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Scoping study for knowledge, attitudes and behaviours survey towards relationships, sexual and reproductive health among young people in Ireland

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Crisis Pregnancy Agency Report

Scoping Study for Knowledge, Attitudes and Behaviours Survey Towards Relationships, Sexual and Reproductive Health Among Young People In Ireland

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JULY 2005

crisispregnancyagency
Formulating & Implementing a National Strategy

Foreword

The Crisis Pregnancy Agency commissioned a scoping study for a Knowledge, Attitudes and Behaviour survey toward relationships, sexual and reproductive health among young people in Ireland in 2004. A report of that study was completed in 2005. The reader is advised of the importance of these dates as changes that have occurred in the interim (2005-2008) will not be reflected in its findings.

The scoping study was envisaged as a project that would inform the development of research on sexual health and relationships among adolescents. It was intended to address technical and procedural issues in consultation with key stakeholders and research partners.

Since the development of this report there have been a number of changes in the structures relating to the stakeholders in the project – most obviously the dissolution of the Health Boards and the inception of the Health Services Executive represents a significant structural change. In that period also, a seminal work - the Irish Study of Sexual Health and Relationships (ISSHR) –commissioned by the Agency and conducted by a team of researchers led by Professor Richard Layte, was completed. ISSHR (2006) surveyed the sexual knowledge, attitudes and behaviours of Irish adults, including young Irish adults. ISSHR provided robust, representative statistics relating to a group that had been the population of interest in the scoping study – Irish teenagers. The information provided by ISSHR, together with information provided by other studies commissioned by the Agency in relation to young people, has provided a firm basis for policy and practice development.

While it would still be desirable to conduct a major national survey among Irish teenagers, such a project is not contemplated by the Agency in the short term. The Agency has decided however, to put into the public domain, the scoping study that would have informed that project. It does so because valuable information contained in the scoping study may be of benefit to those with an interest in the area.

The Agency is grateful to the research team and to all who participated in the scoping study and is confident the study will prove a useful resource particularly to those working in the field of sexual health and young people.

Caroline Spillane
Director, Crisis Pregnancy Agency

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Introduction

Sex and sexual behaviour are an extremely important aspect of human behaviour, with implications for both individuals and societies. Sexual relationships can give immense pleasure and fulfilment to individuals, create families and ultimately underpin the viability of societies, but they can also have less positive consequences. For example, rates of sexually transmitted infections have been increasing strongly in Ireland since the mid-1990s, and rates of crisis pregnancy also seem to be increasing (NDSC 2004). More worryingly, much of the increase in STIs has been among younger people and particularly those under 25. It also appears that pregnancy rates among women under 20 have been increasing over the last 15 years, although statistics here are problematic and need to be contextualised. For example, the birth rate among women under 20 in Ireland has been increasing since the early 90s, but present rates are still well below those in recent decades. Similarly, there has been a steady increase in the number of abortions among 15-19 year olds with Irish addresses in Britain (Hyde & Howlett, 2005) since the early 1970s, but it is not known whether this increase is real or the consequence of changes in patterns of reporting.

Such developments have initiated policy responses among a number of agencies in the Republic of Ireland, but these responses have been handicapped by a lack of accurate, reliable data on the sexual knowledge, attitudes and behaviours of young people. The above developments show that Ireland urgently needs a survey of the sexual knowledge, attitudes and behaviours of young people to provide the information that policymakers need to formulate effective policy. Before policymakers can design interventions to influence outcomes such as STIs (Sexually Transmitted Infections) and pregnancy, they first need to understand the distribution of different sexual behaviours and how these behaviours are related to the person's knowledge, attitudes and beliefs, as well as the characteristics of the person and the context within which the behaviours occur. Only when armed with reliable information on these crucial issues can interventions be developed. Such information is best gathered using a national survey of young people which is constructed to investigate the knowledge, attitudes and behaviours (a 'KAB' survey) of young people on the subject of sex and sexuality. The methodological, ethical and political problems in carrying out such a survey should not be underestimated, as KAB studies address extremely sensitive issues. However, experience from a KAB survey among adults in Ireland shows that the issues involved can be resolved and data successfully gathered.

In the UK and further afield there have been a number of KAB studies that have examined sexual behaviours, perhaps the most important of which are those national studies which form the international 'Health Behaviour in School Aged Children' (HBSC). These studies use a harmonised research instrument with mandatory and optional elements to investigate a range of health behaviours, including sexual behaviour, among a nationally representative sample of 11-year-old, 13-year-old and 15-year-old children (although the questions on sex and sexuality were only asked of the 15-year-old age group in many countries). These studies have revealed policy relevant - and moreover comparative - information on such questions as the proportion of 15 year olds who have had intercourse, the age at which this first took place and whether contraception was used then and on the most recent occasion. Disappointingly, however, the questions on sexual behaviour were not asked in the Republic of Ireland, and this leaves policymakers and researchers here with no national information upon which to form policy.

This is not to say, however, that no information is available on the issue of sexual behaviour among young people in Ireland. A number of Health Boards[1] have undertaken studies and these have yielded interesting findings, but all data available to date have been qualitative or based on non-probabilistic samples of young people. This makes it difficult to judge the extent to which the findings offer a representative picture. The regional basis of these studies also means that we do not have national data upon which to form policy.

In the first chapter of this study we examine past research on the sexual knowledge, attitudes and behaviours of young people, both abroad and in Ireland, and examine the methodology that has been used, the questions asked and the age groups covered. Although Ireland does not, as yet, have a national KAB survey, this delay, at least, has the advantage that Irish researchers can learn from the lessons learnt in other countries when undertaking their surveys. As such, the second chapter of this study examines the broad range of methodological issues that need to be addressed when contemplating a national KAB survey of young people. Chief among these are the target population that is to be studied, the age range, the sampling strategy and implementation that are to be used, as well as crucial questions concerning issues of consent and support. The second chapter finishes with a set of recommendations as to the appropriate methodology that should be used. In the third and final chapter we report on the outcome of two consultation days, which were held in Dublin early in 2005 for stakeholders in the areas of public health, health promotion and education. Over two days around thirty representatives of national bodies and interested parties discussed and debated a large number of issues around whether and how a national KAB survey among young people should be carried out. This produced a huge number of recommendations and insights into the practical, ethical and research issues that should be addressed before any field work commences. Yet what was perhaps most striking about these two days was the high level of agreement that existed across all parties involved that a national KAB study among young people in Ireland was essential.

[1] *The Health Boards were replaced by Health Service Executive areas in January 2005.*

Chapter 1: Irish and International Research on the Sexual Knowledge, Attitudes and Behaviours of Young People

1.1 Introduction

Although there were studies of sex from the late 19th Century onward in the UK (see Hall 1999 for a review) and the renowned studies of Kinsey and Pomeroy of the 1930s and 1940s (Kinsey et al. 1948, Kinsey et al. 1953) and Masters & Johnson (1966) in the 60s in the USA, until the 1980s sex research was carried out without the application of modern survey methods and probability samples. These studies were general attempts to uncover the nature of human behaviour - largely from a biological perspective - and researchers felt that it was just not possible or acceptable in the moral climate of the day to ask these questions of a broad swath of the general population using random probability sampling. This squeamishness was put aside in the 1980s with the spread of the HIV virus, and between 1985 and 2000 over 40 surveys of sexual knowledge, attitudes and behaviours ('KAB surveys') were carried out across a range of western countries. These surveys were generally focused on the national population of adults, or some subset thereof – for example, based on a survey of adults aged 18-44 years etc. General population surveys of this nature explicitly exclude teenagers and adolescents from the samples in question. In this regard they were (and in most cases continue to be) of little use in providing any information on adolescent or teenage sexuality, sexual practices or sexual attitudes. At best, one can focus on younger adult cohort (say 18-24 years) and examine their historic experience of sexual development and behaviour in their teenage years. Clearly, this approach entails a number of major problems regarding understanding current adolescent sexuality and experience. Not least among these is the problem of recall and the tendency to reconstruct the actuality of past experiences to best-fit current contexts. A further major problem relates to the co-contemporaneous context of the experience of adolescence itself. The sexual development of teenagers today may take place in a very different context to that of their counterparts who are currently in their early 20s. The last decade has seen a major increase in the globalisation of values, a greater focusing in entertainment and the media on sex and sexuality, greater access to travel opportunities and increased use of alcohol and illicit drugs among teenagers. Accordingly, pressures from various aspects of value systems, peer sub-cultures etc. which impact directly on the sexual development of teenagers today may be quite new and very different to those which contextualised the sexual awakening, development and practice of adolescents of the mid 1990s (who are, by now, in their early 20s) and whose historic experiences are being used in much of the research output on current adolescent sexuality.

In the light of these problems of recall and changing environments, only a survey of teenage sexuality and experiences among a national sample of current teenagers will provide the necessary data for improved understanding and policy development. There is substantial anecdotal information regarding earlier debut of teenagers and a fall in the age of first intercourse or other sexual initiations, and recent survey data among adults (Rundle et al. 2004) points to declines in the age of first intercourse across recent cohorts. Similarly, there is much anecdotal (and often conflicting) information regarding increases in teenage pregnancy rates. Notwithstanding this anecdotal information there is, in fact, a dearth of evidence-based contemporaneous statistics on the sexual experiences of teenagers. The small amount of research which was carried out on teenage sexuality and sexual behaviour

up to the mid to late 1980s was very much focused on teenage pregnancy and the issues surrounding it. Much of the work which has been carried out since the latter 1980s has been re-focused, with a much greater emphasis on sexually transmitted infections (STIs) and broader sexual health issues – not just those related to contraception. In common with surveys of the national adult population, the focus of many surveys of adolescent sexuality and sexual behaviour since the late 1980s developed as a response to the spread of HIV and AIDS and the need to develop appropriate policy responses to the problem among teenagers. A relatively small number of surveys on adolescent sexuality have also explored issues such as the impact that early or casual sexual encounters can have on the psychological and social psychological development of young people, as well as their ability to connect with others or develop an independent sense of self-identity, self-esteem etc. Most of the studies which address these issues are of a more highly qualitative nature.

In examining questions around teenage KAB issues it is possible to adopt either a qualitative or quantitative approach. The qualitative approach is generally characterised by in-depth interviewing with a relatively small number of respondents, either on a one-to-one or focus-group basis, to elicit more in-depth information on the meanings and values that respondents attach to their behaviour. The discussion usually follows a broad interview schedule or list of topics but it is allowed to flow in fairly general terms. The sessions are usually taped and subsequently transcribed to allow the researcher to examine not only the substantive content of the information provided by respondents but also the structure of their contributions, the language and terminology used, the way they conceptualised of the topic – a so-called discourse analysis. In a typical qualitative study one might run something of the order of 6-7 focus groups each of up to 10-12 respondents, possibly complemented with a small number of in-depth interviews on a one-to-one basis.

In contrast, a quantitative approach involves selecting a larger number of respondents on a random basis from the population under consideration and administering to them a very highly structured and closed questionnaire. The main advantage of the quantitative approach is that one can generalise results from the sample to the total population. Generalisability depends, however, on using a sampling structure from which sample errors can be calculated, and it should be said that none of the quantitative surveys discussed below used random probability samples.

The advantages of the qualitative approach include the opportunity to explore some issues in-depth with a relatively small number of participants. Unfortunately, the results cannot be generalised beyond the group of participants themselves in a statistical sense. In contrast, the main advantage of the quantitative approach is the extent to which one can, using various statistical tools, generalise the results from one's sample to the total population from which the sample has been selected. Accordingly, it is possible to make very strong statements from a quantitative survey; for example, X per cent of adolescents have had sexual intercourse by the age of 17 years. The estimate (in this case X per cent) can be given within measurable limits of precision. Both qualitative and quantitative approaches have their advantages and disadvantages and where possible should be used in tandem.

In broad terms quantitative research output on teenage sexuality and sexual behaviour is quite limited. Although a great deal of qualitative research - based on focus groups or in-depth interviews - has been completed, there are very few nationally representative

quantitative surveys of adolescents, which can be used to allow one to make strong inferences about Irish teenagers as a whole. Much of the quantitative work that has been completed has been based on relatively small sample sizes or on very specific sub-groups or schools. A great deal of the survey work has focused on particularly marginalised sub-groups of the teenage population – the unemployed, early school leavers, homeless etc.

Recurring themes in the quantitative research are:

- sex education
- attitudes and cognition related to sexual relationships
- experience of relationships
- age of first intercourse (if relevant)
- current sexual activity
- use of protection and contraception on first and most recent intercourse
- reasons (including pressure) for first intercourse
- number of partners
- experience of STIs/STDs (if relevant)
- regrets (if any)
- related risk behaviours (alcohol, illicit drugs etc.)
- demographic and background variables.

1.2 International Comparisons

International comparisons offer the possibility of disaggregating the complex processes encountered in the social sciences, but they require good quality data, which has been 'harmonised' across countries. In the area of adolescent sexuality and sexual behaviour the best single source of internationally comparative data and results is the Health Behaviour in School-Aged Children (HBSC) project – an international collaborative project co-ordinated and supported by the World Health Organisation (WHO). The target population of the HBSC study is young persons attending school aged 11, 13 and 15 years old. These age points were selected as they represent the onset of adolescence, the challenge of physical and emotional changes and the middle years when important life and career decisions are beginning to be made. However, in many countries, the questions on sex and sexuality were only asked of the 15-year-old age group. Unfortunately, the questions on sex and sexuality were not asked in the HBSC survey in the Republic of Ireland.

In previous rounds of the HBSC (1989/1990, 1997/1998) some countries included questions about relationships and sexual behaviour, but because these questions were optional and varied in scope and content only limited cross-national comparison was possible. The 2001/2002 HBSC survey was the first to include a set of harmonised, mandatory questions on sexual health (see Currie et al. 2004). The 4 mandatory sexual health items were adopted from the American Youth Risk Behaviour Survey (YRBS) and were as follows:

1. Ever had intercourse?
2. Age at first intercourse?
3. Use of condom at last intercourse?
4. Contraceptive at last intercourse?

The first question included cues (*sometimes this is called "making love", "having sex", or "going all the way"*) in order to help the respondent understand what was being asked.

Validity studies show that most young people interpret this question as asking about vaginal sex only, so one limitation of the data is that information on other forms of sexual behaviour, and the related risk of contracting STIs, is not recorded.

Condom and contraceptive use were asked of last intercourse only as this method is regarded as producing more reliable and valid information than asking about typical behaviour, as it is difficult for an adolescent to report typical behaviour because very often their condom/contraception use is not consistent and they may feel a certain pressure to provide what they regard as a socially acceptable answer.

In the 2001/2002 round of the HBSC, Ireland and three other countries (Denmark, Norway and the United States) did not include any of the four sexual health items because it was felt that doing so would impact negatively on school participation rates. Of the other 31 countries involved in the HBSC varying numbers of the questions were asked, some countries changed the wording of some of the questions and some countries did not ask the sexual health questions of the full national sample.

