



The Irish Study of Sexual Health and Relationships Sub-Report 1: Learning About Sex and First Sexual Experiences

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Foreword by Minister for Health and Children, Mary Harney TD



I WELCOME the publication of *Learning About Sex and First Sexual Experiences*, which is Sub-Report 1 of the Irish Study of Sexual Health and Relationships (ISSHR).

On foot of a recommendation by the National AIDS Strategy Committee (NASC), my Department and the Crisis Pregnancy Agency commissioned in 2003 the Irish Study of Sexual Health and Relationships.

We now have, for the first time, nationally representative data about the sexual knowledge, attitudes and behaviours of adults in Ireland. This data provides us with a benchmark for evaluating and shaping our policies and practices in relation to our overall sexual health.

This sub-report investigates the complex interplay of factors that lead to early first intercourse being associated with high-risk sexual behaviour both at the time and later in life. It shows the strong relationships between early sexual initiation, disadvantaged backgrounds and poor sexual-health outcomes. It also shows the association between unsafe sex and the drinking of alcohol or taking of drugs.

My Department's National Health Strategy (2001) states that "the achievement of health and well-being is not the responsibility of the individual alone". Not only individual factors but also external or structural factors – whether social, economic or environmental – determine aspects of health and behaviour. This sub-report provides policymakers and service providers with new understanding of the range of such factors. As a result, they will be able to plan and develop services and shape prevention activities that will help to improve the sexual health of Irish people and reduce the number of negative outcomes. In particular, they will be able to target programmes at people who are disadvantaged and most at risk.

Given the dramatic changes in sexual practices revealed by ISSHR, it is clear that we need to focus, in particular, on the needs of young people, including adolescents.

I congratulate all those involved in the survey and preparation of the report; the Economic and Social Research Institute (ESRI) and the Royal College of Surgeons in Ireland (RCSI), who conducted the report; the 7,441 participants who spoke candidly about this intimate, sensitive area of their lives, and the 27 interviewers.

The data this report provides will inform in coming years the development of policies and services that help to improve the sexual health of our young people and, thus, of the adults of the future.

Mary Harney TD

Minister for Health & Children

Introduction



It is a great pleasure for me to welcome the publication of Sub-Report 1 of the Irish Study of Sexual Health and Relationships (ISSHR): *Learning About Sex and First Sexual Experiences*.

The ISSHR was commissioned by the Department of Health and Children and the Crisis Pregnancy Agency in response to a recommendation by the National AIDS Strategy Committee. It is the largest nationally representative study of sexual knowledge, attitudes and behaviour ever undertaken in Ireland.

International evidence indicates that aspects of sexual health, such as contraception, crisis pregnancy and sexually transmitted infections, should be examined jointly. To this end, the Crisis Pregnancy Agency and the Department of Health and Children instigated the ISSHR project.

The ISSHR findings have been outlined in a suite of reports – the Main Report, a Summary Report and three sub-reports; the latter provide detailed information in defined areas of interest. This, the first sub-report, focuses on the area of sexual learning and first sexual experiences.

The Crisis Pregnancy Agency (CPA) and the sexual-health sector in general need robust evidence in order to develop sexual-health policies, to plan strategies and to inform the effective promotion of sexual-health messages. The ISSHR findings will be invaluable not only to the work of the CPA in preventing crisis pregnancy, but also to that of other organisations concerned with promoting sexual health, providing sexual-health services, preventing sexually transmitted infections, and providing sex education for young people.

I would like to thank Ms Kay Rundle for her work on this report, as well as the entire ISSHR research team led by Professor Richard Layte of the Economic and Social Research Institute and Professor Hannah McGee of the Royal College of Surgeons in Ireland. Following their sterling work on the ISSHR Main Report and the Summary Report, producing this report entailed a great deal of extra effort for the authors; I am extremely grateful to them for undertaking the task.

I would also like to thank the people who gave their time and expertise in steering and managing this project and in critiquing the reports. A special word of thanks is due to the staff of the Crisis Pregnancy Agency and the Department of Health and Children for their strong commitment to completing the project.

Katharine Bulbulia

Chair

Crisis Pregnancy Agency

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Acknowledgements

THIS study was commissioned by the Department of Health and Children (DoHC) and the Crisis Pregnancy Agency (CPA).

The authors would like to acknowledge the role played by a large number of people outside of the study team who contributed to the completion of the study.

First, we wish to acknowledge the co-operation of the 7,441 individuals who gave their time to take part in the study and who discussed with us many extremely personal aspects of their lives. Without their generous assistance, this study could not have yielded the wealth of information that will be invaluable in developing locally informed policies and services in the coming years.

The ESRI Survey Division, and James Williams, Amanda Quail, Ita Condrón and Pauline Needham in particular, not only contributed hugely to the design of the survey and its protocols, but also showed fine judgement and professionalism in guiding the fieldwork to successful completion.

The study team also wishes to acknowledge the hard work and commitment of the 27 interviewers who worked on the project: Miriam Ahern, Eimear Breheny, Delia Brownlee, Laura Callaghan, Claire Corcoran, Jessica Dempsey, Riona Donnelly, Frances Lyne, Phil Fitzsimons, Catherine Glennon, Kate Halligan, Kathleen Hyland, Hillary Heeney, Fiona Kane, Aoife Kearney, Ciara Lawless, Emer McDermott, Anne Marie McGirr, Charleen McGuane, Carmel McKenna, Katherine Norris, Marita O'Brien, Aideen O'Neill, Patricia O'Neill, Martine Taylor, Anne Toner and Eileen Vaughan.

A large number of other people contributed to the development of the methodology, protocols and data analysis of the ISSHR study. The research team acknowledges their contribution.

The following were members of either the Management and/or Steering Committee for part or all of the project: Bernie Hyland (HSE), Sharon Foley (CPA), Caroline Spillane (CPA), Dr Nazih Eldin (HSE), Dr Stephanie O'Keeffe (CPA), Olive McGovern (DoHC), Mary Smith (CPA), Frances Shearer (Department of Education & Science), Mick Quinlan (Gay Men's Health Project), Deirdre Seery (Alliance SHC), Madeleine O'Carroll (CPA), Ciara O'Shea (DoHC), David Moloney (DoHC), Brian Mullen (DoHC), Deirdre Sullivan (CPA), Deirdre McGrath (CPA), Paul Walsh (CSO), Lucy Deegan Leirião (CPA), Prof. Linda Hogan (TCD), Paula Mullin (DoHC) and Chris Fitzgerald (DoHC).

Other people generously participated in reading groups for the research reports: Dr Máirín O'Sullivan (DoES), Maeve Foreman (TCD), Dr Fenton Howell (HSE), Geraldine Luddy (NWC), Shay McGovern (DoHC), Karen Griffin (IFPA), Teresa McElhinney (HSE), Ann Nolan (AIDS Alliance), Ciaran McKinney (GHS), Bidy O'Neill (DoHC) and Tim McCarthy (DoHC). Others contributed at important points in the overall process: Collette Leigh and Rebecca Garavan (Royal College of Surgeons in Ireland).

This study had a long gestation. Many groups and individuals encouraged and recommended the development of a robust evidence base on sexual health issues in Ireland. We thank all those who enabled this work. We hope that the ISSHR findings will help develop a better understanding of the interplay of sexual knowledge, attitudes and behaviours in contemporary Ireland, and inform the development of improved sexual health policy and services for all.

Abbreviations

AIDS	Acquired Immune Deficiency Syndrome
ASHR	Australian Study of Health and Relationships
CATI	Computer-aided telephone interview
CPA	Crisis Pregnancy Agency
EG	The Erikson/Goldthorpe class measure, based on employment status
ESRI	Economic and Social Research Institute
HIV	Human Immunodeficiency Virus
HPSC	Health Protection Surveillance Centre (formerly the NDSC)
ICCP	Irish Contraception and Crisis Pregnancy Study
IFPA	Irish Family Planning Association
ISSHR	Irish Study of Sexual Health and Relationships
ISSP	International Social Survey Project
KABS	Knowledge, attitudes and behaviour surveys
Natsal	National Survey of Sexual Attitudes & Lifestyles (UK)
NDSC	National Disease Surveillance Centre
NHSLS	(US) National Health and Social Life Survey
ONS	Office of National Statistics (UK)
RANSAM	Sample selection programme developed at the ESRI
RDD	Random digit dialling
RSE	Relationship and Sexuality Education
SAVI	Sexual Abuse and Violence in Ireland Study
SILC	Survey of Income and Living Conditions
SPHE	Social, Personal and Health Education
STD	Sexually Transmitted Disease
STI	Sexually Transmitted Infection
WHO	World Health Organisation

Glossary

Confidence interval	Quantifies the uncertainty in a measurement. The probability (between 0% and 100%) that an observed value is the true or actual value.
Design effects	A measure of how much statistical uncertainty is introduced into a survey by the manner in which individuals are selected for interview.
Disaggregation	The separation of an aggregate body into its component parts. In statistics, categories may be split or disaggregated to reveal finer details.
Religiosity	The condition of being religious. The sociological use of this term has no pejorative connotation.
Sex and sexuality	Sex is used in this report to mean sexual activity. Sexuality encompasses sex, gender identities and roles, sexual orientation, pleasure, etc. It is affected by many factors and their interaction (biological, social, psychological, historical, cultural, economic, political, legal, religious and spiritual).
Sexual health	Sexual health is used to mean, not merely the absence of infection, disease, dysfunction or infirmity, but a state of general well-being (physical, emotional, mental and social) in the area of sexuality.

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Introduction

1.1 Background

SEXUAL health is a fundamental aspect of individual and social well-being. Maintaining sexual health across a population is a challenge for societies worldwide. A working definition of sexual health, presented for discussion by a WHO-convened consultation group, suggests:

“Sexual health is a state of physical, emotional, mental and social well-being in relation to sexuality; it is not merely the absence of disease, dysfunction or infirmity. Sexual health requires a positive and respectful approach to sexuality and sexual relationships, as well as the possibility of having pleasurable and safe sexual experiences, free of coercion, discrimination and violence.”¹

Sex and sexuality (see glossary for definitions) has been a relatively taboo subject until recent decades in Ireland, as elsewhere. Perspectives on sex and sexuality in Ireland were traditionally shaped to a large extent by the teachings of the Catholic Church. Sexual intercourse was seen as appropriate only in the context of marriage, with the primary purpose of procreation.²

Throughout the 1960s and 1970s, a number of factors, including the wider availability of popular media, brought about greater liberalism and increased discussion about sex in Ireland. As well, greater mobility, mainly of Irish people travelling abroad from the early 1980s, introduced a whole generation to new perspectives on sexual norms. Church attendance fell over this time and there was an increasing public challenge to the Catholic Church’s stance on issues such as access to contraception. These factors contributed to the development of significant legislative changes in the area of sexual health in the late 20th century. They resulted in increased availability of contraception, legalisation of divorce, decriminalisation of homosexuality and right to information on abortion.³ At the same time, education generally and sex education in particular have increasingly become the responsibility of the State. Irish society has seen a process of increasingly liberal social norms.³ Evidence of this shift includes the separation of sex from a purely procreative function and the view that sex is no longer exclusively associated with marriage.

The investigation of sexual health and behaviour requires consideration of the range of factors that can influence them. As well as individual factors, external or structural factors (social,

economic and environmental) can determine aspects of health and behaviour. The Department of Health and Children's (2000) National Health Strategy states in its objectives that "the achievement of health and well-being is not the responsibility of the individual alone".⁴ A further objective aims to provide support to disadvantaged groups so that everyone has the same opportunity to attain good health. These objectives highlight the role that external influences can play in determining health, and make clear that it is unlikely that individuals will be able to directly control external determinants of health.

1.2 Learning about sex

KNOWLEDGE about sexual matters comes from a wide range of sources. Article 42 of the Irish Constitution recognises the family as the primary educator of the child and respects the rights of parents to provide religious, moral, intellectual, physical and social education of their children.⁵ Recent social changes have led to increased discussion about sex, and the role that parents play in sex education may also have changed.

Parents can verbally and non-verbally communicate positive and negative messages about sexuality and sexual behaviour to children throughout their childhood.⁶ However, research into parent-child communication about sex is inconclusive.⁷ Some studies have reported that open and positive parental communication about sex is related to decreased likelihood of adolescent sexual initiation and later onset of adolescent sexual activity.⁷⁻⁹ Others have found no relationship between parent-child communication about sex and adolescent sexual activity¹⁰⁻¹⁴. Indeed, a review of research into parent-child communication about sex found that about the same number of studies found no relationship between such communication and adolescent sexual behaviour as did report a relationship.⁷

The extent of any family influence on adolescent sexual behaviour is further mediated by other factors including age, socio-economic status, community characteristics and female employment opportunities.^{15,16}

Two further media of knowledge about sex are information and formal education. Information is now widely available in a variety of media, from magazines to music, television, film and the internet, and through sex education at school. Formal sex education at school is an increasingly common method of teaching young people about sexual matters.

The role of sex education in influencing adolescent behaviour has been examined in research internationally. This has looked at the relationship between sex education and sexual initiation. Most studies have found that some sex-education programmes can reduce sexual activity, delay sexual initiation¹⁷⁻²⁰ and increase contraceptive use among young people.¹⁷⁻²²

Within Ireland, the recent increase in sex education comes after a period of varying levels of sex education in schools countrywide. Evidence suggests that many Irish people have grown up with minimal understanding of sex and sexuality.² For instance, a number of studies in recent decades found that many young people did not have important knowledge and information about sexual matters (e.g. knowledge of the fertile period of the menstrual cycle, understanding the pregnancy risk posed by unprotected sex).²³⁻²⁶

The recent liberalisation of Irish society has increased public discussion of sexual matters such that information is now more readily available to all. Some of this comes from public health agencies and is targeted at adults; it concerns contraception and protection from sexually transmitted infections (STIs), in particular HIV/AIDS. Meanwhile, the implementation of a national sex and relationships education programme in schools helps to provide information to young people in a systematic and developmentally appropriate manner.

Following the publication of the Report of the Expert Advisory Group on Relationships and Sexuality Education (RSE) in 1995, the National Council for Curriculum and Assessment developed Interim Curriculum Guidelines on RSE as an aspect of Social, Personal and Health Education (SPHE). The RSE Support Service was established and carried out an extensive programme of in-service training of primary and post-primary teachers in 1996/7. Resource materials for schools were also developed. From the outset, the involvement of parents in RSE was seen as of crucial importance. Parents worked in partnership with teachers and school boards of management in drawing up a policy framework to guide the implementation of RSE in their children's school. Parent information evenings and policy seminars were organised to support them in doing this.

RSE is part of a wider SPHE curriculum. All schools at primary and post-primary level up to Junior Cycle have been required to include the equivalent of one class a week of SPHE in their timetables since September 2003. The National Council for Curriculum and Assessment is currently developing an SPHE Curriculum for Senior Cycle.

Schools are supported in their implementation of RSE and SPHE by the RSE Support Service and the SPHE Primary and Post-Primary (Junior Cycle) Support Services. At post-primary level, SPHE is managed through a partnership between the Department of Education and Science, the Department of Health and Children, and the Health Service Executive.

The implementation of formal RSE should ensure that future generations receive a more standardised sex and relationships education at school.

1.3 First sexual intercourse

SEXUAL initiation is a significant event for each individual.²⁷ It is a major milestone in the transition of many adolescents to adulthood.²⁸ Social and cultural changes have influenced sexual behaviour and sexual initiation. In Europe, increasing liberalisation of social attitudes and the decline in the control exerted by religious establishments have played a major role in changes to sexual behaviour. Other changes – marital and fertility trends, increased female participation in the workplace and increased availability of modern contraceptive methods – have intensified the changes in attitudes and behaviour.²⁹

In the past, women frequently experienced first intercourse with their husband. This has become unusual in younger cohorts in western countries; young people tend not to marry their first sexual partners.²⁹ Generally, first intercourse is still more likely to occur within a steady relationship,^{27,29-31} with women more likely than men to report this.^{27,29,30,32} Gender differences in age of first partner and relationship status at first intercourse indicate that women and men perceive first intercourse in different ways.²⁹

A decline in age at sexual initiation among younger generations has been recorded around the world.^{29,30,33} This decline is often particularly evident among women.²⁹ International research has found that some groups are more likely to experience intercourse at a younger age; for example, people with lower levels of educational attainment or aspiration.^{23,29,33-35} Similarly, earlier first intercourse has been associated with lower socio-economic status.^{29,33,35}

Some studies investigated the role of factors such as religiosity, family structure and family communication. Higher levels of religious practice and participation have generally been associated with later sexual initiation.^{29,34,36-39}

A number of studies examined contextual or situational factors surrounding first intercourse. For example, higher levels of adolescent alcohol and drug use have been related to earlier sexual initiation,^{11,40-42} although it is possible that this reflects the adoption of experimental behaviours by some adolescents.¹¹

While research internationally has found that contraceptive use at first intercourse has increased over recent years and with younger generations,^{30,32,33,43} some young people are still not protecting themselves against unintended pregnancy or sexually transmitted infection at first intercourse. In recent studies of young people, those who experienced first intercourse at a younger age were less likely to have used contraception at first intercourse.^{31,34,43,44} Early sexual initiation has been related to an increased risk of certain experiences in adolescence and into adulthood, including sexually transmitted infection^{45,46} and teenage pregnancy.³³ Thus, determinants of early first intercourse could be important factors to take into account when seeking to establish and maintain long-term sexual health.

Lower levels of educational attainment and aspiration are also associated with lower likelihood of having used contraception at first intercourse.^{33,35,43} The relationship between educational level, age and contraceptive use at first intercourse is complex, since some adolescents have a positive or ambivalent attitude towards pregnancy.⁴⁷⁻⁵⁰ Many studies have found that adolescent mothers are more likely to have low educational attainment or aspiration.^{33,34,51-57} Recent interpretations of this finding have suggested that adolescents with low educational attainment often view pregnancy more positively since it offers them a social identity as a parent, when the possibility of other social roles may be limited.

A better understanding of sexual initiation among the adult population provides the opportunity to understand social trends. It can also inform the development of education programmes that provide young people with the information and skills they require to develop a healthy approach to sex and sexuality and to avoid experiences such as unwanted sexual contact, unintended pregnancy and STI. As well, identifying determinants of non-use of contraception enables policy-makers to target programmes at people who are most at risk. Reliable data from a national KAB survey provides the opportunity to develop targeted and effective interventions.

1.4 The current study

THE results of a nationally representative, retrospective survey provide an overview of past sexual experiences and behaviours of those now in adulthood. The present study aimed to contribute to the understanding of sexual behaviour by collecting nationally representative and detailed

information on experiences of sex education and first sexual intercourse among people aged 18-64 in Ireland.

This report is one of three specialist reports considering information from the first representative KAB (knowledge, attitudes and behaviour) study of the general adult population in Ireland – the Irish Study of Sexual Health and Relationships (ISSHR). This was an anonymous telephone survey of 7,441 adults aged 18-64 in Ireland. The data was collected in 2004/5.

The following chapters provide a summary of international and Irish research relating to learning about sex and first sexual experiences, and a detailed explanation of ISSHR findings and implications.

First, **chapter two** examines the design and methodology of the ISSHR survey and provides a demographic profile of the final sample.

Chapter three uses the ISSHR data to examine the ways in which Irish people have learned about sexual matters and how this has changed over recent generations. It also examines attitudes to the provision of formal sex education to young people and current requirements for ongoing sex education among adults.

Chapter four provides an overview of experience of first sex across the Irish population, including the age at which vaginal, oral and anal sex were first experienced. It analyses how the experience of first intercourse differs between men and women and how it has changed over recent years. Relationship status at first intercourse is investigated to determine changes across age groups and to identify possible social trends. The chapter also examines contextual aspects of first intercourse, such as planning, coercion and regret.

Chapter five extends the analyses of the previous chapter by investigating determinants of age at first vaginal sex. It examines the role of socio-demographic factors, sex education and family communication in determining age at sexual initiation. It also investigates contextual issues surrounding first intercourse.

Chapter six examines an important aspect of first intercourse – use of contraception. ISSHR results are analysed to provide an overview of levels of contraceptive use across age cohorts and across year of first intercourse. Methods of contraception give varying levels of protection against pregnancy and STIs; the chapter looks into the changes in methods used at first intercourse over recent decades. It also investigates socio-demographic, sex-education and contextual factors as determinants of contraceptive use at first intercourse and reasons given for not using contraception.

Chapter seven gathers the findings of this report to draw conclusions about the education of young people about sex and about their first sexual experiences. It focuses on issues identified throughout the report and draws on the material to recommend possible policy responses.



2

Designing the ISSHR study

2.1 Introduction

THE core aims of the ISSHR study were to generate a nationally representative and reliable picture of the sexual knowledge, attitudes and behaviours of the Irish population and to describe the interrelationships between knowledge, attitudes and behaviours in the context of theory, sexual-health promotion and policy development (Crisis Pregnancy Agency and Department of Health and Children tender documentation, July 2003).

From the beginning of the project a series of decisions had to be taken on how these objectives could be achieved and a balance struck between the competing requirements. A nationally representative survey demands a national sampling strategy that takes account of the geographic and socio-demographic diversity of the country. However, the sampling frame used is influenced by the mode of data collection and this in turn influences the nature of the survey instrument that can be used.

Balancing these requirements to achieve the project aims is a difficult process, but there are also other important issues that need to be considered. Sexuality and sexual behaviour are sensitive subjects; the methodological approach adopted needs to recognise this if it is to be successful and to protect the privacy of respondents.

Similarly, many of the issues addressed within a knowledge, attitudes and behaviour (KAB) survey can provoke a strong emotional reaction. Thus the welfare of respondents also needs to be paramount when designing the methodology. Fortunately, the Irish Contraception and Crisis Pregnancy Study¹⁹, carried out the year before development work on ISSHR began, had tested how to deal with issues of sensitivity and privacy. This contributed greatly to the development process of the ISSHR project.

This chapter examines the diverse range of methodological questions addressed before the study could begin.

The **next section** begins by examining whether a survey of sexual knowledge, attitudes and behaviours among Irish people is actually feasible and will return valid, reliable results.

The **third section** considers the question of the target population in terms of the minimum and maximum ages of respondents and population groups that should be included.

The **fourth section** examines the issue of how the questionnaire should be administered. Administration is a crucial issue in a survey of such sensitive information, but the choice of method also has implications for the sampling strategy, and this is discussed in **section five**.

Section six details the development of the questionnaire and how this was shaped by the aims and objectives of the study and by previous KAB surveys carried out in other countries.

The **seventh section** outlines the pilot survey for the project; **section eight** covers the recruitment and training of interviewers, and **section nine** the issue of ethical clearance.

Section 10 examines interviews carried out and the response rate achieved, while **section 11** assesses the representativeness and demographic profile of the final data file. This section also details the weighting strategy adopted to ensure that the data was representative.

Section 12 describes important relationships between variables, while **section 13** explains statistical methods and provides an overview of methods used to present results.

2.2 Asking questions about sex and sexuality

SEX is a sensitive subject in almost all cultures²⁰ and Irish society is no different. Survey research on sex faces many of the same problems that all survey research faces. The techniques for gaining cooperation are essentially the same as those used when investigating other subjects. For example, at the beginning of the survey and within 20 or so seconds of contact being established, the interviewer needs to convince the respondent that the research is being conducted for a legitimate purpose and that its findings will be used to improve the health and welfare of the population in general. Establishing this may require verification of the project and/or interviewer. The ISSHR project adopted a check-back system developed and used successfully in previous Irish research (described further in section 2.7).

Although people may answer questions, however, the fear of social judgement may motivate them to conceal their true sexual behaviour. Where behaviours are socially disapproved of, or do not reflect well on the individual reporting them, there is always an incentive to either not report or under-report. Similarly, other people may well embellish the accounts they present of their sexual behaviour, over-reporting the frequency of a particular behaviour or reporting behaviours they have not experienced. Further problems include the potential for inaccurate recall of past events or the fact that respondents may reconstruct their experiences in a manner which they perceive is desired by the interviewer.

A number of studies have examined the reliability of self-reported sexual behaviour. In general, the findings are quite positive. One route has been to compare the data given by sexual partners independently of each other, examining the extent to which these present a coherent picture.²¹⁻²³ In general, these have shown a high level of agreement. A number of studies that used a test-retest approach^{22,24,25} found very high levels of reliability, even where the tests were carried out up to 18 months apart.

Another test of the extent to which survey data presents a reliable picture of behaviours is to compare self-reported behaviours with outcomes measured in other statistical sources. A good example of this is the results of the British National Survey of Sexual Attitudes and Lifestyles (Natsal) survey.²⁶ This showed a pattern of sexual risk behaviour across age groups which is highly consistent with the patterns observed across age groups in statistics on STIs and abortions gathered through surveillance centres in the UK.

2.3 The target population

THE overall aim of the ISSHR project was to collect representative data on KAB issues for the Irish population. This presented several problems. First, interviewing all groups, even where they resided in institutions (say, prisons or care homes), would have entailed creating a complicated sampling frame of those who could be interviewed; there would be serious doubts as to whether the samples attained would be useful for analysis because of the circumstances in which they lived. For this reason, in a consultation process with a panel of interested stakeholders in the area of sexual health and education, it was decided early on²⁷ that the sampling frame for the project would be drawn from the non-institutional population in private residential housing.

This choice simplified the sampling frame required, but there was a second problem. There are many groups in the population that it would be beneficial to have in the sample if it is to represent the population. Even cursory analysis shows, however, that if these groups made up a small part of the Irish population^A, the number who would be found in the final sample would not be useful for analysis unless a very large sample was drawn, or a 'booster' sample of that group was collected. Again, these issues were aired and discussed in the consultation process undertaken with stakeholders. It was decided that the survey would not attempt to over-sample specific sub-groups, although individuals from these groups might find their way into the sample on a *pro-rata* basis. That is, it was decided that no specific measures should be taken to increase the representation of sub-groups beyond the proportions that would be found by sampling the national, non-institutional population in a representative fashion. Such a national study could then provide the contextual data required for smaller studies of specific populations.

2.3.1 Age range

Another issue was the age range of the respondents. Sensitivity about the well-being of minors meant that the lower age cut-off was set at 18.

The age range to be interviewed was addressed during the consultation process (see Layte *et al* 2003²⁷). A more difficult question was the maximum age. The initial aim was that all those aged 18 or more should in principle be able to be selected for inclusion. However, resources were limited and evidence from elsewhere suggested that those aged 65 or more are less likely to engage in behaviours that would put them at risk of contracting an STI/HIV. The risk for younger groups has been shown in other national studies and Irish HPSC reports to be much higher. If those aged over 64 had been included in the study, there would not have been sufficient resources to collect a large enough sample of this younger group to make accurate estimates. Such concerns led us to adopt a maximum age of 64 and to use the resources freed to interview a larger proportion of younger respondents.

A For example, if a group make up 2% of the population, as with Irish Travellers, it is likely that around 200 individuals will be contacted in a sample of 10,000 people, although this number may vary because of sampling error.

2.4 Mode of administration

THE sensitivity of the content of KAB surveys means that the quality of the data collected is highly influenced by the manner in which it is collected. Interviewer bias, where the characteristics of the interviewer influence the response, is a constant problem. This has led previous studies, notably the National Survey of Sexual Attitudes and Lifestyles (Natsal 1990 and 2000), carried out in Britain, and the American National Health and Social Life Survey (NHSL 1992), to use face-to-face interviews, supplemented with a self-completion survey.

This combination has a number of advantages. First, face-to-face surveys generally lead to higher data quality as the interviewer can clarify issues with the respondent and monitor data quality.²⁸ Secondly, the instrument can be longer as the method requires less dedication from the respondent, and it can be more complex since the interviewer can clarify issues and use visual aids. Thirdly, the self-completion element means that the respondent can provide information anonymously.

However, all methods have their problems. Face-to-face interviews are more expensive than telephone or mail surveys as the interviewer has to physically travel to the home of the respondent, often several times, before an interview can be carried out. To minimise this cost, interviews can be clustered in geographic areas, but this too has a cost in terms of increasing sample errors through 'design effects' (that is, the sample is no longer a simple random sample of the population, but rather a random sample within each cluster).

Self-completion surveys put greater demands on the respondent in terms of literacy, motivation and time. This means that the people who complete a survey may be different from the people who do not and this can lead to biased samples. For example, Copas *et al* (1997)²⁹ have shown that people with poorer literacy skills were less likely to complete a self-completion survey. This makes it difficult to generalise from the results to the general population.

The alternative to these two methods is the telephone survey. Unlike face-to-face methods, telephone surveys allow interviewers to make calls from a centralised call centre, thus saving on travel costs. A higher number of interviews can thus be completed for a given budget. The centralised call location means that interviewers can be monitored and given appropriate support. Finally, telephone surveys offer a high degree of anonymity once it is explained to the respondent that their number was randomly generated and their name and address are unknown.

As with face-to-face and self-completion surveys, however, telephone surveys also have drawbacks. First, telephone interviews are shorter than face-to-face interviews which can last for 60 minutes or more with few problems, whereas effective average telephone interviews last no more than 30 minutes. This limitation means that the time spent interviewing by telephone must be maximised. Secondly, the questions must be less complex than when using face-to-face methods since visual aids cannot be used and respondents can only retain a limited number of options in their heads when answering questions. This restriction can present particular problems when replicating questions used previously in face-to-face surveys.

After these costs and benefits were weighed up, the telephone interview was chosen as the method for the survey. The telephone interview has been used successfully in KAB surveys outside Ireland, notably in Australia³⁰ and France³¹. It has also been used successfully in Ireland for surveys on sensitive issues (e.g. the Irish Contraception and Crisis Pregnancy Survey {ICCP} 2004¹⁹ and the Sexual Abuse and Violence in Ireland {SAVI} Study³²). To minimise the cost associated with a short interview time, the research team chose to use computer-aided telephone interviewing (CATI). In CATI interviews, questions are selected and answers coded directly into a computer programme. This allows far more complicated routing and filtering than would be possible using a paper questionnaire. It had the added benefit of improving data quality as data did not have to be coded from paper questionnaires.

2.5 The sample design

THE requirement for a nationally representative sample of individuals meant that the sample drawn for the ISSHR survey had to be systematically selected from a national sampling frame.

2.5.1 Random digit dialling

The decision to use telephone interviewing enabled the use of random digit dialling (RDD). This can be used to create a sample of telephone numbers from the national population and has the advantage that the numbers are generated without recourse to a number directory; thus ex-directory numbers and recent numbers not yet in the directory are also listed. This approach does mean, however, that letters to households cannot be sent prior to the interview call (as was done in the French and Australian telephone surveys), a method which has been shown to increase response rates.³³ However, there were concerns that using address matching and notification letters might lead to a biased sample (e.g. no ex-directory numbers would be sampled). It was felt that, in the Irish context, better response rates would be obtained by cold-calling households. This intuition was tested and confirmed during the pilot process; cold-calling produced a response rate comparable to previous Irish face-to-face surveys with notification letters.

2.5.2 Mobile-phone penetration

It is not possible to randomly sample from mobile-phone numbers at present in Ireland. This is a concern given the increasing penetration of mobiles in the Irish population and anecdotal evidence that some households may only use a mobile phone. Although the same 'random digit dialling' technique used with landlines could equally be employed with mobile phones, it would not be possible with mobiles to 'stratify' the sample so that it would represent the population geographically, since mobile phones have no geographical prefix. This would seriously increase the sample error in any survey.

Telephone surveys using mobile phones also face the problem that individuals are likely to be in a public space when called. This is not conducive to carrying out an interview on a sensitive subject. However, the growing penetration of mobiles does raise the possibility that particular sections of the population such as young, single people and/or those living in rented accommodation are less likely to be reached by a landline telephone survey. It is important to clarify the extent of this challenge.

Most analysts of mobile-phone penetration quote the COMREG Trends Survey, the most recent of which was carried out in 2005.³⁴ This indicates that 76% of households have a landline and, perhaps more importantly, that 24% of households have only a mobile phone. However, the survey used by COMREG included just 1,000 individuals and was not a national probability sample. The CSO's Survey of Income and Living Conditions (SILC) from late 2004 is a more robust survey. It shows a much lower proportion of households without a landline. SILC, a weighted, clustered, two-stage probability sample of over 14,000 individuals and 5,000 households, is the main source of official statistics on income and living conditions. SILC 2004 reported that 88% of individuals lived in households with a landline, a significantly higher proportion than found in the COMREG survey.

SILC also shows which population groups are less likely to have a landline. Over 90% of men and women over 35 live in households with a landline, but this falls to 86% among men and 74% among women aged 18 to 24. This confirms the view that younger individuals are the most likely to live in 'mobile phone only' households. This could increase sample error among this age group, particularly among women.

Concern about potential exclusions from the survey due to possible reduced landline coverage within various groups (such as younger people) was in part balanced by using a sophisticated procedure of re-weighting or statistical adjustment to ensure that the data collected was balanced by population characteristics such as age and gender. This statistical adjustment was implemented prior to data analysis. Thus, the data fully represents the population that falls within the scope of the survey (people aged 18-64). Such re-weighting of survey data is a standard aspect of sample surveying and allows conclusions of a wide generalisability. (Further information about the re-weighting procedure can be found in section 2.11.)

2.5.3 RDD stratification – the 'hundred banks' method

RDD telephone interviewing allows researchers to 'stratify' numbers within the population so that full coverage of different geographic areas can be achieved. This guaranteed that, in the survey, all areas in Ireland were represented in the final data set, rather than this being dependent on statistical probability. For ISSHR, the ESRI's RANSAM system was used to perform this stratification of areas (selected through their area code) and number 'stem' selection. The 'hundreds bank' method was then used to create a sample of numbers for call. In this method the number 'stem' is generated and the last two digits varied from '00' to '99', creating a full set of 100 numbers that can then be called. This means that some of the numbers called would not be a residential number. However, by calling numbers in this manner, a full probability sample of all Irish numbers could be built up.

If respondents did not wish to be interviewed at this first call and did not arrange for the interviewer to call back, a 'conversion call' was placed after a suitable period (usually around two weeks). The conversion call provides an opportunity for those who have declined participation in an unsolicited ('cold call') contact by a researcher to reconsider participation. Conversion calls were made to all those who had refused participation on the first contact call. The reasons for re-contact ('It provides us and you with the possibility to reconsider your decision to participate') were provided, with an assurance that this was the only re-contact.

2.5.4 Sample size

The feasibility study for the ISSHR project²⁷ proposed a sample of 10,000 respondents to allow the level of sample disaggregation necessary in study analyses. Assuming five age groups of roughly equal size, a cross-tabulation of age and sex groups would produce sub-samples of around 1,000 respondents each, where the confidence interval including design effects is +/-3.92%. A power to detect differences of +/-3.92% between groups was deemed sufficient for the project overall. Unfortunately, budget constraints meant that the final sample could be around 7,688 cases, which produced an average age/sex cell size of 744 individuals, with a power to detect differences of 5.39%. This power was not deemed acceptable for the analysis of important high-risk groups among younger people aged under 30.

To improve statistical power for the younger age group, those aged under 30 were 'over-sampled' in the final data file. This means that this group make up 4.9% more of the final data file than they represent in the Irish population (36.4% rather than 31.5%). This allows appropriate disaggregation in specific analyses of this age group, but, by weighting down this group, representativeness is preserved in analyses of the total sample. A separate weight for the analysis of those under 30 was also generated. (See section 2.11 for details of the weighting procedures used.)

2.6 Questionnaire development

THE design of the questionnaire is possibly the most important issue in the development of a research project as this defines the nature and quality of the information collected. Fortunately, the development of the questionnaire for the ISSHR study occurred at time when a number of other national KAB studies had been carried out, so that both their research instruments and results were available. This was crucial, as development time was to be extremely compressed; questionnaire development occurred within five months.