Results from the 2001/2002 survey have been published and indicate very substantial fluctuations from country to country in terms of proportion of the population of 15 year olds who recorded having experienced sexual intercourse. These ranged from 15 per cent in Poland to 75 per cent in Greenland. There are also large gender differences. The proportion of boys who responded positively ranges from 18 per cent in Spain to 71 per cent in Greenland. For girls, the range is from 4 per cent in the Former Yugoslav Republic of Macedonia to 79 per cent in Greenland. Over all countries included in the analysis (30 in total) boys - at 28 per cent - were more likely than girls - at 20 per cent - to have had sexual intercourse. Countries such as the Republic of Macedonia, Poland, Croatia and Greece showed a large gender difference in the proportions reporting to have had sexual intercourse. In all but six countries (Greenland, England, Wales, Scotland, Finland, Sweden) boys were more likely than girls to have had sexual intercourse.

The mean age of first intercourse ranged from 13.5 years to 14.5 years for boys and 13.6 years to 14.9 years for girls. In most countries the mean age for boys is lower than the mean age for girls, and the largest gender difference is to be found in Portugal (13.7 years for boys as opposed to 14.8 years for girls). Overall, the proportion of sexually active young people reporting condom use at last intercourse is quite high, particularly for boys (80 per cent, compared to 70 per cent for girls). For boys condom use ranges from a low of 69 per cent in Portugal to 91 per cent in Greece, girls range from 58 per cent in Sweden to 89 per cent in Spain.

The proportion of sexually active young people reporting the use of at least one method of contraception at last intercourse is 85 per cent. There is very little gender difference, with 86 per cent of boys and 85 per cent of girls responding positively. Incidence of use ranges from 73 per cent in Poland to 92 per cent in the Netherlands for boys and from 63 per cent in Ukraine to 97 per cent in the Netherlands for girls.

As noted in Section 1 above, several international studies are based on retrospective details on incidence and nature of first intercourse recorded by adult respondents in a range of different surveys. The New Zealand (Dunedin) birth cohort survey (Dickson et al. 1998) and

the NATSAL 2000 surveys (Wellings et al. 2001) have been used in this way. Wellings et al. (2001), for example, found that the median age of first intercourse among males and females in Britain was 16 years, with 30 per cent of males and 26 per cent of females having had intercourse at less than 16 years of age. In terms of protection, Wellings et al. (2001) found that 82.5 per cent of males and 80.3 per cent of females used a condom at first sexual intercourse, while 7.4 per cent of males and 9.8 per cent of females used no form of contraception or protection. Using a constructed scale for sexual competence (based on questions related to willingness, regret, autonomy and contraceptive method), Wellings et al. (2001) estimates that 55 per cent of males and 42 per cent of females are sexually competent at first intercourse.

Using their data to look at change in age of sexual debut since the early 1980s, Wellings et al. (ibid) note that there has been overall convergence of behaviour among young men and women since the mid to late 1980s. The proportion of women reporting first intercourse before 16 years increased up to, but not after, the mid 1990s. They also note a sustained increase in condom use and a decline in the proportion of both men and women reporting no contraceptive use at first intercourse with decreasing age at interview. In broad terms, the apparent stabilisation since the mid 1990s of the proportion of women reporting first intercourse before age 16 years and the small minority of teenagers having unprotected first intercourse seems to be a most significant finding (Wellings et al. 2001, p 1843).

One of the few large-scale statistical studies in Britain to directly interview teenagers regarding their *current* behaviour is Henderson et al. (2002). This study examined behaviour among two cohorts of third-year pupils in 24 second-level schools in East Scotland[2]. Based on a total of 7,395 questionnaires for analysis the authors found that 18 per cent of boys and 15 per cent of girls aged 14 years had had intercourse. Further, the authors recorded that 41 per cent of boys and 38 per cent of girls had engaged in "heavy petting", while 17 per cent of boys and 13 per cent of girls had experienced oral sex. Significantly, 20 per cent of relevant females recorded that they felt themselves to have been put under some kind of pressure to have intercourse. More girls than boys reported regret at having had intercourse - 32 per cent of girls and 27 per cent of boys felt it was 'too early', while 13 per cent and 5 per cent of girls and boys respectively regretted that it had happened at all. Approximately two-thirds of both sexes used condoms – both at first and (where relevant) most recent intercourse.

Not all international surveys paint a positive picture regarding trends towards safer sex among teenagers. Kangas et al. (2004), for example, report on the findings from a survey of adolescents in a Danish high school. They assess change in sexual behaviour at the high school in question between 1982, 1996 and 2001. In broad terms, the authors find that the period 1982 to 1996 was one in which sexual attitudes were directed towards safer sex. This was reversed somewhat in the period 1996 to 2001. Although these findings lead the authors to suggest that they have significant implications for health care authorities organising preventative strategies for healthy adolescents the representativeness and generalisability of the results are questionable.

Notwithstanding the generalisability of results from various quantitative and qualitative surveys in the area of adolescent behaviour, a few recurring themes or correlates of early sexual initiation appear to emerge from the European and North American literature. In

[2] The authors note that, on the basis of the 1991 Census of Population, the data were representative of 14 year olds in Scotland in terms of parents' social class and the proportion of one-parent families.

general terms, it would appear that early first intercourse is related to low levels of educational attainment and early school leaving of the subject; negatively related to parental social class and parental monitoring; negatively related to family environment and the presence of both parents in the household at age 16 years and positively related to early menarche. Wellings (2001) notes:

> *The association is stronger for education than for family background. Young people who leave school later, with qualifications, are less likely to have early intercourse, more likely to use contraception at first sex, be sexually competent and (for women) less likely to become pregnant if they have sex. Family disruption and lower parental socioeconomic status are also associated with early sexual experience and pregnancy when younger than 18 years, but the effect is weaker* (p1850).

A further correlate of early sexual initiation is level of religiosity. Using data from the US National Longitudinal Study of Adolescent Health (Add Health) Nonnemaker, McNeely & Blum (2003) note that "...both public and private religiosity[3] are significantly associated with lower levels of ever having had sex, public religiosity having a significantly stronger relation" (p4). Whilst there may be statistical relationships between risk behaviour and religiosity, a clear theoretical model which allows testable empirical predictions is difficult to articulate and the causal mechanisms or direction of causality difficult to identify.

Reduction in the age of menarche is well documented in the literature (e.g. Forrest 1993;Wyshak & Frisch 1982), falling from 14.8 years in the 1890s to 12.5 years in 1988. Reduction in male spermarche (production of sustainable sperm) has also been noted and associated with earlier sexual debut (Atwater 1992).

1.3 National Studies – Republic of Ireland

In this section we examine the research that has been carried out on sexual knowledge, attitudes and behaviours of teenagers in the Republic of Ireland. Although there is now a substantial amount of research on KAB issues among teenagers in Ireland, the majority of this research uses small numbers of respondents and is not representative of the population of young people as a whole. Similarly, although a number of larger social surveys have also now been carried out, none have been national and all have used 'convenience' sampling methods, which are unlikely to be representative (and moreover it cannot be established whether they are or not). Overall, then, there would appear to be an even greater dearth of evidence-based statistics on adolescent sexuality in Ireland than internationally. The following discussion attempts to draw out the picture that has emerged from this research, but it should be remembered that none of the studies discussed, whether qualitative or quantitative, should be taken as representative.

Survey research on KAB issues among the general population has developed in recent years. As noted by Layte, Fullerton & McGee (2003), some national attitude surveys have recorded general views and attitudes among the adult population in Ireland on sexuality and aspects of sexual morality. These included various rounds of the International Social Survey Project (ISSP), the European Values Survey and the European Social Survey. The first large-scale study to address issues of sexual behaviour was the so-called SAVI report by McGee et al. (2002)[4]. This examined sexual abuse and violence in Ireland and was based on a nationally

[3] *Public religiosity is based on two questions related to the importance of attending church services; private religiosity is related to two questions on the importance and meaning of prayer and God in a respondent's life.*

[4] *The 1994 round of the ISSP survey did ask a limited number of questions on KAB issues. For more information see Heffernan 2004.*

representative sample of 3,120 adults and their experiences using random digit dialling telephone interviewing techniques. McGee et al. 2004 have also examined issues surrounding clerical abuse in Ireland – again using nationally representative samples generated by random digit dialling techniques.

Rundle et al. (2004) represented a landmark national survey based on 3,300 respondents who completed a detailed questionnaire on issues related to crisis pregnancy and use of contraception. The first national Irish KAB survey of the adult population (The Irish Study of Sexual Health and Relationships - ISSHR) is currently ongoing (February 2005). This will interview roughly 7,500 randomly selected adults and will represent a major step forward in our understanding of sexuality and sexual practices among adults in Ireland. Both Rundle et al. 2004 and the ISSHR project have been commissioned by the Crisis Pregnancy Agency (CPA), the ISSHR project in partnership with the Department of Health and Children.

Given the absence of national research on sexual behaviour or attitudes in Ireland among young people or adolescents it would be useful, before we turn to what research has been done, to examine some of the data from sources other than KAB surveys, such as surveillance data and official statistics. Fullerton (2004), for example, notes the increase in notifiable STIs across the national population - from 2,228 cases in 1989 to 8,869 cases in 2000. Chlamydia trachomatis infections have increased from 245 cases in 1995 to 1,343 cases in 2000. Of these, 15 cases in 1995 were in respect of persons under 20 years of age. This figure rose to 116 cases under 20 years of age by 2000.

Fullerton (2004, p7) further notes that recent international comparisons of births among 15-19 year olds in 28 developed countries showed Ireland to be in the top 10 highest. The US has the highest rate of teenage births followed by the UK. Countries with the lowest rate include Korea, Japan, Switzerland, the Netherlands, Sweden and Italy. Hyde & Howlett (2005, p119) report figures on number of pregnancies to females under 20 years per 1,000 females in the population aged 15-19 years (adjusting for the aggregate of births and abortions in the UK). These are summarised in Table 1 for the period 1970-2004.

Table 1: Rates of birth, abortion and pregnancy (births plus abortions) to females in Ireland under 20 years per 1,000 females in the population aged 15-19 years.

Year	Total number of females in the population aged 15-19 yrs	Rate of births to females under 20 yrs per 1,000 females in the population aged 15-19 yrs	Rate of abortions to females aged 15-19 yrs per 1,000 females in the population aged 15-19 yrs	Rate of pregnancies to females under 20 yrs per 1,000 females in the population 15-19 yrs (agg. Of births and abortions)
1970	125,200	16.8	0.2	17.0
1972	133,900	21.2	0.9	22.1
1974	140,000	22.6	1.4	24.0
1976	146,000	21.8	1.6	23.4
1978	151,700	21.7	2.3	24.0
1980	157,200	22.8	3.0	25.8
1982	159,400	20.6	3.3	23.9
1984	162,000	17.8	3.2	21.0
1986	161,200	16.2	3.4	19.6
1988	162,500	15.1	3.2	18.3
1990	161,000	16.6	4.0	20.6
1992	159,000	17.0	4.4	21.4
1993	154,000	15.6	4.2	19.8
1996	165,600	16.7	4.5	21.2
1998	168,000	19.1	5.3	24.4
2000	160,500	19.4	5.4	24.8
2001	156,200	19.8	5.9	25.7
2002	152,000	19.6	*5.9*	*25.1*
2003	149,767	*19.0*	*5.5*	*24.3*
2004	146,700	*17.1*	*5.4*	*22.3*

Source: Hyde and Howlett (2005:119); Numbers in italics: CPA personal communication.

These figures show that the birth rate to females under 20 years fell from the peak of the 1970's and early 1980's until around 1990 after which it appears to have increased, although not to previous highs. The 2001 rate was the highest in recent times. There are some signs of downturn from 2003 which will need further years of evidence before they can be taken to indicate a decrease. These statistics should also be seen in the context of those from earlier decades which were in general much higher. Statistics on abortion rates also show a steady increase since the early 70s to a peak in 2001 though this may (at least in part) be due to better recording and data availability in more recent years. Again some potential signs of a reduction from 2003 are evident. The potential impact of abortion at locations outside of England on overall rates is unclear. The final column of Table 1 indicates that total teenage pregnancy levels fell from their previous peak in 1980 until around 1990 after which they increased progressively to stand at their second highest level over the 30-year series in 2001. Some year-on-year reduction since 2001 is evident. In the absence of rigorous quantifiable data we can only surmise whether or not these trends are, on the one hand, indicative of underlying real changes in the sexual behaviour of teenagers in Ireland today, or reflect improvements in data recording and record keeping in more recent years.

1.3.1 Quantitative Studies

As noted above, there is a dearth of quantitative studies of any kind on teenage sexual behaviour or early sexual experience in Ireland. The few quantitative studies that have been undertaken are generally not based on nationally representative statistical samples, which would allow one to make generalisable inferences to the national population of young persons. The studies in question do, however, shed light (albeit partial) on this very important aspect of behaviour among adolescents and young people.

One of the few quantitative surveys on teenage sexual behaviour in Ireland is MacHale & Newell (1997). This survey was self-completed in 40 second-level schools in Galway City and County by 2,754 pupils aged 15-18 years between January and April 1994. Its authors' intentions were to "*...describe Irish teenage sexual behaviour and to review the determinants affecting such behaviour*". To this end they also studied the teenagers' level of knowledge of sexual health, sources of such information and the influence of alcohol and drugs on sexual behaviour (p196). Although not representative, this was a landmark study in describing the behaviour of teenagers in the Galway region and is a seminal paper in this field in Ireland.

Recorded levels of sex education were high (70 per cent) but rates were significantly lower among boys than girls. The main source of knowledge in relation to sex was cited as friends (46 per cent), teachers (41 per cent), parents (37 per cent) and health education leaflets (10 per cent). The preferred choice of sex education was from teachers (cited by 57 per cent as preferred choice) followed by parents (37 per cent). Knowledge on the efficiency of condoms as a protection against HIV/STDs was high (83 per cent reporting that condoms would reduce the risk of HIV and 72 per cent recording that they could help reduce the risk of STDs).

A total of 21 per cent of Galway school children interviewed reported having had sexual intercourse, with boys more than twice as likely as girls. Mean age of first intercourse was 15.5 years, with no gender difference in respect to mean age of sexual debut. Teenagers from urban schools were reported to be more likely than their rural counterparts to have had intercourse. Condom use at first intercourse ran at 72 per cent for both boys and girls. A total of 68 per cent of respondents reported having ever consumed alcohol, with 10 per cent recording use of non-prescribed drugs. When related to experience of first intercourse 38 per cent of boys and 31 per cent of girls said that alcohol was an influencing factor in having first intercourse. A total of 9 per cent of relevant boys and 8 per cent of relevant girls recorded that non-prescribed drugs were a contributory factor in having first intercourse[5].