Questionnaire development is a difficult task; as well as choosing the areas that need to be covered to attain the study objectives, research also needs to be carried out on the exact nature of the questions and how these might affect the likely response. The ordering of questions and sections is also crucial. The sequence of the questions has a considerable impact on the nature and reliability of the answers received. For example, the early stages of the questionnaire need to establish a rapport between the interviewer and the respondent, and particularly sensitive or intrusive questions should be avoided at this stage. Similarly, it is advisable to ask questions about beliefs and attitudes early on, as doing so later may lead to contamination if they follow behavioural questions that prompt the respondent to reflect on their sexual attitudes and lifestyle. These are just simple examples of a more complex developmental process which requires that each question be tested to ensure that it is a worthwhile addition.

This development would not have been possible in the time available if much of the ground work had not already been carried out and discussed in the documents describing the ASHR (Australia), Natsal (Britain), NHSLs (USA) and ACSF (France) surveys.

Some developmental work on new questions was also carried out. Questions were selected in discussion with the project steering committee and, after initial work within the research group on question formats, the questions were tested in a pilot survey. However, the limit on time and resources meant that only this single pilot was possible and different forms of the same question could not be tested.

Through an iterative process, a very large collection of possible questions drawn from a range of surveys was distilled to a first draft that was no more than 10 minutes longer than the 30-minute average required. This first draft was tested in mock interviews and shortened in editorial meetings with the steering committee. From this process, a final draft questionnaire was arrived at for CATI development and testing. The question domains established remained intact for the main fieldwork, although many individual items changed. The 12-question domains of the survey were:

SECTION A: Introduction and respondent agreement

This section provided a standardised introduction to the study, detailing who was carrying out the survey, its confidential nature and how the telephone numbers had been randomly selected. Following agreement to participate, information on procedures to verify the study was offered, and, before proceeding, interviewers confirmed that the respondent was over 18 and younger than 65. The section also collected information on marital status and number of children.

SECTION B: Learning about sex

Section B provided a relatively less sensitive opening to the questioning. It centred on sex education experienced at both home and school; the helpfulness of this education; and whether children should receive sex education, and if so, from whom.

SECTION C: Knowledge, attitudes and beliefs

Section C investigated the sexual knowledge, attitudes and beliefs of respondents using a series of multi-item instruments. Questions were included on sexual morality; beliefs about contraception; and knowledge of STIs, a woman's fertility and emergency contraception, as well as a subjective analysis of the person's risk of contracting HIV.

SECTION D: First sexual experience

This section investigated the range of sexual behaviours experienced and when these first occurred, before examining in detail the first occasion of penetrative sex (vaginal or anal).

SECTION E: Attraction

Section E contained a single item asking respondents to indicate the extent to which they had been attracted to the opposite gender alone, their own gender alone, or some mix of the two.

SECTION F: Heterosexual partnerships and practices

This section quantified when the respondent last experienced different types of sexual behaviours (vaginal, oral and anal sex) with members of the opposite gender and the number of sexual partners they had had over different periods (life, last five years, last year). The section also examined the number of partners which the respondent had paid to have sex with over their life so far, and use of condoms with these partners. Lastly, the section examined use of condoms in the last year and, given current lifestyle, the perceived risk of conception.

SECTION G: Homosexual partnerships and practices

This section examined the same subjects as section F, except that here the questions were asked concerning sexual partners of the same gender.

SECTION H: Most recent event

Whereas sections F and G examined total sexual experience, section H examined the last sexual event (with the opposite or same gender). 'Sexual event' was broadly defined, but actual experiences were then examined (vaginal, oral and anal sex), and there was a particular emphasis on use of contraception (whether used and which type) and protection from STIs. This section also examined the expectations of the respondent and partner of their relationship at last event; sexual and emotional satisfaction; number of sexual events in the last four weeks, as well as preferences for frequency of sex.

SECTION I: Sexual problems

Section I asked if the respondent had experienced a range of sexual problems and, if so, if they had sought professional help for these and what type of help this was. Preferences for sexual-health services were also examined. As well, section I examined lifetime fertility and infertility, with a particular emphasis on 'crisis pregnancies' and their outcomes.

SECTION J: Sex outside Ireland and the UK

This section examined sex outside Ireland and the UK in the last five years with a new partner met while abroad. The prime focus was on vaginal or anal sex without a condom and on the number of partners.

SECTION K: STIs and use of health-care services

This substantial section examined use of sexual-health and contraceptive services. Questions included: what types of service were used, whether payment was required, impediments to service use, and preferences for future use. It also examined if the person had ever been diagnosed with an STI, which type, and details of treatment (if any). It finished with questions on AIDS and HIV. These examined knowledge about the subject, experience of testing, and history of injecting drug use.

SECTION L: Demographics and personal characteristics

The final section gathered basic information on education, nationality, employment status and occupation, and place of residence (urban vs. rural). It also examined health status and consumption of alcohol.

2.6.1 Question order

The survey was designed with a section on sex education at the beginning so that respondents would have a relatively non-contentious and less sensitive beginning to the interview. Questions on attitudes and beliefs were also placed early so that these would not be influenced by details about behaviour given later in the survey.

2.6.2 Survey length

The overall length of the questionnaire was a concern. Previous experience had indicated that an average telephone interview should be around 30 minutes and that, after this point, non-response

to particular questions becomes a serious issue. It also indicated that respondent participation becomes a serious issue if the putative respondent is informed beforehand that the survey may take longer than 30 minutes.

One option would have been to follow the French ACSF survey and use a combination of short and long questionnaires. In that survey, 24% of the sample were administered a long instrument (45 minutes) and 76% a short version (15 minutes). The large size of the French sample (20,055) meant that the 4,820 respondents doing the long version still represented a significant sample, although confidence intervals around questions demanding detailed information were higher than thought acceptable.

Instead, a method similar to that used in the ASHR survey was employed.³⁰ In that survey, all those with two or more partners in the year prior to the survey were asked a long form of questionnaire and those with one partner a short version (although a random selection of the 20% with one partner also completed a long form of questionnaire).

The ISSHR survey used the filtering facilities of the CATI system to identify questions in the survey already completely determined by earlier answers. The CATI system was then used to skip these questions for individual respondents and the appropriate answer was inserted. CATI was also used to reduce the number of questions to which people were exposed. For example, if a respondent indicated that they had never experienced oral sex, in section D of the survey, all questions on oral sex were skipped throughout the survey and coded as 'not applicable'.

2.6.3 Questionnaire language

The type of language used in a survey can have major implications for results. As interviewers are trying to establish a rapport with respondents, it is possible that tailoring the language of the survey to the respondent may improve item response.

Kinsey^{35,36} advised against using scientific terms in interviews. The use of vernacular language has been adopted in a number of surveys on sex, some of which have been carried out in Ireland. The All-Ireland Gay Men's Sex Survey (2000), for instance, used vernacular terms throughout, with some success.³⁷ However, tailoring language to the respondent can increase the chance that the respondent will have a different understanding of the subject matter, even though this difference may be extremely subtle. This is a particular problem in broad population surveys. Given this, the ISSHR study followed the practice of most KAB surveys and used scientific/anatomical language within questions.

2.7 The pilot survey

It is essential to test the instrument to be used in a survey and the interview protocols. After a substantial period of questionnaire development, CATI programming and testing, the pilot survey for the ISSHR project was carried out in the first two weeks of June 2004. As with the main fieldwork, the ESRI's RANSAM system was used to draw a sample of number stems to which the 'hundred banks' method was applied to generate the sample numbers.

Six experienced interviewers were given in-depth training before pilot interviewing began. Training covered the background to the survey, survey content, and sensitivity and awareness training, related to issues around sex, sexuality and sexual abuse. The training also examined procedures for legitimising the research should respondents have doubts about the authenticity of the phone calls. The procedure was, first, that the respondent could call back directly to the ESRI and talk to a senior researcher or interviewer supervisor; if this was not sufficient, the interviewer could fax the credentials of the project to a garda station nominated by the respondent.

In all, 1,529 calls were placed, yielding 354 valid households (i.e. a private residential address where a member of the household was aged 18-64). Of these 354 households, full interviews were completed with 205 respondents, 101 refused, 34 appointments were made for a later date and time, and 13 were partially completed. This led – counting as refusals the appointments made for a later date – to a crude response rate of 61.8%, without any attempt at conversion. Conservative estimates of conversion rates (where people who refuse to take part are called back and an attempt is made to 'convert' them to answering a questionnaire) led us to expect a final response rate of at least 65% – similar to that obtained in the Natsal surveys in Britain, though lower than that obtained in Australia, France and the US.

The pilot was particularly useful for identifying aspects of the questionnaire that needed to be changed before the main fieldwork. A number of substantial alterations were made before the instrument re-entered CATI development and testing.

2.8 Recruitment and training of interviewers

TRAINING of interviewers is extremely important in all areas of survey research, but is especially important in research in such a sensitive area as sex. The interviewer's ability to contextualise the research and answer questions is crucial in getting a respondent to commit to taking part in an interview.

Interviewers also need to be aware that the subject matter of KAB surveys can touch on areas in the respondent's life and past that may be hard for them to talk about and may, in a small number of cases, lead to distress. The first requirement of social-survey research is that the respondent should not be harmed by the research. This puts a particular onus on those carrying out a KAB survey to make sure that research protocols are well developed and that interviewers are well skilled in dealing with sensitive issues.

Along with recruiting experienced interviewers and those with other relevant professional experience, the research team designed a six-day training schedule which prepared the interviewers for fieldwork. As well as examining the background to the study, the instrument to be used, validation procedures and the CATI system, the training worked through the study protocols in terms of dealing with distress. It was particularly important to instil in interviewers the understanding that, in such cases, their role was not to give counselling but to provide useful information, using a standard national list of telephone numbers of support agencies, which was developed for the study.

Strategies for debriefing of interviewers were also established to protect their wellbeing in a potentially sensitive research setting. One important part of developing good interview and support skills among interviewers was role-playing, where interviewers had to deal with a number of different situations. In the final part of training, interviewers carried out a number of mock interviews with members of the research team, who varied the type of interview in order to assist training.

2.9 Ethical clearance

THE full set of instruments and protocols for the study as well as the training and back-up procedures to be used were reviewed and approved by the Research Ethics Committee of the Royal College of Surgeons in Ireland.

2.10 Total interviews and response rates

A TOTAL of 87,440 unique telephone numbers were called as part of the main fieldwork of the ISSHR study.

- Of these 87,440 calls, 37,674 were to valid numbers, i.e. a private residential household.
- Of the 37,674 households, 12,510 contained a person within the required age range (18 to 64).
- Out of the 12,510 eligible numbers, 7,441 completed interviews were obtained and 227 partial interviews.

Figure 2.1 summarises the call outcomes for the survey in total.

The final response rate was 61.3% if partial interviews are included and 59.5% if they are excluded.

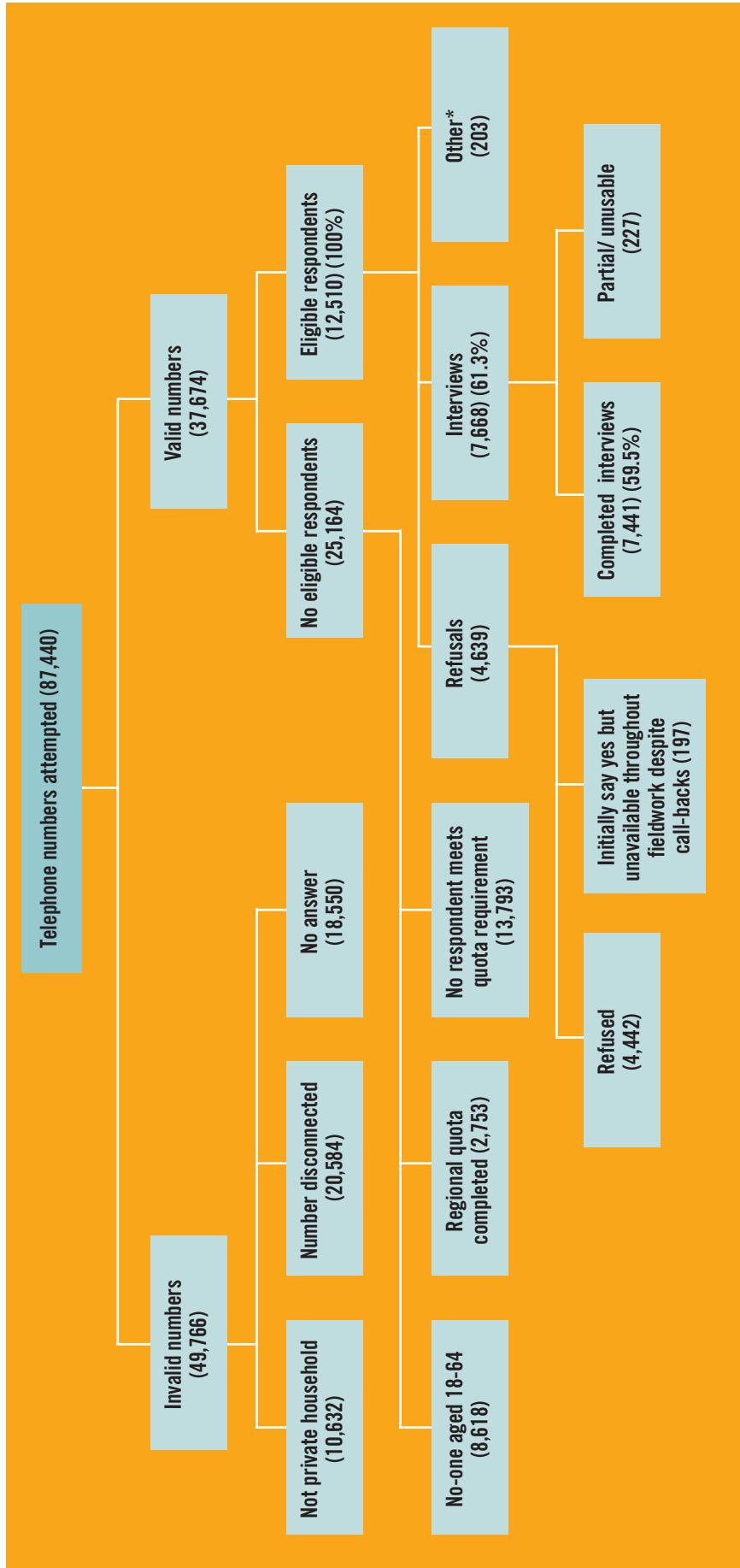
All analyses in the ISSHR report and sub-reports are based on the 7,441 completed interviews. The response rate is close to that obtained by the Irish Contraception and Crisis Pregnancy Survey (63.8%) and the 2000 British National Survey of Sexual Attitudes and Lifestyles (Natsal) (65% after regional reweighting). It is substantially higher than many of the face-to-face surveys carried out in the Irish context, such as the Quarterly National Household Survey or Household Budget Survey (carried out by the Central Statistics Office), which achieve response rates in the low 50% range.

Although the response rate is high in the Irish context, especially given the sensitive nature of the subject matter, it is below that achieved in other countries such as Australia, which achieved the very high rate of 73%. On the other hand, it is notably higher than that achieved by other Irish surveys on sexuality which used self-completion mail surveys. For instance, the 1994 ISSP module achieved a response rate of 53%.

The response rate was achieved by using multiple strategies, as is standard in telephone research protocols internationally, to facilitate participation.

- First, interviewers let a number ring 10 times, then halted that attempt, but repeated the procedure a further 10 times at other times during the day and the following week to try to achieve contact. If there was an answering machine, no message was left (experience has shown that messages cause confusion or concern). If no contact was achieved after 10 separate attempts, the number was logged as 'no answer'.
- Secondly, to facilitate respondents who could not participate during the day on a weekday, calls were made in the evenings up to 9pm and on Saturdays up to 4pm.
- Thirdly, interviewers were given training in first-contact procedures and attaining participation; this was augmented with regular meetings between interviewers, supervisors and fieldwork managers at which the best approach was discussed and successful methods shared.
- Finally, people refusing at the first invitation were offered another opportunity to take part in the survey, around two weeks after the first call. This 'conversion call' procedure is standard in telephone surveys.

Figure 2.1: Profile of unique telephone numbers called and outcome classifications



2.11 Demographic profile and representativeness

Table 2.1 gives an indication of the representativeness of the ISSHR data by comparing the distribution of cases across a number of different characteristics with that found in the Census of Population 2002.

The distribution of cases in the ISSHR data is given first by the 'unweighted' proportion in the first column of *Table 2.1*, with the 'weighted' proportion in the second (given separately for men and women). Data from the Census of Population 2002 is displayed in the third column so that the ISSHR distributions can be compared^B. It is standard practice with population surveys to examine the information collected from the questionnaire and statistically adjust or 'reweight' this prior to analysis so that it represents the population.

For example, *Table 2.1* shows that the unweighted sample comprises 42.8% men and 57.2% women. Based on the national pattern found using the 2002 census, the proportions should actually be around 50/50. Re-weighting is used to achieve this adjustment in the sample. The purpose of this re-weighting is to ensure that the structure of the complete sample is in line with the known structure of the population, according to the classificatory variables used in the analysis.

The re-weighting procedure used was based on a 'minimum information loss' algorithm; this adjusts an initial weight so as to ensure that the distributional characteristics of the sample matches those of the population, according to a set of externally determined controls. The latter are based on independent national sources such as the Census of Population 2002 and the Quarterly National Household Survey (both undertaken by the Central Statistics Office).

The variables used in the statistical adjustment or re-weighting procedure were gender, age cohort, marital status, level of educational attainment and geographic region. The interaction of these variables was also incorporated into the re-weighting scheme.

As has already been discussed in section 2.5, the ISSHR sample included an 'over-sample' of the population aged less than 30 so that more disaggregated analyses could be performed on a population that previous research suggests has more risky behaviours. This meant that two weights were needed for the data. The first or 'total population weight' re-weighted the data to represent the whole population aged 18-64 and thus weighted down the proportion of respondents under 30. The second or 'young persons' weight was designed to be applied only to those under 30; this re-weighted this group to represent those aged 18-29, including a disaggregation into three sub-age-groups.

Analyses in this report were carried out using whichever weight was most appropriate to the particular analyses. Where the number of individuals included in an analysis is given, this is always the unweighted number of cases. (Section 2.12 examines this issue further, describing how the analyses were carried out and how the tables in this report should be interpreted.)

^B The social-class distribution is compared to results from the Living in Ireland Survey (2001) as data on this class measure was not available from the CSO.

The categories used in Table 2.1 are those available from the Census of Population 2002. They are purely for re-weighting purposes and for comparisons with population data. They are not used for analysis in the report. (The distribution of variables used in the analyses will be examined shortly.)

Table 2.1: Unweighted, weighted and population proportions*# of selected characteristics by gender %						
Demographic characteristics	Men (n=3,188)			Women (N=4,253)		
	Un-weighted sample	Weighted sample	General population	Un-weighted sample	Weighted sample	General population
All*	42.8	50.1	50.1	57.2	49.9	49.9
Age*						
18-29	38.1	31.1	30.7	35.2	31.8	31.2
30-39	17.2	23.9	24.3	22.4	23.6	23.8
40-49	20.6	21.1	21.5	19.5	21.3	21.2
50-59	17.8	17.6	17.3	17.3	17.1	17.6
60-64	6.4	6.3	6.2	5.7	6.2	6.2
Relationship status*						
Single	45.4	44.7	45.0	38.1	41.8	42.2
Married	47.1	49.0	48.7	55.5	51.8	51.5
Cohabiting	7.5	6.3	6.3	6.4	6.4	6.3
Highest education*						
Primary or less	9.2	17.4	17.5	8.0	14.4	14.4
Lower secondary	18.5	24.4	24.4	16.8	22.0	22.0
Upper secondary	25.7	31.0	30.9	25.9	32.7	32.7
Post Leaving Certificate	11.2	10.5	10.5	15.2	12.5	12.5
Third level	35.5	16.8	16.8	34.1	18.5	18.4
Region*						
Dublin	30.6	29.4	29.4	26.7	31.1	31.1
Border, Midlands & West	25.4	25.9	25.8	28.2	24.9	24.9
Rest of country	44.0	44.7	44.8	45.1	44.0	43.9
Social class#						
Higher prof. & managerial	22.3	17.9	19.5	11.1	9.2	11.4
Lower prof. & managerial	21.9	19.1	13.9	29.6	22.9	20.9
Clerical/administrative	13.5	13.3	15.1	29.5	30.5	34.8
Skilled manual	22.8	27.2	28.4	1.8	2.1	1.7
Semi-skilled manual	12.3	13.1	13.3	19.3	23.2	21.8
Unskilled manual	7.4	9.4	9.6	8.8	12.1	9.4

* Central Statistics Office (2002)

Living in Ireland Survey (2001)

Table 2.1 shows that, although there are some differences between the unweighted proportions of some groups in the ISSHR data compared to the census data, the weighted data are very close to those of the population as measured by exterior data sources. Data from the Living in Ireland Survey is used to compare the social-class distribution in the ISSHR survey as information on the distribution of this class measure was not available from the CSO. The weighted proportions will not exactly match the census totals as some weights are adjusted so that undue weight is not placed on a small number of individuals. The unweighted differential stems in part from the intentional over-sampling of younger respondents, which was carried out to gain a higher number of younger individuals for analysis. Thus, whereas those under 30 make up 35.2% of the ISSHR sample, when unweighted, compared to 31.2% in the census population, this proportion falls to 31.8% when weighted.

The satisfactory response rate and effective re-weighting mean that results are very representative of the general population. The following sections examine the distribution of cases in the ISSHR data across the various socio-demographic categories used in the later chapters. The distribution of educational, demographic and relationship categories in the data is shown in *Table 2.1*, and the following sections examine a range of other factors.

2.11.1 Social classification

Socio-economic differences are a key interest of this study. Thus measures had to be taken to allow the differences in this dimension to be examined. The term 'socio-economic factors' covers a range of different measures of a person's relationship to the labour market, their level of resources (and power), and the manner in which these are translated into social status.

Although it would be ideal to have measures of all the constituent factors (education, income, social class and social status), this was not practical within the confines of a 30-minute telephone survey. Instead it was decided that education and social class alone would be measured; education because it is a major determinant of other socio-economic factors such as income and status, and social class because it is a useful summary measure of occupational success and income level.

A number of social-class measures have been developed, both in the Irish context and in the international research literature. One of the best known and most frequently used is the Erikson/Goldthorpe or EG class measure, which is based on the employment status of an individual. This has informed the development of other national class measures such as the current Office of National Statistics (ONS) measure in the UK and the current CSO (1996) measure. Operating the EG, ONS or CSO measures requires information on the number of individuals supervised or managed as well as information on the person's occupation and employment status. Shortage of space in the questionnaire made this impractical. Given this, the social class measure used by the Central Statistics Office until 1996 (known as the 1986 class schema) was used instead. Although superseded by the 1996 measure, the 1986 one remains a robust and valid class measure and is still used for research even by the CSO itself.

Table 2.2 provides an overview of the distribution of social class in the ISSHR sample. The largest grouping among social classes is social class III (other non-manual) at 21.4%, followed by social class II (lower professional) at 20.9%. As has already been seen, these proportions are very similar to those of the general population as measured in a recent national sample.

Table 2.2: Social class of study sample by gender

	Men	Women	Total
	N=3,188 (%)	N=4,253 (%)	N=7,441 (%)
Higher professional (social class I)	17.9	9.2	13.8
Lower professional (social class II)	19.1	22.9	20.9
Other non-manual (social class III)	13.3	30.5	21.4
Skilled manual (social class IV)	27.2	2.1	15.4
Semi-skilled manual (social class V)	13.1	23.2	17.8
Unskilled manual (social class VI)	9.4	12.1	10.7

Note: Weighted proportions

It should be remembered when examining the distribution of classes in *Table 2.2* that the age distribution of the population is truncated to those aged between 18 and 64. This means that there is a higher proportion of non-manual occupations in ISSHR than in the general population.

2.11.2 Relationship status

While marital status was used in weighting the sample to match the general population profile (*Table 2.1*), the data was re-categorised by current relationship status for the purposes of analysis (*Table 2.3*). Current relationship status was considered to be a more useful variable in terms of current sexual and contraceptive behaviour. In total, 50% of participants were married, 6% were living with a partner, and 11% were in a steady relationship.

Table 2.3: Relationship status of study sample by gender

	Men	Women	Total
	N=3,188 (%)	N=4,253 (%)	N=7,441 (%)
Not in a relationship	27.3	26.1	26.7
Married and living with spouse*	49.0	51.8	50.4
Not married and living with a partner	6.3	6.4	6.4
In a steady relationship	10.1	12.4	11.2
In a casual relationship	7.4	3.4	5.4

Note: Weighted proportions

* If married, participants were asked if they were currently living with their husband/wife. If not, their current relationship status was ascertained.

2.11.3 Religious beliefs

ISSHR respondents were asked whether they would describe themselves as a religious or spiritual person. Their responses were coded from 'not at all' to 'extremely religious' (Table 2.4). The weighted responses show that the largest grouping was of those who responded that they were a 'little religious' (38%) followed by those who were 'quite religious' (30%).

Table 2.4 Level of religiosity of the study sample by gender

	Men	Women	Total
	N=3,188 (%)	N=4,253 (%)	N=7,441 (%)
Not at all religious	24.4	17.0	20.7
A little religious	38.1	38.0	38.1
Quite religious	27.1	32.2	29.7
Very much religious	9.3	11.1	10.2
Extremely religious	1.1	1.6	1.4

Note: Weighted proportions

2.11.4 Age group

Table 2.1 shows that the age distribution of the ISSHR sample was very representative of the Irish population. The age categories in Table 2.1 were used for comparison because they matched the data available from the CSO. The remainder of this report uses different sets of age categories that allow greater differentiation between age groups, particularly at the younger end of the age spectrum. Two age categories are used: a nine-category age group, as displayed in Table 2.5, and a collapsed five-category version which retains those aged 18-25 as one group but thereafter collapses all other five-year age groups into 10-year groups.

Table 2.5: Age groups by gender

	Men	Women	Total
	N=3,188 (%)	N=4,253 (%)	N=7,441 (%)
18-24	20.8	20.9	20.8
25-29	10.3	11.0	10.7
30-34	10.7	9.4	10.0
35-39	13.2	14.2	13.7
40-44	11.0	11.0	11.0
45-49	10.1	10.2	10.2
50-54	7.9	8.4	8.1
55-59	9.7	8.7	9.2
60-64	6.3	6.2	6.2

Note: Weighted proportions.

Table 2.5 shows that the largest age group comprised people under 25, who make up 21% of the population. The next largest group was of those between 35 and 39. The smallest age group was of people aged 60 to 64.

2.12 The relationship between age group, social class, education and relationship status

THIS section provides a breakdown of the main socio-demographic predictors that are used in this study. It is important to understand the relationship between these variables. This section contains cross-tabulations of four of these variables: age group, social class, educational level and relationship status. The five-category age version employing 10-year age groups is used.

2.12.1 Age and highest educational level

The first important pattern concerns age and educational level. Since the introduction of free secondary education in Ireland in 1967, the level of education in the Irish population has steadily increased. Younger age groups are now far more likely to complete secondary education and participate in third-level education. This is shown in Table 2.6, which gives the distribution of highest educational qualification across age groups.

Table 2.6: Highest educational level attained by age group %

	18-24	25-34	35-44	45-54	55-64
Primary only	2.2	4.6	9.0	21.5	42.9
Lower secondary	11.0	20.0	27.0	27.3	19.4
Upper secondary	57.0	46.1	45.2	35.1	27.6
Third level	29.8	29.3	18.8	16.1	10.2

Note: Weighted proportions

Table 2.6 shows that the average level of highest education increased as age decreased. People under 35 are much more likely to have undergone third-level education than those aged 35 or more. The influence of free secondary education (introduced in 1967) is clear in the large proportion (43%) of those in the oldest age group with primary education alone. Among those aged 45-54, this proportion falls to 22% and to just 2% among those aged 18-24.

It is important in the analyses to come to bear in mind the structured relationship between education and age group when examining patterns of sexual behaviours across education groups. Any results which do not control for age may largely reflect the average age of the people in the education groups rather than the impact of education per se.

2.12.2 Age and social class

The increasing educational profile of younger Irish people has also influenced their occupational and social-class status. Ireland's move from a predominantly agricultural economy in the 1950s to a post-industrial economy by the end of the century has increased the proportion of the population working in professional and white-collar occupations, particularly among younger cohorts who have the higher levels of education required.³⁸ This is shown in Table 2.7, where the lowest proportion in semi-skilled or unskilled occupations is found among the youngest age group, who also have the highest proportion in professional and managerial occupations.

Table 2.7: Highest social-class level attained by age group %

	18-24	25-34	35-44	45-54	55-64
Higher prof. & managerial	25.0	17.6	17.2	16.0	14.2
Lower prof. & managerial	23.7	22.0	22.3	22.6	21.4
Clerical/administrative	15.6	19.5	22.4	20.3	20.4
Skilled manual	17.5	16.5	13.0	15.6	18.5
Semi/unskilled manual	18.1	24.4	25.1	25.5	25.5

Note: Weighted proportions

As with education, it is important to bear this distribution in mind when examining the patterns of sexual behaviours.

2.12.3 Education and social class

The previous section mentioned the influence among younger age groups of higher levels of education on their social class. This relationship, found across all industrial societies studied in social-mobility research, results from the role which education plays in the allocation of occupations in industrial economies.^{39,40} It can be seen clearly in *Table 2.8*, which shows that those with higher levels of education are far more likely to have a higher occupational position. For example, among those with primary education alone, 22% are in professional and managerial positions compared to 66% among those with third-level qualifications. Similarly, whereas 41% of those with primary education alone are in the semi/unskilled-manual class, this is true of just 11% of those with a third-level qualification.

	Primary	Lower secondary	Higher secondary	Third level
Higher prof. & managerial	8.6	13.3	17.3	31.0
Lower prof. & managerial	13.4	13.5	23.5	34.9
Clerical/administrative	13.1	20.2	23.9	15.0
Skilled manual	23.7	21.3	14.8	8.4
Semi/unskilled manual	41.1	31.8	20.6	10.7

Note: Weighted proportions.

This structured relationship between education and social class has implications for the analyses in this report. Analyses aim to identify which socio-demographic factors, such as age, educational level and social class, are independently related to various sexual behaviours and outcomes by controlling for the socio-demographic factors in multivariate analyses (see section 2.13 for more information). However, because social class and education are often closely related in their effects, controlling for both simultaneously can lead to the effects of both being 'cancelled out'. In the analyses, the variables are therefore analysed in separate multivariate models.

2.12.4 Age group and relationship status

Throughout this report, patterns of sexual behaviours are according to a person's relationship status. As explained in section 2.11.2, relationship status is a more powerful predictor of sexual behaviours than marital status since those who are legally married, divorced, separated or widowed may or may not have a sexual partner and it is the latter factor that is assumed to be more important for many outcomes than the legal status itself.

Table 2.9: Relationship status by age group %

	18-24	25-34	35-44	45-54	55-64
Not in a relationship	51.1	26.8	16.6	14.6	21.3
Married (and living with spouse)	1.5	36.4	71.6	76.4	72.8
Cohabiting	5.0	15.9	5.5	2.6	1.5
Steady relationship	30.3	14.4	3.5	3.5	2.2
Casual relationship	12.1	6.5	2.8	2.9	2.2

Note: Weighted proportions.

However, relationship status varies significantly by age group and this will influence the patterns seen in analyses. For example, as shown in *Table 2.9*, younger individuals were far less likely to be in a committed relationship. Over half (51%) of those aged 18-24 in the ISSHR sample were single (i.e. not currently in a relationship), compared to 27% of those aged 25-34 and just 15% of those aged 45-54. The corollary of this is that older age groups were far more likely to be married. This is shown well in *Table 2.9*, where 76% of those aged 45-54 were married and living with their spouse, compared to just 2% of those aged 18-24.

2.13 Statistical analysis and presentation of findings

QUANTITATIVE analysis of the data was performed using the Stata statistical programme. This provided basic descriptive statistics (percentages, means, medians) and allowed for more complex analyses to address research questions. Relationships between variables were analysed using chi-squared tests (unless otherwise stated) as they were considered to provide the best measure of significance without making assumptions concerning the direction of any possible relationship. Chi-squared test results are not listed, since the test results for weighted survey data cannot be interpreted in the usual way.

Most analyses are also presented graphically across important socio-demographic characteristics, such as gender or age, to display the percentage of participants within each socio-demographic category (e.g. age group or male/female) who reported the sexual behaviour or experience of interest.

Where relevant, this is followed by more complex multivariate analyses, which test the relationship of particular variables to the outcome of interest, while controlling for other factors. The ability to control for some variables in order to identify the independent effect of another variable is important because of the relationships between the variables themselves. For example, section 2.12.1 showed that younger individuals are far more likely to have higher levels of education. A simple examination (using a chi-squared test for example) of the relationship between education and a variable of interest (such as use of contraception) may identify that there is a significant relationship. However, it is possible that any relationship between the variable and educational level may actually result from the fact that different age groups are unevenly distributed across the education categories, and thus that age is the more important variable in determining contraceptive use.

The use of multivariate statistical models controls for the influence of age when examining the relationship with education. An example of such a model is given in *Table 2.10*, which has been reproduced from *Table 6.4* (chapter six) in ISSHR main report, showing contraceptive use at first intercourse. Reading from the top line, this table gives the overall proportion of men and women ('all participants') who used contraception at first intercourse, i.e. 66.7% of men and 74.1% of women. Beside this proportion, the actual number of men or women involved in the analysis (the 'N' or 'base') is given, e.g. 2,752 men. Below the top line, the percentage of men or women in different age groups who used contraception at first intercourse and the actual number involved in the analysis are given. For example, 87.8% of all men aged 18-25 used contraception at first intercourse. Each line can thus be read independently of all others to give the simple probability of the sexual behaviour of interest (in this case, use of contraception at first intercourse) being true or occurring.

While it was possible to present the results of multivariate analyses next to the percentages, it was agreed that this format could be confusing for the reader. Instead the report presents the statistical significance of differences between groups, after controlling for all other variables in the table (in the column titled 'MV'). This significance is represented using asterisks (explained in the key at the bottom of each table), as in *Table 2.10*. The more asterisks next to a proportion, the more significant is the difference after controlling for other factors, in a multivariate model.

Some cautions are needed with regard to this method of presentation. Statistical differences between groups may not be reflected in the actual percentages in the table; what appears to be a large difference in percentages on one variable might not be statistically significant, while a small difference on another could be. This is because statistical significance depends not only on the difference between groups in outcome but also on the size of the groups involved and the distribution of other variables in the analysis. Additionally, evaluation of the significance of differences across groups requires a reference category. This is identified in tables using the letter 'c' (for 'constant') which is another term for the reference category. The asterisks in the table thus indicate whether a group is statistically different from the reference category and not necessarily all other categories. For instance, in *Table 2.10*, the reference category for education is primary level, with 42.7% of men with primary education reporting contraceptive use at first intercourse. When compared to this reference group, there was no difference (*ns: not significant*) for men with lower secondary education, but there were significant differences for men with higher secondary and third-level education. Each of these refers to a significant difference from the reference category (primary level), after controlling for the other variables in the table (current age and relationship status). Where possible the reference category used is consistent across analyses.

Table 2.10: Use of contraception at first vaginal intercourse among those at risk of unintended pregnancy, by socio-demographic variables

	Men			Women		
	Used contraception (%)	Base	MV+ contraception	Used (%)	Base	MV+
All participants	66.7	2,752		74.1	3,522	
Current age (years)						
18-24	87.8	625	***	94.1	730	***
25-34	77.4	654	***	86.0	905	***
35-44	66.6	601	***	73.4	918	***
45-54	50.7	511	*	57.9	614	***
55-64	38.8	361	C	39.8	355	C
Education (highest level attained)						
Primary	42.7	206	C	42.1	207	C
Lower secondary	60.1	471	ns	66.0	506	**
Higher secondary	72.7	1,035	**	78.6	1,497	***
Third level	78.7	1,040	***	85.8	1,312	***
Relationship with first sexual partner						
Just met/did not know each other	53.3	239	***	77.0	45	ns
Knew each other, not steady relationship	60.3	819	***	70.3	460	***
Steady relationship/cohabiting/engaged	72.6	1,563	ns	77.5	2,587	ns
Married	61.1	121	C	58.8	427	C

+ Multivariate analysis: logistic regression adjusting for all variables in the table

*= $p < 0.05$; **= $p < 0.01$; ***= $p < 0.001$; ns=not significant; C=comparison group

Analyses relating to age at first intercourse were based on a 'hazard rate' calculation. When analysing age at first sex across a population in which some members have not yet experienced first intercourse, a simple estimation of the median or mean age at first sex is likely to be inaccurate because those who have not yet experienced first intercourse may subsequently report a later age at first sex. Therefore, such an estimate of the median or mean would be lower than the final ('true') value for the population. A 'hazard rate' statistic overcomes this problem by adjusting findings to take account of participants who have not yet experienced first intercourse.

Learning about sex

THIS chapter deals with a range of issues relating to sex education. It begins by providing an introduction to research internationally on sex education at home and on formal sex education. It then discusses the provision of formal sex education in Ireland and the issue of early school-leavers.

The results of the ISSHR study are presented in section 3.2. This begins with an overview of the sex education that participants received on various topics, from all sources. The following sub-sections examine:

- how men and women, across socio-demographic variables, rated the sex education they received
- the sources of sex education (school, home or other) and the variations across socio-demographic variables
- parent-child discussion about sex, in terms of ease of discussion
- attitudes to the provision of formal sex education and views about where such sex education should be provided
- people's satisfaction with current levels of knowledge about different topics and the requirements for ongoing sex education into adulthood

A summary of the results is provided in section 3.3.

3.1 Introduction

3.1.1 Learning about sex at home

ARTICLE 42 of the Irish Constitution recognises the family as the primary educator of the child and respects the rights of parents to provide religious, moral, intellectual, physical and social education of their children.⁵ Families can exert influence on sexual behaviour in numerous ways. The effect of the parent-child relationship on adolescent sexual behaviour has thus been investigated in various dimensions, including family closeness and support and parent-child communication.

Parents can communicate, both verbally and non-verbally, positive and negative messages about sexuality and sexual behaviour to children throughout their childhood.⁶ Numerous studies have examined the extent to which parent-child communication affects sexual behaviour when the child reaches adolescence. Some of the findings conflict:

- Some studies have reported that open and positive parental communication about sex is related to decreased likelihood of sexual initiation during adolescence and later onset of sexual activity;⁷⁻⁹ others have found no such relationship.¹⁰⁻¹⁴
- A review of research into parent-child communication about sex found that about the same number of studies found no relationship between parent-child communication and adolescent sexual behaviour as did report such a relationship.⁷

Generally, the evidence on parent-child communication and adolescent sexual behaviour is inconclusive. This may be due in part to the differing measurements used across studies; some measure general occurrence of parent-child communication while others look at more detailed reports of communication of specific aspects of sex and sexuality. Additionally, some authors have concluded that children and parents often differ on their ideas of what has been communicated between them and that adolescents are often ignorant of the attitudes held by their parents.¹³ Many studies do not consider what has been communicated and thus exclude the effect that parental values may have on what is communicated.

In general, however, much research has confirmed an association between parental attitudes towards sex and onset of sexual activity as well as age of onset.

The extent of any family influence on adolescent sexual behaviour is further mediated by other factors including age, socioeconomic status, community characteristics and female employment opportunities,^{15,16} again highlighting the inter-related nature of factors affecting adolescent sexual behaviour.

3.1.2 Formal sex education

Debate continues internationally about whether providing formal sex education to young people encourages adolescent sex. However, the vast majority of research indicates that sex-education programmes do not increase sexual activity among adolescents^{17,20-22,79,80}, and that some programmes can reduce sexual activity, delay sexual initiation¹⁷⁻²⁰ and increase contraceptive use among young people.¹⁷⁻²² Furthermore, a review of sexual-health policy across Europe showed that better provision of sex education was generally related to lower levels of teenage pregnancy.⁸⁰ Similarly, evidence from a review of reviews concluded that school-based, community-based and family outreach programmes could be effective in promoting good sexual health and reducing pregnancy, while not promoting earlier initiation of sexual behaviour.⁸¹

While some sex-education programmes have achieved greater success than others, reviews of programme evaluations have concluded that their effectiveness varies widely.^{19,82} International discussion about the content of sex-education programmes continues. Sex-education encouraging abstinence has become increasingly popular in the US over recent years.⁸³ One version of this approach, 'abstinence only', focuses on abstinence until marriage, whereas other programmes encourage abstinence but also teach about contraception.⁸⁴ There is a lack of conclusive evidence about the benefits of the abstinence-only approach, but the little research

available suggests that it does not consistently reduce levels of sexual activity or age of sexual initiation among adolescents.⁸⁵⁻⁸⁷ As well, young people who receive abstinence-only sex education may not receive important information about contraception and safe sex⁸³ and may be less likely to use contraception if they do become sexually active.⁸⁵

Some sex-education programmes have begun to incorporate teaching of interpersonal skills, such as negotiation and assertiveness, in an attempt to provide adolescents with the skills to avoid unwanted sexual interactions and/or to secure the use of contraception. Such programmes could be more effective in delaying onset of sexual activity and increasing contraceptive use among adolescents.^{82,88,89}

A review of sexual-health policy in European countries described one stance on sex education, which envisages it as:

“less about learning the mechanics of sex and more about how to foster healthy relationships, developing personal and social skills, positive attitudes and beliefs about sexual identity, and increase knowledge about sexuality and sexual health”.⁸⁰

This view is supported by a number of organisations including the British Medical Association and the Sex Education Forum (cf. Hosie 2002⁸⁰).

International reviews of research to date suggest variations in the effectiveness of sex-education programmes internationally,^{19,82} with many key areas often not covered in curricula.¹⁷

3.1.3 Formal sex education in Ireland

SINCE the national programme of formal Relationships and Sexuality Education (RSE) has only developed in recent years in Ireland, little is known of the extent of school sex education that was provided to the current Irish adult population.

- A number of studies during the 1960s and 1970s found that many Irish people lacked knowledge of basic facts of life.²
- More recent research has also reported a lack of basic knowledge and information about sexual matters among both adults and young adults.²³⁻²⁶
- Other studies have reported that young mothers and pregnant women fail to link sexual activity with the risk of pregnancy.^{51,90}
- The Irish Family Planning Association (2002) reported that it “continues to see clients who lack an understanding of bodily functions and the risks posed by casual, unprotected sex”.⁹¹ It recommended improved sexual and reproductive health education, to include coverage of reproduction, safe sex and contraception.
- A handful of small studies provide an insight into more recent experiences of sex education. In their study of 2,754 people aged 15-18 in Galway, MacHale and Newell (1997) found that 70% had received sex education at school. However, friends were the main source of sexual knowledge for 46% of participants, while 41% cited teachers, 37% parents and 10% leaflets as their main source. Preferred sources of information about sex were teachers (57%), followed by parents (37%) and health-education leaflets (32%).⁹²

An evaluation of sex education in Irish schools in 2000 found that 42% of primary and 34% of post-primary schools had not drafted an RSE policy document, while around a quarter of both primary (26%) and post-primary (28%) schools had not established an RSE policy committee⁹³. The report concluded that many children were not receiving adequate sex education at school or at home. The evaluation did find an increase in the number of schools establishing committees and drafting policy documents between 1999 and 2000. Additionally, 36% of primary schools and 64% of post-primary schools had actually drawn up an RSE programme by 2000, and 19% of primary and 42% of post-primary schools had implemented it in all classes. Again, an increase in schools drawing up and implementing RSE programmes was seen between 1999 and 2000, and 59% of primary and 42% of post-primary schools said they intended to implement an RSE programme in all classes in the following year.⁹³

A subsequent national survey of implementation of Social, Personal and Health Education (SPHE) at post-primary (Junior Cycle) asked school principals (response rate 48%) to outline availability of RSE programmes. Results showed that an RSE programme was then available to 73% of first-year, 69% of second-year and 63% of third-year pupils. The authors suggested that, while fewer pupils received RSE as they moved into adolescence, it is probable that their need for education in RSE was likely to increase over these school years.⁹⁴ It was not clear in this cross-sectional study if the higher proportion undergoing the programme in their first year represented an expansion of the programme generally or a shift of the same input to earlier in the post-primary curriculum.

Another evaluation of RSE implementation in primary schools (response rate 50%) carried out in 2002 found that 69% had established an RSE policy committee, 65% had drafted an RSE policy document and 50% had implemented the policy through an RSE programme. Many other schools reported an intention to implement an RSE programme in the coming years.⁹⁵

The experience of school sex education in the current adult population is assumed to be considerably more varied than that of currently young people, in both extent and depth. In the few small-scale Irish studies available, reports of inadequate sex education²⁴ and dissatisfaction with sex education⁹⁶ were found among those who finished school prior to the State's introduction of formal RSE. There is now a clear commitment to establishing a comprehensive RSE programme and evidence that, while it is not universally delivered, provision of it is increasing.

3.1.4 Early school-leavers

Early school-leavers, and those who miss significant portions of the school year for various reasons, pose a particular challenge for sex education in schools. By current estimates, around 13,000 young people in Ireland leave school legitimately by age 16 or when they have completed three years of post-primary education.⁹⁷ Among the under-16s in post-primary school however, around 37,000 miss 20 days or more of school per year. Rates of poor attendance are higher in more disadvantaged areas. For example, there is a 30% difference in rates of poor attendance (20 days or more) in the most disadvantaged areas compared to the least disadvantaged.

There is some Irish evidence on the issue of vulnerability of early school-leavers in relation to sexual health (see section 6.1.1). A small qualitative study by the Midland Health Board/Regional Youth Council in 1996 provided evidence of limited knowledge of sexual-health

issues among early school-leavers aged 13-18 and of those 'at risk' being early school-leavers. The study found a major lack of awareness about contraception and protection from STIs, limited knowledge of STIs, and lack of awareness about the availability of sexual-health services and the services offered. Most participants reported receiving very little formal sex education, particularly about contraception, STIs and early pregnancy.⁹⁸

3.2 Results and discussion

3.2.1 Sex education received, from all sources

SUMMARY

Participants were asked a number of questions about their experience of sex education. They were asked if, when they were growing up, they had received sex education (from any source) on the following topics:

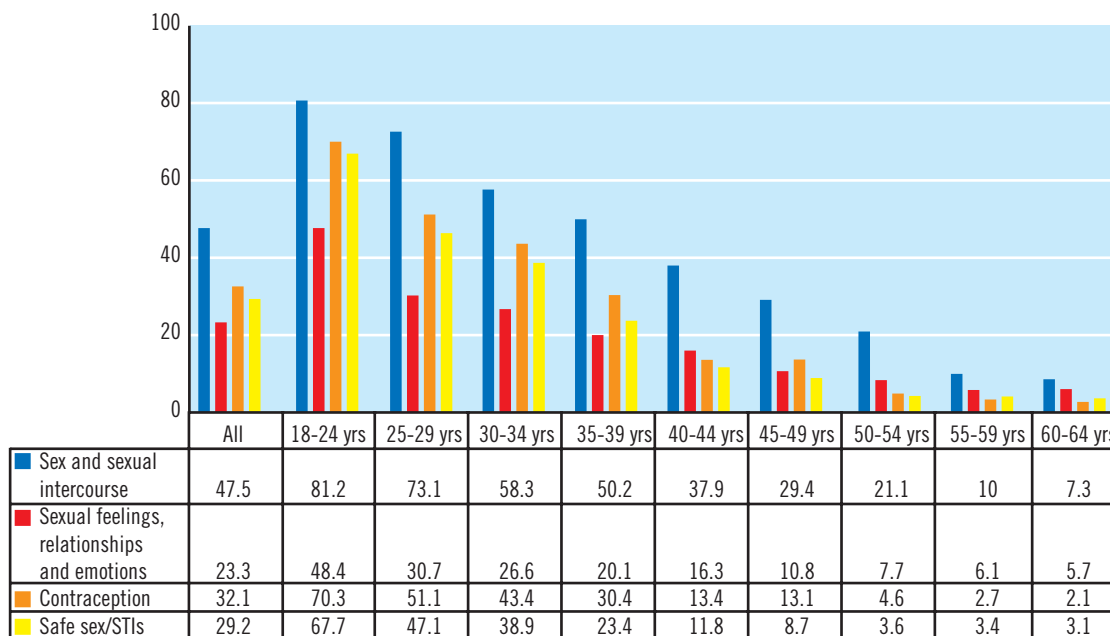
- sex and sexual intercourse
- sexual feelings, relationships and emotions
- contraception
- safe sex/STIs

- Almost half of men received sex education (from any source) on sex and sexual intercourse (47.5%), contraception (32.1%), safe sex/STIs (29.2%) and sexual feelings, relationships and emotions (23.3%).
- Women were most likely to report sex education (from any source) on sex and sexual intercourse (54.5%), contraception (36.3%), safe sex/STIs (30.8%) and sexual feelings, relationships and emotions (29.4%).
- Younger age and higher educational level were major predictors of having received sex education (from any source).

GENDER differences were identified for some topics. Women were significantly more likely than men to have received sex education on sex and sexual intercourse ($p < 0.001$), sexual feelings, relationships and emotions ($p < 0.001$) and contraception ($p < 0.01$). There were no significant gender differences in receipt of sex education on safe sex/STIs.

Figure 3.1 displays the percentage of men who received sex education (from any source) on each topic, by current age.

Figure 3.1: Men who received sex education on various topics from any source, by current age %



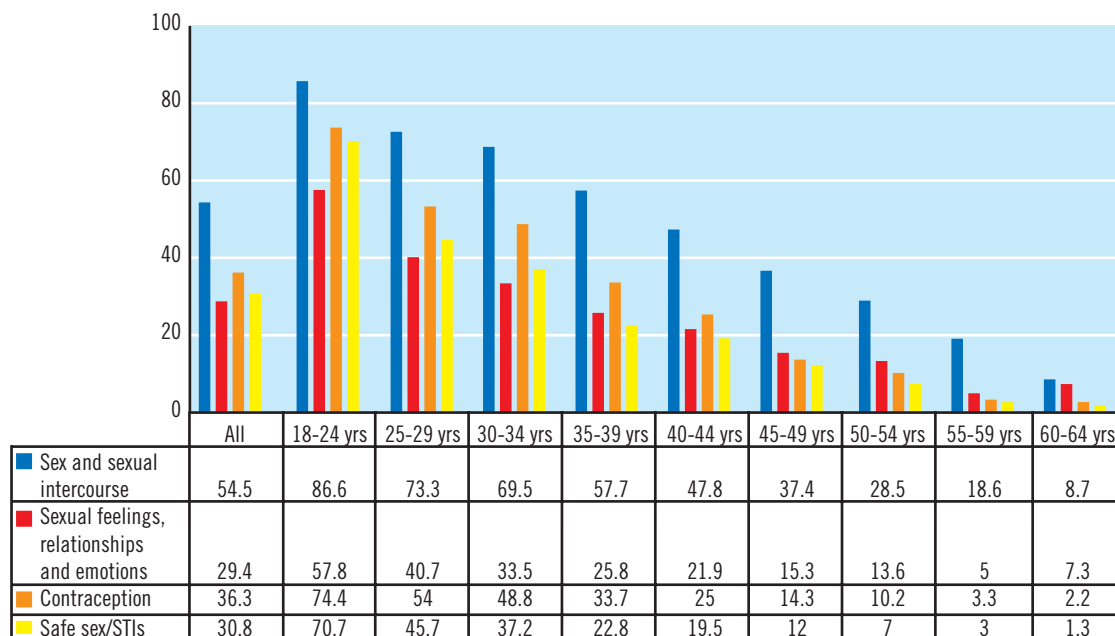
More men (47.5%) received sex education on sex and sexual intercourse than on any other topic. This would be expected since it is the most general of the topic areas. Almost a third (32.1%) received education on contraception and 29.2% on safe sex/STIs. Fewer men (23.3%) received education on sexual feelings, relationships and emotions.

It is clear from *Figure 3.1* that receipt of sex education on each topic was increasingly likely with younger age; for example, 81.2% of 18-24 year-old men had received education on sex and sexual intercourse. However, even among this younger group, considerably fewer men (48.4%) received education on sexual feelings, relationships and emotions.

Figure 3.2 shows receipt of sex education for women, and the same patterns were clear. Women were most likely to receive education on sex and sexual intercourse (54.5%), followed by contraception (36.3%), while fewer received education on safe sex/STIs (30.8%) or sexual feelings, relationships and emotions (29.4%).

Again, for all topics, an increase in receipt of sex education was seen with younger age.

Figure 3.2: Women who received sex education on various topics from any source, by current age %



These patterns of increasing receipt of sex education with younger age among both men and women are positive findings. The sources of this increase are considered later in the chapter (section 3.2.3).

It is also interesting to determine patterns across other socio-demographic variables. *Tables 3.1* and *3.2* display the percentage of men and women who received sex education (from any source) on each of the four topics, by other socio-demographic variables.

Table 3.1 indicates that men with higher levels of education and, to some extent, higher social class were more likely to have received sex education on the four topics. These patterns were further investigated in multivariate analysis. Since the pattern across topics is similar, these were combined to make one variable of receipt of any sex education. All participants who received sex education on at least one topic were compared with those who did not receive sex education on any of the topics.

In total, 52.7% of men received sex education on at least one of the four topics. After adjusting for education, age differences among men were confirmed: receipt of education on at least one topic was increasingly likely with younger age.

When controlling for current age, educational differences were also found. The higher the level of education, the greater was the likelihood of receiving sex education on at least one topic.

Table 3.1: Men's receipt of sex education on each sex-education topic, by socio-demographic variables

	Received sex education on:				
	Sex and sexual intercourse (%)	Sexual feelings, relationship and emotions (%)	Contraception (%)	Safe sex/ STIs (%)	Base (range)*
All participants	47.5	23.3	32.1	29.2	3,181-3,188
Education (highest level attained)					
Primary	11.5	7.0	7.0	5.9	263
Lower secondary	39.8	18.1	24.1	21.4	543-544
Higher secondary	56.0	27.6	40.2	37.1	1,195-1,198
Third level	66.7	32.8	43.9	39.7	1,180-1,183
Social class					
Higher professional	52.2	27.6	36.6	33.3	789-790
Lower professional	51.0	26.8	32.9	32.3	728-731
Administrative/clerical	49.3	23.5	29.1	25.4	427-428
Skilled manual	41.9	19.5	29.0	25.6	610-611
Semi-skilled/unskilled manual	42.6	18.3	31.1	26.4	490-492

**A small number of participants did not respond to all questions relating to sex-education topics; this is reflected in the base range.*

Social class could not be included in this model due to the close association between education and social class. A separate regression analysis, controlling for current age, found significant social-class differences. Men in the skilled manual or semi-skilled/unskilled classes were significantly less likely to have received sex education on at least one of the four topics, than men in the non-manual classes.

Table 3.2 shows receipt of sex education on each topic among women, by major socio-demographic variables.

Table 3.2: Women’s receipt of sex education on each sex-education topic, by socio-demographic variables

	Received sex education on:				
	Sex and sexual intercourse (%)	Sexual feelings, relationship and emotions (%)	Contraception (%)	Safe sex/ STIs (%)	Base (range)*
All participants	54.5	29.4	36.3	30.8	4,244-4,252
Education (highest level attained)					
Primary	17.8	7.5	8.2	8.4	304-305
Lower secondary	43.7	21.3	28.7	22.0	657
Higher secondary	61.8	34.0	41.5	35.4	1,776-1,780
Third level	70.0	39.3	48.4	41.8	1,507-1,510
Social class					
Higher professional	65.1	37.5	48.0	43.4	642
Lower professional	59.4	32.6	38.2	31.3	1,093-1,096
Administrative/clerical	52.7	24.6	32.7	27.0	974-978
Skilled manual	63.3	37.4	49.2	45.1	296
Semi-skilled/unskilled manual	46.7	27.0	32.0	26.6	891-892

**A small number of participants did not respond to all questions relating to sex-education topics; this is reflected in the base range.*

Across all topics, receipt of sex education among women increased with higher educational level. In general, more women in the higher professional and skilled manual classes received sex education on the topics evaluated. However, these educational and social-class differences may reflect age differences in receipt of sex education (since age differences also exist across educational attainment and social class). Again, sex-education topics were combined in order to compare women who received sex education on at least one topic with those who did not receive sex education on any topic. In total, 60.2% of women received sex education on at least one of the four topics. This was significantly higher than the comparable total for men of 52.7% ($p < 0.001$).

After controlling for educational level, age differences were confirmed; the younger the woman, the greater the likelihood of receiving sex education on at least one topic.

When controlling for age, educational differences were identified, as with men. The higher the level of education, the greater was the likelihood of receiving sex education on one or more topics.

Social class was examined in a separate model, controlling for current age. There were no significant differences between women in the higher professional class and those in the lower professional, administrative/clerical or skilled manual classes. However, women in the semi-skilled/unskilled manual class were less likely than those in the higher professional class to have received sex education.

In summary, younger age and higher educational level were identified as major predictors of receipt of sex education on at least one topic among both men and women.

A further consideration is the quality of the sex education received. One way to measure this is to ask recipients to rate their sex education. This is examined in the following sub-section.

3.2.2 Rating of sex education received

SUMMARY

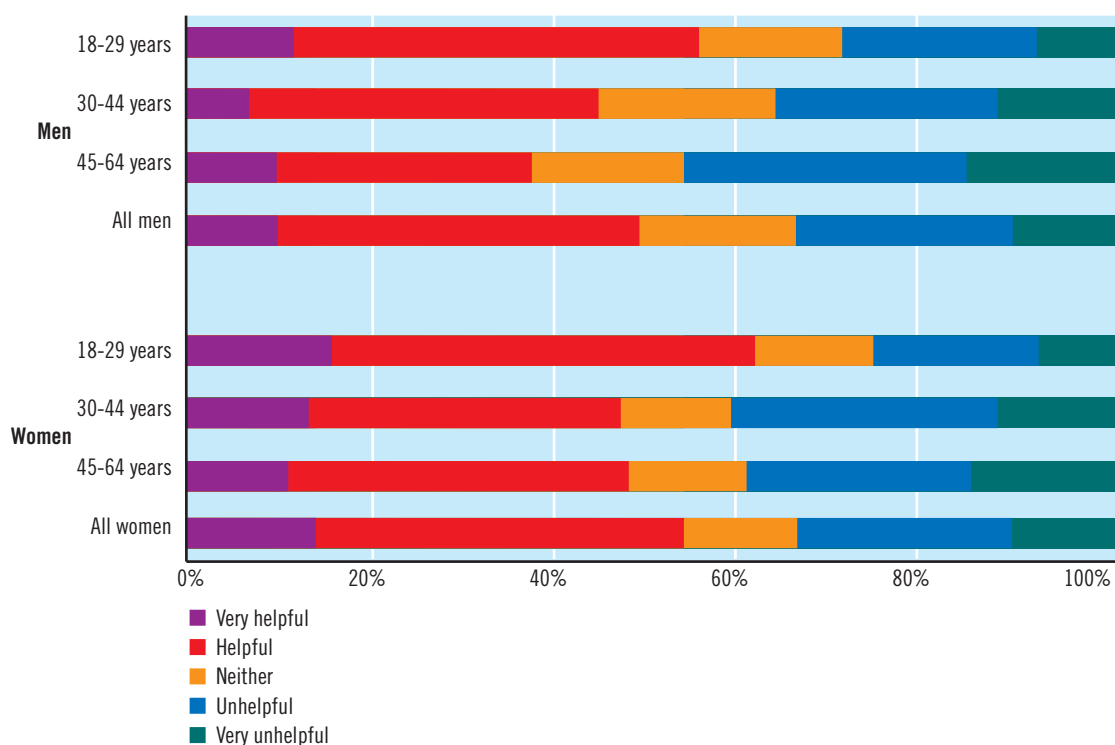
Participants who had received sex education were asked to rate it (from all sources) in terms of how helpful it was in preparing them for adult relationships.

- Half (49%) of men and 53.8% of women rated the sex education they received (from all sources) as helpful or very helpful.
- Younger participants were more likely to rate the sex education they received as helpful.

FIGURE 3.3 provides an overview of ratings of sex education received, by gender and current age. Among both men and women, there were significant age differences in ratings ($p < 0.001$). More younger men (aged 18-29) (55.4%) rated the sex education they received as helpful or very helpful than did 30-44 year-olds (44.4%) and 45-64 year-olds (37.5%).

Similarly, more women (61.1%) aged 18-29 rated their sex education as helpful or very helpful than did those aged 30-44 (47.2%) or 45-64 (47.9%).

Figure 3.3: Rating of sex education received from all sources, by gender and current age



While these ratings were requested only from participants who had received sex education, it is interesting to look at socio-demographic differences in ratings to identify groups who did not find that education helpful. There were significant gender differences ($p < 0.01$): 49% of men and 53.8% of women rated the education they received (from all sources) as helpful or very helpful. Differences across socio-demographic variables are investigated in Table 3.3.

Table 3.3: Participants who rated the sex education they received¹ (from all sources) as helpful or very helpful, by socio-demographic variables

	Men			Women		
	Sex education was helpful (%)	Base	MV+	Sex education was helpful (%)	Base	MV+
All participants	49.0	1,839		53.8	2,679	
Current age (years)						
18-24	58.3	671	C	65.6	842	C
25-34	47.1	545	**	51.2	771	***
35-44	44.0	339	***	45.1	628	***
45-54	37.4	198	***	47.9	304	***
55-64	37.7	86	**	47.9	134	**
Education (highest level attained)						
Primary	50.4	37	ns	42.3	63	ns
Lower secondary	42.6	232	*	56.7	310	*
Higher secondary	49.4	742	ns	54.4	1,151	ns
Third level	52.6	828	C	52.7	1,155	C

¹Includes only participants who received sex education

+ Multivariate analysis: logistic regression adjusting for all variables in the table

*= $p < 0.05$; **= $p < 0.01$; ***= $p < 0.001$; ns=not significant; C=comparison group

Table 3.3 again shows that younger participants were more likely to rate the sex education they received as helpful or very helpful. This was confirmed using multivariate analysis; the youngest age group (18-24) were more likely than all other age groups to rate their sex education as helpful, after adjusting for educational level.

- Men with lower secondary education were significantly less likely than men with third-level education to rate the sex education they received as helpful or very helpful.
- In contrast, women with lower secondary education were more likely than women with third-level education to say the sex education they received was helpful or very helpful.

Among both men and women, no other educational group differed significantly from those with third-level education, after controlling for current age.

A separate regression analysis examined the role of social class, controlling for current age. Among both men and women, no class group differed significantly from the highest class in rating their sex education as helpful or very helpful.

In summary, in addition to the earlier finding that younger participants were more likely to have received sex education on one or more of the four topics, younger participants (among those who had received sex education) were also more likely to rate as helpful the education they received.

The previous sub-sections have looked at sex education from all sources. The specific sources from which sex education was received are examined in the following sub-section.

3.2.3 Sources of sex education

SUMMARY

Participants who received sex education on any of the four topics were asked from which sources they had received that education: home, school or other source.

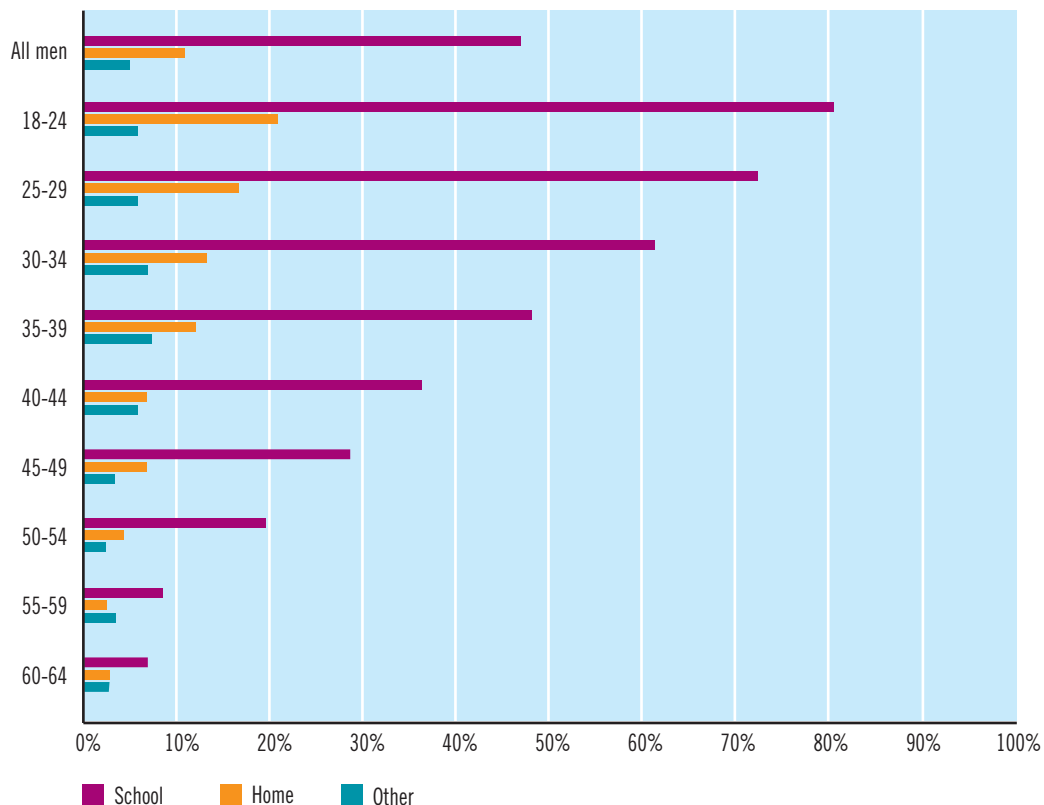
- *About half of men (46.8%) and women (50.1%) received sex education at school.*
- *A minority of men (11.3%) and almost twice as many women (21.2%) received sex education at home.*
- *Few men (5.1%) or women (6.3%) reported receipt of sex education from another source.*
- *More younger people received sex education both at school and at home.*

THE previous sections relate to experience of sex education from any source. This section investigates the sources (home, school or other source) from which participants received sex education on any of four topics.

Figures 3.4 and 3.5 display the number of men and women who received sex education at school, at home or from another source as a percentage of all men and women.

- Almost half of men (46.8%) and 50.1% of women received sex education at school
- 11.3% of men and 21.2% of women received sex education at home
- 5.1% of men and 6.3% of women received sex education from another source

Figure 3.4: Men who received sex education at school, at home or from another source, by current age



There was a significant increase in receipt of sex education at school with younger age among both men ($p < 0.001$) and women ($p < 0.001$), as seen in *Figures 3.4 and 3.5*. For example:

- 81% of men and 84.9% of women aged 18-24 received sex education at school, compared with 6.4% of men and 7.4% of women aged 60-64

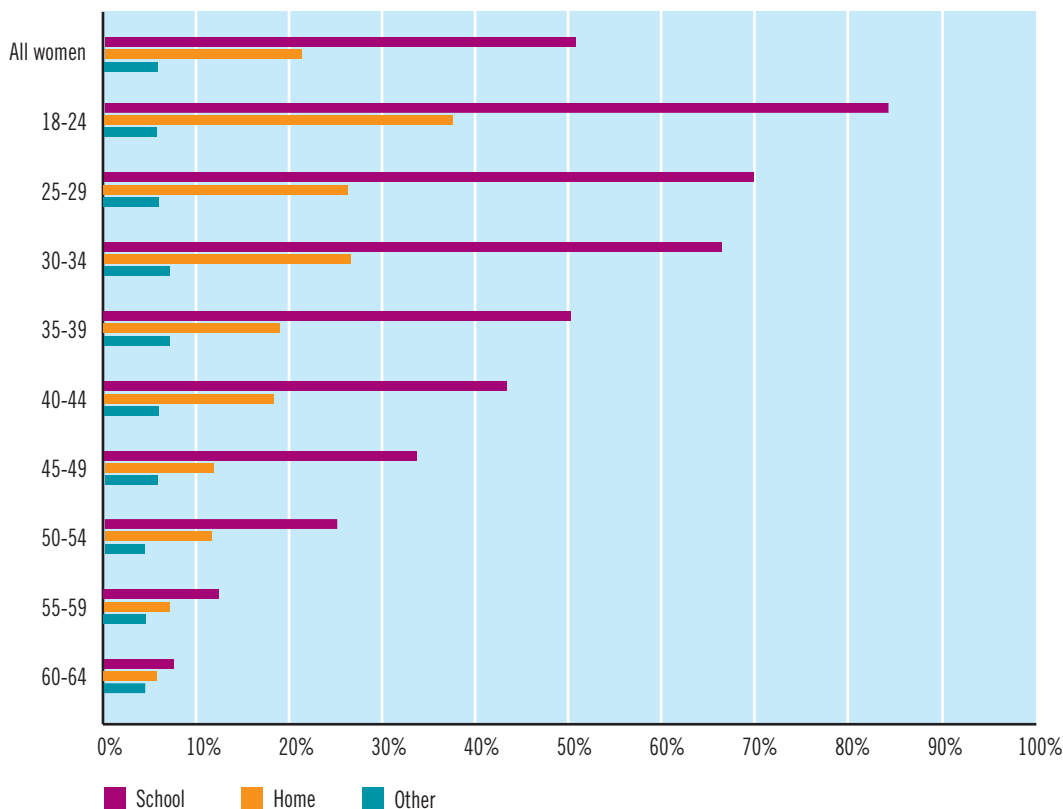
Receipt of sex education at home is still relatively low among men; this was reported by just 20.8% of men aged 18-24. However, it has increased significantly with younger age ($p < 0.001$); only 2.9% of men aged 60-64 received sex education at home.

Among women, 21.2% received sex education at home. There was a significant increase with younger age ($p < 0.001$). For example:

- 37.5% of women aged 18-24 received sex education at home, compared with 5.6% of women aged 60-64

For both men and women, reported receipt of sex education from another source did not differ significantly across age groups.

Figure 3.5: Women who received sex education at school, at home or from another source, by current age



An analysis of the 2000 British Natsal study found that school lessons were the main source of sex education for people then aged 16-19. Among men, all older age groups (above age 19) and, among women, most older age groups (above age 24) cited friends as their main source.³³ Since the question was formulated somewhat differently in the ISSHR study, it is not possible to make a direct comparison. However, both studies found an increase in the role of sex education at school. The ISSHR study found increasing receipt of sex education at school with younger age, while Natsal found that sex education had increased as the main source of information about sexual matters among the youngest age groups. While ISSHR found a steady increase in receipt of sex education at home, the proportion receiving it at home was relatively low.