In April 1996 the Department of Public Health undertook a study of sexual practices among 16-18 year old school-going children in the Midland Health Board (see Bonner 1996). The study principally examined, inter alia, patterns of smoking, drinking, illegal drug use and sexual practices. The survey was conducted through 12 schools within the Board's catchment area, with a total of 1,654 questionnaires being completed by pupils (892 males, 762 females).

Levels of sex education and general knowledge relating to sexual issues were found to be high. As many as 82 per cent of males and 95 per cent of females recorded having discussed the facts of life with someone at some point in their life. Just over one-third recorded having discussed them with a teacher or professional. In general, girls were found to have a higher propensity to discuss the facts of life with their mother, boys with their father. Books and

[5] *Although not explicitly stated in McHale and Newell 1997 this is clearly on a self-administered basis in contrast to, for example, having had drinks spiked etc.*

magazines were identified as an important source of information – cited by 69 per cent of respondents as having provided useful information.

Although knowledge of the average gestation period was high (96 per cent), only 25 per cent of males and 51 per cent of females seemed to be properly informed as to a female's period of maximum fertility during her monthly cycle. Knowledge was strongly related to parental social class. Recorded information on knowledge of contraception was high. Only 2 per cent of respondents claimed not to have any knowledge of contraceptive methods – condoms and the pill being the most frequently cited.

In terms of sexual behaviour a total of 32 per cent of respondents recorded having had sexual intercourse, with recorded rates among males being substantially higher than among their female counterparts – 38 per cent and 26 per cent respectively. Early sexual initiation was not found to be correlated with socio-economic status. Three–quarters of those who recorded having had sexual intercourse recorded age of first intercourse between 15 and 17 years.[6] Approximately one-quarter claimed to have had intercourse once in the previous six months, 54 per cent to have had it between two and nine times and 16 per cent recorded having had intercourse more than ten times. Just over one-quarter of those who recorded having had intercourse recorded having had three or more partners.

The authors of the report found that 70 per cent of those who recorded having had intercourse said they used contraception on the first occasion. A condom was by far the most frequently cited form of contraceptive.

The figure of 32 per cent of school children in Bonner's report who recorded having had sexual intercourse was substantially higher then the 21 per cent recorded by McHale and Newell (1997) in the Galway area.

Dunne et al. (1997) report findings from a quantitative study of adolescent behaviour in Cork for the former AIDS Alliance. The study had three elements: the first was based on 800 questionnaires completed by 15-24 year olds in Cork City. The second was a series of four focus groups with participants aged 15-25 years (three with early school leavers and one with participants from mixed social backgrounds). The third was based on visits to a range of AIDS and sex education organisations in Berlin, Amsterdam and Utrecht. The study did not use probability sampling but instead drew on questionnaires from young people in schools, youth groups and youth oriented organisations who were willing to cooperate. Questionnaires were completed under examination-type conditions. Although the results are not generalisable to the national population they yield some interesting insights[7]. Overall, the research reports a substantially higher incidence of sexual initiation than MacHale and Newell (1997), with 30 per cent of females and 45 per cent of males aged 15-17 years having had experience of sexual intercourse. Contraception use was relatively high at first intercourse – 86 per cent of males and 73 per cent of females recorded having used some form of contraception. In terms of number of previous partners Dunne et al. found that 81 per cent of 15-17 year old females had previously had two partners or fewer, while 46 per cent of males aged 15-17 years had three or more partners. Levels of sex education in the Cork study were substantially higher than in MacHale and Newell (1997), with 90 per cent of Cork respondents recording having received sex education – 88 per cent from school, 53 per cent from parents and 51 per cent from friends.

[6] *Given the age range of those who fell within the scope for the study this is not surprising.*

[7] *Given the focus and design of the survey the results appear to be biased in favour of early school leavers, those with lower levels of educational attainment and otherwise marginalised sub-groups. The sample also appears to be disproportionately skewed towards females (63 per cent) – See Dunne et al. 1997 (p.11).*

1.3.2 Qualitative Studies

As noted above, many of the studies that have been undertaken in this area in Ireland have been qualitative in nature. These are based on focus groups or in-depth interviews on a one-to-one basis. Such studies offer important insights and provide one with the potential for discourse analysis. They do not (nor in general, do they purport to) allow one to make inferences from those interviewed to the general population under consideration. Given the highly sensitive nature of the issues under consideration they are often the preferred methodology for sexual Knowledge, Attitudes and Behaviour (KAB) studies and have come to be used widely in investigating behaviour in this area. We consider below a few such studies which have been carried out in Ireland.

Early school-leavers are the explicit focus of Mayock & Byrne (2005), which investigates on sexual attitudes, beliefs and behaviour of early leavers as well as exploring the processes and mechanisms whereby young people construct experience and define their sexuality and sexual practice (p.9). This research is based on the experiences of 41 young people[8] from 12 recruitment sites (six in Dublin and six in provincial towns and cities). The average school-leaving age for participants was 14.4 years. The authors found that 72 per cent of young men and 47 per cent of young women were sexually active – 93 per cent of young respondents in provincial sites compared with 41 per cent in Dublin City. The average age of first sex was 13.5 years (12.9 years for young men and 14.5 years for young women). First sex was almost always unplanned with high levels (54 per cent) having been unprotected. A total of 63 per cent of female and 77 per cent of male participants report incidents of non-condom use since their first experience. There was unanimous agreement among the group that young men were responsible for obtaining and carrying condoms. In broad terms, the research indicated that young participants showed greater concerns regarding pregnancy than STIs. The authors of this very well structured and meticulously written report themselves caution the reader in attempting to generalise their results to all Irish young people who leave school early or are "at risk" of early school leaving (p.34).

Hyde and Howlett (2005) adopt a similarly qualitative approach in their study, which is aimed at "....understanding post primary pupils' perspectives on sexuality, sex education and the discourses and factors that influence their sexual knowledge and behaviour" (p.9). The research is based on 29 focus groups with a total of 226 second-level school pupils from ten schools in urban and rural locations throughout the Republic of Ireland. Fieldwork for the study was carried out between October 2003 and January 2004 in interviewer-facilitated focus groups. Given the strictly qualitative nature of the report no estimated incidence levels of sexual behaviour or its correlates are provided. A series of very important summary points may, however, be gleaned from the analysis. The authors found that most participants did not discuss sex with their parents and those who did generally found that parental signals to sons were often different to those given to daughters. Whilst the message given to a male often appeared to be rooted in a context of protecting himself from the unwanted consequences of sexual activity, the message received by females was more likely to be based on abstinence and chastity. In terms of school-based sex education this was found to vary substantially across the country. In general, female sources of information on sexuality and sexual behaviour were more emotionally based, while males were felt to be more objective in nature. Alcohol was identified as likely to increase desire and also to reduce inhibitions among both males and females. Inconsistent use of condoms was identified, as

[8] *23 women and 18 men; 23 were aged 13-15 years, 18 were aged 16-18 years. A total of 27 respondents were based in Dublin. Two respondents self-identified as homosexuals.*

were stereotyped views of females who carried them. Overall, the researchers reported very highly gender-defined stereotypes of sex roles and behaviour. In common with Mayock et al. (2005) Hyde and Howlett (2005) identified a greater concern among participants about pregnancy than STIs.

In 1996 the Midland Health Board and Regional Youth Council published a qualitative piece of research on 'Values, Attitudes and Norms from the Perspective of Midlands Youth' (Sheerin, 1996). The purpose of this report was to record the views of marginalised young people aged 13 to 18 years in relation to their lifestyle and needs. The study was carried out in Athlone, Mullingar, Tullamore, Mountmellick/Portlaoise and Birr. Most of the young people involved in the study were early school leavers who were attending Community Training Workshops or Youthreach and many of those who were still in school were considered by their principals to be 'at risk' of leaving early.

The research involved a mixture of focus groups and semi-structured interviews. Fifteen focus groups, with an average of seven young people in each were conducted in Training Centres, Youth Centres and schools. Among a number of issues addressed in the research were a series of issues related to sexual health and behaviour. Further in-depth interviews were conducted with 20 of the young people who had taken part in the focus groups, and again, sexual health was one of the topics included in the interview. Because of the sensitive nature of the issues related to sexual health, only general views were sought from the participants of the focus groups, whereas more personal opinions were asked in the one-to-one interviews. Specific levels of sexual activity were not sought in this research.

An attempt was made to make contact with young people who were not in school and had no involvement with the workshops or training centres via snowball sampling. This method, however, proved unsuccessful, and it was found to be very difficult to contact these young people.

Results from this research shows that there is a major lack of awareness among young people about contraception and STI protection. Only a very small number of participants could name more than three forms of contraceptive (condoms, the Pill and the Three-Month Injection). The authors found that even those who were already sexually active showed limited knowledge of contraception. Whilst it was felt that young people displayed a relatively high level of contraception usage, this was somewhat diminished when sexual activity was associated with drinking alcohol. Reduced contraceptive use as a result of drinking alcohol was put forward as one explanation for teenage pregnancies. Although most young people did state that they would use protection to avoid contracting a sexually transmitted infection, their knowledge of STIs beyond AIDS and HIV was very limited. Indeed, it was found that even in the context of these two infections knowledge did not stretch far beyond being able to name them. Likewise, there was a considerable lack of awareness about sexual health services, where they were available and what services were offered. Where there was a familiarity with sexual health services reasons given for under-utilisation included concerns in relation to confidentiality, feeling intimidated by professionals, embarrassment about personal lack of knowledge, and fear of being looked down on as a sexually active young person.

Another interesting finding from this research is that most of the participants had received very little formal sex education, particularly in relation to issues of contraception, STIs and early pregnancy. Most of their information came from the media and/or friends. Suggestions as to who should provide sex education to young people included individual and group counsellors through schools, youth projects and workshops, parents, and a freephone helpline.

1.4 The Content of KAB Surveys Among Young People

In the UK there have now been at least seven KAB surveys among young people. These surveys have been carried out among young people of different age groups, with the youngest age group questioned being 13 and a number asking questions of young people up to the age of twenty-five. These surveys have covered a number of topics, but in general their primary purpose has been to investigate epidemiological concerns, i.e. behaviours which increase the risk of STIs and HIV, though most have also dealt with issues around contraception itself. In Ireland there have now been at least eight KAB surveys among young people; these have covered similar issues to those undertaken in the UK except that many of the Irish surveys tend to have been general health and lifestyle surveys and so have dealt with many other issues such as diet, smoking and alcohol consumption as well. If we look across surveys in the UK and Ireland we see the following subject areas covered around sex and sexuality:

- Experience of sex education
- Informal sex education
- Preferred sources of information
- Attitudes and moral opinions around sex and relationships
- Specific attitudes to use of contraceptives and protection
- Attitudes to AIDS and HIV
- Beliefs about risks of infection with HIV
- Knowledge of STIs and HIV
- Use of contraceptive services
- Age of different sexual experiences
- First sexual intercourse: age, age of partner, coercion, contraception, protection, regret
- Total sexual experience
- Sexual attraction
- Negotiation within relationships
- Assertiveness skills
- Perception of sexual activity among peers

It should be said that many of the studies on adolescent sexual behaviour do not strictly define the terms within which they operate, thus questions about sexual behaviours are often vague and open to multiple interpretation by both respondent and researcher. The widely used questionnaires of the international HBSC study use the general term 'sexual intercourse' with local colloquial explanations such as 'making love' or 'going all the way' added, as suited to participating countries and agreed with the overall study co-ordinating centre. No formal definition of sexual intercourse is used with respondents themselves deciding what is covered by this term. This stands in contrast to the approach taken in the vast majority of adult KAB surveys where anatomical descriptions are used to define a behaviour. The reason for this vagueness in teenage KAB studies is an uneasiness about the

use of explicit language among young people, yet the issues underlying this uneasiness and the impact of explicit language on young people has never been explicitly investigated. Given the fact that such research practices seriously undermine research efforts, thought should be given to this issue should an Irish Teen-KAB be undertaken. As we will go on to discuss, this is one issue which would benefit from investigation in the preliminary stages of a possible Irish KAB study among young people.

1.5 Conclusions

It is clear from these reports (and also from the excellent review of research into adolescent sexuality and sexual behaviour by Fullerton 2005) that there has been a substantial amount of research carried out on the topic of teenage or adolescent sexual behaviour in Ireland, but this research cannot be said to present a coherent national picture of behaviours or their antecedents and no research to date can be taken as representative of the population. Both the qualitative and quantitative research vary widely in their results and, although this research is valuable, it is hard not to come to the conclusion that the pattern of adolescent sexual behaviours in Ireland remains largely unknown. Given recent trends in STIs and conception rates among young people in Ireland presented by official statistics, this represents a serious gap in our knowledge and understanding of this important aspect of young peoples' development into adulthood. In the next chapter in this study we consider some of the methodological and related issues that we feel must be addressed to rectify this serious deficiency in our understanding of adolescent development.

Chapter 2: Methodological Considerations

2.1 Introduction

It is clear that a large-scale nationally representative statistical sample is necessary to provide evidence-based estimates of the incidence, nature and characteristics of sexual attitudes and behaviour among adolescents in the Republic of Ireland. We saw in the previous chapter that the research that has been carried out to date has all been qualitative or regionally based, and this has led to a range of findings that are inconsistent at best. Although qualitative data can provide important insights into the values and meanings that respondents attached to their behaviour, health and education, social policy development in Ireland requires nationally representative data on the knowledge, attitudes and behaviours of young people. Only a large-scale survey based upon probabilistic random sampling will allow researchers to estimate the prevalence of certain knowledge, attitudes and behaviours and policy makers to draw any inferences to the experience of the population of young Irish people.

In this chapter we address some of the issues that arise in considering the methodological aspects of implementing the proposed survey. Presenting this material is complicated by the fact that, in reality, at least two very different types of studies will need to be carried out if KAB information is to be collected on a statistically representative population of young people in Ireland. The vast majority of young people aged under 18 are in the second-level education system, and this provides both a simple sampling frame and ready mode of access that for practical and economic reasons cannot be ignored when carrying out a national survey of young people. However, not all young people of this age-group will be in school. Those aged 16 or who have completed three or more years of post-primary education are legally allowed to leave school (Education [Welfare] Act 2000), and each year around 13,000 children take this opportunity (NESF 2002). Even among the under 16s in post-primary school around 37,000 will miss 20 days or more of school per year, with rates of poor attendance being higher in more disadvantaged areas. For example, there is a 4% difference in levels of attendance at schools located in RAPID areas compared to the average and there is a 30% difference in rates of poor attendance (20 days or more) in the most disadvantaged areas compared to the least disadvantaged. Rates of poor attendance are also particularly high for the children of Traveller families.

Research (Dunne, Seery, O'Mahoney & Grogan 1997) suggests that early school-leavers may be systematically different to that of their counterparts who remain in the education system in terms of early sexual experience, and this translates into higher rates of conception and births among this group as well as higher rates of STIs. Early school-leavers are then clearly a distinct sub group who need both to be included in any national sample of young people, but also treated separately in analysis. Indeed, given the perceived importance of the group in question a strong case could be made for disproportionate over-sampling of early school-leavers. Given this, we deal first with the issues in designing and collecting a representative sample of the school-going population of young people before moving on to the specific issues involved in collecting data among those that have already left school. In the next Section, 2.2, we briefly discuss the population under consideration in a school sample as well as sample design. In Section 2.3 we examine the method through which young people and,

more importantly, their parents can be recruited into the sample before moving on to consider the mode of implementation in Section 2.4. Section 2.5 discusses aspects of sample recruitment, including issues such as informed consent and approval (ethical, parental etc.). Section 2.5 also examines the need to put in place appropriate supports for respondents and those who will deal with respondents (e.g. teachers) after the survey has taken place. The survey itself may precipitate responses from participants long after the survey has been administered. For some respondents the questionnaire may trigger questions that must be answered after the survey has been completed. For others it may precipitate a series of emotional and psychological responses to past experiences, behaviour or actions, which must be dealt with in an appropriate fashion. In Section 2.6 we briefly consider the survey instrument or instruments before moving on in Section 2.7 to discuss sample size, disaggregation and reweighting of the data. In Section 2.8 we return to the crucial issue of collecting a nationally representative KAB study of early school-leavers. The design issues are substantially different for this group and in reality this means that a separate study would need to be completed.

2.2 Sampling Frame and Sample Design

The Irish Study of Sexual Health and Relationships (ISSHR) is currently surveying the sexual knowledge, attitudes and behaviours of people aged 18-64 years of age in Ireland. In contrast, the project discussed in this report would focus explicitly on children aged less than 18, but no younger than age 14 years. It is that population (all children in the relevant age cohorts) from which one will be sampling and in respect of which the data will be representative. The first requirement is for a sampling frame which has a complete listing of those aged 14 to 17 in the Irish population. We have already briefly touched upon the issue of sampling young people and hinted that collection in the school system is the most practical and cost effective, but there are a number of ways of generating a random sample of the age cohort in question. One could, for example, carry out a national sift of the population of households to identify those that contained a child who fell within scope (i.e. aged 14-17 years) for the study. A 'sift' survey is a random population survey of the entire population of households, which aims to find particular individuals or households that will then be the focus of a survey. This means that the researcher will contact far more households than are necessary for research as the majority will not be the type necessary, in this case households with children aged 14 to 17. The size and expense of the sift survey depends on the prevalence of the target group in the population. Figures from the Living in Ireland Survey from 2001 show that around 14% of households in Ireland have a child aged between 13 and 17, therefore to generate a sample of say 10,000 young people a sift survey would have to call over 71,000 households (10,000/0.14 – assuming one 13-17 year old per house). Given that not all those contacted would want to take part in the survey, the actual number of calls would have to be higher. For example, if we assume the (very high) response rate of 70%, this still means calling somewhere approaching 100,000 households for an effective sample of 10,000 young people. Whilst this approach would yield a random sample it has a number of important drawbacks. First, it would be an extremely expensive option needing considerable resources just to select the sample. Second, and as we will go onto see later in the study, it also means interviewing young people in the home on sensitive KAB issues, which can present difficult moral and ethical problems.

The most efficient sample design aimed at capturing the bulk of the target population is one based on the second-level education system. There are approximately 750 second-level

schools in the country. A particularly efficient design would be based on a two-stage sampling procedure. The first stage is the selection of a random sample of schools for inclusion in the survey. In doing this, the schools would be selected with a probability proportionate to size (a so-called PPS Sample). This means that larger schools would have a greater probability of being selected into the sample, with the increase in probability being proportionate to the schools' size.

There are sound statistical reasons for selecting the PSUs with a probability proportionate to size, and the technique has a long pedigree (Hansen and Hurwitz 1943). Consider a situation with three schools having 600, 300 and 100 children, as shown in Column 1 of Table 2. Suppose the means per child (of any characteristics) are 2, 4 and 1 respectively (Column 2 of Table 2). The population mean per child is Y=[(600*2)+(300*4)+(100*1)] /1000 = 2.5

The Mean Square Error (MSE) gives a measure of the efficiency of a sample design. Consider the MSE of the PPS design with that based on an equal probability of selection of PSU (i.e. equal probability of selection within each PSU).

Table 2: Example of MSEs in selecting schools with PPS versus equal probability of selection.

School	(1) No. of children	(2) Mean – Y_i	(3) Selection Probability	(4) Error of Estimate (Y_i-Y)	$(Y_i-Y)^2$
1	600	2	0.6	-.05	0.25
2	300	4	0.3	+1.5	2.25
3	100	1	0.1	-1.5	2.25
Total	1000	2.5	1.0		

This MSE for a design based on PPS is given by:

(0.6)(0.25)+(0.3)(2.25)+(0.1)(2.25)=1.05

The MSE for a design based on equal selection probability of schools (PSUs) is given by:

(0.33)(0.25+(0.33)(2.25)+(0.33)(2.25)=1.5675

This estimate of MSE (a measure of the efficiency of the sample design) is almost 50 per cent higher than that given by the PPS selection. In intuitive terms it will thus be more efficient to select larger schools, as the population mean (average) which we are attempting to estimate will depend more on their means than on the means of the smaller schools. It should be remembered that we are trying to measure the mean of the characteristics of *pupils* (not *schools*).

The sample design would be 'stratified' to make sure that the target sample contained an adequate number of schools with certain characteristics that are deemed important for the research question. For example, a national sample would need to have adequate regional representativeness and thus the sample would need to have a regional 'strata' built in so that schools were chosen from within each region. Similarly, the type of school is important (vocational; secondary; community/comprehensive) as is the gender mix (boys only, girls only, co-ed) and whether it is denominational. One might consider over-sampling on some

dimensions if one thought that certain types would be imperative for answering the research question. For example, if researchers wish to examine the impact of single-sex schools on sexual behaviour among their students (say through the RSE taught) and the interaction of this with religious affiliation, the relatively low number of single-sex multi-denominational schools in a pro-rata sample may make this difficult. Given this, an over-sample of these types of schools would be essential.

The ratio of primary sampling units (PSUs) to individual cases is important, as the correlated error among cases collected from the same PSU can present problems. We will be dealing with sample size in more detail in Section 2.7, but for the moment, if we assume a minimum effective or completed sample of 10,000 pupils, this should be based on a sample of at least 170 PSUs (second-level schools) so that the ratio of individual cases to PSU is no more than 1:60. If the sample size should increase, however, the number of PSUs should be increased commensurately to maintain the ratio of PSUs to individual cases[9].

Once the PSUs had been selected one would have to recruit the schools into the survey. In other words, one would secure agreement from the principals to participate in the process. We discuss the important issue of recruiting principals in the next chapter, but it is important to underline that the integrity of the sample needs to be protected against non-response from schools. Obviously, some non-response is usually unavoidable, but the importance of maintaining the ratio of individual young people to PSU (i.e. the school) and making sure that the schools selected are representative means that non-response should be minimised.

There will clearly be some level of non-response among schools. Given the sensitive nature of the survey some principals may not wish to be recruited into the survey. On average ESRI surveys have a response rate of around 85% at the school level, but the sensitivity of KAB issues will probably mean that lower response rates are more likely. How low response becomes will be a function of the time and effort spent preparing the project, but the actual response rate will not be known until a pilot study is completed.

Once the principals agree to participate the next step would be to get them to select a random sample of children in the relevant age cohorts across all relevant year groups in the schools. Ideally each pupil within the sample age range would have a random probability of being selected for the sample, but in reality this approach (where each child would be brought out of their class to take part in the study) is not acceptable to teachers and schools. The ESRI has much experience interviewing and sampling within schools and has repeatedly found that schools prefer whole classes to take part in research rather than individual children so that disruption can be kept to a minimum. For this reason practicality is usually better served by randomly selecting a given number of classes in the school to achieve the desired number of surveys.

However, the random selection of classes does assume that children are randomly distributed across classes and this may not be true. For example, many schools would practise streaming across subject areas, and this means that dimensions such as literacy (and quite often social class and income) are not randomly distributed across classes. Given this, within schools the selection of classes should be random (using the kish grid method) when no streaming is in operation and some stratification with random choice where there is.

[9] *As we will see later this is a particular issue when increasing the sample size for regional disaggregation.*

To implement this we would propose contacting principals on recruitment and establishing whether or not streaming takes place in the school. If it does we should record how many classes would be in the high, medium and low streams. Principals should then be asked to select a high, medium or low base class to ensure an adequate selection of pupils across all streams. This is not, of course, an issue in the schools in which streaming does not take place, although care should be taken to ensure that some systematic structure is not used even if this is not ability streaming.

There are approximately 750 mainstream second-level schools in the education system. These obviously form the main component of the sampling frame which we are proposing. In addition, there is a relatively small number of schools with children with special learning or other difficulties. Due consideration should be given to their inclusion in the population frame of PSUs. The potential sensitivities of including those with learning difficulties in a study and the implications for instrument design and research protocols mean that if this group were to be included in a study, it would be so largely as a separate research project requiring specific work.

The recruitment of schools into a sample is dealt with in more detail in the next chapter and the recruitment of pupils into the survey by the schools is considered in Section 2.3 below.

2.3 Recruitment - Parental and Young Person Consent and Approval

After the schools have been chosen to be sample members they will need to be recruited into the study. This will be a difficult process that will have huge implications for the representativeness of the sample, and we discuss how response can be maximised in detail in the next chapter. Assuming schools will be recruited, the next issue will be how to recruit students from the school into the sample. Given the age of the subjects and the sensitivity of the topic it is clearly essential to secure informed consent from the parent or guardian of the children in question. This will involve the school writing to the parent/guardian and providing them with information about the survey. This information should, at minimum provide details on:

- the purpose, nature and content of the survey
- the funders of the survey
- the way in which the survey will be implemented
- the uses to which the survey will be put
- the nature of their child's participation in the survey and what this will entail.

In addition to providing the *information* necessary to allow the parent to give informed consent to their child's participation, the letter from the school also needs to provide the mechanism through which consent can be exercised. There are two options: standard procedure in much school-based research is that the parent can 'opt-out', but in research in an area as sensitive as the envisaged study it may be necessary to provide an 'opt-in'. The difference is crucial and could have a large bearing on the response rate and representativeness of the sample. A pro forma slip with an opt-out choice assumes that if the parent does not return the form then they are willing for their child to take part, whereas with an opt-in, unless the form comes back in the affirmative, the child cannot take part. As a large proportion of such forms never make it back to the school, the assumption of an opt-

out would lead to substantially higher response rates whereas an opt-in could have devastating consequences for the sample size and structure. For this reason the opt-out method would be preferable from a researcher's perspective, but the sensitivity of any KAB survey of young people could mean that an ethics committee may see it as essential that the researchers obtain full informed consent, including an opt-in from parents, before involving their child. This question would therefore require considerable thought before the ethics application and fieldwork began.

As well as gaining parental consent, it should also be remembered that researchers will need the consent of young people themselves before they will take part in any survey. The National Children's Strategy (NCO 2000) states that children should, where possible, be directly involved in research concerning them and that at a minimum they should have the opportunity to give consent and voice their opinion on research. In the next chapter we discuss the implications of this for the manner in which any KAB of young people should be structured.

2.3.1 Improving Response Rates

Gaining the consent of parents for the involvement of their children will be essential to the project and recruitment will be substantially improved if the materials that are used when contacting parents look professional and make a compelling case for the involvement of their child. We would suggest that the services of a copywriter and, possibly, professional communications/PR company be secured in preparing the information packs for the parents/guardians of the target respondents. These should be professionally written and designed in such a way as to maximise the likelihood of the parental agreement in allowing their child to participate in the survey.

2.4 Implementation

Once the school-based sample has been selected the survey would be implemented within the school itself. There are two methods through which the survey could be completed in the school. The first would be the standard method of face-to-face administration, where a research worker would interview the child one on one. This has the advantage that the survey can be more complex and is not limited by the literacy of the respondent, but it has a number of drawbacks. First, in areas where the research questions are personally sensitive, face-to-face interviews can lead to high levels of interviewer bias, the direction of which depends on the characteristics of the person carrying out the interview. In the adult KAB study currently underway, this problem was approached through the use of telephone interviewing, which proved very effective - but this could not be used in school based interviews. Second, face-to-face interviews are also considerably more resource intensive and would require a very substantially larger budget for a given number of interviews.

The second option is to use self-completion questionnaires. This method affords the respondent a higher level of anonymity and perceived confidentiality and so leads to higher reliability and validity; it also costs substantially less per survey to administer because a single researcher can collect a large number of questionnaires over a relatively short amount of time. However, the technique also has the drawback that the instrument used must be simple to complete and avoid filtering of even the simplest kind. Literacy is also a serious issue, particularly in surveys of young people whose reading and writing skills may be poor.

Methods have been used to limit the impact of poor literacy such as administering the questionnaire using a personal stereo and headphones, but even here the respondent needs to have a basic literacy so that they can mark the response sheet.

It is possible that computers could be used for self-completion surveys. This has the advantage that the survey could be considerably more complex as the computer would deal with the routing, but has a similar drawback to written methods in terms of those with limited literacy. Current lap-top computers also have the problem that the screen tends to be vertical which allows others to see what has been typed on screen, although it is possible that some form of 'tablet', flat panel PC could be used instead. It is clear that the use of laptops or tablets would have very substantial budget implications for administering the survey.

If self-completion surveys are used, these would be completed under examination–like conditions or so-called group self–completion, with facilitation from a number of research staff. A number of research staff would come into the school and respondents would be brought together in a sports or PE hall. The researchers would explain the survey to the respondents, distribute questionnaires and answer queries regarding the completion of the survey. They would then collect completed questionnaires and return them to the research team for analysis. This approach to completing questionnaires is most cost-effective and has been implemented with great success on numerous occasions by the ESRI on a range of school-based surveys.

One very important issue that would need to be examined would be whether the research worker would deal with the class alone or whether they would be accompanied by a teacher in the classroom. Ideally, teachers should not be present as this could lead to answer contamination if the children believe that their answers may be seen, but this may not be practical in schools where there are discipline issues.

An important aspect of the self-completion approach is to ensure that a distinction is made between the school and its teachers and other staff on the one hand and the researchers on the other. In implementing this methodology one should make it as clear as possible that the external facilitators (researchers) who are assisting in completing the survey are independent of the school and are in no way linked to the school. It is important to continually re-emphasise to respondents that none of the staff in the school will ever see any completed questionnaires. Completed instruments should be collected by the facilitators/interviewers and sealed in envelopes in front of the students on completion of the survey. It should be made clear that the sealed envelopes will be returned to the research team for analysis. Further, no student identifier should be used on the survey and this should be explained to the respondents. Accordingly, one can assure the respondent that it would not be possible for anyone to associate his/her answers with the actual respondent. Such procedures are simple to implement and may minimise bias and inaccuracy introduced to the survey results from a fear of being identified or pressure arising from either peer groups or social conformity.