Further investigation looked to identify socio-demographic determinants of not receiving sex education either at school or at home. First, participants who did not receive school sex education on any of the four topics were compared with all other participants. Since there were wide variations across age groups, it was decided to focus on 18-29 year-olds to identify the determinants of not having received school sex education among those who had left school more recently.

- In total, 22.2% of men and 21.4% of women aged 18-29 did not receive sex education at school on any of the four topics (there were no significant gender differences).

From *Table 3.4*, it is clear that age differences exist even among the youngest cohort (18-29 year-olds). This was confirmed in multivariate analysis; older men and women were significantly less likely to have received sex education at school.

The only significant educational difference was that women with primary education were less likely to have received sex education at school than women with third-level education. However, since only 14 women in this age group had primary education only, this finding is somewhat unreliable.

A further regression analysis examined the role of social class in receipt of sex education at school. After controlling for current age, no class differences were found among men or women.

Table 3.4: Participants aged 18-29 years who did not receive school sex education on any of the four sex-education topics

	Men			Women		
	Did not receive school sex education (%)	Base	MV+	Did not receive school sex education (%)	Base	MV+
All participants	22.2	1,213		21.4	1,495	
Current age (years)						
18-21	15.1	435	C	13.0	526	C
22-25	24.7	418	**	18.8	489	*
26-29	27.4	360	***	32.4	480	***
Education (highest level attained)						
Primary	35.4	18	ns	47.8	14	*
Lower secondary	29.1	132	ns	22.7	111	ns
Higher secondary	20.3	528	ns	20.3	634	ns
Third level	19.9	535	C	21.0	736	C

+ Multivariate analysis: logistic regression adjusting for all variables in the table
 *= $p < 0.05$; **= $p < 0.01$; ***= $p < 0.001$; ns=not significant; C=comparison group

In summary, the major predictor of not having received sex education at school among people aged 18-29 was older age. The age differences identified even in this younger age group indicate that recent increases in reported implementation of RSE programmes may already have had an impact on experiences of sex education at school among the youngest Irish adults.

The introduction of formal government policy and implementation of a nationwide school sex-education programme more recently (i.e. among those too young to be eligible for this study) should further increase the receipt of sex education at school across Ireland.

Sex education can also be received at home. Participants aged 18-29 who did not receive sex education at home are shown in Table 3.5.

Table 3.5: Participants aged 18-29 who did not receive sex education at home on any of the four sex-education topics

	Men			Women		
	Did not receive school sex education (%)	Base	MV+	Did not receive school sex education (%)	Base	MV+
All participants	80.5	1,213		66.9	1,495	
Current age (years)						
18-21	80.7	435	C	64.4	526	C
22-25	77.1	418	ns	63.0	489	ns
26-29	83.9	360	ns	73.4	480	**
Education (highest level attained)						
Primary	87.5	18	ns	80.4	14	ns
Lower secondary	85.2	132	*	76.9	111	**
Higher secondary	81.7	528	**	69.4	634	***
Third level	74.3	535	C	59.0	736	C

+ Multivariate analysis: logistic regression adjusting for all variables in the table

*= $p < 0.05$; **= $p < 0.01$; ***= $p < 0.001$; ns=not significant; C=comparison group

In total, 80.5% of men and 66.9% of women aged 18-29 did not receive sex education at home. There were significant gender differences ($p < 0.001$). Age trends are not clear from Table 3.5, although slightly more men and considerably more women in the older age group (26-29 year-olds) reported that they did not receive sex education at home.

Multivariate analysis, controlling for educational level, confirmed that women aged 18-21 were significantly more likely to have received sex education at home than women aged 26-29. There were no differences between women aged 18-21 and those aged 22-25, and no significant age differences among men, after controlling for educational level. It is possible that this represents a social change – that parents have become more likely to discuss sexual matters with their daughters, although this pattern is not evident with sons.

Men and women with lower levels of education were more likely than those with third-level education to report that they did not receive sex education at home. In multivariate analyses, those with primary education were not found to be significantly different, but this may reflect the very small participant numbers in these groups.

Additional multivariate models examined the relationship between social class and receipt of sex education at home, controlling for current age. Among both men and women, there were no significant differences between the highest social class (class I) and any other class group.

The level of religiosity (not at all religious, a little, quite, very much or extremely) was also examined. After controlling for current age and educational level, there were no significant

differences in receipt of sex education at home across current levels of religiosity, among both men and women.

Another way of investigating sex education at home is to consider the ease with which parents communicate with their children about sexual matters. This is examined in the following sub-section.

3.2.4 Parent-child communication about sex

SUMMARY

Participants were asked how easy or difficult it was to talk openly about sex with their mother (or female guardian) and their father (or male guardian) when they were growing up.

- More younger than older men and women found it easy to talk to their mother and father about sex when they were growing up.
- Women found it easier to talk to mothers, but not fathers, than did men.
- Among women, half (50.8%) of 18-29 year-olds and 13.2% of 45-64 year-olds said it was quite or very easy to talk to their mother.
- Equivalent figures for women speaking to fathers were 14.2% (18-29) and 3.4% (55-64).
- Among men, a third of 18-29 year-olds (31.6%) and very few 45-64 year-olds (7%) said it was quite or very easy to talk to their mother.
- The equivalent figures for men speaking to fathers are 24.4% (18-29) and 4.3% (45-64).

THIS section examines whether participants found it easy or difficult to talk openly about sex with their parents (or guardians) when they were growing up.

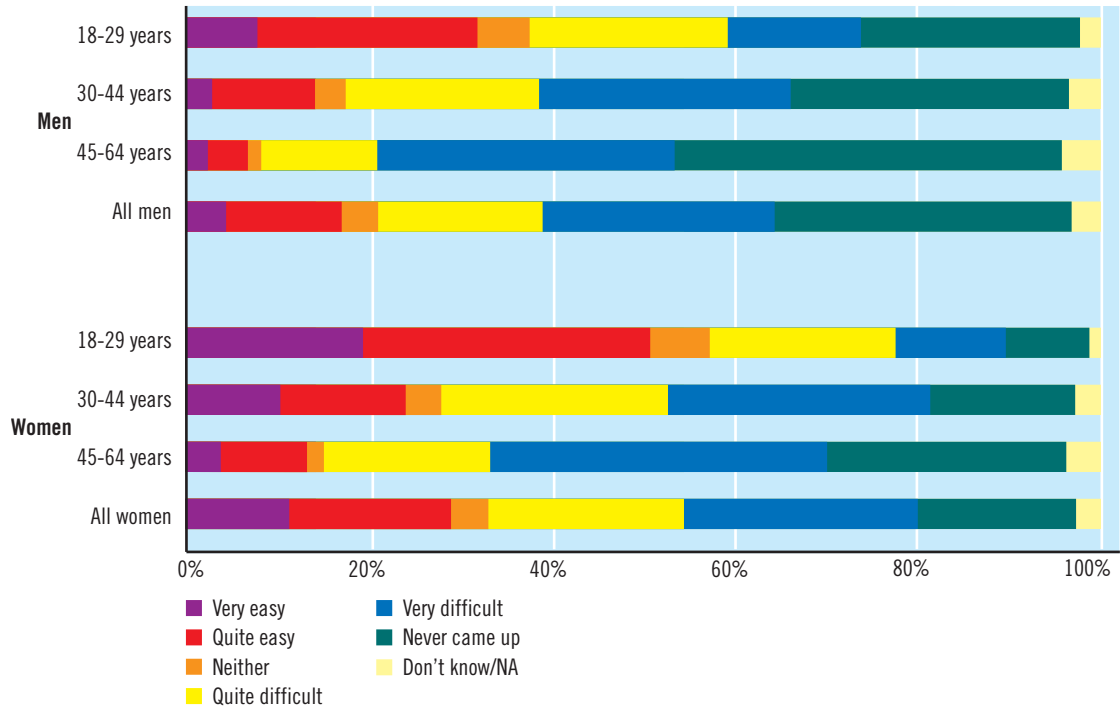
Figure 3.6 displays the ease with which participants could talk to their mother about sex when they were growing up.

- Men were more likely than women to say that sex never came up as an issue (32.6% vs. 17.3%).
- Women were more likely than men to say that it was very or quite easy to talk to their mother about sex (28.9% vs. 17.2%).
- Older men and women were considerably more likely to report that sex never came up or that it was very or quite difficult to talk to their mother about sex when they were growing up.

Among women, 50.8% of 18-29 year-olds, 24.1% of 30-44 year-olds and 13.2% of 45-64 year-olds reported that it was very or quite easy to talk to their mother about sex.

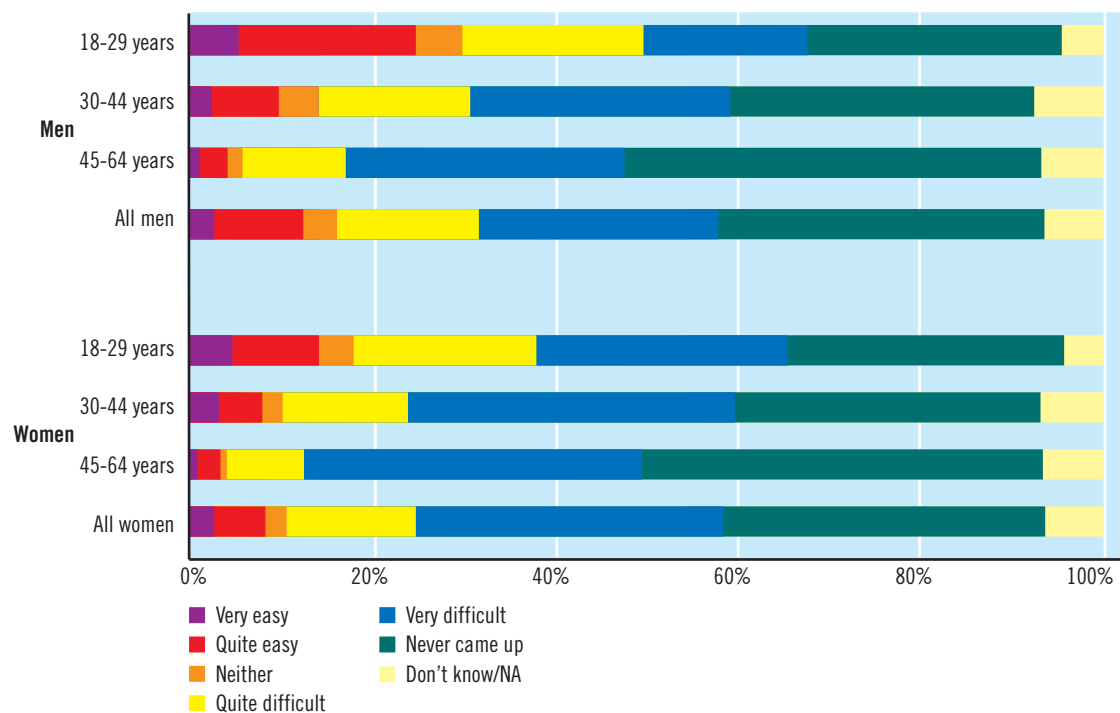
Among men, 31.6% of 18-29 year-olds, 14.2% of 30-44 year-olds and 7% of 45-64 year-olds felt that it had been very or quite easy to talk about sex with their mother.

Figure 3.6: Ease of discussing sexual matters with mother, by gender and current age



Participants were also asked how easy it was to talk to their father about sex when they were growing up (Figure 3.7).

Figure 3.7: Ease of discussing sexual matters with father, by gender and current age



In general, men and women reported similar profiles of discussion with their father about sex. Of all participants,

- 12.5% of men and 8.5% of women found it very or quite easy to talk about sex with their father
- 42% of men and 47.6% of women found it very or quite difficult
- 35.8% of both men and women said that it never came up

Among men, across all age groups there were similar patterns for ease of discussing sex with father and mother (*Figures 3.6 and 3.7*).

One-quarter (24.4%) of 18-29 year-olds, 9.8% of 30-44 year-olds and 4.3% of 45-64 year-olds found it very or quite easy to talk to their father about sex, compared with 31.6% of 18-29 year-olds, 14.2% of 30-44 year-olds and 7% of 45-64 year-olds who felt it had been quite or very easy to talk about sex with their mother.

Among women, 14.2% of 18-29 year-olds, 8.1% of 30-44 year-olds and 3.4% of 45-64 year-olds found it very or quite easy to talk to their father about sex. These proportions are considerably smaller than the 50.8% of 18-29 year-olds, 24.1% of 30-44 year-olds and 13.2% of 45-64 year-olds who felt it had been easy to talk to their mother about sex.

These trends towards increasing ease of discussion with parents are positive findings. However, they do indicate that many young people still do not find it easy to talk to their parents about sex. For example:

- only half of women (50.8%) and under one-third of men (31.6%) aged 18-29 found it easy to talk to their mother about sex
- one-quarter of men (24.4%) and just 14.2% of women aged 18-29 found it easy to talk to their father about sex

Women appear to find it considerably easier to talk to their mother than their father about sex. Among men, the difference is much smaller.

Further analysis of socio-demographic differences in ease of discussion with parents about sex was carried out. Participants who found it very or quite easy were compared with all other participants. A small number of participants reported that they did not know or that the question was not applicable; this group have been included in the 'not easy' group, based on the assumption that those participants who did find it easy would have specified that that was the case. This 'don't know' or 'not applicable' group may include a number of participants for whom the relevant parent or guardian was not present when they were growing up.

In total, 17.2% of men and 28.9% of women found it easy to talk to their mother about sex. There were significant gender differences ($p < 0.001$).

Gender differences were also identified in ease of discussion with father about sex; 12.5% of men and 8.5% of women reported that it was easy to talk to their father about sex ($p < 0.001$).

Socio-demographic differences were investigated for men and women (*Table 3.6*).

Table 3.6: Participants who reported that it was easy to talk to their mother and father about sex when they were growing up, by socio-demographic variables

	Men					Women				
	Easy to talk to mother		Easy to talk to father		Base	Easy to talk to mother		Easy to talk to father		Base
	(%)	MV+	(%)	MV+		(%)	MV+	(%)	MV+	
All participants	17.2		12.5		3,188	28.9		8.5		4,253
Current age (years)										
18-24	35.1	C	28.0	C	759	55.9	C	15.4	C	908
25-34	19.9	***	14.4	***	701	38.7	***	11.7	ns	966
35-44	13.9	***	9.0	***	647	19.6	***	6.9	***	1,014
45-54	7.6	***	4.1	***	574	15.3	***	3.3	***	755
55-64	6.4	***	4.4	***	507	10.5	***	3.7	***	610
Education (highest level attained)										
Primary	5.0	***	2.3	**	263	15.5	ns	4.9	ns	305
Lower secondary	12.9	**	11.3	ns	544	22.8	ns	5.3	ns	657
Higher secondary	21.0	ns	15.8	ns	1,198	32.0	ns	10.0	ns	1,780
Third level	23.7	C	14.9	C	1,183	35.7	C	10.5	C	1,511

+ Multivariate analysis: logistic regression adjusting for all variables in the table
 *= $p < 0.05$; **= $p < 0.01$; ***= $p < 0.001$; ns=not significant; C=comparison group

Table 3.6 confirms independent age differences in ease of talking to parents about sex:

- Ease of talking to mother or father about sex increases with younger age.
- The percentage of men and women who reported ease of discussion with their mother and father about sex generally increased with higher educational level.

However, multivariate analysis found that women with third-level education were not significantly different to any other educational group in ease of discussing sexual matters with their mother or father. In contrast, men with third-level education were significantly more likely than men with primary education to have found it easy to talk about sex to both their mother and their father. They were also more likely than men with lower secondary education to have found it easy to talk to their mother about sex.

The relationship between social class and ease of discussion was next examined, by replacing education with social class. After controlling for current age, there were no differences in ease of discussion with mother or father about sex across social-class groups, for men or women.

In summary, the major determinant of having found it easy to talk to parents about sex appears to be younger current age. This perhaps reflects social changes, which have made discussions about sex more acceptable. Among men, higher educational level was also associated with greater ease of parent-child discussion about sex.

3.2.5 Attitudes towards sex education

SUMMARY

Participants were asked if they thought that young people today should receive formal sex education on the following topics:

- sex and sexual intercourse
- sexual feelings, relationships and emotions
- contraception
- safer sex/sexually transmitted infections/VD
- homosexuality

- The vast majority of men and women felt that young people should receive sex education on all five topics investigated: sex and sexual intercourse (94.7% and 96.8% respectively), sexual feelings, relationships and emotions (94.6% and 96.7%), contraception (98% and 98.1%), safe sex/STIs (98.5% and 98.9%) and homosexuality (92.3% and 96.0%).
- Most men and women thought young people should receive sex education at school on each of the five topics (87.5%-91% of men; 87.1%-90.8% of women).
- Considerably fewer men and slightly fewer women thought young people should receive sex education on the various topics at home (68.4%-73.6% of men; 78.8%-82.8% of women).

THIS section examines people's views on whether young people today should receive formal sex education on specified topics.

Initial investigation found significant gender differences among those who thought that young people should receive sex education on sex and sexual intercourse ($p < 0.001$), sexual feelings, relationships and emotions ($p < 0.001$) and homosexuality ($p < 0.001$).

Table 3.7 displays the percentage of men who thought that young people should receive sex education on each of the topics, by current age, highest educational level attained, social class and religiosity.

For all topics, the vast majority of men felt young people should receive formal sex education (92.3%-98.5%). Some trends across socio-demographic variables were indicated, such as age differences for some topics; older groups were less likely to think that young people should receive formal education on sex and sexual intercourse, contraception and safe sex/STIs. It also appears that men with lower levels of educational attainment and, for some topics, greater religiosity, were less likely to think that young people should receive formal sex education. As has been seen previously, these slight trends may be confounded by relationships between the variables themselves.

Table 3.7: Men's attitudes towards receipt of sex education on various topics, by socio-demographic variables

	Young people today should receive formal sex education on:					Base (range)
	Sex and sexual intercourse (%)	Sexual feelings, relationships & emotions (%)	Contraception (%)	Safe sex/ STIs (%)	Homo-sexuality (%)	
All participants	94.7	94.6	98.0	98.5	92.3	3,157-3,187
Current age (years)						
18-24	96.9	94.8	99.1	99.2	90.8	750-759
25-34	95.4	93.5	98.1	98.8	94.5	692-701
35-44	96.1	95.8	98.0	98.4	91.8	641-647
45-54	94.6	95.3	97.7	99.0	93.5	570-574
55-64	89.2	93.0	96.5	96.8	91.0	502-506
Education (highest level attained)						
Primary	90.1	92.2	96.3	97.4	90.4	259-262
Lower secondary	93.8	93.9	97.5	98.3	92.0	535-544
Higher secondary	95.7	95.6	98.4	98.6	92.6	1,190-1,198
Third level	97.5	95.2	98.8	99.3	93.6	1,173-1,183
Social class						
Higher professional	95.6	93.9	98.7	99.0	92.3	785-790
Lower professional	93.9	95.7	97.0	98.5	93.2	722-730
Administrative/clerical	95.4	95.2	98.3	98.0	91.9	425-428
Skilled manual	94.3	93.6	97.9	98.0	93.1	606-611
Semi-skilled/ unskilled manual	93.8	94.9	97.7	98.7	91.5	487-492
Religiosity						
Not at all	95.0	94.7	98.0	98.8	92.7	800-808
A little	95.6	95.5	98.6	98.9	94.1	1,153-1,166
Quite	94.8	94.2	98.4	98.4	91.5	879-887
Very/extremely	90.7	91.9	94.3	96.4	86.9	320-321

Table 3.8 shows the percentage of women who thought that young people today should receive formal sex education on each topic, by socio-demographic variables. As seen among men, the vast majority of women felt that young people should receive sex education on all topics, with little variation across topics.

In total, 96.8% of women believed that young people should receive education on sex and sexual intercourse, 96.7% on sexual feelings, relationships and emotions, 98.1% on contraception, 98.9% on safe sex/STIs and 96% on homosexuality.

A number of possible trends were found for socio-demographic variables. For example, slightly fewer older women and the more religious women believed that young people should receive sex education on each of the topics. Women with lower educational attainment were less likely to believe that young people should receive sex education on some topics, but not on others. Again, these slight trends may be a result of confounding relationships between variables.

Table 3.8: Women’s attitudes towards receipt of sex education on various topics, by socio-demographic variables

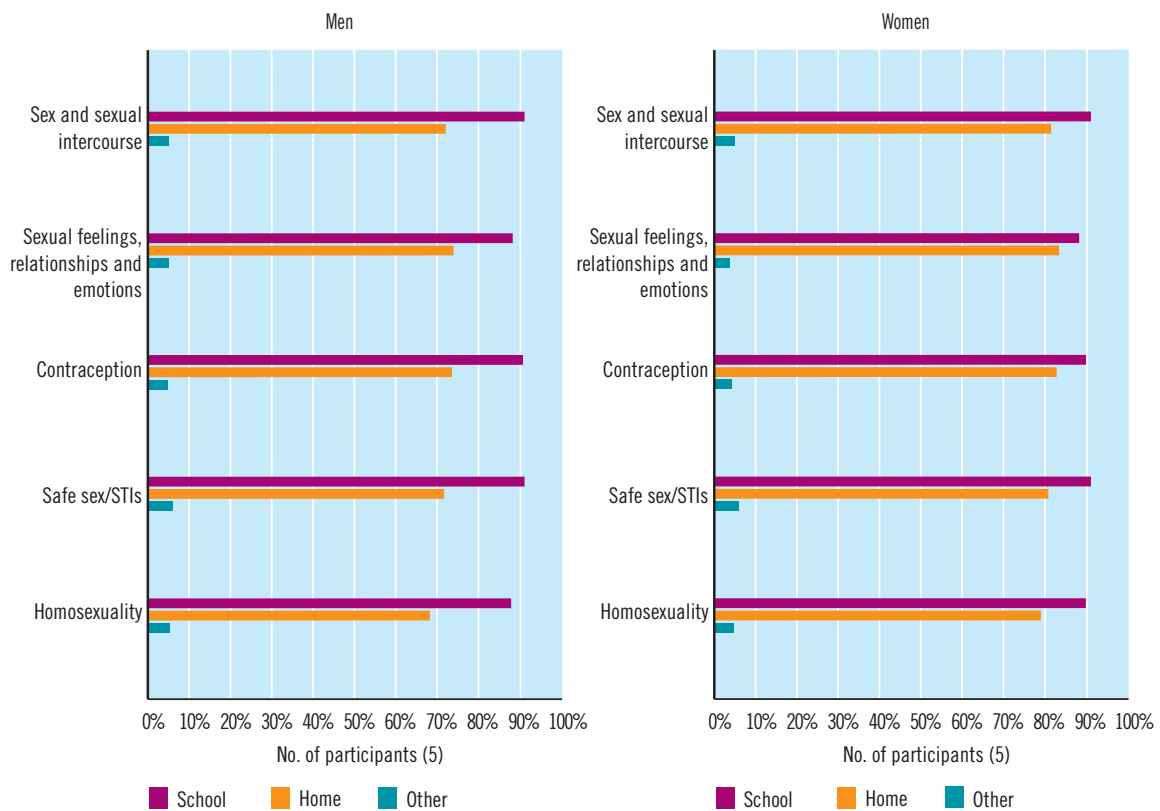
	Young people today should receive formal sex education on:					
	Sex and sexual intercourse (%)	Sexual feelings, relationships & emotions (%)	Contraception (%)	Safe sex/ STIs (%)	Homo-sexuality (%)	Base (range)
All participants	96.8	96.7	98.1	98.9	96.0	4,224-4,251
Current age (years)						
18-24	98.3	97.8	99.4	99.3	97.2	898-908
25-34	98.5	98.3	99.1	99.7	97.5	962-966
35-44	97.6	97.8	98.7	99.8	96.4	1,009-1,014
45-54	96.0	95.9	97.6	98.5	95.8	750-755
55-64	91.7	91.9	94.5	96.7	91.2	603-608
Education (highest level attained)						
Primary	91.1	94.5	97.4	99.1	94.8	301-304
Lower secondary	96.5	95.2	97.4	98.3	95.0	651-656
Higher secondary	97.4	97.1	98.2	99.0	96.1	1,770-1,780
Third level	98.9	98.2	99.1	99.3	97.3	1,501-1,511
Social class						
Higher professional	95.9	94.4	97.4	98.9	94.8	638-642
Lower professional	97.2	97.4	98.4	98.5	96.0	1,091-1,097
Administrative/clerical	97.5	97.5	98.1	99.3	96.1	973-978
Skilled manual	96.2	97.3	97.5	99.1	96.4	292-296
Semi-skilled/unskilled manual	96.6	96.7	98.9	99.3	97.3	883-892
Religiosity						
Not at all	99.0	98.0	99.2	99.6	96.8	698-701
A little	97.3	97.1	98.6	99.3	97.1	1,611-1,620
Quite	95.9	96.5	98.1	99.1	95.6	1,382-1,389
Very/extremely	94.3	93.9	95.1	96.7	92.4	528-536

Since participants overwhelmingly supported formal sex education for young people, it was not considered worth investigating further those who do not support it. Just 36 of 7,441 participants believed that young people should not receive sex education on any of the five topics.

All participants who said young people should receive formal sex education were asked, for each topic, where young people should receive that education: school, home or other source. *Figure 3.8* shows the percentage who thought that young people should receive sex education from these sources. Responses were similar across all topics.

- Most men and women thought young people should receive sex education at school on each of the five topics: 87.5%-91% of men; 87.1%-90.8% of women.
- Slightly fewer women and considerably fewer men thought they should receive sex education at home: 68.4%-73.6% of men; 78.8%-82.8% of women.

Figure 3.8: Where young people should receive sex education on each topic, by gender



For all topics, there were no gender differences in belief that young people should receive the sex education from school and from another source. However, for all topics, significantly more women than men thought young people should receive the education at home ($p < 0.001$ for all topics).

This section has found that the vast majority of participants believe young people should receive formal sex education. The following sub-section examines the requirements for ongoing sex education into adulthood.

3.2.6 Sex education into adulthood

SUMMARY

Since the sexual knowledge needs of individuals may change throughout life, it is useful to examine the extent to which adults currently require further information about sex.

In recent times, the legal and perhaps social acceptability of relationship breakdown and divorce has increased. In this context, adults who have been in committed relationships, and who have not previously felt the need to understand aspects of protection and safe sex, but intend to embark on new sexual relationships, may have concerns about their knowledge in a rapidly changing social world.

To ascertain the extent to which Irish adults feel they lack important information about sexual matters, participants were asked if they felt they knew enough or would like more information about:

- contraception
- how to have a satisfying sex life
- safer sex/STIs

Participants responded to the question according to their current situation.

- *A minority (8.5%) of all participants said they would like more information about contraception (no significant differences between men and women).*
- *Among women, younger age, lower secondary education and casual relationship were determinants of requiring more information about contraception.*
- *One-fifth of participants (19%) felt they would like to know more about how to have a satisfying sex life. There were small but statistically significant gender differences; 20.1% of men and 17.9% of women required more information.*
- *Younger women were more likely than older women, and women in a casual relationship more likely than married women, to want more information about how to have a satisfying sex life.*
- *One-fifth (21.6%) of all participants felt they would like more information about safe sex/STIs (no differences between men and women).*
- *Men with lower and higher secondary education were more likely than men with third-level education to require more information about safe sex/STIs.*
- *Younger women were more likely than older women to want more information about safe sex/STIs.*
- *Women in a steady relationship were more likely than married women to require more information about safe sex/STIs.*
- *Women who had received sex education about safe sex/STIs were significantly less likely to require more information about safe sex/STIs.*

AN individual's needs for sexual knowledge are likely to change throughout his or her life. This section investigates the extent to which participants reported a need for further information about sex.

In total, 8.5% of all participants felt they would like more information about contraception currently. While no significant gender differences were found, initial analyses indicated there might be important gender differences across socio-demographic variables. Further analyses were conducted for men and women separately (Table 3.9).

Table 3.9: Participants who would like more information about contraception, by socio-demographic variables

	Men			Women		
	Like more information (%)	Base	MV+	Like more information (%)	Base	MV+
All participants	8.3	3,182		8.7	4,250	
Current age (years)						
18-24	9.2	758	C	15.4	907	C
25-34	7.6	701	ns	7.9	966	***
35-44	9.2	645	ns	5.9	1,014	***
45-54	8.8	572	ns	8.1	753	**
55-64	6.2	506	ns	5.8	610	***
Education (highest level attained)						
Primary	8.8	263	ns	6.0	304	ns
Lower secondary	8.6	544	ns	8.8	656	ns
Higher secondary	8.7	1,196	ns	9.6	1,779	ns
Third level	6.7	1,179	C	8.3	1,511	C
Current relationship status						
Married	7.5	1,500	C	6.5	2,359	C
Cohabiting	3.3	239	ns	10.0	270	ns
Steady relationship	8.7	370	ns	11.0	520	ns
Casual relationship	10.2	222	ns	17.3	141	*
Not in a relationship	10.2	851	ns	10.4	960	ns

+ Multivariate analysis: logistic regression adjusting for all variables in the table

*= $p < 0.05$; **= $p < 0.01$; ***= $p < 0.001$; ns=not significant; C=comparison group

After adjusting for current age, educational level and current relationship among men, none of the variables was independently associated with requiring more information about contraception.

Among women, 18-24 year-olds were significantly more likely than all older groups to require more information about contraception.

After controlling for current age and relationship, there were no significant differences in requiring more information about contraception across educational level.

After controlling for current age and educational level, the only significant difference across current relationship status was that women in a casual relationship were significantly more likely than married women to require more information about contraception.

Receipt of sex education about contraception was then added to the models in *Table 3.9*. Among both men and women, there were no significant differences in requirements for more information about contraception between those who had and had not received sex education about contraception.

The relationship between social class and requirement for more information about contraception was examined in a separate model, controlling for current age and relationship status. For both men and women, no significant differences in that requirement were found across class groups.

These findings point to a number of areas for targeting adult-education campaigns. The fact that 18-24 year-old women and women in a casual relationship were more likely to require more information about contraception may reflect their current sexual situation, since women in these groups are less likely to desire pregnancy. However, the fact that more women in these groups did not feel they had all the knowledge they needed is relevant, particularly if they were currently sexually active.

When asked about requirements for more information about having a satisfying sex life, 81% of all participants felt they knew enough while 19% felt they would like to know more. There were significant gender differences ($p < 0.05$); 20.1% of men and 17.9% of women required more information.

Table 3.10 shows the percentage of men and women who would like more information about how to have a satisfying sex life across socio-demographic variables, as well as the results of multivariate analyses.

After adjusting for social class and current relationship, only men aged 55-64 were significantly less likely to require more information than 18-24 year-old men. Compared with men in the higher professional social class (class I), only men in the skilled manual class (class IV) differed significantly; the latter were more likely to require more information about how to have a satisfying sex life. Men who were not in a relationship were more likely to require more information than married men.

For women, age was a significant factor. The younger the woman, the greater the likelihood of requiring more information about a satisfying sex life.

The only significant social-class difference among women was that those in the administrative/clerical class (class III) were more likely than those in the semi-skilled/unskilled manual classes (V and VI) to require more information about a satisfying sex life.

After adjusting for current age and social class, the only significant relationship difference was that women in a casual relationship were almost twice as likely as married women to require more information about a satisfying sex life.

Table 3.10: Participants who would like more information about how to have a satisfying sex life, by socio-demographic variables

	Men			Women		
	Like more information (%)	Base	MV+	Like more information (%)	Base	MV+
All participants	20.1	3,177		17.9	4,232	
Current age (years)						
18-24	22.1	755	C	27.4	900	C
25-34	19.7	700	ns	20.2	964	*
35-44	21.4	644	ns	13.2	1,012	***
45-54	22.5	572	ns	15.7	749	**
55-64	13.3	506	*	12.1	607	***
Social class						
Higher professional	17.8	786	C	20.3	638	ns
Lower professional	22.6	730	ns	17.0	1,095	ns
Administrative/clerical	19.0	426	ns	18.6	971	*
Skilled manual	22.4	610	*	22.0	293	ns
Semi-skilled/unskilled manual	19.1	490	ns	14.8	891	C
Current relationship status						
Married	18.7	1,499	C	13.8	2,354	C
Cohabiting	16.3	239	ns	22.2	269	ns
Steady relationship	19.3	369	ns	20.1	518	ns
Casual relationship	21.6	222	ns	33.0	141	**
Not in a relationship	23.4	848	*	21.7	950	ns

+ Multivariate analysis: logistic regression adjusting for all variables in the table
 *= $p<0.05$; **= $p<0.01$; ***= $p<0.001$; ns=not significant; C=comparison group

Receipt of sex education on sex and sexual intercourse or sexual feelings, relationships and emotions was next added to the models in *Table 3.10*. Among both men and women, there were no significant differences in requirement for more information between those who had and had not received, when they were growing up, education on sex and sexual intercourse or sexual feelings, relationships and emotions.

Additional models examined the role of educational level in determining requirements for more information about a satisfying sex life. After adjusting for current age and relationship status, there were no significant educational differences in requirements among men or women.

Finally, participants were asked if they would like more information about safe sex/STIs. In total, 21.6% of all participants felt they would like more information (there were no significant gender differences).

Further analyses were conducted to examine socio-demographic differences in requirements for more information about safe sex/STIs among men and women (Table 3.11).

After adjusting for educational level and current relationship, only 55-64 year-old men differed significantly from 18-24 year-old men. The latter were about twice as likely to require more information about safe sex/STIs. Men with lower secondary and higher secondary education were more likely than those with third-level education to require more information. There were no effects for current relationship status, after adjusting for the other variables in Table 3.11.

Women aged 18-24 were significantly more likely to require more information about safe sex/STIs than all other age groups, after adjusting for the other variables. There were no educational differences among women. The only significant relationship difference was that women in a steady relationship were more likely than married women to require more information.

Table 3.11: Participants who would like more information about safe sex/STIs, by socio-demographic variables

	Men			Women		
	Like more information (%)	Base	MV+	Like more information (%)	Base	MV+
All participants	21.4	3,186	21.8	4,248		
Current age (years)						
18-24	25.1	759	C	31.5	907	C
25-34	22.3	701	ns	23.2	966	**
35-44	21.0	647	ns	18.7	1,013	***
45-54	23.0	572	ns	17.9	753	***
55-64	14.1	507	**	16.4	609	***
Education (highest level attained)						
Primary	18.9	262	ns	20.3	305	ns
Lower secondary	23.5	544	*	20.4	654	ns
Higher secondary	22.7	1,197	*	22.6	1,778	ns
Third level	18.4	1,183	C	22.3	1,511	C
Current relationship status						
Married	19.6	1,501	C	18.2	2,359	C
Cohabiting	18.0	239	ns	22.2	270	ns
Steady relationship	23.0	371	ns	30.8	520	*
Casual relationship	21.8	222	ns	29.0	141	ns
Not in a relationship	24.7	853	ns	23.6	958	ns

+ Multivariate analysis: logistic regression adjusting for all variables in the table
 *= $p < 0.05$; **= $p < 0.01$; ***= $p < 0.001$; ns=not significant; C=comparison group

Receipt of sex education on safe sex/STIs was next added to the models in *Table 3.11*. After controlling for age, educational level and current relationship status, receipt of education about safe sex/STIs was not related to requirement for more information about safe sex/STIs among men. However, women who had received education about safe sex/STIs were significantly less likely, than women who had not, to require more information.

Finally, after adjusting for current age and relationship status, there were no significant social-class differences in requirements for more information among men. The only significant difference among women was that those in the lower professional class (class II) were less likely to require more information about safe sex/STIs than women in the semi-skilled/unskilled classes (classes V/VI).

3.2.7 Sex education as a predictor of subsequent sexual experience

SUMMARY

Receipt of sex education as a determinant of subsequent sexual behaviour was investigated. Analyses focused on 18-29 year-olds only in order to examine recent social trends. The subsequent sexual behaviours investigated were experience in lifetime of an STI and, for women only, crisis pregnancy and abortion.

*For each variable, multivariate analyses were conducted to determine the independent effect of receiving relevant sex education. Current age and educational level were included. Since this report focuses on the role of sex education, relationships involving socio-demographic variables are not stated. (Further examination of these findings can be found in *The Irish Study of Sexual Health and Relationships: Main Report and Overview and Sub-Report 3: Sexual Knowledge, Attitudes and Behaviours – A Further Analysis*.)*

- *Receipt of sex education about safe sex and STIs was not significantly related to diagnosis with an STI among 18-29 year-old men or women.*
- *Receipt of sex education about sex and sexual intercourse or contraception was not significantly related to experience of crisis pregnancy or abortion.*
- *Women who rated their sex education as helpful were less likely to have been diagnosed with an STI than those who rated that education as unhelpful. There were no differences among men.*
- *Women who rated their sex education as helpful were less likely to have experienced crisis pregnancy than those who felt their sex education was unhelpful.*
- *There were no differences in experience of abortion among women who said their sex education was helpful and those who said it was unhelpful.*

PARTICIPANTS were asked if they had ever been diagnosed with an STI. In total, 3.8% of men and 3.1% of women aged 18-29 reported such diagnosis.

After controlling for current age and educational level, receipt of sex education about safe sex and STIs was not related to diagnosis with an STI (chapter five of the sub-report 'Sexual

Health Challenges and Related Service Provision’ provides further analysis of risks of STIs for the youngest group studied – those aged 18-24.)

Women were asked if they had ever experienced an abortion or a crisis pregnancy. A crisis pregnancy was defined as a pregnancy that represented a personal crisis or emotional trauma. It could include a pregnancy that began as a crisis but where this was resolved over the course of the pregnancy, or a pregnancy that developed into a crisis before the birth due to a change in personal circumstances (women who reported miscarriage or stillbirth {N=44} were not included under the definition of crisis pregnancy). In total, 12.9% of women aged 18-29 reported a crisis pregnancy.

After controlling for current age and educational level, receipt of sex education about sex and sexual intercourse or contraception was not significantly related to experience of crisis pregnancy.

In total, 3.6% of women aged 18-29 reported having an abortion. After adjusting for current age and educational level, receipt of sex education about sex and sexual intercourse or contraception was not significantly related to experience of abortion.

There are a number of limitations to the above analyses. First, receipt of sex education was measured to include any source and could therefore include less reliable sex education of variable quality. Secondly, the quality of sex education received was not measured. However, a further analysis of 18-29 year-olds who had received sex education – which compared those who rated it as ‘helpful’ (i.e. helpful or very helpful) with those who felt it was ‘unhelpful’ (i.e. unhelpful, very unhelpful or neither helpful nor unhelpful) – highlighted some interesting differences:

- After controlling for current age and educational level, women who rated their sex education as helpful were about half as likely to report diagnosis with an STI as those who rated their sex education as unhelpful ($p < 0.05$) (there were no differences among men).
- Similarly, after controlling for current age and education level, women who rated their sex education as helpful were less likely to report crisis pregnancy than those who felt it was unhelpful ($p < 0.05$).
- However, there were no differences in reported helpfulness of sex education among the smaller numbers who had experienced abortion.

Overall, then, the *quality* of sex education received, as distinct from the presence or absence of such education, appeared to be the more important factor in determining good sexual outcomes. Further research should examine the aspects of sex education that people consider to have been helpful.

Analysis of the relationship between receipt of sex education and both age and contraceptive use at first intercourse can be found in the relevant chapters of this report (chapters five and six respectively).

3.3 Summary

THIS study clearly shows that, the younger they are, the more likely it is that people received sex education when growing up, from any source. Women were more likely than men to have received sex education on sex and sexual intercourse, sexual feelings, relationships and emotions, and contraception. However both men and women were less likely to have received education on safe sex/STIs (which they received in similar proportions).

Educational attainment was also an important predictor of receipt of sex education (from any source). People with lower levels of education were less likely to have received sex education.

As well as being more likely to have received sex education, younger participants were more likely to rate it (from any source) as helpful.

Due to interviewing-time constraints, receipt of sex education was evaluated quite briefly in this study. It is important that the above findings are evaluated within the context of the study question, which asked participants about receipt of sex education from any source. The quality of the source of sex education (home, school, etc) was not considered separately.

A wide variety of school-based and community-based sex-education programmes exist internationally. Evaluation of the success of sex education needs to take into account the nature of the programmes, including their theoretical basis. A more extensive measure of sex education than that used in the present study, including a detailed evaluation of quality and extent of sex education from specific sources, is necessary to better understand the experience and effect of such education on people in Ireland.

Concerning sex education received at school, younger participants were considerably more likely to have received it. More women than men received sex education at home. However, while sex education at home was uncommon among men – just one-fifth of 18-24 year-olds reported it – it was still relatively uncommon among women: 38% of 18-24 year-olds reported it.

Among 18-29 year-olds, younger women were more likely to have received sex education at home than those closer to age 30. There were no age differences among 18-29 year-old men. It is possible that this represents a social change, with parents increasingly likely to discuss sexual matters with their daughters, but not with sons. Educational differences were also found: men and women with higher levels of education were more likely to have received sex education at home.

While there is a positive trend of participants having found it easier to discuss sexual matters with their parents, it is clear that many did not find this easy:

- Even among 18-29 year-olds, only half of women and under one-third of men found it easy to talk to their mother about sex.
- One-quarter of men and just 14% of women found it easy to talk to their father about sex.

Women found it considerably easier to talk to their mother than their father about sex, whereas men showed few major differences in ease of talking to either parent. The main determinant of having found it easy to talk to parents about sex appears to be younger current

age. This perhaps further reflects social changes which have made discussions about sex more acceptable.

Among men, higher educational level was also associated with finding it easier to talk to parents about sex.

The vast majority of men (92%-99%) and women (96%-99%) felt that young people should receive formal sex education on all proposed topics (sex and sexual intercourse, sexual feelings, relationships and emotions, contraception, safe sex/STIs and homosexuality).

When asked where young people should get sex education on each of the topics, most men and women thought they should receive it at school. Slightly fewer women and considerably fewer men thought they should receive it at home.

Concerning the continuing need for information about sexual matters into adulthood, just 8% of men and 9% of women felt they would like more information about contraception. Among men, no major socio-demographic determinants of such a requirement were found. However, younger women, those with lower secondary education and those in a casual relationship were more likely to require more information about contraception.

These findings indicate a number of target areas for education campaigns. It is of concern that younger women in casual relationships were less likely to feel they possessed all the knowledge they needed about contraception, particularly if they were currently sexually active.

Around one-fifth of participants would like more information about how to have a satisfying sex life. Significantly more men than women wanted this information. Among women, the determinants of requiring more information about how to have a satisfying sex life were younger age and casual relationship.

Finally, participants were asked if they would like more information about safe sex/STIs. About one-fifth felt they would like such information. Among men, some significant educational differences were found; men with lower and higher secondary education were more likely to require the information than those with third-level education. Among women, age differences were found; younger women were more likely to require the information. As well, women in a steady relationship were more likely than married women to require more information, while women who had received education about safe sex/STIs were significantly less likely than those who had not to require more information.

It is clear from the findings of this chapter that experiences of sex education have changed over recent generations. As well, social changes supporting increased availability of information about sex are reflected in changes in sexual behaviour.

The following chapter examines experiences of first intercourse and how these have changed in recent decades.

Overview of first sexual intercourse

THIS chapter provides an overview of experiences of first intercourse among Irish people.

First, section 4.1 provides an introduction to international literature relating to sexual initiation, age at first sex, relationship status and context of first intercourse. This is followed by the results of the ISSHR study in section 4.2.

- The first results sub-section provides an overview of levels of experience of vaginal, oral and anal sex among people aged 18-64 years, and variations across age cohorts.
- A summary of the ages at which vaginal, oral and anal sex were first experienced is provided in sub-section two, which also looks at differences in median age at first sex across age groups.
- The third results sub-section looks at trends in relationship status at first intercourse across age cohorts. This includes an examination of socio-demographic determinants of casual-relationship status, and looks at age patterns across duration of first relationship and experience of a second partner.
- Changes in the context of first intercourse across age cohorts, such as planning, willingness and drink/alcohol use, are investigated in sub-section four.

Finally, a summary of results is provided in section 4.3.

4.1 Introduction

4.1.1 Overview of sexual experience

SEXUAL initiation continues to be a major aspect of the transition of adolescents to adulthood.²⁸ A greater understanding of experiences of first intercourse among young people today can aid the prediction of social trends and identify the barriers to healthy sex and sexuality. This includes identifying groups at higher risk of unwanted outcomes such as unwelcome sexual contact, STIs and unintended pregnancy.

Recent social and cultural changes have influenced sexual initiation and behaviour. In Europe, liberalisation of social attitudes and the decline in control exerted by religious establishments have played a major role in changes in sexual behaviour. Changes such as those seen in marital and fertility trends, in increased female participation in the workplace and greater availability of modern contraceptive methods have further intensified changes in attitude and behaviour.²⁹

Knowledge of the sexual practices in which people engage is important since different behaviours carry differing risks. Thus, differentiation between vaginal, oral and anal sex is important in any sexual-health survey, so that risks are correctly estimated.⁹⁹ Discussion of adolescent sexual behaviours has recently turned from focusing on vaginal intercourse to considering the wider range of possible behaviours. While little research currently exists to confirm it, some authors have suggested that adolescents are increasingly adopting practices such as oral sex. Reasons for this are unclear. There are suggestions that oral sex may not be considered to be 'sex' and thus may be more acceptable in some situations. Another possibility is that oral sex is practised as it does not carry a pregnancy risk. It does, however, carry some STI risks.¹⁰⁰

While research into sexual health and behaviour from adolescence into adulthood in Ireland has increased in recent years, the available information is still limited. A number of small-scale studies of teenagers have contributed to the knowledge base, but these are rarely clearly applicable to the wider population. The present study contributes by providing a detailed account of experiences of first intercourse across the Irish population.

4.1.2 Age at first sex

Research has also looked at age at first intercourse and trends in this area. Many studies internationally have reported a declining age at first intercourse with younger age cohorts.^{23,29,30,32} This is often particularly evident among women.^{29,30,32} An overview of age at first vaginal, anal and oral sex is provided in this chapter; a detailed analysis of determinants of age at first vaginal intercourse is given in chapter five.

4.1.3 Relationship status at first intercourse

In recent generations, the experience of first intercourse has changed dramatically. Whereas women once frequently experienced first intercourse with their husband, this has become unusual in younger cohorts. Nowadays, young people do not tend to marry their first sexual partners.²⁹ Generally, though, first intercourse is still more likely to occur within a steady relationship.^{27,29-31} Women are more likely than men to report this.^{27,29,30,32}

Research in Australia found age differences in relationship status at first intercourse. Fewer younger than older men and women were married when they first experienced intercourse. While the number of men whose first sexual experience occurred outside a steady relationship remained relatively stable across age cohorts, the number of women who reported the same increased with younger current age.³²

A review of European studies reported a similar pattern, whereby levels of first sex occurring within a steady relationship have decreased among younger women. However, the proportion of younger men reporting that first sex occurred within a steady relationship increased in three of the four European countries studied.²⁹

Research has also reported gender differences in age of first sexual partner. A review of findings from European surveys (in Finland, France, Britain and Norway) found that most women reported that their first partner was older.²⁹ This was true over time and across countries, and has been supported by other research findings.^{27,31} Bozon and Kontula (1998) found that the age of first partner reported by men was more varied across countries. In Finland, about half of men reported a younger first partner, one-third a partner of the same age and few an older partner. Norwegian men followed a similar pattern, although more reported first sex with an older partner. French men were more likely to experience first intercourse with a partner of the same age or older. British men followed a similar pattern, particularly in younger age cohorts (aged 18-29); less than a quarter of men experienced first intercourse with a younger partner.²⁹

In summary, gender differences in age of first partner and relationship status at first intercourse indicate that first intercourse represents something different to men and women.²⁹

4.1.4 Context of first intercourse

First intercourse can also be defined by the context in which it occurs, including planning for intercourse, willingness and personal reasons for engaging in it – as well as by retrospective feelings about it, such as regret. Understanding such factors can highlight issues such as possible reasons for not using contraception. Some studies have found a substantial minority (particularly women) reporting that they were less willing for first intercourse than their partner.^{33,46}

Research has also investigated various aspects which may be associated with first intercourse by asking participants if certain statements applied to their experience of it.^{33,46} These include: having been 'curious about what it would be like', having wanted to lose their virginity, having been 'in love' and having been drunk at the time. For example, Dickson *et al* (1998) asked participants (at age 21) about seven factors which may have been associated with their first intercourse.

The most common factors in men's first sexual intercourse were:

- being 'curious about what it would be like'
- 'wanting to lose their virginity'
- it 'seemed like a natural follow-on in the relationship'
- being a bit drunk at the time (self or partner)

For women, the most common factors were:

- being 'curious about what it would be like'
- 'it seemed like a natural follow-on in the relationship'
- they were in love⁴⁶

In general, women have been found to be more likely to report being in love with their first sexual partner.^{29,46}

4.2 Results and discussion

4.2.1 Overview of lifetime sexual experience

SUMMARY

Participants were asked if they had experienced vaginal, oral and anal sex.

- Of all participants, 93.1% of men and 93.8% of women had experienced vaginal intercourse.
- Significantly more men than women had experienced oral sex: 76.2% of men and 60.6% of women. Although the numbers were small, men were also more likely than women to have experienced anal sex (12.4% of men and 8.2% of women).
- Experience of vaginal sex did not differ dramatically across age groups. Younger men and women were considerably more likely to have experienced oral sex and slightly more likely to have experienced anal sex.
- Most men (56.7%) and women (73.8%) experienced vaginal sex first. Few men (10.9%) or women (5.8%) experienced oral sex first. A third (32.4%) of men and 20.4% of women first experienced vaginal and oral sex at the same age.
- More younger than older participants experienced oral sex prior to, or at the same age as, vaginal sex. For example, 67.6% of men and 53.6% of women aged 18-24 experienced oral sex first or at the same age as vaginal sex, compared with 16.6% of men and 6.7% of women aged 55-64.

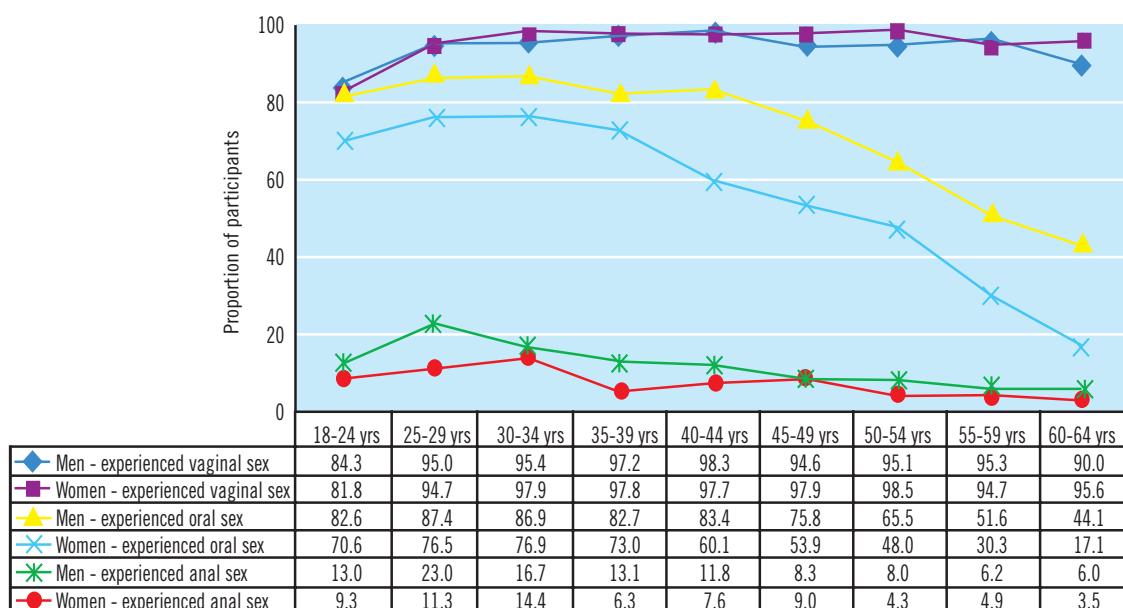
THE vast majority of people surveyed (93.1% of men and 93.8% of women) had experienced vaginal intercourse. There were no significant gender differences. Significant gender differences were found in experience of anal intercourse (12.4% of men and 8.2% of women; $p < 0.001$) and of oral sex (76.2% of men and 60.6% of women; $p < 0.001$).

The Australian ASHR study provides comparative data, although it included a slightly different age range (16-59) to that in ISSHR (18-64). In Australia, very similar levels of participants had experienced vaginal intercourse (92.2% of Australian men and 93.1% of Irish; 92.3% of Australian women and 93.8% of Irish).

Similar experience of oral sex was found among men in the Australian study and in ISSHR (78.7% and 76.2% respectively). Australian women were slightly more likely to have experienced oral sex than Irish women (66.7% vs. 60.6%). Australian men (20.9%) and women (15.1%) were also slightly more likely to have experienced anal sex than Irish men (12.4%) and women (8.2%). In both Australia and Ireland, men were significantly more likely than women to have experienced both oral and anal sex. The Australian study also found some age differences in experience of oral and anal sex; men and women aged 20-49 were more likely to have experienced both (de Visser et al 2003).

The following analyses investigate age differences among participants in ISSHR in experience of vaginal, oral and anal sex, by current age (Figure 4.1).

Figure 4.1: Experience of vaginal, anal and oral sex among Irish men and women, by age group %



The percentage of participants with experience of vaginal sex remains relatively stable across age groups, apart from 18-24 year-olds. Fewer of these had experienced vaginal intercourse. This is likely to reflect the fact that more of this age group have yet to begin sexual activity.

A steady increase in experience of oral sex with younger age is clear from Figure 4.1. For example, among 60-64 year-olds, 44.1% of men and 17.1% of women had experienced oral sex, compared with 82.6% of men and 70.6% of women aged 18-24. The proportion increases to 87.4% of men and 76.5% of women aged 25-29; again, this may be because fewer of the youngest group have embarked on this sexual activity.

Fewer participants had experienced anal sex, particularly those aged 60-64: just 6% of men and 3.5% of women. Men aged 25-29 and women aged 30-34 were most likely to report anal sex (23% and 14.4% respectively). It is not possible to determine whether this represents a trend whereby more 18-24 year-old men and 18-29 year-old women will also subsequently experience anal sex.

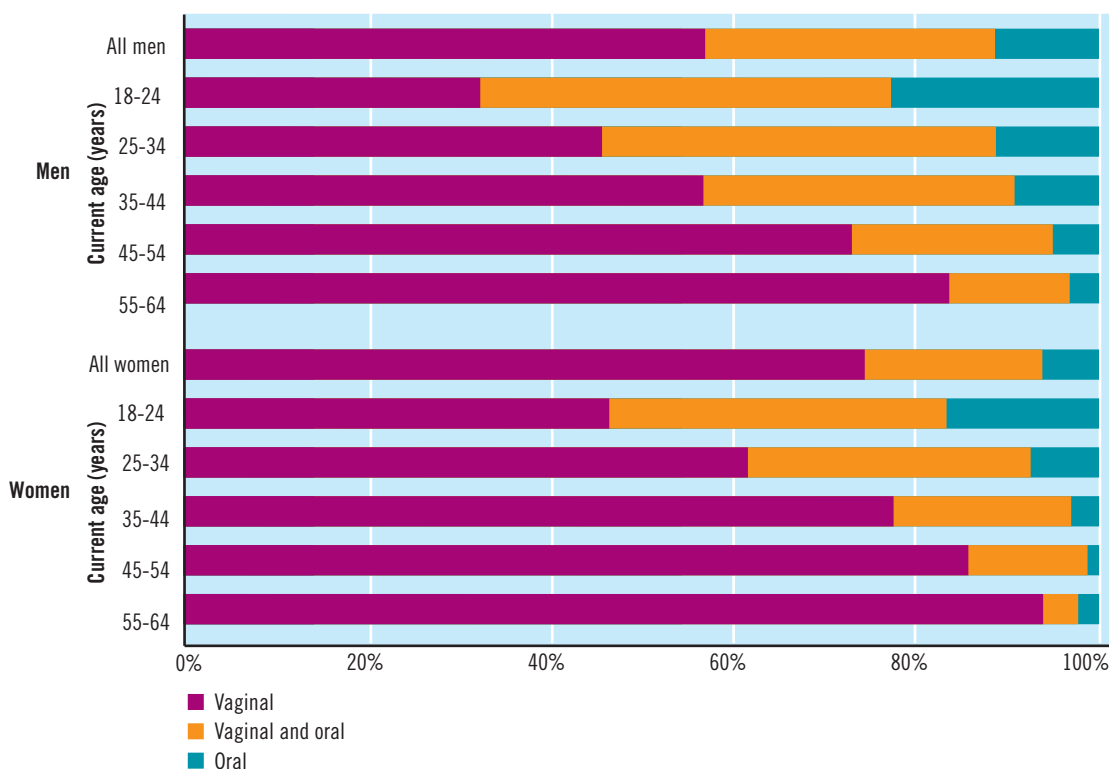
As has been discussed (see section 4.1.1), there have been recent suggestions that young people today do not consider oral sex to be real ‘sex’. If this is the case, it might be assumed that experience of oral sex before vaginal sex is more likely among younger people.

Figure 4.2 shows the percentage of participants whose first experience was of vaginal intercourse, compared with those whose first experience was of oral sex and those who experienced them at the same age:

- most men (56.7%) and women (73.8%) experienced vaginal sex first
- few men (10.9%) or women (5.8%) experienced oral sex first
- 32.4% of men and 20.4% of women first experienced vaginal and oral sex at the same age

More younger participants experienced oral sex before, or at the same age as, vaginal sex. For example, 67.6% of men and 53.6% of women aged 18-24 experienced oral sex first or at the same age as vaginal sex, compared with just 16.6% of men and 6.7% of women aged 55-64.

Figure 4.2: First sexual experience (vaginal or oral), by gender



It is possible that these findings represent a change in attitude towards oral sex among younger groups; for instance, a feeling that oral sex is not fully 'sex' and is therefore more permissible than vaginal sex at an early age. However, the findings may simply be a result of general changes in social attitudes, whereby oral and anal sex have become increasingly accepted and experienced (see *Figure 4.1*). It may also be the case that oral sex is seen as less risky than vaginal or anal sex. It is interesting to note, however, that 25-34 year-olds were more likely to have experienced oral sex than 18-24 year-olds (see *Figure 4.1*), but were less likely to have experienced oral sex before vaginal sex (*Figure 4.2*).

It was not possible to include anal sex in the above analysis because of the small number of men (n=36) and women (n=7) who reported experiencing anal sex before vaginal sex. Similarly, analysis of experience of first sex with a person of the same gender was not possible since only 11 men reported that their first experience of intercourse was of same-sex anal sex.

4.2.2 Age at first sex

SUMMARY

Participants with experience of vaginal, oral or anal sex were asked at what age they had first experienced each.

- Median age at first vaginal intercourse was 18 for men and 19 for women.
- First oral sex occurred at a median age of 19 for men and 20 for women.
- Among men, the median age at first anal intercourse was 21, and among women it was 23.
- There was a lowered median age of first vaginal, oral and anal intercourse with younger current age. For example, men and women aged 60-64 experienced first vaginal intercourse at a median age of 22 and 23 respectively. Men and women aged 18-24 reported a median age of 17 at first vaginal intercourse.
- In total, 21.3% of men and 12.9% of women first experienced vaginal intercourse before they were 17.
- The percentage of men and women experiencing first intercourse before 17 was higher among younger age groups. Among 60-64 year-olds, 8% of men and no women (0%) reported first intercourse before 17, compared with 31.3% of men and 22.3% of women currently aged 18-24.

THIS section examines the age at which participants reported experiencing vaginal, oral or anal sex.

Figure 4.3 shows the median age at first vaginal, oral and anal sex, by gender and current age. The median age is displayed to provide a reliable overview across the group by providing the mid-point value (based on a hazard-rate calculation which adjusts findings to take account of those participants who have not yet experienced vaginal intercourse – see section 2.12 for further explanation).

The median age at first vaginal intercourse was 18 for men and 19 for women. First oral sex occurred at a median age of 19 for men and 20 for women. Among men, the median age at first anal intercourse was 21; among women it was 23.

As seen in research internationally, age at first intercourse can vary considerably by current age. Therefore, analyses were carried out (using hazard-rate statistics) to identify trends in age at first intercourse across age groups.

Figure 4.3: Median age at first vaginal, oral and anal sex, by gender and current age

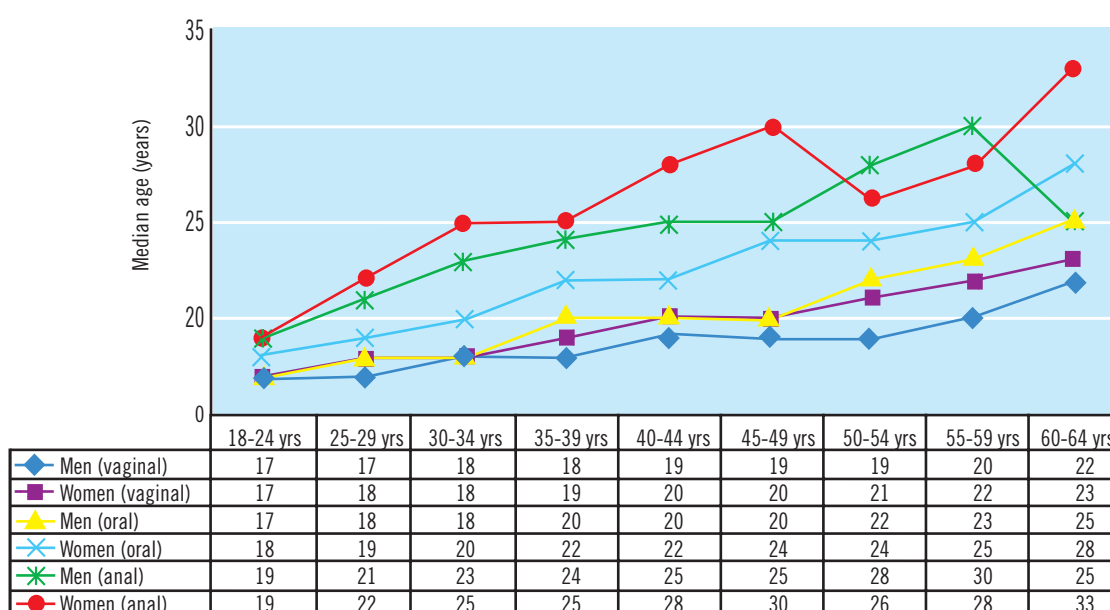


Figure 4.3 shows clearly a decline in median age of first vaginal, oral and anal intercourse with younger age. For example:

- men and women aged 60-64 experienced first vaginal intercourse at a median age of 22 and 23 respectively
- men and women aged 18-24 reported a median age of 17 at first vaginal intercourse

While the pattern of median age at first anal intercourse among older age groups was unusual, it is important to note that there were small participant numbers in these groups.

Chapter five provides further analyses of age at first vaginal intercourse, including individual and situational determinants, as well as discussion of the findings and comparison with international research. The chapter investigates the median age at first vaginal intercourse (as summarised above) and a further classification of age at first vaginal intercourse, examining those who first experienced it before 17 and those who experienced it later.

4.2.3 Relationship status at first intercourse

SUMMARY

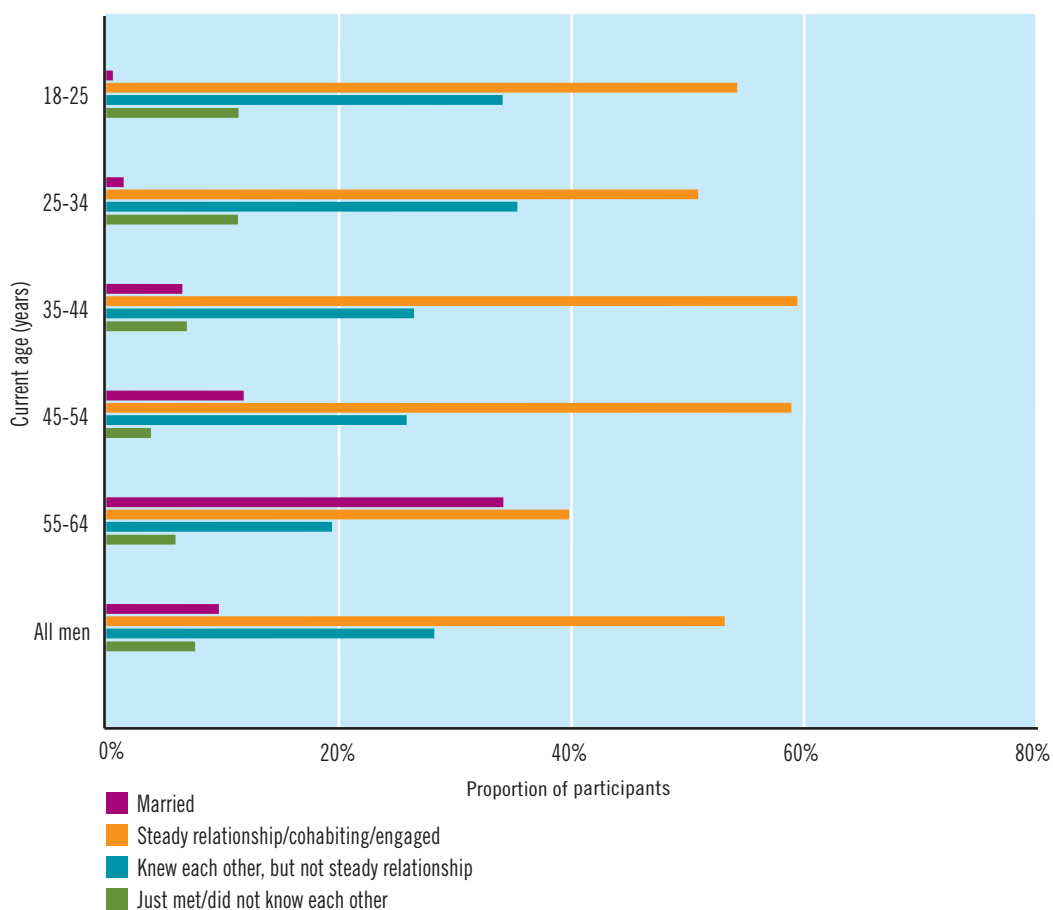
All participants with experience of vaginal or anal intercourse were asked to describe the nature of their relationship with their first partner.

- Men were most likely to have been in a steady relationship with their first partner (53.6%); 28.6% had known the partner but not been in a relationship, while 9.7% were married and 8% had just met/did not know their first partner.
- Two-thirds (65.4%) of women experienced first intercourse with a steady partner, 20.9% with a partner to whom they were married, 12.3% with a partner that they knew but were not in a steady relationship with, and 1.3% with someone they had just met or did not know.
- Men were significantly more likely than women to have been in a casual relationship (i.e. just met/did not know partner, or knew partner but was not in a steady relationship) at first intercourse.
- First intercourse with a casual partner increases from 25.9% of men aged 55-64 to 45.5% of those aged 18-24 and 47.2% of 25-34 year-olds.
- Similarly, while just 2.9% of women aged 55-64 experienced first intercourse with a casual partner, the proportion increased to 21.3% of 18-24 year-olds and 22.1% of 25-34 year-olds.
- Experience of a subsequent sexual partner increased with younger current age. Among 60-64 year-olds, 44.1% of men and just 16.2% of women reported intercourse with more than one partner, whereas 73.2% of men and 59.1% of women aged 18-24 already reported experience of a second sexual partner.
- A pattern of a shorter length of time between a first and second partner was found among younger participants. Half of men (49.6%) and 29% of women aged 18-24, but 16.4% of men and 2% of women aged 55-64, reported a subsequent partner less than one year after sex with their first partner.
- Most men (83%) and women (64.5%) said their first partner had been of a similar age (+/-2 years).

THIS section investigates the nature of the relationship with their first partner reported by all participants with experience of vaginal or anal intercourse.

Figures 4.4 and 4.5 show the nature of the relationship with the first sexual partner (vaginal or anal sex) for men and women respectively, displayed by current age of participant. Significant gender differences were found ($p < 0.001$).

Figure 4.4: Men's relationship with first sexual partner, by current age



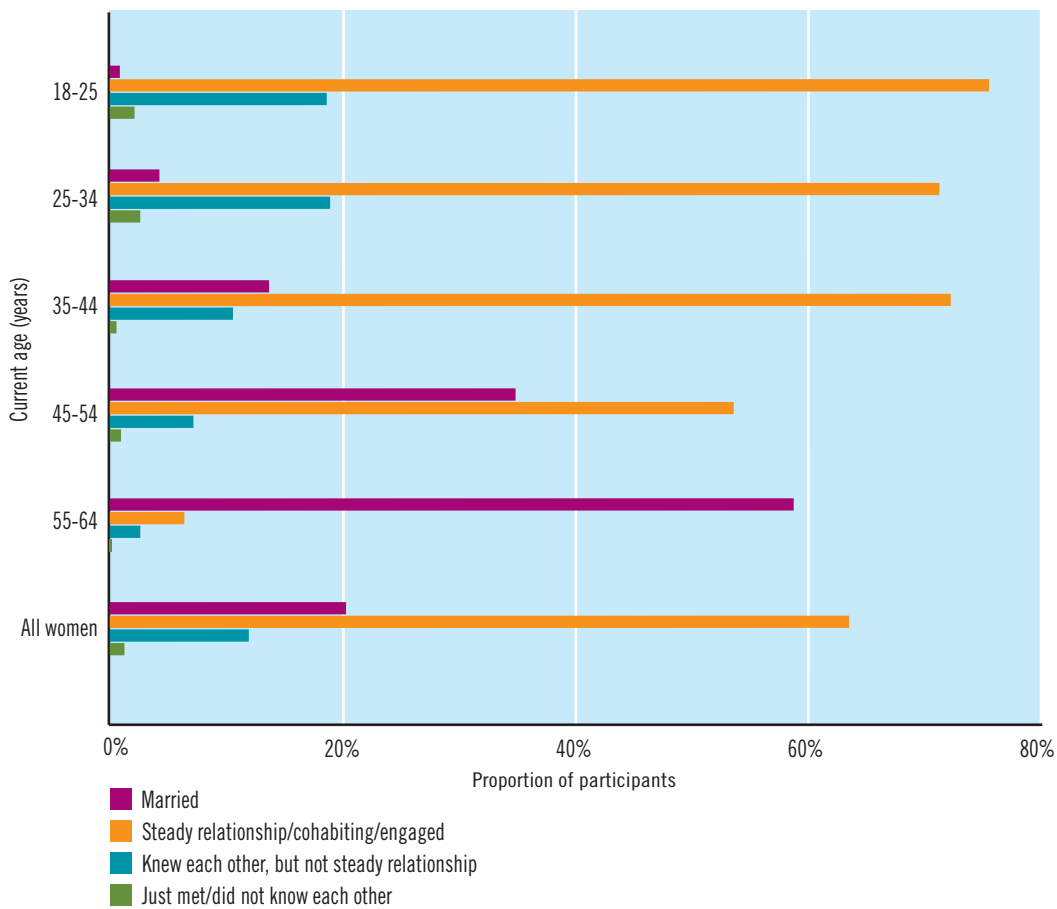
As can be seen in Figure 4.4, men were most likely to have been in a steady relationship with their first partner (53.6%), while 28.6% knew the partner but were not in a relationship, 9.7% were married and 8% had just met/did not know their first partner. More older men were married to their first sexual partner: 34% of 55-64 year-olds compared with just 0.3% of 18-24 year-olds.