2.5 Support Structures for Participants

An important aspect of the project would be the provision of appropriate support structures, which could be used after the survey by teachers of pupils who require assistance or advice in responding to issues that may arise as a result of the survey. Participation in the survey may

raise issues for some respondents. For many pupils these may be relatively straightforward factual questions aimed at eliciting information on topics which were included in the survey but about which respondents may have very limited knowledge. In contrast, participation in the survey may also raise very serious questions regarding previous practice, experience or abuse. Providing some form of structures for support, assistance and counselling services will be necessary as part of the infrastructure of the survey process. This might involve a national telephone "hotline" number for respondents, teachers and parents who wish to discuss any issue arising from the student's participation in the survey. One aspect of this telephone "hotline" would be fast-track access to counselling services where requested.

In this context one must give due consideration to the question of reporting. Procedures and protocols must be passed by the ethics committee in advance of the project to address the issue of possible reporting of certain experiences if they are brought to the attention of those involved in the implementation of the research. There are a number of different levels of personnel involved here. At one level there is the teacher, principal or others employed by the school. Disclosure of past experiences or incidents to those employed by the school is subject to mandatory reporting procedures. The second level of personnel is the facilitators/researchers/interviewers and others engaged in carrying out the project. Reporting requirements in respect of disclosure to this group are not so clearly defined. These would have to be worked out in detail with the ethics committee, who would give approval for the project including contingencies for any likely scenario. We would point out that the issue of reporting is effectively a limited breach of confidentiality. Given the potential consequences for all concerned this is clearly not an issue which can be treated lightly and will require most serious and rigorous consideration by researchers, steering and the ethics committees for the project.

2.6 The Questionnaire

The questionnaire which will be administered in the survey could address a large number of issues, but in designing the survey instrument the researcher should be sensitive to the developmental range across children aged 14 to 17 years of age. Ideally, all information of interest would be gathered for the entire age range, but 14 and 15 year olds may be perceived and, indeed, may be very different to 16 and 17 year olds in terms of general maturity, knowledge of sexual issues, ability to synthesise, analyse and interpret information etc. The emotional, psychological and developmental differences between the 14/15 year olds on the one hand and 16/17 year olds on the other may be such that the research team should consider developing two questionnaires – one for each age group. The questionnaires would respect the different levels of development of both groups. Whereas the instrument developed for the older age group may contain the full range of research questions, including direct questions on sexual behaviours (to the level deemed appropriate for this age group), the instrument developed for the younger age group could leave out certain questions that are deemed too explicit or unsuitable. Accordingly, in designing the instrument to be used in the survey one must be sensitive to the potential impact on subjects (albeit unintentional) of presenting them with a set of explicit and intrusive questions. With this in mind the ethics committee assembled for the project will need to assess whether different questionnaires should be developed for the different age groups. If so, the two instruments would need to be highly harmonised to the point where it would be possible to derive comparable estimates of shared issues. We note that this was the approach used by Dunne et al. (1997) in their study

undertaken on behalf of the Cork Alliance. As noted above in our review of previous research, this approach was decided upon after the initial pilot and was developed in response to the reaction to the pilot experiment.

From a researcher's perspective, having one instrument that includes questions on knowledge and behaviours as well as attitudes and beliefs would be preferable, as some of the questions in the area are around the sexual behaviours of younger teenagers. This approach, however, may not gain much support from parents, guardians and teachers; it may increase the acceptance of the survey if two separate, age-sensitive instruments were developed. To be able to say that one is adopting this approach may increase the "buy-in" from parents/guardians who could only interpret this as an attempt to minimise any potentially adverse impact on younger respondents. This is another area that would greatly benefit from an extended development phase to the project and extensive pilot testing.
As researchers, one of the basic ethical principles which we must adhere to is so-called "non-maleficence". This specifies that our work should not cause harm or undue risk to subjects. The research should not adversely impact on the physical, emotional or psychological well-being of respondents/participants or their families. In this context we must be aware of the possibility of causing distress because of the nature of the information sought or the methods used to record it as well as possible consequences of feelings triggered by the questions asked. These, and the other issues flagged above, should be pursued with the ethics committee for the project.

2.6.1 School-level Information

One area that has never been assessed in the Irish context is the extent to which the school has an impact on pupil behaviour above and beyond the characteristics of the pupils who attend the school. This is a problematic issue to investigate as it may be that schools have a particular intake of pupils who are more likely to behave in certain ways or believe certain things, and it is difficult to separate these correlated factors. A statistical technique known as 'multi-level analysis' has improved considerably in recent years and it is now possible to examine a range of questions about the independent effect of the school after controlling for the make-up of the young people within the school. For example, we know that deprivation and lower social class is associated with earlier sexual debut, but to separate the independent effect of the school (say the manner in which it teaches RSE) from the fact that most of its intake comes from unskilled manual backgrounds we would need to hold the make-up of the pupils constant whilst we analyse the school effect. This can be achieved using multi-level models.

Given this, it would be useful to collect data at the level of the school which would be shared by all respondents at that school. This information could be gathered through the principal or teachers (e.g. How may hours of SPHE/RSE are taught per year? What subjects are covered?), or the researcher could gather the data directly from observation at the school using some form of pre-coded instrument. There would be many issues that would need to be resolved in carrying out this kind of research, but it could provide very important data for analysis.

2.7 Sample Size

Survey sample size depends on two factors: the variance and incidence of particular groups or behaviours that need to be surveyed and the budget for the project, but the overall aim should be to have a large enough sample that the data can be disaggregated to a sufficient extent. More interviews are always regarded as better, but the marginal value of each additional interview after a particular point becomes debatable once a minimum size for each sub-group has been reached. The overall aim of the sample design is to achieve a representative statistical sample of the population with enough respondents in each important sub-group to be able to make reliable generalizations about their attitudes, knowledge and behaviour. In the case of a KAB survey of young people there are two distinct samples that need to be acquired – the school-going sample and the 'early-leaving' sample. We deal with the latter in Section 2.8. For the school sample it will be necessary, at a minimum, to have enough respondents that the data can be disaggregated by sex and by the four years of the age range. The chief concern is to minimise the confidence interval around any population statistic that is produced so that a robust estimate of the significance of the finding can be made. As Table 3 shows, though, even with a sample of 1000 respondents, the 95% confidence interval is already of the order of 3% assuming a 50% prevalence.

In the first column in Table 3 below we outline the estimated 95 per cent confidence interval as an incidence estimate of 50 per cent for various sample sizes assuming simple random sampling (SRS). Using SRS techniques means that the sample design has a design effect of 1.0. As one departs from a Simple Random Sample design one increases the variance of estimates from the survey.[10] This increase in variance is referred to as design effects. A two-stage sampling design based on the school as the PSU and child as the sub-element or sub-unit within the PSU would have a design effect of the order of 1.6. The 95 per cent confidence interval on a prevalence of 50 per cent for any given characteristics at different sample sizes is given in Column 3 of Table 3.

Table 3: Confidence Intervals for Different Sample Sizes

Size of sample	Design effects of: 1.0 95 per cent confidence interval	1.6
20	21.91	27.72
100	9.80	12.40
120	9.00	11.38
500	4.38	5.54
1000	3.10	3.92
3000	1.79	2.26
5000	1.39	1.75
8000	1.10	1.39
10000	0.98	1.24

Given this, we would recommend a sample size of the order of 10,000, if feasible, for the school-going sample. It should be remembered that if the data are to be disaggregated

[10] *Strictly speaking the design effects (DEFF) of a complex sample design is defined as the ratio of the variance of the estimate derived from the complex sample design to the variance of the estimate derived from a simple random sample of the same size.*

further than the age/sex breakdowns just mentioned this will have implications for the confidence intervals involved and precision of the estimates.

In terms of the design considered above for the school-going population we discussed a two-stage approach with the schools being the primary sampling unit and the pupils being the secondary unit. There are a total of 750 second-level schools in the country. One should sample from approximately 170 of these to ensure as broad a spatial spread as possible of respondents across the country (see above). This would mean that we would have an average of approximately 60 pupils per selected school for a sample of 10,000 pupils. One of the main advantages of this sample design (apart from its statistical characteristics) is that the marginal costs of the additional completed sample are relatively low.

2.7.1 Spatial Disaggregation

As we will go on to discuss in the next chapter, there is a substantial need for data on teenage KAB issues on a sub-national basis. The change in health service governance makes the exact nature of this disaggregation uncertain at present, but among policymakers there is desire to have data that can be used to tailor the policy response to regional concerns. We would point out that although the sample envisaged above is comparatively large, there are limitations to the extent to which it can spatially or geographically disaggregated. Discussions with the incoming Director of Population Health in the new Health Service Executive suggest that the new regional structure of four public health service delivery areas will be the main disaggregation within which it will be useful to have data. Four regions will mean population sizes of around one million people, but the argument made was that, in general, there are no economic and cultural cleavages within these regions as long as Dublin and the surrounding area make up one of the regions. We discuss this issue in more detail in the next chapter, but for the moment, if a sample of 10,000 is disaggregated into four regions this leaves 2,500 completed cases per region (on average) for analysis. Any attempt to provide age and gender differentiated prevalence levels of sexual experience from a reduced sub-sample of that size would obviously leave very few cases for analysis in many of the relevant cells. The problem is to some degree compounded by the two-stage sample design that is based on the schools. If a sample of 170 schools is selected this gives (on average) only 43 schools in each region – each with 60 respondents. This would limit the extent of disaggregation which could be carried out on the data.

The unavoidable implication is that if disaggregated sub-national estimates are required, this will entail collecting a larger sample and to a certain extent replicating the national sample in each regional unit, whatever that may turn out to be. This has cost implications, made worse by the fact that increasing sample size in each region is more complex than simply sampling more pupils in each school. More schools would need to be added to the sample as well so that the primary sampling units (PSU) would increase in proportion to the sample which would increase the marginal cost of each survey collected. If replication is attempted within health regions this should not be on a sample of less than 8000 individual pupils in each region based in 130 schools. This will yield a sample which can be disaggregated into four age groups and two sexes with a minimum cell size of 1000 individuals and a confidence interval of +/-3.92%.

The views of key stakeholders on these issues are considered in the next chapter.

2.8 The Early School-leaver Sample (ESL)

As explained at the outset to this chapter, the division of the 14-to-17-year age population into a school-going and non-school-going group essentially means that any study will actually be composed of two surveys, although these will be intimately linked as those missing from school (and aged less than 16) on first and subsequent visits will be in scope to be interviewed at home in the ESL sample. This means that if a sample of ESLs is to be studied this will have to occur relatively soon after the schools survey, unless the two studies are completely divorced and a new sample of those absent from school on a particular day created at a later date. This option would have cost implications but may be preferable if it was felt that a single research team could not carry out both studies in such a short space of time.

We have already examined the school-based survey in detail, including the sampling frame, sample design and implementation. In this section of the chapter we examine the same issues except that here they relate to sampling 14 to 17 year olds in the non-school going population. Section 2.2 discussed the fact that the picture of discrete school and non-school going groups was actually somewhat misleading. Approximately 13,000 young people will, quite legally, leave school at 16 and these form a discrete group that can be surveyed, but there is a far larger group of young people - some 37,000 - who will miss 20+ days of schooling per year and who may or may not be observed in a survey of the school population. Certainly, this group would have a lower probability of being sampled than the general school population, and the probability of sampling would be inversely proportional to the number of days that the young person was absent from school. We have the difficulty, however, that the under 16 population of ESLs is actually very complex, with some almost totally absent from school, but some missing little more than 20 days from school. This means that if a survey is designed whose sole aim is to sample those aged under 16 who are not at school for 20+ days, this population will substantially overlap with the main school population. For this reason it makes more sense to try to integrate the under-16 ESL sample into the main schools study where possible. For example, it would be possible (but costly) for the researcher to return to a school after some period to complete the questionnaire with the pupils in the target sample who failed to complete it on the researcher's first visit to the school. This would require that the researcher get a list from the school of those absent from the school on the day of their first visit. When the researcher returned to the school they would need to establish whether the young people were now back in class and if so, follow the same procedures as before, except this time selecting specific pupils from classes. Where the child is not available on the second or subsequent visits or has left school permanently a second methodology based on a visit to the student's home address may be needed.[11] This methodology could be made more sophisticated with the addition of school information on the teenager's past attendance. For example, where absence in the past is quite low it is likely that the individual's loss from the study will not be a serious bias to the sample. However, where that person has a high truancy rate it is more likely that they are systematically different from the general body of second-level students, and their inclusion in the study is more important. Access to school information on absenteeism would allow this more sophisticated selection to be carried out.

11 This, of course, would mean that the school would have to provide the names and addresses of the pupils in question; this has data-protection implications and would need to be investigated as part of the set-up phase of the project.

Where a home visit is required, the methodology required to collect information now resembles that used for early school-leavers who are aged 16 and over. We discuss this in the next sections.

2.8.1 The ESL Sampling Frame and Sample Design

Unlike in the schools sample, there is currently no easily accessed sampling frame (i.e. a population list) of ESLs aged 16 or over. This means that the only option would be to attempt the same type of 'sift' survey which was suggested in Section 2.2. As already suggested, this would be expensive and time consuming and it would be much more preferable to draw on some other listing. To this end we are investigating whether or not the Department of Education and Science could identify early school leavers over the two years preceding any survey. To effectively provide such a list the Department would have to be able to identify early leavers each year according to the age at which they left the school system. The feasibility or otherwise of this approach is currently being explored with the Department of Education and Science.

If a sampling frame can be accessed this would allow a sample to be drawn; similar techniques to those discussed in Section 2.2 can be used to construct a stratified sample. For example, regional coverage would require that a sample be drawn in each regional area and this would require a regional stratification. We will come back to the mode of administration shortly, but it is likely that a home visit will be required and this can entail more than one visit to the house before contact is made. Given this, tight clustering of the sample is necessary so that travel expenses are minimised. The absence of any other information in the sampling frames available makes it unlikely that any further sample stratification could be used, although stratification by sex would be possible given that the name would be known. This may be important if non-response becomes higher in one sex compared to the other, although to a certain extent this can be dealt with in post-fieldwork weighting.