There has been a steady increase in men experiencing first intercourse with a partner they were not in a relationship with (i.e. just met or knew but not in a relationship): 45.4% of men aged 18-24 and 47.1% of those aged 25-34 were not in a relationship with their first partner, compared to 25.8% of men aged 55-64.

Figure 4.5 shows relationship status with first partner among women. Around two-thirds (65.4%) experienced first intercourse with a steady partner, 20.9% with a partner to whom they were married, 12.3% with a partner they knew but were not in a steady relationship with, and 1.3% with someone they had just met or did not know.

Older women were considerably more likely to have been married to their first partner; for example, 60.5% of 55-64 year-old women compared with just 0.9% of 18-24 year-olds. The percentage of women whose first intercourse was with someone they had just met or did not know has remained low across all age groups: between 0.2% of 55-64 year-olds and 2.7% of 25-34 year-olds. However, more women aged 18-24 (19.2%) and 25-34 (19.5%) said their first partner was someone they knew but were not in a relationship with; this compares with 10.9% of 35-44 year-olds, 7.4% of 45-54 year-olds and 2.7% of 55-64 year-olds.

Figure 4.5: Women's relationship with first sexual partner, by current age



The vast majority of older women reported being married to or in a steady relationship with their first partner. The number of women in a casual relationship at first intercourse increases to around one-fifth of 18-24 and 25-34 year-olds. As has been discussed by Bozon and Kontula (1998), women no longer tend to experience first intercourse with someone to whom they are married.²⁹ This is evidently now also the case in Ireland; the proportion experiencing first intercourse within marriage has fallen dramatically from 60.5% of women currently aged 55-64 to 0.9% of those currently aged 18-24. These figures are not completely comparable across age groups since more 18-24 year-olds have not yet experienced intercourse (18.2%), and they may yet have first intercourse with someone to whom they are married. However, an age-related trend is clear across all other age groups, within which similar proportions have experienced intercourse.

A recent Australian study provides comparable data, although somewhat different age groupings were used. Among younger Australians (18-29), 1% of men and 3% of women were married to their first sexual partner, compared to 12% of men and 23% of women among older Australians (50-59).³² While similar proportions of younger Australians and Irish were married to their first partner, this was true of relatively few older Australians, compared to the rate among older Irish people.

It is interesting to investigate relationship status further, using a categorisation of steady and casual-relationship status, to determine whether other variables are associated with being in a casual relationship with a first sexual partner. Thus, participants who were married to their first partner were combined with those in a steady relationship (or cohabiting or engaged) to form a category of 'steady' relationship with first partner. Similarly, those who had just met or did not know their first partner were combined with those who knew their partner but were not in a steady relationship with them, to make a category of 'casual' relationship.

- In total, 74.8% of participants experienced first intercourse with a steady partner and 25.2% experienced it with a casual partner.

It is clear that first intercourse was most likely to occur within a steady relationship. This is in line with a number of international surveys of sexual behaviour.^{27,29-31}

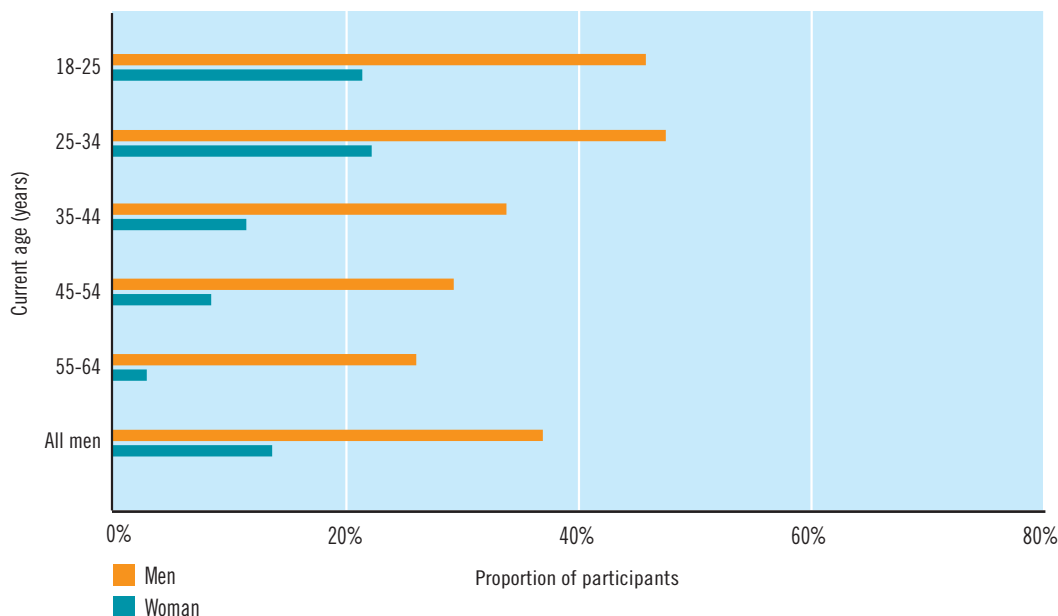
- Significantly more men (36.7%) than women (13.6%) had first intercourse within a casual relationship ($p < 0.001$).

The finding that men were less likely than women to report first intercourse within a steady relationship also supports findings in a number of international studies.^{27,29,30,32}

As seen in *Figure 4.6*, the percentage of men who had first intercourse within a casual relationship increased from 25.9% of 55-64 year-olds to 47.2% of 25-34 year-olds and 45.5% of 18-24 year-olds.

Similarly, while just 2.9% of women aged 55-64 experienced first intercourse with a casual partner, this increased to 22.1% of 25-34 year-olds and 21.3% of 18-24 year-olds.

Figure 4.6: Casual relationship with first partner, by gender and current age



Multivariate analysis, controlling for current age and educational level among men, found no significant differences between 18-24 year-olds and 25-34 year-olds. However, all groups aged 35+ were significantly less likely than 18-25 year-olds to have been in a casual relationship at first intercourse ($p < 0.001$ for all age groups). There were no significant educational differences among men.

Receipt of sex education (on sexual feelings, relationships and emotions) was added to the multivariate model. There were no significant differences in casual relationship at first intercourse among those men who received or did not receive sex education.

Multivariate analyses were then carried out for women, first controlling for current age and educational level. As seen among men, there were no significant differences between 18-24 year-olds and 25-34 year-olds, but all groups aged 35+ were significantly less likely than 18-25 year-olds to have been in a casual relationship at first intercourse ($p < 0.001$ for all age groups). A review of European studies by Bozon and Kontula (1998) also found that the percentage of women having first intercourse within a steady relationship decreased with younger age. However, they found an increase in first sex within a steady relationship among younger men, which was not seen in the present study.²⁹

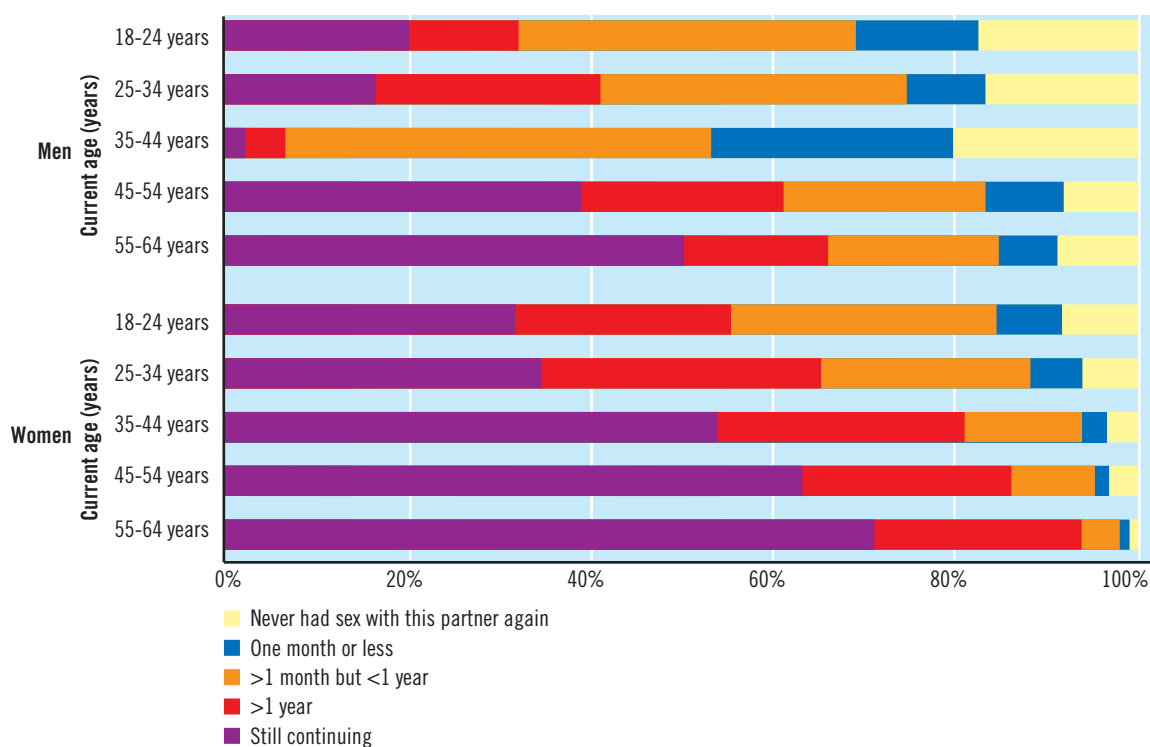
After controlling for current age, women with primary education were more likely than women with higher secondary education to have been in a casual relationship with their first partner ($p < 0.05$). No other differences were found across educational level.

Again, receipt of sex education (on sexual feelings, relationships and emotions) was added to the model. Women who had received it were less likely to have been in a casual relationship with their first partner than women who had not received it.

Participants were also asked if they were still in a relationship with their first partner, and if not, how long the relationship had continued after first intercourse. The latter question assumes that participants have good recall of past events.

Figure 4.7 shows length of relationship after first intercourse, including relationships that were continuing, by gender and current age.

Figure 4.7: Length of relationship with first partner after first intercourse, by gender and current age



There is clearly a trend towards decreasing length of relationship with first partner by younger current age (Figure 4.7).

Age differences in relationship length were significant for both men ($p < 0.001$) and women ($p < 0.001$). Among 55-64 year-olds, 49.9% of men and 70.9% of women were still in a relationship with their first partner. This fell to 19.9% of men and 31.7% of women currently aged 18-24.

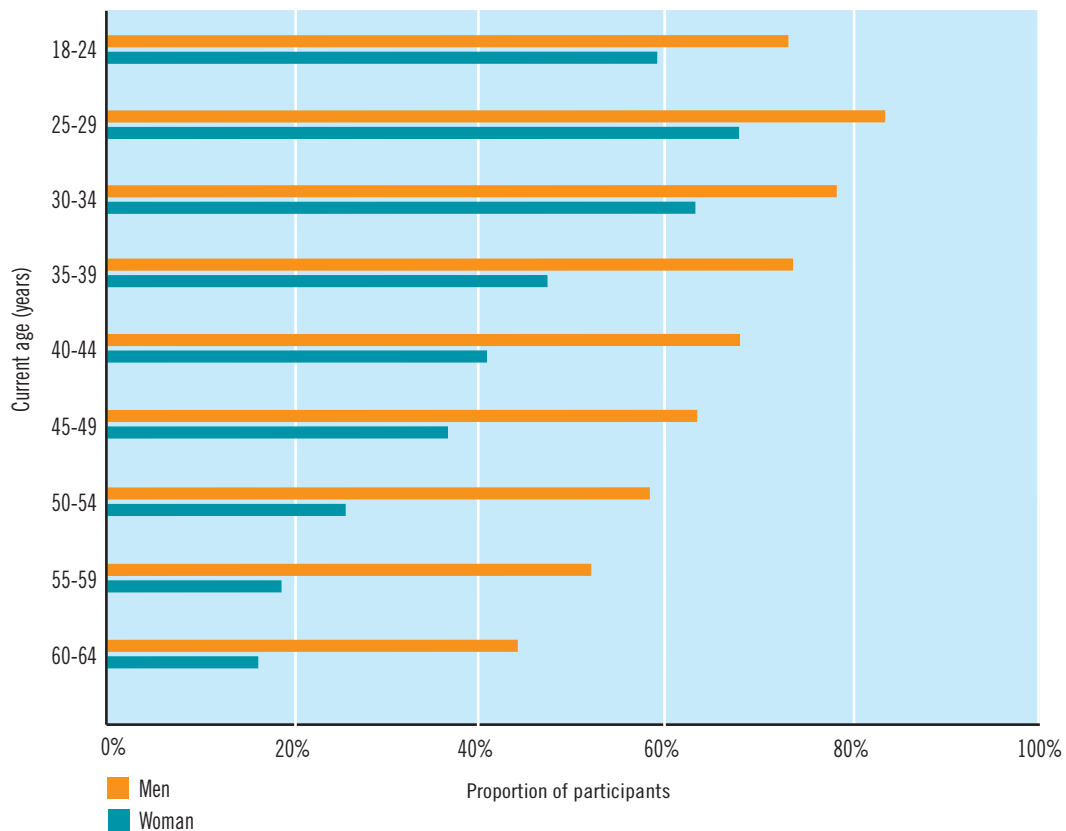
Among 18-24 year-olds, 18.2% of men and 8.8% of women never had sex with their first partner after the first occasion. This compares with 9.6% of men and 1.1% of women aged 55-64. Younger people were more likely to experience first intercourse with someone they never subsequently had intercourse with, and their first sexual relationships were also likely to be briefer than those of older groups.

Participants were next asked if they ever had vaginal or anal intercourse with another partner after first intercourse. If yes, they were asked the length of time between sex with their first partner and sex with a second partner.

Figure 4.8 displays the percentage of men and women who had intercourse with another partner after their first sexual partner, by gender and current age:

- 68.3% of men and 45.1% of women had sex with a second partner ($p < 0.001$)

Figure 4.8: Percentage of participants who had vaginal or anal intercourse with a subsequent partner after their first partner, by gender and current age



It might be assumed that these results would be similar to those in Figure 4.7 which shows the percentage of participants whose relationship with their first partner was continuing, but the fact that a relationship was continuing does not preclude sexual experience with another partner.

Again, it is clear from Figure 4.8 that the percentage of men and women who had experienced intercourse with a second partner increases with younger current age.

Significant age differences in experience of a second partner were found for both men ($p < 0.001$) and women ($p < 0.001$):

- 44.1% of men and 16.2% of women currently aged 60-64 subsequently had intercourse with a second partner, whereas 73.2% of men and 59.1% of women now aged 18-24 reported experience of a second partner already.

More men and women aged 25-34 reported a second partner than those aged 18-24. This is likely to reflect the more recent occurrence of first intercourse among 18-24 year-olds.

Building on the above findings, *Figure 4.9* shows the length of time after sex with their first partner that participants had intercourse with a second partner. A pattern of decreasing length of time between first and second partner is clear.

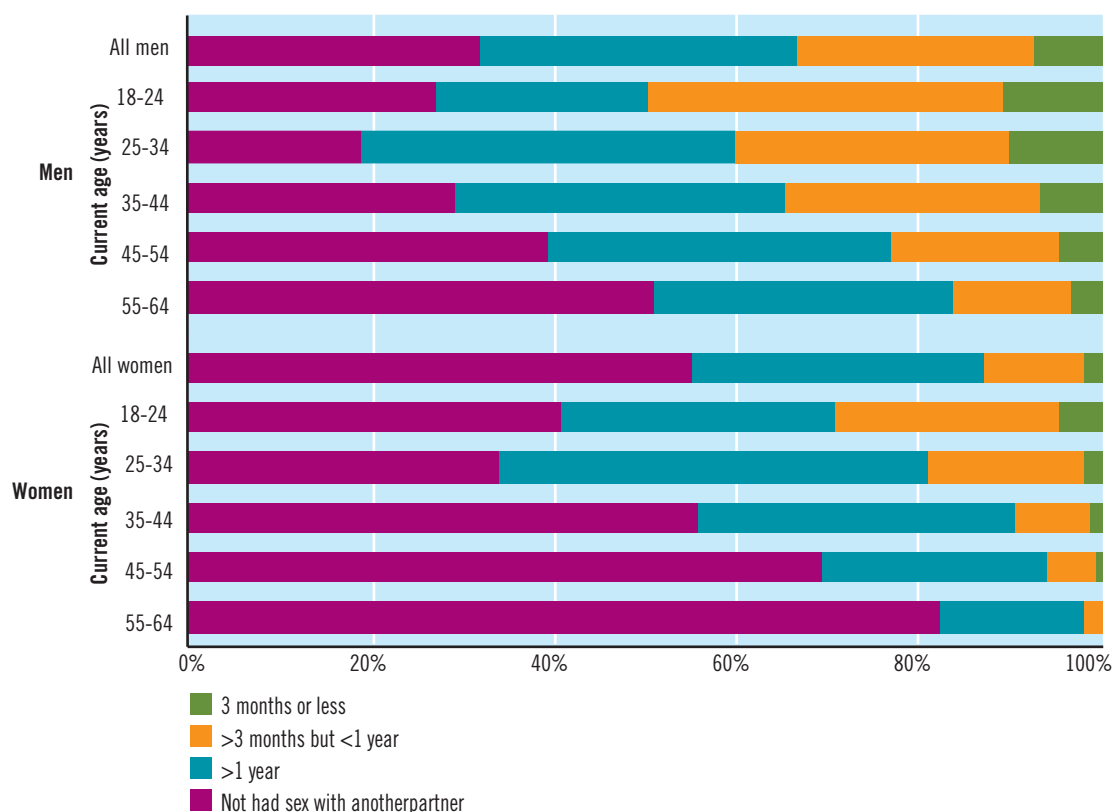
There were significant gender differences in length of time ($p < 0.001$), as well as significant differences across age groups for both men ($p < 0.001$) and women ($p < 0.001$).

Women were generally less likely than men to report shorter intervals (three months or less, or more than three months but less than one year).

The same pattern of decreasing length of time was evident for both men and women. For example:

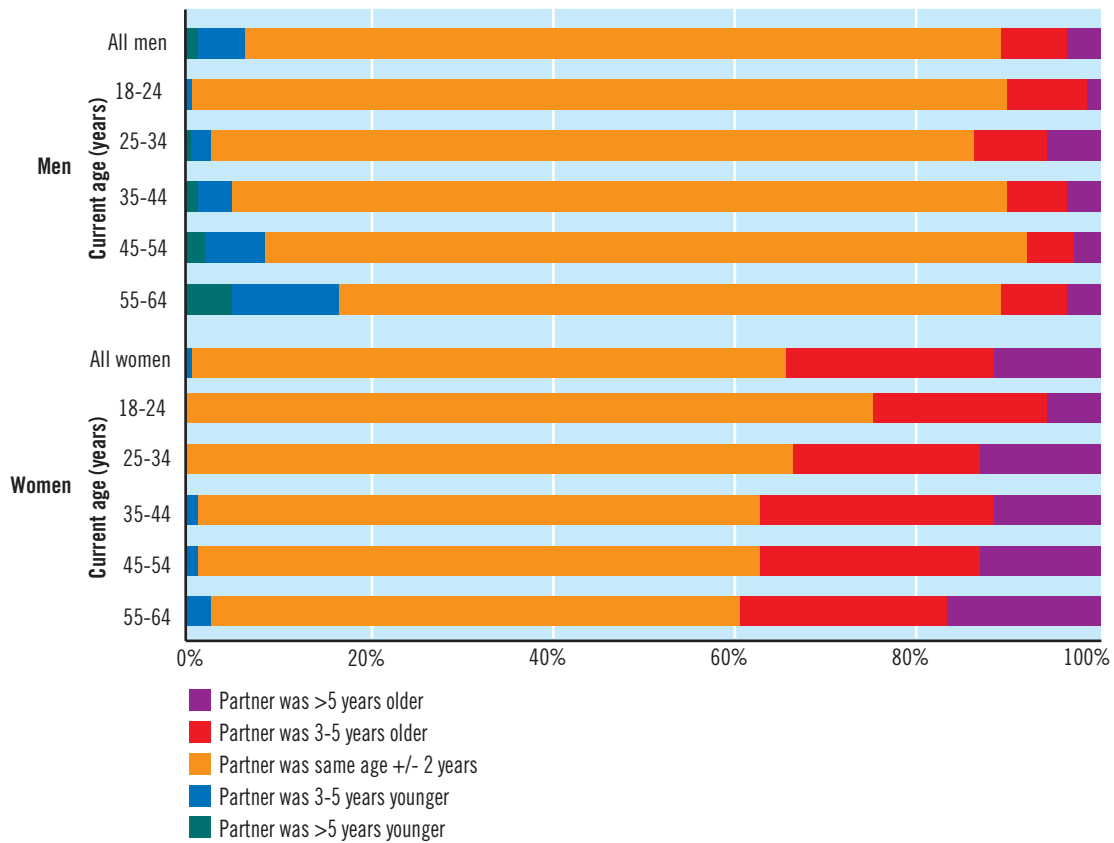
- among 18-24 year-olds, 49.6% of men and 29% of women reported a second partner less than one year after sex with their first partner
- among 55-64 year-olds, 16.4% of men and 2% of women experienced a second sexual partner less than one year after sex with their first partner
- while 18-24 year-olds were more likely than 25-34 year-olds not to have had sex with another partner, this is likely to reflect their younger current age and more recent occurrence of first intercourse.

Figure 4.9: Length of time after sex with first partner that participants had sex with a second partner, by gender and current age



The final area of questioning concerning relationship status involved age differences between participants and their first partners. As shown in *Figure 4.10*, men and women of all age groups were most likely to have had a first partner of the same age +/- 2 years.

Figure 4.10: Age difference between participant and first sexual partner, by gender and current age



There were significant partner age differences across age groups for both men ($p < 0.001$) and women ($p < 0.001$). There were small variations in the proportion of men whose first partner was three or more years younger; older men were more likely to have had a younger partner. For example:

- 17% of men aged 55-64 but only 0.8% of those aged 18-24 said their first partner had been three or more years younger

Across age groups, similar, small proportions of men experienced first intercourse with a partner who was three or more years older.

Very few women had first intercourse with a partner who was three or more years younger. Considerably more women than men had first intercourse with a partner who was three or more years older. Women aged 18-24 were less likely than older women to have experienced first intercourse with a partner who was three or more years older.

4.2.4 Context of first intercourse

SUMMARY

This section investigates issues relating to the context of first intercourse, such as willingness, planning, timing, drinking alcohol or taking drugs, and later regret. Questions were adapted from the British Natsal survey.

In reporting the results, it is assumed that participants have a reasonable recall of past events and that these are not reconstructed, based on current beliefs, attitudes and emotions. This assumption needs to be borne in mind in assessing participants' evaluation of their willingness for or regret about first intercourse.

- More men (92.5%) than women (86.6%) said that they and their partner had been equally willing to have first intercourse.
- More women (12%) than men (3.5%) reported that their partner had been more willing.
- More men (3.8%) than women (0.6%) reported that they had been more willing.
- Significantly more men (55.1%) than women (40.4%) said first intercourse happened on the spur of the moment. The remainder said they had expected it to happen soon or at that time.
- Most men (80%) and women (78.3%) said first intercourse occurred at about the right time.
- Very few men (6.2%) and women (2.7%) felt they should not have waited so long. More people (13.8% of men and 19% of women) said they should have waited longer.
- Slightly more older than younger men and women felt they should not have waited so long for first intercourse. Younger men were slightly more likely, and younger women considerably more likely, to feel they should have waited longer.
- Most men and women agreed that it was the right time for first intercourse (85.7% and 91.6% respectively) and that it had seemed like a natural follow-on in their relationship (85.1% and 90.1% respectively).
- Significantly more women (85.1%) than men (61.4%) said they had been in love with their first partner. Younger men and women were less likely to say this.
- Over one-quarter of men (27.4%) and 16.5% of women said that they or their partner had been drinking alcohol or taking drugs at the time of first intercourse.

THIS section looks at the context of first intercourse, investigating issues such as willingness, planning, timing, drinking alcohol or taking drugs, and later regret.

First, participants were asked if they and their first partner had been equally willing, if one was more willing than the other or if they had been forced. *Figure 4.11* displays the percentage of men and women who reported each of these responses. There were significant gender differences ($p < 0.001$).

Figure 4.11: Willingness for first intercourse, by gender and current age

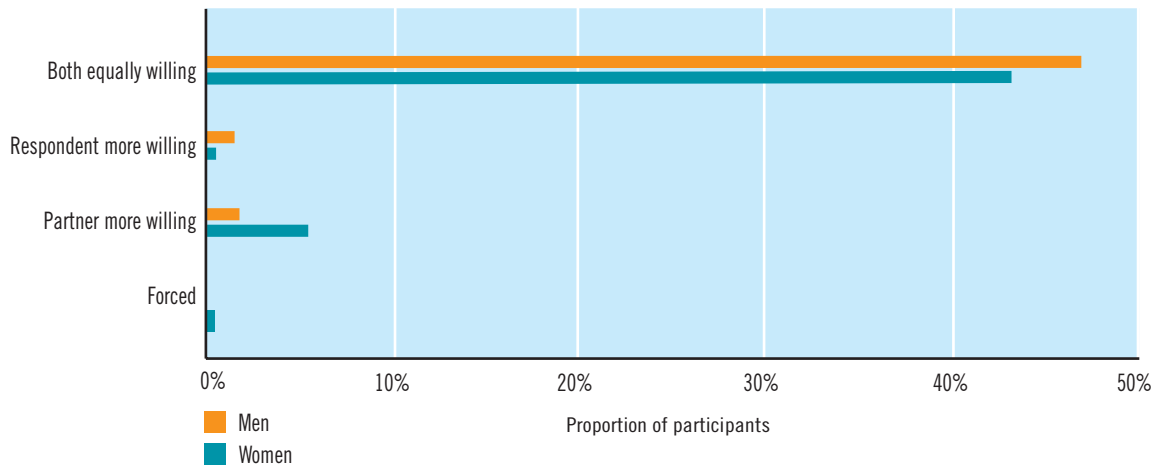


Figure 4.11 shows that more men (92.5%) than women (86.6%) felt that both partners had been equally willing to have first intercourse. Notably more women (12%) than men (3.5%) reported that their partner had been more willing. More men (3.8%) than women (0.6%) reported that they had been more willing. This is in line with research findings from small studies internationally, which have found that young women were more likely than young men to say their partner had been more willing.^{31,46}

More women (0.8%) than men (0.2%) reported having been forced.^c

Among men, there were small but significant age differences ($p < 0.05$):

- Fewer younger men reported being more willing (2.6% of under-30 year-olds, 3.9% of 30-44 year-olds and 4.7% of 45-64 year-olds).
- More younger men reported that their partner was more willing (4.9% of under-30 year-olds, 3.4% of 30-44 year-olds and 2.4% of 45-64 year-olds).

^c While these proportions are small, they translate into a considerable number of individuals. Other reports such as the Sexual Abuse and Violence in Ireland (SAVI)⁷⁰ study document the extent of sexual violence in the current adult population in Ireland.

There were few age differences in both partners being equally willing (94.2% of under-30 year-olds, 92.1% of 30-44 year-olds and 92.9% of 45-64 year-olds).

There were no age differences in willingness among women.

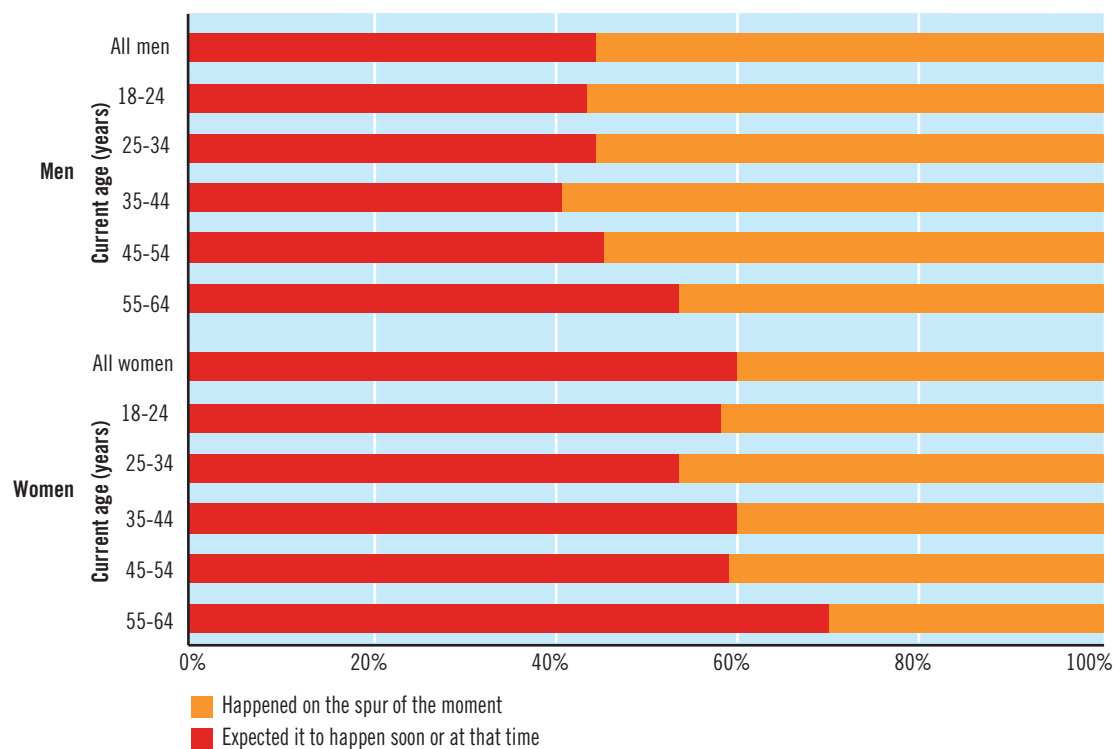
A question relating to planning of intercourse was also included. Participants were asked if, before first intercourse, they had expected it to happen on that occasion, or if it happened ‘on the spur of the moment’. Figure 4.12 shows the percentages for both, by gender and current age.

- In total, 55.1% of men and 40.4% of women said first intercourse happened on the spur of the moment ($p < 0.001$). The remainder said they had expected it to happen soon or at that time.

The proportion of participants who experienced first intercourse ‘on the spur of the moment’ remains stable across age groups, with the exception of 55-64 year-olds, and particularly 55-64 year-old women, who appear to be less likely to have experienced first intercourse on the spur of the moment.

While variation across groups appears minimal, significant differences across groups were found in planning of first intercourse, for both men ($p < 0.01$) and women ($p < 0.001$).

Figure 4.12: Planning of first intercourse, by gender and current age



Participants were also questioned about regret regarding first intercourse, specifically whether they now felt they should have waited longer before having sex, if it was about the right time, or they should not have waited so long. There were significant gender differences in regret ($p < 0.001$).

Figure 4.13: Regret concerning first intercourse, by gender and current age

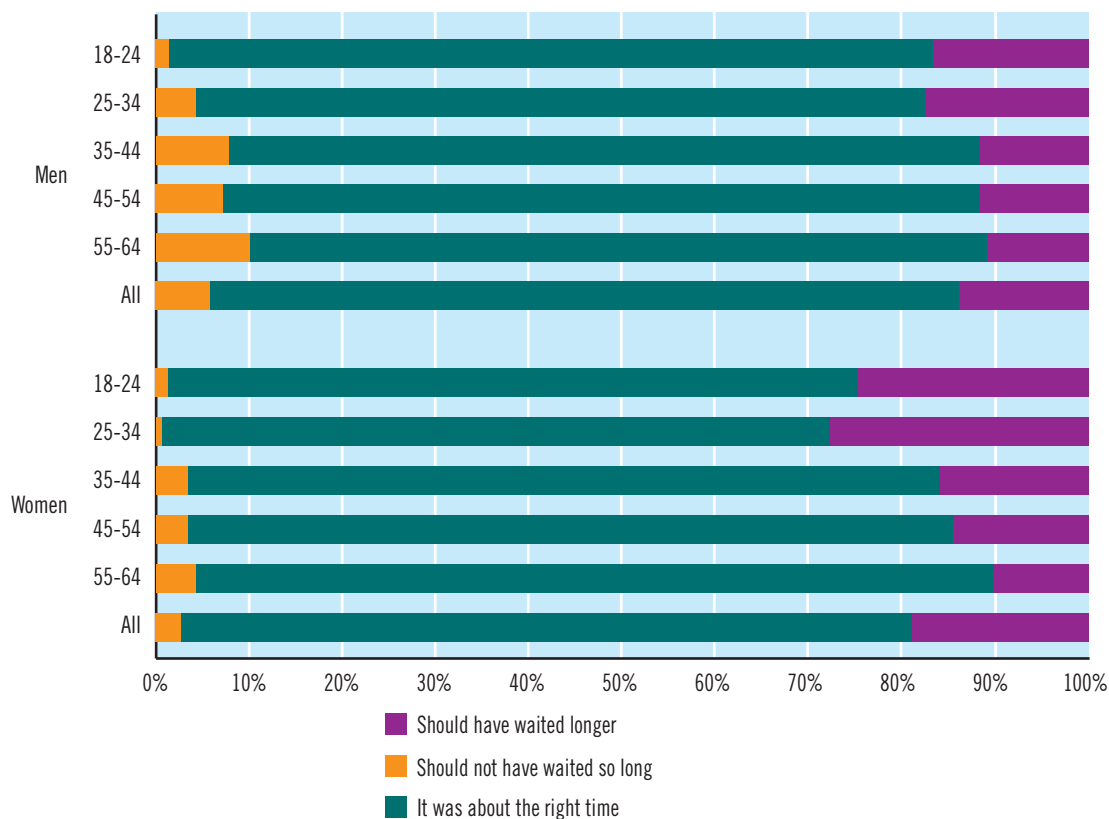


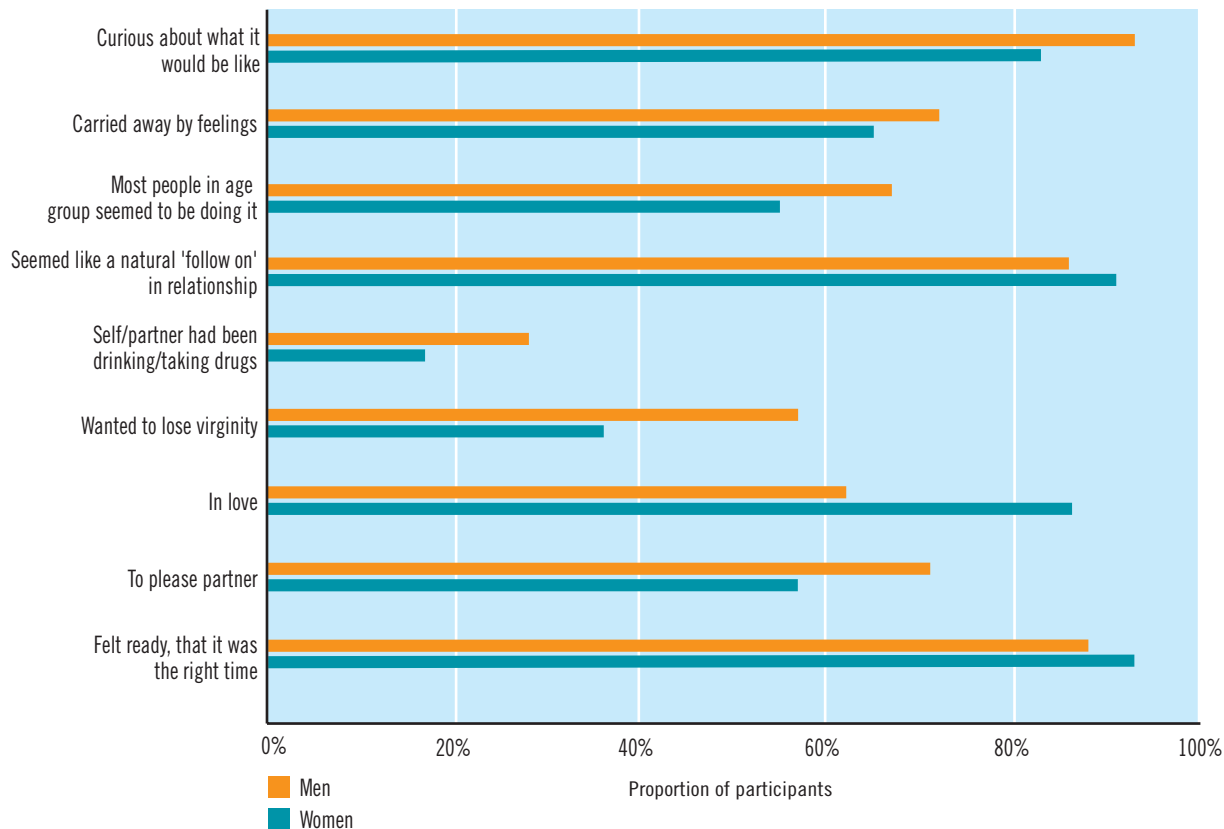
Figure 4.13 shows that most men (80%) and women (78.3%) felt that first intercourse had occurred at about the right time. Very few men (6.2%) and women (2.7%) felt they should not have waited so long. Slightly more older men and women than younger felt they should not have waited so long. Younger men were slightly more likely, and younger women considerably more likely, to feel they should have waited longer.