2.8.2 Sample Size

Given that the non-school-going or 'early-leaver' sample is likely to differ significantly from the school-going sample and given that ESLs are an important population from a policy perspective it seems logical that the sample gathered should be larger than that which would be expected were the sample simply to be pro rata the population. However, this would have significant resource implications, as face-to-face interviews would be required for all those aged 16 plus and an unknown proportion of those under 16 (i.e. those who are nominally still part of the school-going population but have poor attendance). A sample of 1000 would only yield 125 respondents in each of the age/sex cells given in the example above. An argument could be made that respondents with similar characteristics aged less than 16 will be present in the main (school-going) sample and this would allow a smaller proportion of this group to be sampled, but steps should be taken to ensure that an adequate sample of 16- and 17-year-old school-leavers is available so that robust analyses can be made. We would suggest that a sample of 1000 be the minimum, with 80 per cent plus of this sample being made up of 16- and 17-year-old school-leavers, although the numbers of those aged less than 16 who would be within scope (missing from school on the day of interview of the schools survey and any follow-up visit) is at present unknown.

As in Section 2.7.1, if regional disaggregation of data is required this will entail collecting a sample in each region comparable to the national sample size suggested above - with obvious resource implications. If, as already suggested, there are four public health regions this would mean a stratified and clustered sample of 4000 respondents, which is a quite substantial undertaking. Although cost is an important consideration, reducing the sample below 800 in each region would yield unacceptably high confidence intervals.

2.8.3 Implementing the Early-leaver Sample

There are two main methodologies that could be used to collect data from the ESL sample, but both would require a visit to the home of the respondent. It would be possible to use mailed questionnaires since the names and addresses of the respondent are known, but mailed questionnaires have low response rates in Ireland, particularly among lower social class/income groups who would make up the vast majority of those who leave school before leaving certificate (as seen in the final sample achieved for the Slán survey – Kelleher et al. 2003). As we will go on to discuss, literacy is also generally lower in early school-leavers and this has important implications for postal surveys that demand a relatively high level of literacy, even in their most basic forms. Given these problems, a home visit would be preferable as this would increase response rates and allow the researcher to put conditions in place that will aid completion by semi-literate respondents. For example, in recent years innovative methods of collecting information have been developed, which minimise the level of literacy demanded, such as using personal stereos and headphones. Implementation using such innovative techniques obviously has budgeting implications.

It may be, though, that the most difficult problem encountered when trying to implement a survey among ESLs is the practical and ethical difficulties in interviewing these vulnerable young people in their own homes. First of all it would be desirable, even with a self-completion survey, for the respondent to be alone - this may not be possible in the homes of lower income groups who tend to have larger families and smaller homes. Second, even if the interviewer can find a separate room in which to discuss the survey with the respondent this presents difficult ethical and child protection issues. For example, for the interviewers' own protection they should have another witness present. For research and other reasons, including non-contamination of information recorded, this should preferably be another researcher. But one-to-one contact with the respondent also raises important child-protection issues since information could be revealed that would place the interviewer in a very delicate situation. For example, should the respondent reveal under-age sexual contact and particularly abusive contact? If so, this would place the researcher in a very difficult position of responsibility regarding reporting. The implications of these risks and the protocols to handle them would need to be a large component of the development and ethical process. Once again, an unfortunate consequence of the need to have a witness present and the associated "doubling up" of interviewers/researchers for the surveys in question has serious budgetary implications for the project.

2.8.4 The Questionnaire

As the instrument to be implemented in schools would already be fairly simple it is likely that this could also be used in the ESL sample, but the very different situation of the ESL sample could suggest that a new instrument tailored just to this group be developed. For example, it may be that the role of living standards and deprivation, or perhaps future orientation and

aspirations, is more important for this group, in which case the instrument would need to have more developed sections on these areas. Whatever the content, the instrument would need to be simple in design - with the minimum of filtering - and basic language that would be suitable for those with a basic level of literacy.

2.8.5 Support Structures

As with the school-going sample, the issue of support structures are crucial. Whilst carrying out the interview the field workers will be able to offer some resources for issues which the respondent brings up. Although interviewers should never counsel, they can be trained to guide respondents to other sources of support and can provide numbers as well as preferential access to counselling if necessary. For example, during the SAVI survey any person who felt that they needed counselling was given an immediate appointment. Other protocols such as information leaflets would also need to be developed for instances where a respondent only discovers their need for support once the interviewer has left.

2.9 Pilot Testing and Development

In a number of sections we have stated that a long development period would be essential for the successful completion of a KAB study among young people in Ireland. We will discuss this more in the next chapter, particularly in terms of gaining support from national organisations, but from a methodological and ethical standpoint alone, it is clear that a period of around a year would be required before any fieldwork could begin if the issues that have been identified so far are to be sufficiently dealt with. For example, the ethical questions of the study such as whether to use an opt-in or out, whether different instruments should be used in different age groups and the types of questions that would be admissible are all important questions that will take extensive and delicate work to resolve. The issues are not just technical but ethical and political and this will ultimately dictate whether the survey can be carried out at all. Among the ESL sample particularly, many ethical issues would need to be resolved around interviewing respondents in their own homes and exposing field staff to difficulties related to child-protection and personal safety (the latter being exacerbated by the nature of the survey in question). Even without these issues, it is likely that the process of contacting and garnering support in national organisations and then contacting schools and gaining participation will take at least a year. The sensitivity and importance of the issues involved in a national KAB survey of young people mean that the development phase could be protracted, but patience is essential if problems are to be avoided in the main phase of data collection and report production. It is important, for instance, to ensure as far as possible that those with concerns about a KAB survey of young people have an opportunity to voice them, to hear how these are being addressed and to see the benefits of the survey alongside the acknowledged challenges and concerns. This means that the first task, early in the development phase, is to consult with the national organisations of school management, principals, teachers, parents and young people. If most of these groups can be persuaded of the need for the survey and the merits of the approach, broadly speaking, before researchers try to gain cooperation from management, principals, teachers and parents in individual schools, this will lend a great deal of weight and momentum to the project.

As in other sensitive areas of research, it is important to hear the concerns of the relevant group(s), to take on board and incorporate suggestions which will address their concerns and also to clarify from the experience of researchers how many of the concerns expressed are

manageable. The aim will be to develop the best possible protocol to address the concerns of any reasonable person in conducting a Teen KAB survey. The starting point for discussion will be the "what" and "how" [specifics about the nature and delivery of the survey] rather than the "if" [should such a survey take place]. From a policy perspective, to paraphrase the view from health research agencies: "Today's educational research is tomorrow's educational service." Not researching teenage sexual health issues today means building tomorrow's educational strategies in this area without up-to-date information on what teenagers think and do.

Once discussions with national organisations of stakeholders are nearing completion, work should focus on another important constituency where support should be developed before sampling begins: the main political parties. Their general party-level support will be required to ensure the subject is handled with mature discussion. It would be most regrettable if any one politician in either local or national government could make capital out of uninformed opposition to the project. Ultimately, the project cannot afford to begin until it is felt that broad-level support is available to the project team. The school and individual student participation rates of the project will determine how useful the information obtained can be. Any broad unease will increase the chances of many people opting for the 'safe' non-participation route.

With the broad support of stakeholders and opinion formers, the Steering Committee for the project will be in a better position to both respond to and shape media coverage. This should be limited, as far as possible, before organisational and political support has been achieved, but is essential later for drawing groups a priori opposed to a KAB survey into debate and forming public opinion. Instigating and guiding the presentation of a Teen KAB survey in the media could be a difficult task, and the Steering Committee of the project should have access to the services of professional media consultants.

Whilst these more principle-level issues are being dealt with, there would need to be a separate complementary stream of development work undertaken to deal with the ethical and technical questions to be resolved before the surveys could go into the field. Among the ESL sample particularly, but in the school context too, the issue of literacy among respondents is a problem and will require the development of techniques that have not been used in Ireland before. The acceptability of an opt-out sampling strategy will need to be debated. Obtaining sample frame information for the ESL sample will also be difficult and this will require negotiation with a number of public bodies.

2.10 National Management of the Project

The very sensitive nature of this project and the legitimate concerns of the many stakeholders involved mean that there will be a variety of preferences for the appropriate approach to the issue. This will result in procedural and operational challenges. A common goal, e.g. 'to best support young Irish people in their sexual development by evidence-led policy and practice', must be the banner under which these many differences are ultimately accommodated. To fail in the delivery of a sexual health evidence base on young people that is local to Ireland is to concede that planning support for sexual health development for the next generation will be on the basis of 'roadmaps' developed elsewhere and that this is an acceptable standard from which to work. Thus, whatever the reasonable beliefs about the merits of differing

approaches to this exercise, all of those who fundamentally believe that this is the way forward (from policymakers to parents) will need to work together to ensure it happens. It must be acknowledged that while there will be many views on the relative merits of differing approaches, there is also the view that no such exercise should be undertaken. This latter approach conflicts with the knowledge and evidence-based culture within which our current public service seeks to operate. The challenge is to ensure that all of those who philosophically support moving forward on the basis of a clear understanding of the perspectives and experiences of today's young people work together to see that this philosophy can be operationalised.

Consultation is the key to progress on the issue. The consultation process needs to be clearly outlined. An open announcement and call for submissions on how to develop the project (what approaches to take, what aspects to focus on, what sensitivities to consider) should happen in parallel with specific consultation plans with the key stakeholder groups (those will include boards of management, principals, teachers, students themselves, parents and their representative groups). Part of the process will be to outline reasonable timeframes for its closure. Consultation must occur in the context of what, rather than whether, the final survey will deliver. Hence reasonable but definite sign-off dates will be an essential commitment by all who want to see the project realised. This consultation process is expected to take a year at most. It will require considerable commitment of time and flexibility from senior staff of each of the agencies involved in delivery of the survey. Roles for the management and steering groups need to be clearly defined and timely ongoing liaison between them maintained. The steering group needs to have a wide set of expertise and to consider the 'representative' nature of its membership as one to facilitate the best possible survey for all concerned. Members of the steering group may serve as important links to particular constituencies in the project consultation and delivery process. However, the steering committee would need to be aware that considerable time on their part may be required during the consultation phase. Appointment to the steering group should be in the context of these considerations.

The research team on the project needs to work with partners towards constructive resolution of the challenges to be addressed. In this context, appointment of the right project leader is a key factor in the delivery of the project. A detailed timetable needs to be developed and agreed at the outset for the following phases: consultation and development; piloting; fieldwork; analysis and discussion; and subsequent presentations, dissemination and consultation. The period from the end of fieldwork to presentation of the information (and its possible implications) needs to be adequate to the essential task of doing justice to the information collected. While the information-collection aspect of the project has its obvious sensitivities, acknowledgment must be given to the importance of the end phase of the project. This needs to ensure the best and most complete representation of the research findings from the outset. Representation of the findings in a way that can be sensationalised, or used to blame one or other group in society could be seriously damaging to the project and far beyond. Thus a process beyond the completion of the project, where information can be represented clearly in terms of implications for practice, needs to be outlined. This has implications for the project itself. While some general implications of the findings can be highlighted, the project findings must be seen as the basis for partners in health and education, rather than researchers, to plan their sexual health initiatives. One way to initiate this process is to plan for a major meeting to introduce the findings and to have an invited

panel of stakeholders reflect on the first consideration of findings. From this a process of engagement of policy agencies with stakeholders needs to be established. The ongoing role of steering group members in this 'roll-out' phase of the implications of the findings is worthy of consideration at the point of selection of the steering group membership. While all of these procedural issues will be worked on with the research team and funders, the views of potential researchers on these issues should be an integral aspect of the project tender. In sum, the procedural and operational challenges in delivering on this project are considerable. The wider implications of failure of this model of direct consultation with young people through schools are considerable. Thus, whatever investment it takes to ensure the success of the project is both necessary and well spent if this is to become a model for good practice in research involving health-related issues for young people in Ireland in the coming years.

Chapter 3: Consultation with Stakeholders

3.1 Introduction

Consultation is an important part of any study planning process and is used increasingly in the Irish setting for large studies. Consultation can achieve a number of objectives. These include providing an information forum (where those consulting can explain the overall aim of the project to stakeholders in a facilitative environment), identifying areas of agreement across stakeholders, and focusing on the issues that are less clear, more difficult or have less consensus. In this context, as has been outlined, there was already much experience in the Irish system of conducting and being the recipient of KAB research on young people at regional level. Thus the consultation days aimed to identify priorities for a KAB survey, preferred methods of surveying students, possible enablers and barriers to conducting a survey and how to address these matters to achieve maximum consensus and support for a usable and useful survey.

3.2 Identification of Stakeholders

The research team compiled a list of stakeholders, with advice from the Crisis Pregnancy Agency. Invitations to participate in a national consultation exercise were issued to 94 organisations or individuals with an interest and/or relevant expertise in late 2004. This list comprised a wide range of stakeholders in the health and education sectors, including representatives from statutory organisations such as the Department of Health and Children and the Department of Education and Science and Science; their regional infrastructures (including the [then] health boards and Social and Personal Health Education programme staff); relevant voluntary organisations representing schools, parents and young people; and researchers in academic institutions. While a complete list of all possible stakeholders is very difficult to ensure, given the wide constituency and diverse contact points, the aim here was to consult widely and openly. (A full list of groups invited is presented in Appendix 1.)

3.3 Consultation Process

Each stakeholder organisation was invited to send a representative to a national consultation day to be held in Dublin in January 2005. A list of possible priority topics for discussion at the meeting was circulated with these invitations. Organisations were asked to rank topics in order of priority for discussion at a consultation meeting, to add additional topics where appropriate and to return this with confirmation of attendance to the research team. This feedback was collated and the order of prioritisation was circulated to attendees in advance of the meeting. A six-page briefing document summarising the general research issues and Irish research background on adolescent sexual health to date was also circulated in advance of the meeting. Because of the large invitation list and potential number of attendees, two consultation meetings were scheduled [26th and 27th January 2005]. These were held in Dublin from 11.00am to 3.00pm on 26th and 27th January 2005. While both days had a mix of both 'health' and 'educational' attendees, one day focused predominantly on the health constituency and the other on the education constituency. Differing priorities in terms of themes to discuss emerged by this mechanism. This allowed for more specific discussion of the areas of most concern for differing groups, e.g. discussion of sample sizes so that information can be locally applicable for the health sector and discussion on how to support

teachers in dealing with emerging issues after the survey for the education sector. Each topic was discussed by both groups but in differing order of priority.

A total of 34 participants attended over the two consultation days. They represented government departments, public health and health promotion services, community services, child and family services, SPHE, teacher unions, school organisations, parents, organisations representing marginalised youth, and academic researchers. The days were facilitated by two members of the research team (Hannah McGee & Richard Layte) and supported by a member of the Crisis Pregnancy Agency (Mary Smith). Two stakeholders not invited to the consultation meetings were contacted subsequently for their views. Firstly, the incoming Director of Population Health of the Health Service Executive was consulted (this post and the Health Service Executive were established on January 1st 2005 after the initial invitations to participate.) Secondly, the Union of Second Level Students was consulted. This organisation was not identifiable by pre-consultation search strategies of partners in education (such as listings under the National Youth Council of Ireland) but was brought to the attention of the research team through the consultation days. One written submission was received (a team response from a HSE Health Promotion Department) as was notification of an upcoming relevant publication from the National Youth Council of Ireland – a Sense and Sexuality resource pack for young people out of school.