These age differences in levels of regret about the timing of first intercourse were significant for both men and women ($p < 0.001$).

To investigate further the context of first intercourse, a number of statements were included in the interview. Participants were asked if each statement applied to their first experience of intercourse, using the responses 'yes', 'no' or 'don't know'. Those who responded 'don't know' were excluded in order to focus on those who had a definite judgement. In general, few men (0.4%-3.0%; $N=17-82$) or women (0.5%-3.5%; $N=21-120$) responded 'don't know' for any statement. However, in relation to the statement 'most people my age seemed to be doing it', 9.4% of men ($N=280$) and 10.4% of women ($N=395$) said they did not know.

Levels of agreement with each statement (i.e. the percentage who responded 'yes') are shown in Figure 4.14, for both men (base range=2,658-2,923) and women (base range=3,512-3,891). For all statements, there were statistically significant gender differences in proportions agreeing ($p < 0.001$).

Figure 4.14: Agreement with statements relating to context of first intercourse, by gender



As has been found in international studies,^{29,46} significantly more women (86.3%) than men (62.8%) agreed that they were in love with their first partner. Most men and women also agreed that they had felt ready/it was the right time (88% and 92.9% respectively) and that it had seemed like a natural follow-on in the relationship (86.1% and 91.1% respectively).

Over one-quarter of men (27.6%) and 16.6% of women said that they or their partner had been drinking alcohol or taking drugs at the time of first intercourse.

Further analyses by current age can identify trends in first intercourse. *Table 4.1* shows men’s agreement with each statement, by current age. Significant age differences were found for all statements ($p < 0.001$). The percentage of men who agreed that they had been curious about what sex would be like was somewhat higher in younger age groups, as was agreement that they had wanted to lose their virginity.

Table 4.1: Men's agreement with statements relating to context of first intercourse, by current age

	18-24 (%)	25-34 (%)	35-44 (%)	45-54 (%)	55-64 (%)
Curious about what it would be like	97.0	94.4	92.5	89.9	88.8
Carried away by feelings	63.5	68.9	72.2	77.8	79.6
Most people in age group seemed to be doing it	71.7	72.3	66.4	58.7	61.2
Seemed like a natural 'follow-on' in relationship	81.0	82.7	87.6	89.7	90.4
Self/partner had been drinking/ taking drugs at time	36.0	37.0	28.1	19.6	12.7
Wanted to lose virginity	64.2	65.6	60.0	44.8	47.2
In love	48.3	54.1	63.6	73.7	77.9
To please partner	62.8	65.3	74.1	74.6	80.9
Felt ready, that it was the right time	84.7	81.9	90.3	92.2	92.0
Base (range)	614-635	617-664	572-621	471-542	384-466

More younger men agreed that most people in their age group seemed to be doing it. Similarly, the likelihood of agreeing that they or their partner had been drinking or taking drugs at the time was higher among younger age groups. Agreement that they had wanted to please their partner and that they had been carried away by feelings was lower for younger groups.

Older men were considerably more likely to agree that they had been in love or got carried away by feelings, and slightly more likely to agree that they had felt ready/it was the right time, and that it had seemed like a natural follow-on in the relationship.

Table 4.2 displays agreement with the context statements among women, by current age. For all statements, significant age differences were found ($p < 0.005$ for statement 'most people in age group seemed to be doing it' and $p < 0.001$ for all other statements). As seen among men, more younger women agreed that they were curious about what sex would be like, although a similar pattern was not evident for agreement that they had wanted to lose their virginity. There was a trend towards higher levels of agreement that most people in their age group seemed to be doing it and that they or their partner had been drinking or taking drugs, although, in both cases, the percentage agreeing was lower for 18-24 year-olds than for 25-34 year-olds.

Table 4.2: Women’s agreement with statements relating to context of first intercourse, by current age

	18-24 (%)	25-34 (%)	35-44 (%)	45-54 (%)	55-64 (%)
Curious about what it would be like	94.3	89.0	88.1	78.1	76.3
Carried away by feelings	47.5	63.2	71.2	70.5	71.1
Most people in age group seemed to be doing it	55.5	61.2	55.5	50.3	51.2
Seemed like a natural ‘follow-on’ in relationship	83.8	88.0	93.5	93.2	97.7
Self/partner had been drinking/ taking drugs at time	20.8	21.7	16.6	15.1	5.9
Wanted to lose virginity	35.8	42.6	31.5	30.4	43.2
In love	70.1	78.6	91.5	92.9	98.6
To please partner	36.6	45.2	58.2	69.5	81.5
Felt ready, that it was the right time	88.5	89.1	95.1	94.4	97.9
Base (range)	705-736	869-912	883-978	611-728	444-558

As seen among men, older women were considerably more likely to agree that they had been in love, and slightly more likely to agree that they had felt ready/it was the right time, and that it seemed like a natural follow-on in the relationship. Similarly, considerably more older women agreed that they had wanted to please their partner. They were also more likely than the youngest groups to agree that they had been carried away by their feelings.

The increasing use of alcohol among adolescents, including during sexual initiation, is of increasing concern in modern society. Agreement with the statement that ‘self or partner had been drinking or taking drugs at the time’ of first intercourse was deemed worthy of further investigation to determine the level of drinking and drug use with first intercourse, as well as to identify social trends (Table 4.3).

After adjusting for all variables listed, there were no significant differences between the youngest men and men aged 25-34 or 35-44.

- Older men (45-54 and 55-64) were significantly less likely than those aged 18-24 to agree that they or their partner had been drinking or taking drugs at first intercourse.
- Among women, only those aged 55-64 were significantly less likely than 18-24 year-old women to report that they or their partner had been drinking or taking drugs.

There were no independent educational differences among men. However, women with lower secondary or higher secondary education were less likely than women with third-level education to report drinking or taking drugs, after adjusting for the variables.

Table 4.3: Agreement with statement 'had been drinking or taking drugs at the time' in relation to first intercourse, by socio-demographic factors

	Men			Women		
	Agree (%)	Base	MV+	Agree (%)	Base	MV+
All participants	27.4	2,940		16.5	3,912	
Current age (years)						
18-24	36.0	636	C	20.8	736	C
25-34	36.9	665	ns	21.7	914	ns
35-44	28.0	625	ns	16.5	979	ns
45-54	19.4	549	**	15.0	727	ns
55-64	12.6	465	***	5.8	556	*
Education (highest level attained)						
Primary	21.0	235	ns	13.0	280	ns
Lower secondary	25.4	508	ns	14.0	599	*
Higher secondary	30.1	1,095	ns	15.3	1,639	***
Third level	29.1	1,102	C	23.1	1,394	C
Relationship with first sexual partner						
Just met/didn't know each other	65.3	242	***	57.2	47	***
Knew each other but not steady relationship	42.5	836	***	46.7	467	***
Steady relationship/cohabiting/engaged	17.2	1,588	*	13.5	2,617	**
Married	6.1	260	C	5.9	777	C

+ Multivariate analysis: logistic regression adjusting for all variables in the table

*= $p < 0.05$; **= $p < 0.01$; ***= $p < 0.001$; ns=not significant; C=comparison group

Relationship status was identified as a major independent determinant of drinking or taking drugs at first intercourse.

Compared with men who were married to their first partner,

- men who had just met or did not know their partner were 18 times more likely
- men who knew their partner but were not in a steady relationship with them were over seven times more likely
- men in a steady relationship were twice as likely

to report that they or their partner had been drinking or taking drugs at first intercourse.

Similarly, compared with women who were married to their first partner,

- women who had just met or did not know their first partner were over 15 times more likely
- women who knew their first partner but were not in a steady relationship with them were 11 times more likely
- women in a steady relationship were twice as likely

to agree that they or their partner had been drinking or taking drugs at first intercourse.

Finally, additional multivariate models that substituted educational level with social class found no significant differences across social classes in agreement with the statement, for men or women.

4.3 Summary

THE great majority of people had experienced vaginal intercourse (93% of men and 94% of women) or oral sex (76% of men and 61% of women). Fewer participants had experienced anal sex (12% of men and 8% of women). Most men (57%) and women (74%) experienced vaginal sex before oral sex; few men (11%) or women (6%) experienced oral sex first.

For all people (aged 18-64), the median age at first vaginal intercourse was 18 for men and 19 for women. The median age at first oral sex was 19 for men and 20 for women, and that at first anal intercourse was 21 for men and 23 for women.

Experiences of first intercourse were examined across a number of relationship and contextual areas. Just over half of men had been in a steady relationship with their first partner; a further 9.7% were married. Over a quarter of men knew their partner but were not in a relationship with them. A further 8% had just met or did not know their first partner.

Around two-thirds of women experienced first intercourse with a steady partner and two-fifths were married to their first partner. Fewer women had first intercourse with a partner that they knew but were not in a steady relationship with (12%) or with someone they had just met or did not know (1%).

Younger men and women and those with lower levels of religiosity were more likely to have been in a casual relationship (just met/did not know or knew but were not in a relationship) with their first partner.

Women who had received education on sexual feelings, relationships and emotions were also less likely to have been in a casual relationship with their first partner than those who did not receive this education.

Men and women in a casual relationship with their first partner were considerably more likely than those in a steady relationship to have been drinking or taking drugs at the time of first intercourse.

Most men and women felt that first intercourse occurred at about the right time. Most said they had felt ready/it was the right time or that it had seemed like a natural follow-on in the relationship. However, over half of men (55%) and 40% of women said first intercourse had happened on the spur of the moment, while the remainder said they had expected it to happen soon or at that time. This may have implications for contraceptive use, since more deliberate planning for intercourse may provide an opportunity for contraceptive planning (see chapter six for further analysis).

Gender differences were found in a number of aspects of sexual initiation. Men were more likely than women to have had oral and anal sex, and men generally experienced vaginal, oral and anal sex at younger median ages.

- While both men and women were more likely to have been in a steady than a casual relationship at first intercourse, men were considerably more likely than women to have experienced first sex with a casual partner.
- Men were less likely than women to have been married to their first partner, and more likely to have just met or not known their first partner.
- Considerably more women than men were still in a relationship with their first partner and had not had sex with a second partner.
- Men were more likely than women to report not having sex with their first partner after first intercourse or to report a shorter relationship following it.

There were also gender differences in contextual aspects of first intercourse. More men than women felt that they and their partner had been equally willing for first intercourse, while more women than men said their partner had been more willing. Men were also more likely than women to say that intercourse had happened on the spur of the moment. More women than men expressed regret over the timing of first intercourse (mostly saying that they should have waited longer).

Men were significantly more likely to agree that:

- they had been curious about what sex would be like
- they had been carried away by their feelings
- they or their partner had been drinking or taking drugs
- they wanted to lose their virginity

Women were more likely than men to agree that:

- they had been in love
- it had seemed like a natural follow-on in the relationship
- they had felt ready/it was the right time

As well, age differences were found in experiences of sexual initiation. For example, younger men and women experienced first vaginal, oral and anal sex at younger median ages. There has been a steady increase in the experience of oral sex in the younger current age groups; younger participants are also more likely to have experienced oral sex prior to, or at the same age as, vaginal sex.

While first intercourse was still more likely to occur within a steady relationship among younger men and women, they were considerably more likely than older men and women to have experienced first intercourse with a casual partner. Few younger men and women were married to their first sexual partner. Older men and women were more likely than younger men and women to still be in a relationship with their first partner. They were also less likely to have experienced intercourse with a second partner. Younger men and women were more likely to have experienced first intercourse with a person whom they then never had intercourse with again. Their first sexual relationships were likely to be of shorter length than those of older groups.

A pattern of decreasing length of time between a first and second sexual partner was also found among younger age groups.

Concerning the context surrounding first intercourse, younger men were slightly more likely, and younger women considerably more likely, to feel they should have waited longer. Older participants were considerably more likely than younger people to agree that they had been in love, and slightly more likely to agree that they had felt ready/it was the right time and that it had seemed like a natural follow-on in the relationship.

Younger men and women were more likely than older men and women to say they had been curious about what sex would be like and that they or their partner had been drinking or taking drugs at the time.

In summary, the ISSHR study shows that the meaning of first intercourse has changed notably over recent decades such that it now represents something quite different for younger Irish men and women. A key finding of this chapter is that sexual initiation for both men and women occurs at an increasingly younger age. As well, it appears that first intercourse continues to be experienced differently by men and women.

The next chapter investigates determinants of age at first vaginal intercourse.

Age at first sex

THE previous chapter provided a detailed overview of experiences of first intercourse across age cohorts. This chapter focuses on issues relating to age at first vaginal sex.

An introduction to the international literature is provided in section 5.1. This discusses research findings relating to changes in age at first intercourse over time, followed by the determinants of earlier and later sexual initiation found in international research.

- The ISSHR study results are provided in section 5.2, beginning with an overview of median age at first vaginal intercourse and the percentage of participants reporting first intercourse before 17, across age cohorts.
- The second results sub-section looks at factors such as socio-demographic variables, sex education and parent-child communication about sex as determinants of age at first sex.
- The role of relationship and partner factors, such as relationship status and age of partner, in age at sexual initiation are examined in sub-section three.
- The fourth sub-section looks at differences in situational and contextual factors across different ages at first sex. It includes an examination of the association between age at first sex and planning for sexual encounters, willingness and regret.
- Age at sexual initiation as a predictor of subsequent sexual experiences such as multiple partners, STI, crisis pregnancy and abortion are examined in the final results sub-section.

The chapter is summarised in section 5.3.

5.1 Introduction

5.1.1 Declining age at first intercourse

GENERAL population surveys in countries around the world have reported on age at first intercourse. A review of European surveys has found a declining age at first sexual intercourse. This decline was more evident for women; previous gender differences in age at sexual initiation among older groups (i.e. women reporting later ages at first intercourse) converged among younger generations.²⁹

These patterns have also been reported in surveys in Australia.^{30,32} For example, the Australian Study of Health and Relationships (ASHR) found a median age at first sex of 18 for women and 17 for men. Men aged 50-59 reported a median age at first sex of 18, but this fell to 16 among men aged 16-19. Median ages for women declined from 19 to 16 across these age cohorts.³⁰

In the UK, the 2000 Natsal study found a median age at first intercourse of 17 for women aged 25-44 and men aged 20-44, and a median age of 16 for women aged 16-24 and men aged 16-19.³³

A recent nationally representative survey of younger Irish people (aged 18-45) reported a median age at first intercourse of 19 for women and 18 for men. Median age at first sex for men decreased across age cohorts from 19 (year of birth 1956-60) to 17 (year of birth 1981-85). Similarly, that for women fell from 20 (year of birth 1956-60) to 18 (year of birth 1981-85). As well, 52% of 18-25 year-old participants compared with 22% of 36-45 year-olds first had sex before age 18.²³

Irish research into young people also supports the assertion that a substantial proportion of adolescents are experiencing first intercourse at a young age.^{92,101} For example, a survey of 1,000 15-24 year-olds throughout Ireland found that 25% of 15-17 year-olds had experienced intercourse, 68% of 18-19 year-olds, 78% of 20-22 year-olds and 85% of 23-24 year-olds.¹⁰¹

International research has investigated the long-term implications of earlier sexual initiation. A number of studies have examined differences in sexual behaviour and experience among participants reporting earlier or later sexual initiation. In a review of European surveys, Bozon *et al* (1998) noticed a trend in most countries of increased likelihood of experiencing anal sex among those reporting earlier sexual initiation.²⁹ Similarly, in Australia, Rissel *et al* (2003) found that men and women who first had sex before 16 were significantly more likely to have had oral and anal sex than those who first had sex at 16 or later.³⁰

Studies internationally have also found early onset of intercourse to be associated with a greater number of subsequent sexual partners.^{30,40,102} A review of European surveys found that earlier sexual initiation was related to increased likelihood of having more than one partner over the last year. This was true for both men and women across the six European countries studied. As well, a nationally representative Australian study found that men and women who first had sex before 16 had had significantly more sexual partners and more sexual partners over the last year than those who first had sex at 16 or later.³⁰

A trend was also seen in most countries of increased frequency of sexual activity over the last month among those reporting earlier sexual initiation.²⁹

Earlier sexual initiation has been related to an increased likelihood of subsequent STI infection in some studies^{30,45,46} but not in others.³³ Some studies have looked at the relationship between early age at first sex and teenage or unintended pregnancy. In 2000, the British Natsal study reported that the likelihood of motherhood and abortion before 18 was higher among women who first had sex before 16.³³ Furthermore, a number of studies have found earlier first intercourse to be associated with decreased likelihood of contraceptive use at first intercourse.^{31,34,43,44,103}

The relationship between early sexual initiation and subsequent behaviours has sometimes been discussed in terms of early sexual intercourse itself as a risk factor. However, it may also reflect the adoption by some people of a range of other experimental or risk behaviours.

5.1.2 Determinants of age at first sex

Research has tried to identify factors associated with early age at first sexual intercourse and with non-use of contraception at first intercourse. Determinants of early first intercourse are described in this chapter and determinants of contraceptive use at first intercourse are discussed in chapter six.

Determinants are discussed in terms of individual factors, such as socio-demographic or familial factors, and situational factors, such as use of alcohol or context of first intercourse. While determinants are described in distinct categories, in reality they often interact to further determine the level of risk. Since little research exists into determinants of first intercourse in Ireland, most of the research described concerns international findings.

Educational attainment and socio-economic status

International research has shown that people with lower levels of education and aspiration are more likely to experience first intercourse at a younger age.³³⁻³⁵ A recent review of European sexual-behaviour studies noted later sexual initiation among graduates than among early school-leavers across Europe.²⁹ The 2000 British Natsal study looked in detail at participants aged 16-24 and found that first sex before 16 was more likely among those with a lower level of education.³³ In an Irish study of 18-45 year-olds, Rundle *et al* (2004) found lower educational level to be a predictor of earlier sexual initiation.²³

Since socio-economic status and educational attainment tend to be closely related, one would expect associations between socio-economic status and adolescent sexual behaviour to be similar to those seen for education. This is extensively supported by research, which has reported an association between earlier onset of sexual activity and lower socio-economic status.^{29,33,35}

Lower educational attainment has also been associated with decreased likelihood of contraceptive use at first intercourse^{33,35,43} and increased likelihood of teenage motherhood.^{33,34,52-55,57} Similarly, international research has frequently reported that adolescent pregnancy is more likely among those from socially deprived areas and from families of lower socio-economic status.^{55,56,79,104}

It was previously assumed that adolescents generally wanted to avoid pregnancy and that most pregnancies among adolescents were unplanned. However, this view has been challenged in the light of research showing that many adolescents have either a positive or an ambivalent attitude towards pregnancy.⁴⁷⁻⁴⁹ It is possible that some adolescents, particularly those with lower educational attainment or from socially or economically disadvantaged backgrounds, view motherhood positively since it provides them with a specific role in society. These issues will be discussed further in section 6.1.1, which looks at educational and socio-economic differences in contraceptive use.

Religiosity

Religiosity may influence behaviour in a number of ways; for example, through a mechanism of social control, whereby a bond with a social organisation, such as a religious organisation with conservative values, causes adolescents to refrain from 'deviant' behaviour. Fear of divine punishment for deviant behaviour may further motivate people to comply with religious principles.^{36,42} In an analysis of European surveys, higher levels of religious practice and participation were generally associated with later age at first intercourse. People not belonging to any religion tended to report earlier sexual initiation.²⁹ A number of studies have also reported a relationship between higher levels of religiosity and decreased likelihood of experience of intercourse^{34,37-39} or later age at first intercourse.³⁶ Some studies have found this relationship among girls only, indicating possible gender differences in the influence of religion on sexual behaviour.^{31,42}

Sex education

Arguments still exist over the effectiveness of sex education in influencing sexual behaviour. However, most research has found that some sex-education programmes can reduce sexual activity or delay sexual initiation.¹⁷⁻²⁰ A method of research often employed involves retrospective questioning of adults about their experience of sex education at school and comparison of this with their reported sexual behaviour in adolescence. For example, Wellings *et al* (2001) used data from the British Natsal 2000 study to investigate the relationship between sources of sex education and incidence of first intercourse before age 16 among 16-24 year-olds. They found that fewer of those for whom school lessons were the main source of information about sexual matters experienced first intercourse before 16, than those for whom the main source was parents, friends or other sources.³³

These relationships need to be examined further to identify which factors determine outcomes, as distinct from those that exist alongside them. A related area of study frequently considered in relation to determinants of early sexual intercourse and contraceptive use is the role of the family in teaching adolescents about sexual matters and in influencing adolescent sexual behaviour.

Family characteristics

Families may exert influence in numerous ways; for example, through verbal and non-verbal communication about sex. In his overview of research into family influences on sexual behaviour, Miller (2002) defines three distinct areas in which the family may influence behaviour: family structure, parent-child relationship and biological influences (explained in paragraph below).¹⁰⁵ These distinctions provide a useful way to categorise family influence. First, research has consistently found a relationship between adolescent sexual behaviour and family structure (i.e. living with either both parents, one parent or neither parent, and living with or without siblings). Most research has found that adolescents who did not live with both parents were more likely to have experienced sexual intercourse, and more likely to have experienced first intercourse at an earlier age.^{7,31,33,34,38,42}

The parent-child relationship has been investigated in terms of family closeness and support, parental monitoring and parent-child communication. Research has found that greater parent-child closeness and support is associated with adolescents taking fewer sexual risks, by starting sexual activity later and having fewer sexual partners.⁷ Similarly, most research into parental monitoring (i.e. parental knowledge of their child's whereabouts, activities, friends, etc)

has concluded that higher levels of parental monitoring result in reduced likelihood of early onset of sexual activity^{7,8,38,106} and less sexual risk-taking.¹⁰

As discussed in section 3.1.2 (learning about sex at home), some studies,⁷⁻⁹ but not others,¹⁰⁻¹⁴ have found that parent-child communication about sex is related to decreased likelihood of adolescent sexual initiation and later onset of adolescent sexual activity. It is possible that these discrepancies reflect to some extent the different measurements the studies used; some investigated the general occurrence of parent-child communication about sex while others looked at more detailed reports of communication about specific aspects of sex and sexuality.⁷

Miller's (2002) third familial factor concerns biological (partially hereditary) influences.¹⁰⁵ One example of this is younger age of puberty, which a number of studies have found to be related to earlier age at first intercourse.^{33,34,40,42}

Families can clearly influence adolescent sexual behaviour in many ways. The extent of influence is further mediated by other factors including age, socio-economic status, community characteristics and female employment opportunities.^{15,16} This again highlights the inter-related nature of factors affecting adolescent sexual behaviour. In general, while families alone cannot fully determine adolescent sexual behaviour, they can exert a notable influence.¹⁰⁵

Relationship and partner factors in age at first intercourse

Few studies have investigated the association between differences in relationship status and age at sexual initiation. However, some research internationally has found that people who experienced first intercourse at younger ages were more likely to report that it occurred outside a steady relationship⁴⁶ and, among men but not women, that their partner was more likely to be someone they had just met for the first time.³³

Contextual factors

In recent years, research has increasingly investigated contextual factors surrounding sexual initiation, in an attempt to determine the effect of context (for example, on age or contraceptive use). A number of studies have looked into planning, coercion and regret in relation to first sexual experiences. Questions include whether first sexual intercourse occurred too early, and through force rather than choice. Research has generally found that those experiencing first intercourse at a younger age were more likely to report regret (wishing they had waited longer)^{31,33,46} and less likely to have been equally willing to have sex (i.e. having been more or less willing than their partner).^{33,46} Women and girls were more likely than men and boys to report that they had felt pressurised or been persuaded to engage in first sexual intercourse.^{27,107}

An alternative method of investigating the role of context in experiences of first intercourse is to present various statements about context and ask participants if these applied to their experience. Wellings *et al* (2001) used the Natsal 2000 data for 16-24 year-olds to investigate the relationship between age at sexual initiation and peer pressure or drinking of alcohol. Among women but not men, agreement that peer pressure was the main reason for intercourse decreased with older age at sexual initiation. There were no significant age differences in agreement that being drunk was the main reason for intercourse, among men or women.³³

Other studies have found that women were more likely than men to agree that they were in love with their first sexual partner. As well, later sexual initiation is generally more likely to be associated with love.^{29,46}

Role of alcohol and illicit drugs

The World Health Organisation's 'Declaration on Young People and Alcohol' (2001) states that current trends in young people's use of alcohol include increased experimentation by children and greater high-risk behaviour (e.g. 'binge drinking' and drunkenness) by adolescents and young adults. It states that high-risk drinking has been associated with "violence, unsafe sexual behaviour, traffic and other accidents, permanent disabilities and death".¹⁰⁸

In Ireland, recent studies have shown that drinking of alcohol by young people is now commonplace. In an Irish survey of 1,000 15-24 year-olds, 80% said they drank alcohol. Among 15-17 year-olds, 60% said they drank alcohol, and 87% of 18-19 year-olds.¹⁰¹ In another Irish study, over half of under-12 year-olds had drunk alcohol, and 35% of boys and 24% of girls under 18 had already been 'really drunk'.¹⁰⁹

A number of studies have shown the influence of alcohol and illicit drugs on the decision to have sex. Higher levels of alcohol and drug use by adolescents have been related to an increased likelihood that they have experienced intercourse and began sexual activity earlier.^{11,40-42} Some studies have related this to problem or experimental behaviours generally. As well as to alcohol and drug use, early onset of sexual activity has been related to greater levels of smoking, substance use, truancy and minor delinquency.^{40,42} Thus, early sexual intercourse may be one of a number of experimental behaviours.

Chewning *et al* (1998) developed a model for predicting onset of sexual activity in adolescents, with a particular focus on problem behaviours. They found a relationship between earlier substance use and earlier onset of intercourse. However, this varied by gender; substance use among adolescent age groups was generally a more constant predictor of early onset of sexual activity among boys than among girls. Age, too, influenced the relationship between substance use and sexual initiation; for example, a greater level of minor deviant behaviour (e.g. skipping class) was related to earlier sexual initiation. This may indicate an 'age-related trajectory' which begins with minor deviance in younger adolescence.¹¹

A study comparing virgin and non-virgin Canadian high-school students found that non-virgins spent significantly less time doing homework, and were more likely to report heavy drinking, daily smoking and drinking and driving.¹¹⁰

These studies add support to the suggestion that earlier sexual initiation is associated with higher-risk behaviour among some adolescents.

Little research has been conducted in Ireland into the relationship between alcohol and sexual behaviour. A study of sexual behaviour of 15-18 year-olds in Galway found that, of the 21% who had experienced intercourse, 38% of boys and 31% of girls said alcohol had contributed to them having their first sexual intercourse. Additionally, 9% of boys and 8% of girls felt that use of non-prescription drugs had been a contributory factor.⁹²

The recent CLAN survey of Irish third-level students reported that 61% of male and 44% of female college students were regular (at least weekly) binge drinkers. Binge drinking was associated with more risky sexual behaviour: 21% of regular binge drinkers (vs. 7.8% of less frequent drinkers) reported unintended sex while 18.5% (vs. 5.5%) reported unprotected sex¹¹¹.

Use of alcohol at sexual initiation has also been investigated in studies of adults. In New Zealand, Dickson *et al* (1998) found that 25% of men and 20% of women reported that being drunk at the time was associated with their first sexual intercourse. Significantly more men who first had sex at 16 or older (28%) reported that being a bit drunk was a factor than men whose first sex occurred before 16 (18%), with no differences for women.⁴⁶ However, the Natsal 2000 data for 16-24 year-olds focused on the number of participants reporting that being drunk was the main reason for intercourse having occurred. They found no significant differences across age of sexual initiation among men or women.³³

In a recent nationally representative survey of Irish people aged 18-45, Rundle *et al* (2004) reported that:

- 58% of men and 38% of women felt that drinking alcohol had contributed to their decision to have sex
- 45% of men and 26% of women felt that drinking alcohol had contributed to them having sex without using contraception
- 21% of participants who had not used contraception consistently during the previous year and 15% of those who had not used contraception on their most recent occasion of sex said that non-use of contraception was due to the use of alcohol or drugs at the time

Such proportions were significantly higher among younger participants:

- 33% of 18-25 year-olds who had not used contraception consistently over the previous year and 29% who had not used contraception on the most recent occasion of sex blamed alcohol or drug use (for non-use of contraception)

The study focused only on the sexual behaviour of adults; it did not question people specifically about their use of alcohol at the time of their first sexual experiences. It does, however, highlight the role of alcohol in sexual behaviour among Irish adults.²³

Further research is urgently needed in Ireland to establish the role of alcohol in sexual behaviour among young people.^D

5.2 Results and discussion

THE previous sub-sections have described the main factors that international research has found to be associated with age at first intercourse. The results of the ISSHR study follow, beginning with an overview of findings relating to age at first vaginal intercourse.

^D A national in-depth study is currently being carried out by the Royal College of Surgeons in Ireland (contact gousins@rcsi.ie).

5.2.1 Age at first vaginal intercourse

SUMMARY

Participants with experience of vaginal sex were asked at what age they had first experienced it.

Two measures of age at first intercourse are used throughout the analyses:

- The median age provides a reliable overview across a group (it gives the mid-point value, based on a hazard-rate calculation which adjusts findings to take account of people who have not yet experienced vaginal intercourse – see section 2.12 for further explanation).
- The second measure provides prevalence data by categorising people into those who experienced vaginal intercourse prior to 17 and those who experienced it at 17 (the legal age for sexual intercourse in Ireland) or later.
- Median age at first vaginal intercourse was 18 for men and 19 for women.
- There was a decline in median age of first intercourse with younger current age. For example, men and women aged 60-64 experienced it at a median age of 22 and 23, while the median age for men and women aged 18-24 is 17.
- More men (21.3%) than women (12.9%) first experienced intercourse before 17.
- The percentage of men and women experiencing first intercourse before 17 increased with younger age. Among 60-64 year-olds, 8% of men and no women reported first intercourse before 17, compared with 31.3% of men and 22.3% of women aged 18-24.

THIS section provides an overview of ISSHR findings about age at first vaginal intercourse.

The median age at first vaginal intercourse was 18 for men and 19 for women. International research has established that age at first intercourse often varies considerably by age. *Figure 5.1* displays median age at first vaginal intercourse (using hazard-rate calculation) by gender and current age.

Figure 5.1 Median age at first vaginal intercourse, by gender and current age

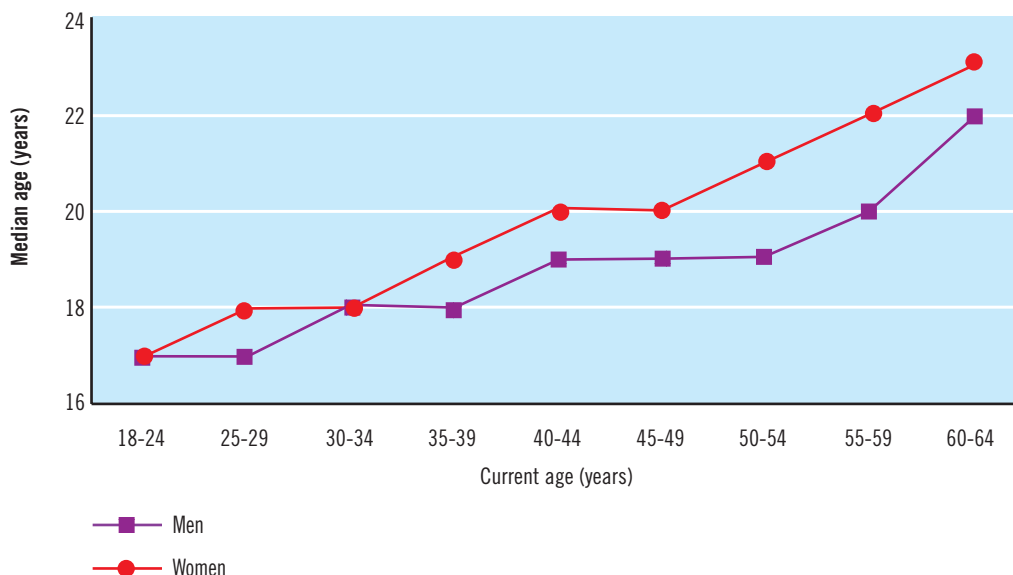


Figure 5.1 shows a lower median age of first vaginal intercourse for younger age groups. Men and women aged 60-64 experienced first intercourse at a median age of 22 and 23, while those aged 18-24 have a median age of 17.

Most international research into age at first sex has also reported an earlier age for first vaginal intercourse among younger people.^{29,30}

International studies have also reported an earlier age for sexual initiation among women; older women generally report later ages for first intercourse than men, but the age of sexual initiation converges among younger groups.^{29,30,32} A similar pattern was found in the present study; younger men and women (18-24 and 30-34) have the same median age, but above 34 men have older median ages than women.