3.4 Consultation Findings

The topics discussed by those consulted can be organised into three broad groupings:

- **WHO** will use the survey findings?
- **HOW** to do the survey?
- **WHAT** is the focus of the survey?

Issues raised under these three broad headings are outlined next (these are organised in a logical sequence rather than in order of preference for discussion on consultation days).

3.4.1 Purpose of Survey - "Who will use the survey?"

Discussion on these issues focused on the various stakeholders with an interest in results to come from the study.

Survey end users

The information collected was seen to be important at national and regional level and to a number of constituencies:

- The Department of Health and Children and Department of Education and Science and Science were seen as very important users of the information collected.
- Agencies and services working on behalf of these two Departments, e.g. the Social, Personal and Health Education (SPHE) Programme, the Health Promotion Unit, the National Children's Office and the Crisis Pregnancy Agency (also seen as important stakeholders).
- Partners in education (school, teacher, parent and youth representatives) needed to be included.

Groups to be consulted

Discussion of possible users overlapped somewhat with stakeholders who needed to be consulted in order to enable the survey to be conducted:

- 'Teacher' partners include teacher unions and representatives of principals.
- 'Parent and school' partners include national parent groups and groups representing types of school .
- Youth representatives include national youth organisations, secondary school, organisations and representatives of out-of-school groups. These include the National Youth Council of Ireland and YouthReach Programmes. Other possible youth organisations to consider in terms of representation on a Steering Group are youth county councils, Dáil na nÓg and health cafes as developed in the Western Health Board and the Donegal Youth Council.

The value of a national survey was strongly endorsed. As has been outlined in the previous chapter, there are many examples of high-quality regional surveys on the issue over the last decade in Ireland. These provide useful advice on how to conduct the survey and what to assess in the Irish context. However, no surveys to date have used a nationally representative sample. It was agreed that:

- Nationally representative data is needed if it is to influence national policy and practice.
- Decisions about resource needs and priorities can only be informed by national data.
- Information about the perceived accessibility of services was needed to ensure youth-oriented and youth-accessible services.

Regional/sub-group information

It was considered essential that information would be both available and useful at regional and sub-group level from any national adolescent sexual health survey. A successful survey would require support of many national and regional agencies and individuals. An unambiguous commitment to ensuring local and timely benefits of such participation was seen to be needed. Some reported that previous experiences concerning access to local data from national surveys had been unsatisfactory and that concerns on the issue needed to be allayed by clear agreements from the outset. It was agreed that:

- Sample sizes needed to ensure regional usefulness of data.
- Timely access to regionally specific data should be built into the survey.

In terms of regional structures, the new structures to be announced by the Health Service Executive were seen as the important unit of analysis needed for useful regional information. It is expected that these structures will be defined by July 2005. Current HSE regional structures comprise a four-region structure with a 32-unit structure, which will provide the delivery unit basis of the service. The delivery unit structure was seen as too small (and too demanding in terms of sample size needs) for regional survey analysis. The value of the larger four-group region was that each region represents about the same population size (c.1 million people). While this was seen as larger than the former eight health-board-region structure, it was proposed that potential dichotomous demarcations within these regions be considered as the units of analysis for sample size calculations (e.g. urban or rural and high

vs. low socioeconomic status – the latter was seen as particularly important). This would in effect create eight blocks similar to the old health board unit size. Within and across these groups the reality or otherwise of regional differences could be evaluated. There was some feeling that regional differences are more perceived than real or meaningful at policy level. It was acknowledged that there may be socioeconomic differences and that the 'East' might differ from the rest of the country in some respects. These issues remain empirical questions, but information from a KAB survey could provide valuable information for the planning of other health-related studies. It was seen as important to establish and demonstrate the value of this wider survey mechanism in a manner that acknowledges a partnership approach. In the light of this, support from national agencies with general and specific interest in a KAB survey of young people could be called upon to assist in delivering this study (both in terms of regional personnel and funding). The HSE appears to be the national vehicle for local delivery of a TeenKAB or similar surveys. In terms of health promotion-type projects such as these, the HSE's Office of the Director of Population Health is the logical home for such activities. The directorship has responsibility for managing the health intelligence function of the HSE. Building research capacity is seen as a major component in achieving this task, and working with existing agencies is one of the mechanisms to achieve it. This work will mainly focus on population health, and sexual health is envisaged as a component, among others, of that intelligence system.

In terms of sub-groups, other ways in which the information could be broken down include features of schools: for instance single vs. mixed sex; religious vs. comprehensive; urban vs. rural; number of pupils (small vs. large); extent of SPHE delivery. The importance of evaluation of information by these criteria would need to be prioritised by the research steering group in advance of the survey. Discussions highlighted the sensitivity of principals, teachers, and parents to comparisons between schools, and many present underlined the need for schools to be anonymous in both reports and data that are made public.

- It was proposed that individual schools should not be identifiable by such a survey.

One important caveat to considering aspects of schools in the analysis of survey findings was raised in discussion. Schools are one (convenient) focus when considering influences on adolescent sexual health issues. It is proposed that the survey be conducted through schools. Analysis across students can thus be conducted at a school level. It is, however, vital that the other influences such as the media and the family are adequately incorporated into the survey content such that their level of influence can also be considered. In effect this means that:

- Questions about the influence of school, family and media need to be included in the survey.

Many present in the consultation believed that the process of carrying out a KAB survey of young people could do more than just deliver data for policy development. It would also be an important opportunity to build partnerships among those with an interest in health and education for young people. Undertaking a challenging national survey with cooperation from all of the relevant partners, and providing information of great interest to all of them was seen as an important opportunity to build consensus in the sector. The national survey approach to answering important 'research and development' questions about young people

in Ireland could either be greatly developed and strengthened by this exercise or damaged and discredited by it.

It was also felt that greater acceptance of a survey of KAB issues would be achieved if the survey were to examine a range of health behaviours and address issues around the wider welfare of young people. It was thought, for instance, that suicide was a serious problem among young men especially, and that questions on this and other issues could be integrated alongside KAB questions, although it was realised that space in any survey would be limited. In summary:

- The survey process and outcome is a very important opportunity to consolidate partnership among all those with an interest in the health and well-being of young people in Ireland.
- KAB issues could be integrated into a survey of wider health and welfare issues among young people.

3.4.2 Survey Design and Delivery - "How to do the survey"

A number of issues were considered ranging from ensuring the survey has ethical approval, is developed with student welfare as a priority, is negotiated with maximum opportunity to ensure access and thus representativeness, introduction of and conduct of the survey in schools, and management of issues arising in schools from the survey. These are described in the following sections.

Ethical and validity issues

A survey of this type was seen as presenting challenges of an ethical nature, e.g. how to ensure information is sought in a way that it does not upset or otherwise challenge students, how to ensure that the information obtained is valid and useful, and how to ensure that information is analysed in a way that is meaningful, valid and non-judgmental. It was widely held that a substantial development period would be required for the large number of ethical issues to be investigated and resolved. Particular concerns were the nature of the survey instrument itself, whether different versions should be used for different age groups, and the manner in which student and parent consent would be obtained. Even once these issues had been addressed there was a strong feeling that ethical approval should be sought from an established national committee. In sum:

- Issues concerning ethical and data quality (validity, reliability and usefulness) need careful consideration in planning the survey.

Access

Accessing schools is the key to a successful survey. This will need both national negotiation with partners in education and local negotiation with school principals and boards of management (and in the case of VECs, the chief executive officer). Gaining the support of national organisations such as those of principals and teachers was thought to be essential, but the autonomy of individual schools in deciding whether to take part or not also needs to be recognised. This autonomy means that the research steering group and team have significant responsibility to identify and address the requirements and concerns of each

school approached for participation. Gaining the cooperation of national organisations and schools will take time, and this, once again, underlines the importance of a substantial lead-in time to the study fieldwork, since low response rates jeopardise the representativeness and thus the value of the final survey. In sum:

- Access to schools requires national and local negotiation with partners in education.
- Flexibility is needed to facilitate a range of local concerns and needs.

School concerns

To ensure adequate participation, it is important to offer schools an incentive to take part. There are many competing demands on schools and they will be weighing these up in detail before deciding whether to participate in the study. The significant time and cost commitment entailed by participation was emphasised by many at the meetings. Because of this, substantial consultation with principals, teachers and parents will be required in advance of a survey, and consideration will have to be given as to how this can be achieved and its implications for the development time required. It may be, for instance, that a senior researcher may have to visit some schools, possibly even the majority, to facilitate participation. Meetings between researchers and parents (perhaps at public meetings) should also be considered. The logistical demands of undertaking consultation with parents and teachers should not be under-estimated. For example, informing parents by letter, holding information and consultation meetings, distributing and collecting parental consent (or withholding consent) forms, scheduling times and settings for the survey itself and providing any follow-up needed from students, parents or teachers following the survey will take substantial personnel time on the part of the research team. The research team will need time and resources to provide a menu of possible activities to assist in promoting the survey in schools. Teacher anxieties will need to be addressed in the same way as those of parents. The supports that would be required are outlined later. More generally, the research will need to be presented to schools in a way that maximises participation, primarily through the value of the information to be obtained. The use to which survey findings will be put is also an issue. For example, will additional resources be forthcoming for issues identified as most problematic? The presentation of the survey and its unique value will need to convince those who feel that the school setting is over-surveyed with possibly little perceived benefit from some previous research participation. In sum:

- Schools need administrative support in order to participate.
- Schools need to see value in the project and believe that they will be supported in any challenges arising from its conduct.

Supports needed for participating schools

A number of child protection issues need consideration when conducting a survey on sexual issues with young people. Information about under-age sexual activity is a concern for all involved in child protection. The survey itself is expected to be anonymous, so any experiences reported cannot be traced to individuals or schools. Discussion of these issues may, however, prompt young people to seek advice from either research team members on the day of the survey or from teachers, parents or peers in the time following the survey. A detailed protocol of where such queries can and should be channelled (e.g. to parents, teachers or services outside of schools) needs to be developed and agreed with individual

schools. This protocol is to ensure safe and appropriate management of issues if they arise and to provide all concerned with assurance of the appropriate response to any issues which arise as a consequence of the survey. A clear consultation process with students was also seen to be important. This involves a clear introduction to the purpose and requirements of the survey, an outline of students' right to participate in the survey or not (in tandem with parental approval), and a debriefing process. This should reiterate some points and clarify what will happen to the information collected, the fact that it is confidential/anonymous, why particular questions were asked and who to contact if they have concerns or queries as a consequence of the survey. This should be conducted in a manner that acknowledges the partnership of young people. In sum:

- Child protection issues need to be addressed in study protocols.
- Young people need to be involved in meaningful way in all aspects of the study.

The timing of the survey

The school calendar of activities means that requests for participation are likely to be less welcome at specific times of the year. Major exam periods are problematic (any time after Easter is unpopular). Similarly, late spring is a time when exam classes are preparing for 'mock' exams. The autumn and early new-year periods were seen as most feasible for most schools. Flexibility was also seen as important, as individual schools will have differing priorities. The pre-survey consultation period was also seen as needing to be lengthy. Negotiations with partners in education and then with individual schools should be started at least one year in advance of the date at which fieldwork is expected to commence. As already mentioned, this may require researchers and possibly a senior researcher to visit schools during the initial contact phase to increase school participation and such visits may also include consultation with parents. In sum:

- Considerable lead-in time is needed to negotiate the conduct of the study.

Sampling

The importance of true randomisation in recruiting students was discussed. Selection of specific classes in some schools mean that particular 'streams' in terms of educational ability will be selected. Stakeholders advised that it is necessary to assume a 20% absentee rate on any given day. Sampling from the non-exam years was seen as preferable. Sampling issues incorporating these points are discussed elsewhere in the report.

Group survey setting

The challenges of conducting the survey in groups were considered. Space within group settings was considered important to ensure some privacy to students in completing questionnaires. Options to increase valid participation included the presence of a same-sex supervisor [in single sex schools] or a credible group leader from the research team. The issue of teacher presence was discussed. While most considered this could be unhelpful, it was also noted that some schools with discipline issues may require a teacher to accompany the fieldworker into the classroom. The overall message was that flexibility was needed to ensure the choice of the most acceptable solution in each school. A protocol will be needed

for the management of the group survey setting. This protocol needs to consider not just the time management itself but the follow-on period where issues raised from the survey may come to the attention of school authorities, peers or families. In sum:

- The group survey setting was accepted as the most appropriate study method.
- Schools need to be offered some flexibility in terms of the management of the group setting.

School characterisation

The issue of categorising schools was discussed. Questionnaires can be categorised such that later analysis will be able to specify whether the information was from students in a single/mixed sex, religious/non-religious etc school. Other information on location of a school (in terms of economic (dis)advantage and in terms of its involvement in RSE/SPHE activities) was discussed. The merits and difficulties of doing this were outlined. Designating a school as being more or less engaged in SPHE activities was seen as valuable in terms of the overall relationship of those with student attitudes and behaviours. However, it was felt that multiple sources of assessment of this would be needed – principal of school, SPHE coordinator etc – if it was to be respected and seen to be useful as a criterion. Concern was also expressed about the project taking on (intentionally or unintentionally) an evaluation function in relation to SPHE in this early delivery phase of national delivery of the SPHE programme. In sum:

- School characterisation needs to be agreed in a manner that is most useful to all concerned.

Literacy and language

Group questionnaires in school settings should be developed with Plain English criteria. Fieldworkers in the classroom can deal with some questions of clarification. For those sampled outside of the school setting (e.g. in YouthReach programmes), where there may be more difficulties related to literacy, it was advised that consideration should be given to interview formats but also to the separate challenges of the one-to-one survey format [both in terms of the information which will be disclosed and in terms of chaperone issues for the survey researcher involved in sensitive interviews with young people]. It was agreed that the language of the questionnaire should be 'proofed' by young people. Past experience of stakeholder attendees indicated that efforts to be 'trendy' in terms of language used in such surveys were usually counter-productive. Instead, clear unambiguous questions are needed. In sum:

- Time is needed in questionnaire development to ensure the survey is accessible to students.

Validity of answers

Concerns were expressed about the validity of answers to survey questions. Methods of increasing validity included the introduction of the survey by a person with legitimacy. Briefings about the survey were seen as very important. Such briefings should cover factors such as explaining the purpose of survey; young people's right to participate or not; why honesty is important; the importance of asking young people themselves; and the unique

value of the student's altruism in taking part so that a national profile can be obtained. In sum:

- Strategies to increase validity need to be built into study delivery.

Pen and paper survey

The option of CAPI (computer assisted personal interview) was discussed. Since CAPI has 'drop-down' menus, only those questions that are relevant are seen by the participant. Thus, where a student answers that s/he has not had sexual intercourse, subsequent questions (e.g. on age at first sexual intercourse, location, use of contraception) are not presented. One possibility would be a travelling 'survey-bus' equipped with multiple computer assisted completion stations, which could travel to schools and sample classes in units of 10-12 students at a time. While appealing, there was little information available to determine if this was a feasible option. Whatever method was used, there needed to be time to complete the survey by all participants. It was noted that some students would take appreciably longer than others and that this needed to be managed in a way that did not disenfranchise them.

Participation

t-out (rather than an opt-in) system for participation by individual students was strongly advised. This assumes parents agree to have the young person participate unless they provide a signed statement saying otherwise. The experience of schools in other situations was that only about one in three forms are returned (indicating either consent or lack of consent from parents) when information is requested from parents. An opt-out system needs to ensure that all parents know that the study will take place and that they are being asked to indicate if it is not something they wish their young family member to take part in. This can be achieved by sending a letter about the study to all parents. Parents need to feel that they are free to choose participation or not in the study. In sum:

- An opt-out system of parental approval for study participation was recommended.

Sample representativeness

A number of very disparate groups need to be considered to ensure representation. An Irish language version of the questionnaire may be needed. Information on many vulnerable groups will not be collected in a general national survey. As identified by stakeholders, these include but are not limited to those in special schools; those who left school early, including those in post-VEC courses and YouthReach programmes; out-of-home children including those in State custody or on remand and those in 'health board' care; refugee and asylum seekers; homeless young people; and Travellers. Consideration of supplementary surveys to complete information on all young people was seen as needed. A priority was seen to be young early school-leavers. The survey should also consider other sources of information or other opportunities to address these issues so as to maximise the information available in the system without unnecessary replication. An ongoing study on homeless young people (being conducted by Paula Moyock and colleagues at Trinity College) was seen as an example of a useful parallel survey which could complement the information obtained in the main survey. In sum:

- Early school-leavers were seen as the primary excluded group for attention in studies complementary to the main study.

Societal context of the survey

There will be varied perspectives on the value of a KAB survey among young people. Some will see a survey as sexualising adolescents before it is appropriate and of legitimising all of the attitudes and behaviours discussed in it. Others will want issues discussed that are unacceptable to a large proportion of the population. For a survey to be useful in informing policy and practice there needs to be a high level of school participation. The best compromise of differing perspectives thus needs to be found. It is acknowledged that no solution will satisfy everyone in society. All partners who are willing to support the overall principle for a national KAB study on sexual health are to be encouraged to be facilitative in the interest of achieving a national goal. The positive value of the survey needs to be actively promoted in advance by survey sponsors, the survey steering group and team. Important constituencies included politicians, the media and school, parent and youth groups. These groups need to be engaged early in the process if responsible discussion of the survey is to be achieved. In sum:

- Informed partnership is needed from a wide constituency to provide support for the principle and conduct of a national study. This needs investment of time from the study sponsors, steering group and research team.

3.4.3 Survey Content - "What is the focus of the survey?"

Content of study

The balance of a sociological survey [What is the nature of relationships and sexuality in contemporary Ireland?] and a sexual health survey [What sexual behaviours are being undertaken and what are the risks associated with them?] was discussed. The need to ensure that the survey provided some sociological information and was not just a policy-focused survey of 'who does what risky behaviours?' was highlighted. This was seen as important individually for those young people participating (in terms of the messages implicitly given by the questions about what is important in relationships and sexuality), just as it was important collectively in terms of how the information will improve our understanding of relationships and sexuality for young Irish people. Its value will be greatly enhanced if international comparison is maximised in planning topics and questions.

Questions on the influences on sexual knowledge attitudes and behaviours were seen as important. These included questions on where young people get information and how it is valued:

- influence of parent, school, religious, media and peer sources of advice
- media sources used and influence of the media (including opportunities for 'private' access to media – mobile phone and bedroom TV and internet access)
- perceived level of sexual activity among peers / in society.

Questions on young people's attitudes to a range of issues challenging them were identified – these included views on adolescent abstinence and sexual activity, on teenage pregnancy, on sexual orientation, on education concerning relationships and sexuality from family, schools and the media and on the messages they feel they get from society about their sexuality. Awareness of attitudes on these issues was seen as important in fully understanding the nature of sexual attitudes and experiences of young people. The level of investigation of health and social behaviours outside of the KAB area was considered. Being able to relate sexual behaviours to other behaviours such as smoking, alcohol or drug use and patterns of socialising were also considered important.

Agreement about survey content will need consultation with a number of stakeholders. Questionnaire (re)viewing will need to happen at a number of levels. In developing the questionnaire a number of groups need to be consulted. These will be determined by the survey steering group but are likely to include health, education, school, parent and youth partners. A lengthy phase of consultation and piloting is likely to be necessary to ensure an instrument that is acceptable to the broad constituencies. Viewing the piloted and agreed questionnaire is something that individual parents, students or schools may wish to do as part of making an informed decision about participation in the survey. At this point, if a national instrument has been agreed, the decision was seen to be about participation or not. It was not seen to be feasible to have local or individual requests for amended versions of questionnaires once the pilot period has been concluded.

Survey background characteristics: the following variables were seen as important criteria for designating the sample: gender; age; family structure; presence of older siblings; socioeconomic status; geography – urban vs. rural and transport access to urban areas/services; service knowledge and access. Personal educational attainment was raised as a possible variable to include.

Questions on behaviours: the sensitivity of asking questions on sexual behaviour - in particular for junior-cycle students - was discussed. One proposal was to ask only attitudinal questions of junior-cycle students. This suggestion was refuted since the most vulnerable students, in terms of early sexual experiences, would be likely to be in this group. It was considered a lost opportunity if the survey could not document the numbers and types of young people who were at risk because of their sexual attitudes or behaviours. For those who were sexually active, age difference in sexual partner was seen to be an important variable. The intention-behaviour gap was also seen as important, as were influences on this gap. Questions about behaviour needed to be asked in non-judgmental ways and in ways which did not suggest that certain behaviours (or attitudes) were either widespread or normative.

The unacceptability of questions about homosexuality in previous surveys was noted but no decision reached on the inclusion/exclusion of questions in this area. In a parallel vein, questions on emerging sexuality were seen as important since they can be the cause of a lot of concern and distress for young people and a source of vulnerability for them. Those who have had pregnancies or pregnancy scares were identified as an important source of information on the context of risk; and on barriers and enablers to sexual activity, to safe sex, and to advice and services when pregnancy was suspected and confirmed. In sum:

- A wide range of issues need to be considered by the Steering Group and research team when devising the most widely useful and acceptable questionnaire.

3.5 Summary

The two consultation days provided much valuable information about the survey. Those attending the consultation days not only had a great deal of practical experience in working with young people, but many also had substantial experience conducting surveys among young people at regional level. Those working in the health or educational sectors were able to identify the important issues from each perspective. It is interesting to note that overall there was enthusiastic support for the survey from all attendees, with many endorsing the value of having contemporary national data on such an important issue for young people and society.

Chapter 4: Recommendations

Combining information from the research literature and key stakeholders, we make the following recommendations regarding the running and methodological aspects of the survey:

1. It is absolutely essential to implement a nationally representative, statistical survey of children and adolescents aged 14-17 years using a rigorous quantitative methodology. Only by doing so will one be able to create the benchmark statistical information necessary to allow evidence-based policy information in this area. Whilst qualitative and partial quantitative research provides important inputs in this field, a national statistical quantitative survey is necessary to progress debate on this very important aspect of human behaviour and development.

2. A *minimum* period of one year and, if possible, eighteen months should be used for the development of the study before fieldwork begins to allow the methodology to be refined and support for the survey to be developed.

3. The project budget must ensure that a senior researcher is engaged full-time on the project from the beginning and during sample recruitment to ensure that issues can be dealt with speedily and with a personal visit to individuals/schools/organisations if necessary. This will be crucial in building trust and maximising response.

4. The population under consideration is all young people aged 14-17 years, regardless of their principal economic status. In other words, we attempt to access not only those in the relevant age category who are at school but all such young people. Crucially, however, we recommend that two studies be undertaken – one of school-going young people and a second of early school-leavers.

5. Before recruitment of schools into the sample begins, attempts should be made to gain the support of National organisations representing school principals, teachers, parents and young people for the project. These organisations should be asked to include statements to this effect in their literature that is circulated to their members. The best approach to developing this support is a national consultation meeting where stakeholder organisations can voice their opinions on the proposed design of the surveys.

6. The steering group for the project should be selected so as to include individuals with specific expertise and representatives from stakeholder organisations.

7. Attempts should also be made to canvas the support of political parties for the project and to gain assurances that public support will be forthcoming should media interest and public discussion ensue.

8. A public relations/design company should be employed to aid in the design of the literature to be distributed to schools and parents to enhance the probability of recruitment into the project. The PR company should also be used to advise on the design and structure of support literature for young people to be distributed at the end of the survey. Professional advice should also be taken on the most appropriate approach to take should public and media discussion of the project become widespread.

9. The majority of children who fall within scope will be at school. Accordingly, we would recommend that the sample design would principally be through the school system. We would propose a two-staged sampling process in which 170 schools would be initially selected. From each of the 170 schools or 'primary sampling units' (PSUs) 60 pupils should be selected yielding a sample of a little over 10,000 individual pupils.

10. The sample should be replicated within each of the four new health regions. The sample size should be lowered to no less than 8000 students in each region based in 130 schools using the same stratifications as in a national sample.

11. It is recommended that schools for children with learning disabilities not be included in the main schools sample but that another research project be designed for this group should research be deemed to be necessary.

12. Schools should be selected on a probability proportionate to size; larger schools should thus have a higher probability of selection than smaller schools.

13. The sample of schools should be 'stratified' to ensure that pro-rata representativeness is achieved for schools which are single/mixed sex; denominational/multi-denominational; vocational/secondary; community/ comprehensive. Due to the relatively small number of single-sex multi-denominational schools, an attempt should be made to sample all of these in the survey.

14. Within schools classes should be selected from relevant year groups on a random probability basis, or if streaming is used, sampled within strata to ensure a cross-sectional representation of abilities.

15. If at all possible parental consent should be obtained on an 'opt-out' basis to preserve sample integrity. Only where this proves impossible on political and ethical grounds should an 'opt-in' be used.

16. Consent from individual pupils is essential and so a structured presentation and consent process should be designed to be used in class before questionnaires are administered.

17. Questionnaires would be filled out on a group self-completion basis in the schools and research staff would act as facilitators in each school during questionnaire completion with the assistance of teachers in some locations where discipline is an issue. When the questionnaires are being filled out the field staff should be responsible for their distribution, for any explanation of the survey requested by the pupils and, most importantly, for collecting the completed forms and taking them away at the end of the interview session. It is important to make a strong distinction between the school and its staff on one hand and the researchers/interviewers on the other.

18. Where at all possible, a single questionnaire should be used for all age groups. Only where this is deemed impossible on ethical grounds should more than one questionnaire be designed. If more than one questionnaire is designed the different instruments must yield comparable information for analytic purposes.

19. Consideration should be given to interviewers returning to the school for a second session, if necessary, to complete the survey with target respondents who were absent at the first session. The main purpose of this would be to appropriately represent students who have high levels of absence. A threshold should be established during the design of the project for days absent in the previous year above which pupils who are not available on a second visit will be added into the sample of early school-leavers for home interview.

20. A school-level questionnaire should be filled out by the principal of the school and development time should be allocated to the development of protocols for sampling other informants in the school and other school-level measures, including direct observation/information from the Dept. of Education and Science.

21. Accessing those in the relevant age category who are not at school (early leavers) is obviously very important. We are currently exploring whether a national sampling frame of early school-leavers is available with the National Educational Welfare Board and the Department of Education and Science & Science. If such a sampling frame is available and can be used (data protection issues will be an important issue here) then home interviews, preferably with a self-completion element, should be carried out. If a national sampling frame cannot be obtained then the researchers would have no option but to carry out a national 'sift' sample, but this would be very costly and time consuming.

22. A sample of 1000 early school-leaver (ESL) respondents should be seen as the minimum based on a tightly clustered sample to minimise cost. The sample should be 80% composed of 16- and 17-year-old school leavers, with 20% maximum sample made up of under 16s who could not be sampled in the school.

23. The ESL sample should be replicated within each of the four HSE regions with a minimum sample of 800 respondents in each if regional desegregation of data is required.

24. The ESL sample should be interviewed in the home using self-completion surveys, although investigation should be made into innovative methods of implementation such as personal headsets.

25. Development time should be set aside for work on safe and ethically sound research methods in the home of ESL respondents.

26. Well designed literature (see point 7) should be developed for distribution at the end of the questionnaire. This literature must list a number of avenues through which support structures can be contacted such as telephone helpline etc. Support protocols must include priority appointments for counselling, advice and medical services.

27. The project should be assessed by a well established ethics committee in a major research institution.

28. The data from the project should be admitted to the National Social Science Data Archive at the earliest opportunity.

29. Any data or reports made publicly available from the project should ensure that both individuals and schools involved cannot be identified. This may mean limiting the variables in the publicly available data set.

Appendix I: List of those invited to attend consultation days

Department of Health and Children
Department of Education and Science and Science
Department of Social, Community and Family Affairs
Departments of Public Health – Health Boards
Departments of Public Health Nursing– Health Boards
Departments of Health Promotion – Health Boards
Community Services (Child Care managers/Assistant CEOS responsible for child health) – Health Boards
Director of Population Health, Health Service Executive
SPHE Support Services – Health Board regions
RSE Support Service
National Educational Psychological Service
Association of Community and Comprehensive Schools
Joint Managerial Body, Secretariat of Secondary Schools Church of Ireland Board of Education
National Association of Boards of Management of Special Education Schools
Teachers Union of Ireland
Association of Secondary Teachers of Ireland
National Parents Council (Post-Primary)
Catholic Secondary Parents Association
National Youth Council of Ireland
National Centre for Guidance in Education
Institute of Guidance Counsellors
Irish College of General Practitioners
YouthReach
VTOS Programme
FÁS
Fáilte Ireland
Academic researchers: TCD, UCC, NUI Galway, St Patrick's College

Additional consultation

Director of Population Health, Health Service Executive
Union of Secondary Students

Appendix II: List of topics for discussion at consultation days

(no particular order of topics)

1. Confidentiality and safety issues
2. Post-survey use of information by health and education agencies
3. Teacher and school management: access/permission/concerns
4. Parent and student: access/permission/concerns
5. Ethical issues/permission to conduct study
6. Conducting questionnaires in groups
7. Sample sizes (how many to be surveyed)
8. Sub-group analysis of results
9. Management/steering group for study
10. Knowledge and attitude questions
11. Behaviour/experiences questions
12. Views of youth groups on survey
13. Questions for junior-cycle (ages 13-15) students
14. Early school-leavers
15. Other marginalized/vulnerable groups
16. Survey in context of current educational programmes/programme reviews (RSE and SPHE).

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