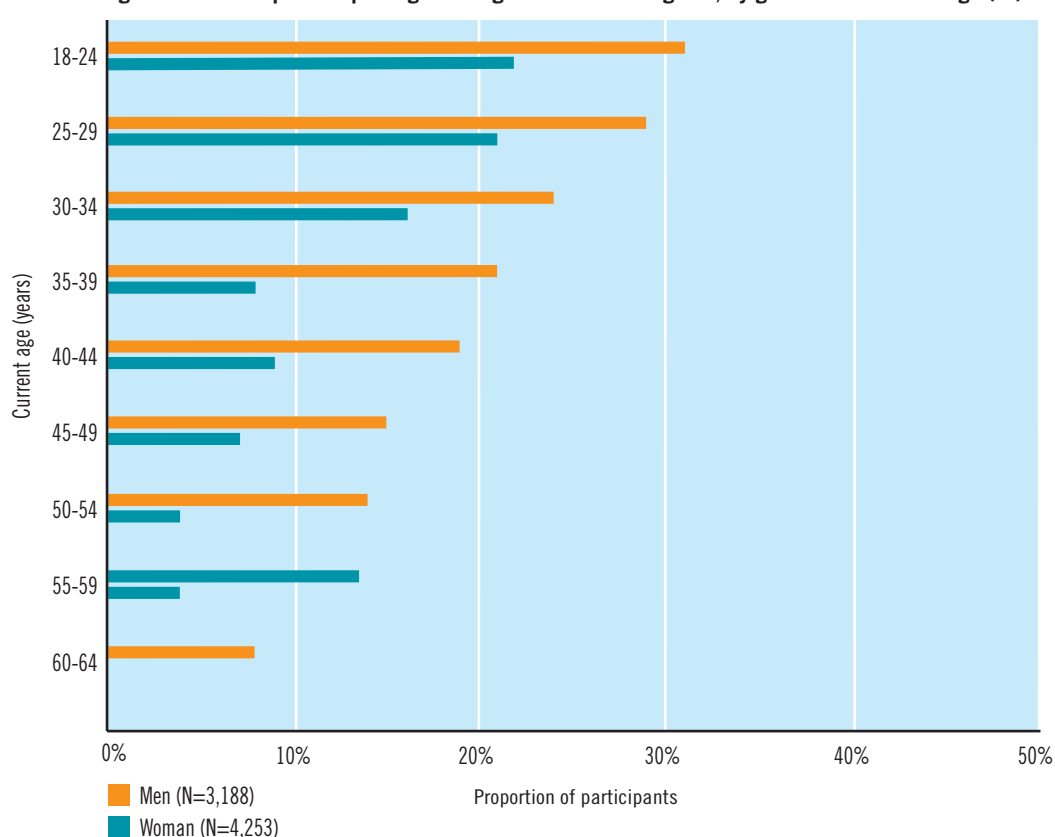
While the ISSHR results suggest a higher median age for first intercourse in Ireland than that reported in many other international studies,^{33,112} the decrease in age of first sex reported across age groups indicates that Ireland is following the pattern of earlier age at first sex that is found in other countries.

An alternative way of investigating age at first vaginal intercourse is to examine the percentage of people who experienced first intercourse before a chosen age. As previously described, a differentiation was made between first intercourse before 17 and at or after 17, since this is the age at which vaginal intercourse is legal in Ireland.

- In total, 16.7% of participants experienced vaginal intercourse before 17.
- There were significant gender differences ($p < 0.001$): 21.3% of men and 12.9% of women first experienced vaginal intercourse before 17.

Figure 5.2 shows the percentage of men and women who experienced first vaginal intercourse before 17, across age groups. This percentage increased considerably with younger age. Just 8% of men and no women aged 60-64 reported first intercourse before 17, compared with 31.3% of men and 22.3% of women currently aged 18-24.

Figure 5.2: Participants reporting first vaginal sex before age 17, by gender and current age (%)



In 2000, the British Natsal study compared the percentage of people under and over 30 who had experienced first intercourse before 16 (the age at which vaginal intercourse is legal in Britain). They found that more women under 30 had first intercourse before 16, whereas the proportion of men who did so was similar for those under 30 and those over 30. This does not appear to be the case in Ireland. There is a steady increase in both men and women having first intercourse before 17.

Natsal also reported that the percentage of women experiencing first intercourse before 16 had increased up to but not after the mid-1990s.³³ Again, this pattern was not seen in Ireland; the percentage of women experiencing first intercourse before 17 has continued to rise.

Further factors associated with earlier first intercourse are examined next.

5.2.2 Individual factors as predictors of age at first intercourse

SUMMARY

Age at first vaginal intercourse was first investigated across socio-demographic variables to determine differences across groups.

- *Younger age and lower educational attainment were strong predictors of first vaginal intercourse before 17.*
- *Level of religiosity was significantly associated with intercourse before 17: men and women who were currently more religious were less likely to have experienced intercourse before 17.*
- *Women who experienced menarche before 13 were more than twice as likely to have experienced intercourse before 17 as women for whom it occurred at or after 13.*

THIS section examines age at first vaginal intercourse according to socio-demographic variables, in order to determine differences across groups.

Table 5.1 shows median age at first sex (using hazard-rate statistics) and prevalence of first sex before 17 (percentage and results of multivariate analyses) across major socio-demographic variables.

Table 5.1: Median age at first vaginal sex and prevalence of first vaginal sex before age 17, by socio-demographic variables

	Men				Women			
	Median age ¹	First sex before 17		Base	Median age ¹	First sex before 17		Base
	(years)	(%)	MV+		(years)	(%)	MV+	
All participants	18	21.3		3,188	19	12.0		4,253
Current age (years)								
18-24	17	31.3	C	759	17	22.3	C	908
25-34	18	26.6	*	701	18	18.7	**	966
35-44	18	20.2	***	647	19	8.3	***	1,014
45-54	19	14.5	***	574	21	5.7	***	755
55-64	21	10.8	***	507	22	2.2	***	610
Education (highest level attained)								
Primary	19	21.4	***	263	20	11.0	***	305
Lower secondary	18	29.0	***	544	19	13.9	***	657
Higher secondary	18	19.9	*	1,198	19	13.1	***	1,780
Third level	18	15.8	C	1,183	19	8.5	C	1,511

¹Using hazard function

+ Multivariate analysis: logistic regression adjusting for all variables in the table

*= $p < 0.05$; **= $p < 0.01$; ***= $p < 0.001$; ns=not significant; C=comparison group

The differences in median age at first intercourse across age cohorts reported in the previous section were confirmed in multivariate analyses.

After adjusting for educational level, men and women aged 18-24 were significantly more likely than men and women in all older age cohorts to have experienced first intercourse before 17.

Educational attainment was also a strong predictor of first intercourse before 17, after controlling for current age. For example:

- Men with primary or lower secondary education were around three times more likely, and men with higher secondary education were slightly more likely, to have experienced first intercourse before 17, than men with third-level education.
- Similarly, compared with women with third-level education, women with primary education were nearly six times more likely, women with lower secondary education over three times more likely and women with higher secondary education two times more likely to report sexual initiation before 17.

These results are strongly supported by international research, which has shown lower levels of educational attainment and aspiration to be associated with earlier first intercourse.³³⁻³⁵

Due to the association between educational level and social class, separate models were constructed, replacing educational level with social class.

- After adjusting for current age, men in the manual classes (classes IV-VI) were significantly more likely to have experienced first intercourse before 17 than men in the higher professional class (I). There were no significant differences between men in the lower professional or administrative/clerical classes (II and III) and the higher professional class (I).
- Women in the semi-skilled/unskilled manual classes (V/VI) were more likely than those in the lower professional and administrative/clerical classes (II and III) to have experienced first intercourse before 17. There were no differences between women in the semi-skilled/unskilled manual classes (V/VI) and those in the higher professional or skilled manual classes (I and IV).

Individual and sex-education variables were next added to the models in *Table 5.1*, producing *Table 5.2*. After controlling for current age, educational level, age at menarche (women only) and receipt of sex education, current level of religiosity was significantly associated with intercourse before 17; among men and women, increasing levels of religiosity were associated with decreasing likelihood of intercourse before 17. A number of international studies have also reported an association between higher levels of religious practice and participation and later age at first intercourse.^{29,36,37} Some studies have found the relationship among women only,^{31,42} but ISSHR found it among men also.

As has been discussed (see section 5.1.2), religiosity may influence behaviour through social control, where a bond with a religious organisation with conservative values causes adolescents to refrain from behaviour seen as inappropriate. Fear of divine punishment would further motivate a person to comply with religious principles.^{36,42}

It is important to note that level of religiosity measured in the present study refers to *current* religiosity, which in some cases may not represent religiosity in adolescence.

Table 5.2: Median age at first vaginal sex and prevalence of first vaginal sex before age 17, by individual and sex-education variables

	Men				Women			
	Median age ¹ (years)	First sex before 17		Base	Median age ¹ (years)	First sex before 17		Base
		(%)	MV+			(%)	MV+	
Religiosity								
Not at all	17	31.7	C	809	18	22.5	C	701
A little	18	21.6	***	1,166	19	11.9	***	1,620
Quite	19	15.3	***	887	20	8.8	***	1,390
Very/extremely	20	12.2	***	321	21	6.2	***	537
Age at menarche (years)								
<13	-	-	-	-	18	18.1	***	1,532
≥13	-	-	-	-	19	8.6	C	2,705
Received sex education²								
Yes	18	25.9	**	1,740	18	14.6	ns	2,552
No	19	16.8	C	1,448	20	8.5	C	1,701

¹Using hazard function

²Received sex education on sex and sexual intercourse or sexual feelings, relationships and emotions + Multivariate analysis: logistic regression adjusting for all variables in tables 5.1 and 5.2

*= $p < 0.05$; **= $p < 0.01$; ***= $p < 0.001$; ns=not significant; C=comparison group

After controlling for current age, educational level and religiosity, men who had received sex education on sex and sexual intercourse or sexual feelings, relationships and emotions (from any source) were significantly more likely than those who did not to have experienced intercourse before 17. No sex-education differences were found for women. The British Natsal study found that fewer of those for whom school was the main source of information about sex experienced intercourse before 16.³³

The finding of the present study, that men who received sex education were more likely to experience intercourse before 17, is difficult to explain. Further analysis showed that men aged 25-34 and with lower or higher secondary education accounted for this significant result. There are a number of issues to take into consideration. The measurement of receipt of sex education refers to education from all sources. This would include less reliable sources, such as uninformed peers, which could negatively affect sexual behaviour. While the options for further analysis were limited due to the format of the question (participants were simply asked if they had received sex education from school, home or other sources), additional analyses found no significant differences in age at first intercourse within these three types of sex education: no differences among those who had and had not received sex education at school, between those who had and had not received sex education at home, or between those who had and had not received sex education from another source, after controlling for current age and educational level.

Women who experienced menarche (start of first period) before 13 were over twice as likely to have had intercourse before 17, compared with women for whom menarche occurred at or after 13. This finding supports international research, which has reported an association between younger age of puberty and earlier age at first intercourse.^{33,34,40,42} For example, in 2000, the British Natsal study found that, among 16-24 year-old women, being under 13 at menarche was associated with first intercourse before 16.³³

Finally, an additional multivariate model examined the role of reported ease of communication with mother and father when growing up, controlling for current age and educational level. Among both men and women, there were no significant differences in age at sexual initiation between those who reported ease of communication with mother or father and those who did not. Some international research has found open and positive parental communication about sex to be related to decreased likelihood of sexual initiation during adolescence and later onset of adolescent sexual activity,⁷⁻⁹ but other research has found no such relationship.¹⁰⁻¹⁴

The evidence on parent-child communication and age of sexual initiation remains inconclusive. It is possible that the measure of ease of discussion of sex when growing up as used in the present study does not measure some important aspect of parent-child communication. Other aspects, such as parental values and attitudes, should also be assessed. In their review of research evidence, Miller *et al* (2001) found that most research has reported an association between parental attitudes towards sex and age at sexual initiation.⁷

5.2.3 Relationship and partner factors in age at first intercourse

SUMMARY

This section investigates the association between relationship differences and age at first vaginal intercourse by looking at differences in age of partner, length of relationship and length of time between first and second partner. Since age differences in relationship factors were found across a number of first-intercourse variables (see section 4.2.3), the following analyses concern 18-29 year-olds only. This group is assumed to more closely represent current sexual behaviour among young people.

- *Among 18-29 year-olds, men and women who had their first vaginal intercourse before 17 were more likely to have been in a casual relationship with their first partner than those whose first intercourse was at 17 or later.*
- *Among 18-29 year-olds, more men and women who experienced first intercourse before or at 16 said they never had sex with their first partner again, compared with those experiencing first intercourse at later ages.*
- *Among men and women now aged 18-29, those who first experienced intercourse at a later age were more likely to report that the relationship with their first sexual partner was continuing.*
- *Men and women now aged 18-29 who first experienced intercourse at a later age were considerably less likely to have had sex with a second partner than those who first experienced intercourse at younger ages.*

TO investigate the association between relationship differences and age at first vaginal intercourse, analyses of the relationship status of first partners were carried out for men and women, by age at first intercourse (Table 5.3). Differences in age at first sex across relationship status were significant for both men ($p < 0.005$) and women ($p < 0.001$).

Table 5.3: Relationship status at first intercourse among 18-29 year-olds, by gender and age at first intercourse

	Men						Women					
	Age at first sex (years)						Age at first sex (years)					
	<16 %	16 %	17 %	18 %	>18 %	All %	<16 %	16 %	17 %	18 %	>18 %	All %
Just met/did not know each other	11.0	11.8	10.7	12.0	11.1	11.3	2.6	3.6	3.4	1.0	2.8	2.6
Knew each other but no steady relationship	44.3	37.1	33.8	31.2	30.8	34.9	41.3	22.1	16.9	18.3	17.4	20.3
Steady relationship/ cohabiting/ engaged	44.7	49.2	55.6	56.8	54.2	52.7	54.5	74.4	79.7	79.2	74.1	75.0
Married	0.0	0.0	0.0	0.0	4.0	0.9	1.6	0.0	0.0	1.6	5.6	2.1
Base	158	172	271	215	245	1,061	94	190	303	322	385	1,294

As shown in Table 5.3, there was no clear pattern among men or women in experiencing first intercourse with a partner they had just met or did not know. However, men and women who experienced first intercourse at later ages were less likely to report that their partner was someone they knew but with whom they were not in a steady relationship. Among men and women, the likelihood of experiencing first intercourse within a steady relationship increased with later age at first intercourse. This pattern is particularly clear among women:

- 56.1% of women who experienced first intercourse before 16 had been in a steady relationship or married, compared with 79.7% of women aged over 18 at sexual initiation

The British Natsal 2000 study looked at age at first intercourse with a partner whom participants had just met for the first time. Among 16-24 year-olds, 4.6% of men and 2.9% of women reported that their first partner was someone they had just met for the first time.³³ This compares with 11.3% of men and 2.6% of women aged 18-29 in ISSHR (exact age-group comparisons not possible).

The Natsal 2000 study found a significant difference across age at sexual initiation among men; fewer men aged 13-14 (3%) or 15 (1%) at sexual initiation reported that their first intercourse occurred with a partner they had just met for the first time than did those aged 16, 17 or 18-24 at sexual initiation (5%, 8% and 6% respectively).³³ In comparison, ISSHR found more men reporting first intercourse with a partner they had just met/did not know across all ages.

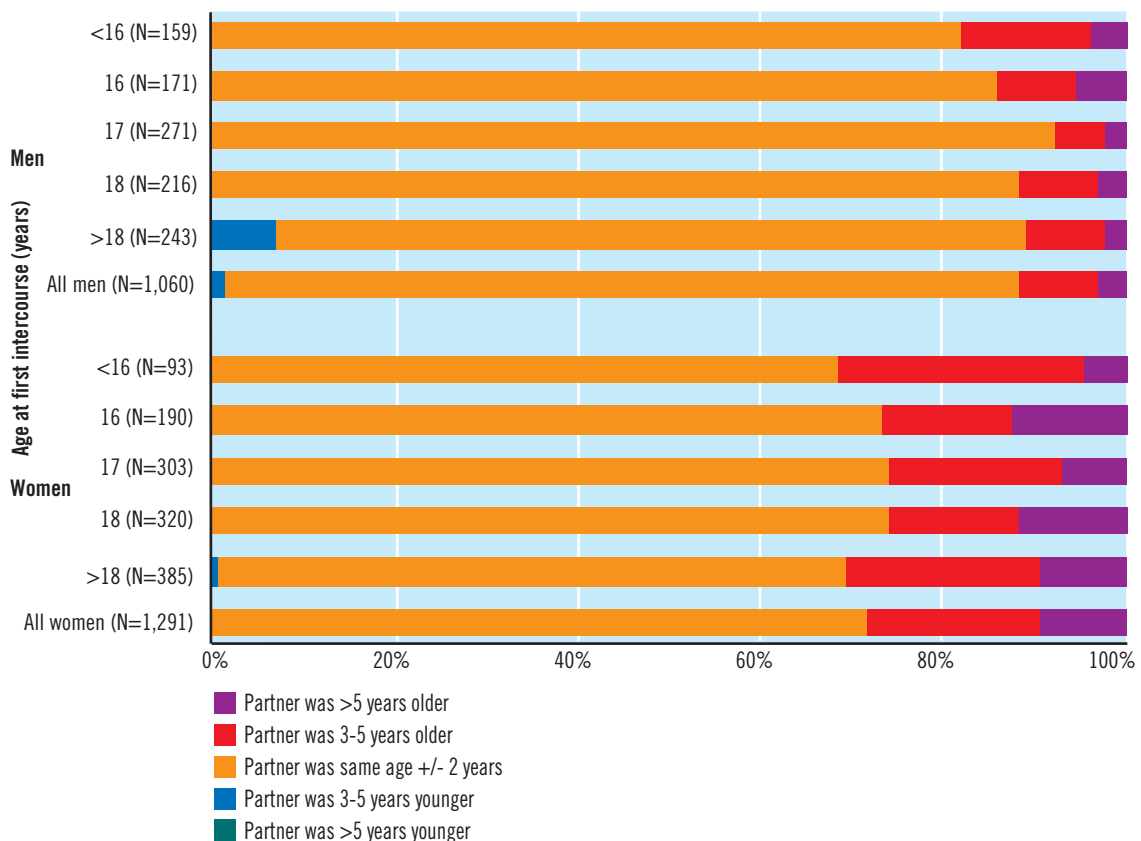
Relationship differences were further investigated using the categories 'casual' (i.e. just met/did not know each other or knew each other but were not in a steady relationship) and 'steady' (i.e. steady relationship/cohabiting/engaged and married) relationship. Building on the model in section 4.2.3, which investigated predictors of casual relationship at first intercourse, further multivariate analyses for men and women added age at first intercourse. The analyses considered 18-29 year-olds only, in order to gain further insight into the subject among those whose first intercourse occurred more recently, and who thus indicate future trends.

After controlling for age, educational attainment and receipt of sex education (on sexual feelings, relationships and emotions), sexual initiation before 17 was found to be a determinant of casual (as opposed to steady) relationship at first intercourse. Among men, this group were almost one and a half times more likely to have been in a casual relationship with their first partner ($p < 0.05$) than those whose first intercourse occurred after 17. Women whose first intercourse occurred before 17 were over twice as likely as those who first had intercourse after 17 to have been in a casual relationship at first intercourse ($p < 0.001$).

While few other studies have investigated relationship differences in age at first intercourse, the finding that earlier intercourse is more likely to take place in a casual relationship has also been reported in some small studies internationally.^{31,46}

Another interesting comparison is of the age difference between a participant and first partner among those whose sexual initiation occurred at various ages (Figure 5.3).

Figure 5.3: Age difference between participant and partner among 18-29 year-olds, by gender and age at first sex

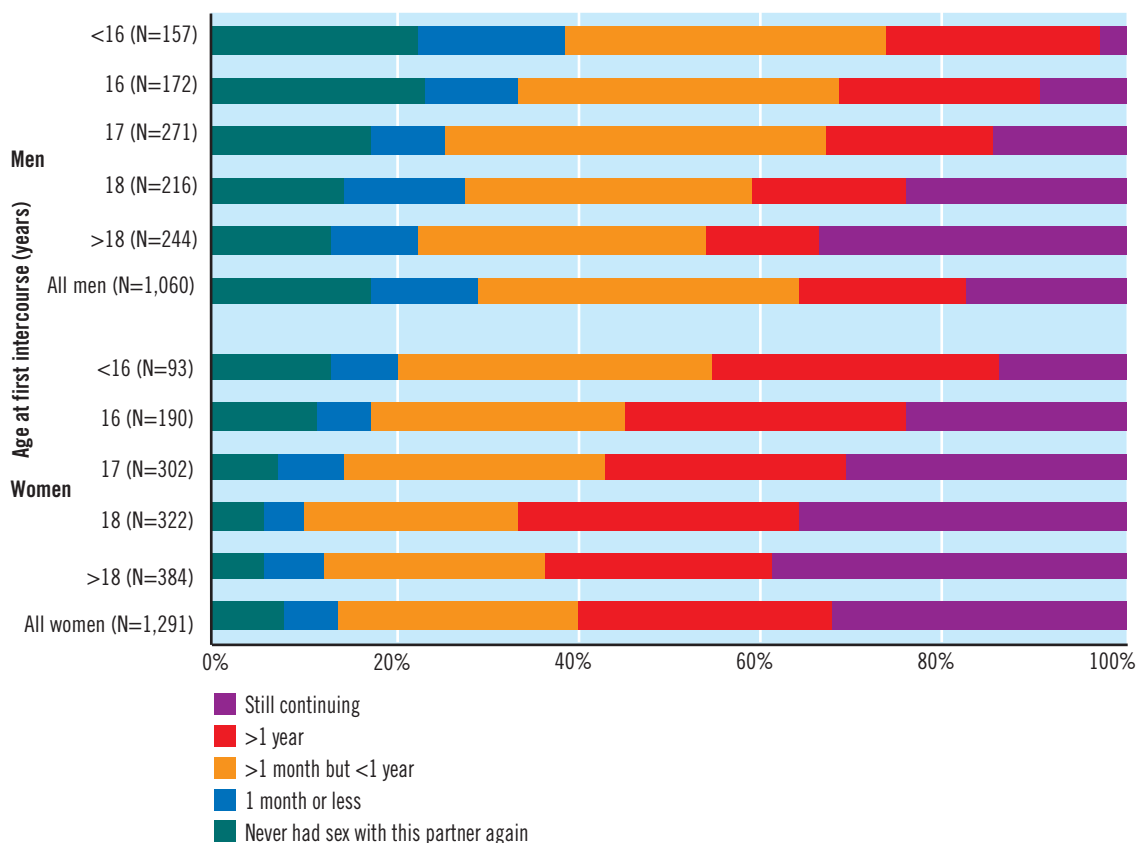


There were significant differences in partner age across age at sexual initiation among men ($p < 0.001$). Men who had first sex at a younger age were more likely to report a first partner who was more than two years older. Men who first had sex at 19 or later were notably more likely to report a first sexual partner who was more than two years younger.

Among women, there were no significant differences in partner age across age at sexual initiation. Few clear patterns were identified. However, very few women in any age group said their first partner was more than two years younger.

The previous finding that earlier age at first intercourse is related to an increased likelihood of casual relationship suggests possible differences in relationship length across age at first intercourse. If casual relationship is more likely with younger age at sexual initiation, then shorter length of relationship may also be more likely with younger age at sexual initiation. Figure 5.4 shows length of relationship after first intercourse among 18-29 olds, by age at sexual initiation.

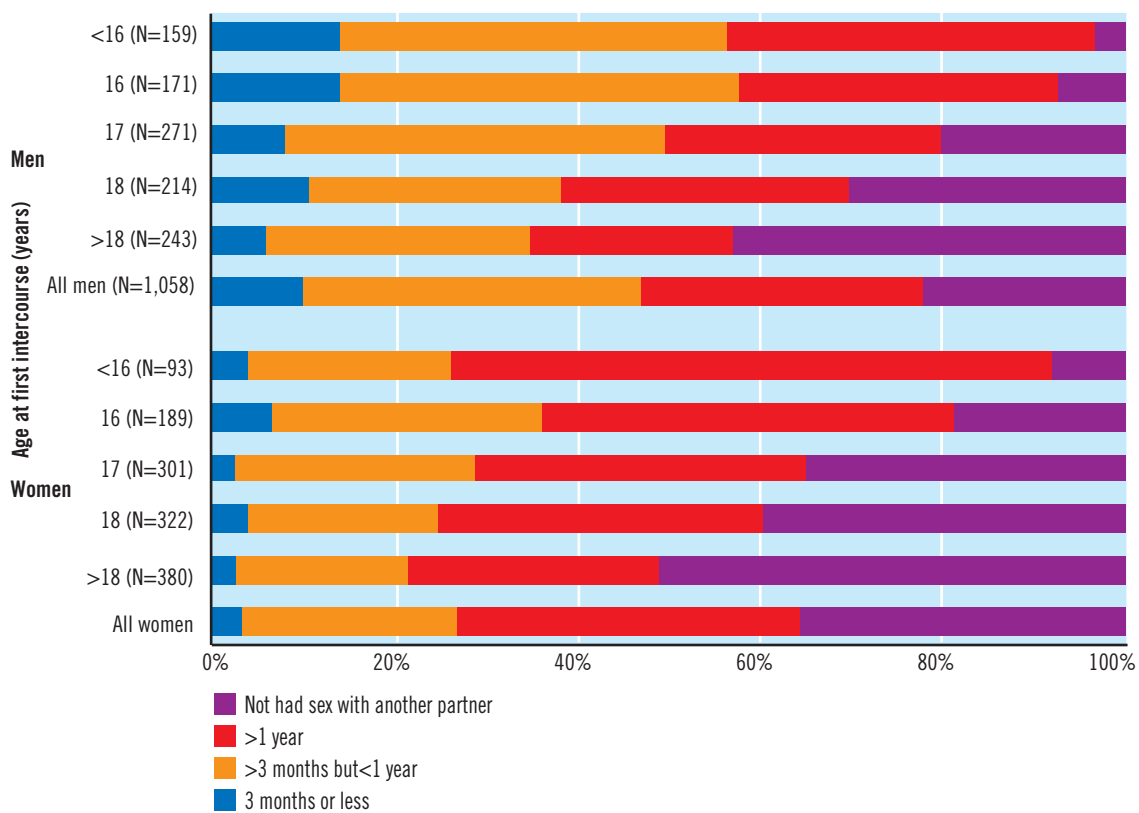
Figure 5.4: Duration of relationship after first intercourse among 18-29 year-olds, by gender and age at first intercourse



There were significant differences in length of relationship across age at sexual initiation among both men ($p < 0.001$) and women ($p < 0.01$). More men and women who experienced first intercourse before or at 16 said they never had sex with their first partner again, compared with those who experienced first intercourse at later ages. The likelihood of both men and women reporting that the relationship with their first partner was continuing increased with later age at first intercourse.

It is also interesting to investigate the length of time between experience of a first and a second sexual partner, in order to determine if those who have first intercourse at an earlier age are more likely to experience sex with a subsequent partner sooner. *Table 5.5* shows the length of time between sex with a first partner and sex with a second partner, among 18-29 year-olds. There were significant differences in length of time between first and second partner across different ages at sexual initiation for both men ($p < 0.001$) and women ($p < 0.001$).

Figure 5.5: Length of time after sex with first partner that participants aged 18-29 had sex with a second sexual partner, by gender and age at first intercourse



Even among this younger cohort (18-29 year-olds), men and women who first experienced intercourse at later ages were considerably less likely to have had sex with another partner. For example:

- 42.8% of men and 51.2% of women aged 18-29 who had been 19 or older at first intercourse did not have sex with another partner, compared with 3.1% of men and 8.1% of women who first had intercourse before 16

Patterns across length of time between first and second partner are more difficult to determine. However, men who experienced sexual initiation at younger ages appeared to be more likely to have had a second partner within three months of having sex with their first partner.

5.2.4 Situational and contextual factors in age at first intercourse

SUMMARY

The previous sections have investigated patterns of age at first sex across a number of socio-demographic and individual variables. However, this provides only a partial understanding of first sexual intercourse since it excludes situational effects. This section investigates situational differences in age at first vaginal intercourse.

Research has found a number of changes in the situational aspects of first intercourse for younger age groups and more recently occurring first intercourse. Chapter four investigated socio-demographic differences in situational factors relating to first intercourse, i.e. whether particular groups were more likely to report specific situational factors (such as casual relationship, lack of planning, regret). Many of these situational and contextual factors varied across age groups. Therefore, the following analyses examine age-at-first-intercourse differences across situational variables among 18-29 year-olds, since this group is assumed to more closely resemble recent and current sexual behaviour.

- Women now aged 18-29 who first experienced intercourse at older ages were more likely than women who experienced it at younger ages to say they had expected it to happen soon or at that time.
- The likelihood of men and women (aged 18-29) feeling that they should have waited longer before first sex increased with younger age at first intercourse. Men who experienced intercourse before 16 and women who experienced intercourse before or at 16 were considerably more likely to say they should have waited longer. On the other hand, the percentage of men and women who said that first intercourse occurred at about the right time increased with older age at first intercourse.
- Men and women aged 18-29 who experienced first intercourse before 17 were significantly less likely to agree that: they had been in love, it seemed like a natural follow-on in the relationship, and they felt ready/it was the right time.
- Young women (18-29) whose sexual initiation occurred before 17 were more likely to say they had been carried away by their feelings than those whose first intercourse occurred at or after 17.

THIS SECTION examines age-at-first-intercourse differences across situational variables among 18-29 year-olds.

Of all participants, 30 women and five men reported having been forced into first intercourse. They were excluded from all further questions about first sex and have also been excluded from analyses relating to willingness.

Table 5.4 shows the percentage of participants aged 18-29 who felt that they and their partner had been equally willing, that they had been more willing or that their partner had been more willing, by age at first intercourse.

For both men and women, willingness was not significantly related to age at first intercourse. However, some patterns are indicated in *Table 5.4*. Women who experienced intercourse at a younger age, particularly before 16, were considerably more likely to report that their partner was more willing and less likely to report equal willingness. To some extent, this pattern was also seen among men.

Table 5.4: Willingness for first intercourse among 18-29 year-olds, by gender and age at first intercourse (%)

	Men						Women					
	Age at first sex (years)						Age at first sex (years)					
	<16 %	16 %	17 %	18 %	>18 %	All %	<16 %	16 %	17 %	18 %	>18 %	All %
Both equally willing	89.9	89.7	93.5	96.4	92.7	92.7	79.7	84.7	88.5	90.9	88.2	87.7
Respondent more willing	3.1	3.0	2.9	1.3	2.0	2.4	0.0	1.1	0.9	0.8	0.9	0.8
Partner more willing	7.0	7.3	3.6	2.3	5.3	4.9	20.3	14.2	10.6	8.3	10.9	11.5
Base	157	170	268	215	242	1,052	90	190	302	321	384	1,287

International research into willingness for first intercourse has found that younger age at sexual initiation is associated with a lower likelihood of both men and women reporting that both partners were equally willing.^{33,46} In the British Natsal study, 22% of women and 7% of men currently aged 16-24 said their partner had been more willing. Among those who experienced first intercourse when aged 13-14, this proportion rose considerably for women, to 33%, and slightly for men, to 9%.³³

While the age groups considered in the ISSHR study were a little different from those in Natsal, it found that slightly fewer men (4.9%) and considerably fewer women (11.5%) said their partner had been more willing. Both studies found that women who had earlier first intercourse were more likely to say their partner had been more willing.

Next, planning for first intercourse was investigated among 18-29 year-olds. Participants were asked if they had expected first intercourse to happen soon or 'at that time' or if it had happened on the 'spur of the moment' (*Table 5.5*).

- For women but not men, planning was significantly related to age at first sex ($p < 0.05$).
- Women who first experienced intercourse at older ages were more likely to say they expected it to happen soon or at that time.

While results were not significant among men, there was, again, a pattern of increasing planning for first intercourse with older age at sexual initiation.

Table 5.5: Planning for first intercourse among 18-29 year-olds, by gender and age at first intercourse (%)

	Men						Women					
	Age at first sex (years)						Age at first sex (years)					
	<16 %	16 %	17 %	18 %	>18 %	All %	<16 %	16 %	17 %	18 %	>18 %	All %
Happened on the 'spur of the moment'	63.6	61.4	56.2	51.1	49.3	55.8	47.0	51.7	43.6	36.4	38.7	42.0
Expected it to happen soon or at that time	36.4	38.6	43.8	48.9	50.7	44.2	53.0	48.3	56.4	63.6	61.3	58.0
Base	159	170	269	214	241	1,053	93	190	301	320	380	1,284

Participants were also asked if they now felt that first intercourse had occurred at about the right time, or if they should have waited longer or should not have waited so long. *Table 5.6* displays levels of regret for men and women across different ages at sexual initiation in both ISSHR and the British Natsal 2000 study.

The ISSHR study found that:

- Regret about the timing of first intercourse was significantly related to age at first intercourse for both men ($p < 0.001$) and women ($p < 0.001$).
- The likelihood of both men and women feeling they should have waited longer was higher for those who were younger at first intercourse: men who experienced intercourse before 16 and women who experienced it before or at 16 were considerably more likely to say they should have waited longer.
- The percentage of men and women who said first intercourse occurred at about the right time was higher for those who were older at first intercourse.

These ISSHR findings lend support to international research, which has generally found early first intercourse to be associated with higher levels of regret (i.e. people wishing they had waited longer).^{31,33,46}

For example, *Table 5.6* shows results from ISSHR and the 2000 British Natsal study of people aged 16-24. Natsal found that 42% of men and 84% of women who first experienced sexual intercourse at 13 or 14 wished they had waited longer. Among those aged 18-24 at first intercourse, the levels of regret fell to 8% of men and 19% of women.

In ISSHR, it was not possible to investigate differences among participants who experienced intercourse before 16 due to small participant numbers, but the patterns are relatively similar to those found in Natsal.

Table 5.6: Regret about timing of first intercourse among 18-29 year-olds in ISSHR and 16-24 year-olds in Natsal 2000³³, by gender and age at first intercourse (%)

Age at first sex (yrs):	Men						Women					
	<16	16	17	18	>18	All	<16	16	17	18	>18	All
ISSHR participants (aged 18-29 yrs)												
Shouldn't have waited so long	0.4	3.2	2.6	0.9	2.8	2.1	1.6	1.2	0.3	0.9	1.7	1.1
It was about the right time	62.8	78.0	82.2	88.4	88.4	80.9	39.5	55.7	77.4	80.9	81.9	72.9
Should have waited longer	36.8	18.8	15.2	10.8	8.8	17.1	59.0	43.1	22.3	18.2	16.4	26.0
Base	157	171	271	215	239	1,053	92	190	299	321	378	1,280
Age at first sex (yrs): Natsal participants (aged 16-24 yrs)³³	13-14	15	16	17	18-24	All	13-14	15	16	17	18-24	All
Wish waited longer	42	26	19	12	8	20	84	49	34	34	19	42

Finally, in ISSHR, a number of contextual responses relating to first intercourse were analysed to determine differences across age at first intercourse. Participants were asked if a statement applied to their experience of first intercourse, to which they responded 'yes', 'no' or 'don't know'. Those who said they did not know were excluded in order to focus on those who made a definite judgement. In general, few men (0.4%-3%; N=17-82) or women (0.5%-3.5%; N=21-120) responded 'don't know' for any statement. However, in response to the statement 'most people in age group seemed to be doing it', 9.4% of men (N=280) and 10.4% of women (N=395) said they did not know.

Table 5.7 shows the percentage of participants aged 18-29 who agreed with each of the contextual statements, by gender and age at first intercourse (<17 or ≥17 years).

- Men and women who experienced first intercourse before 17 were significantly less likely (than those who first had intercourse at or after 17) to agree that: they had been in love, it seemed like a natural follow-on in the relationship and it was the right time. They were also more likely to agree that most people of the same age seemed to be doing it.
- Women whose sexual initiation occurred before 17 were more likely to say they had been carried away by their feelings.
- Men who first had intercourse before 17 were less likely to agree that they had wanted to please their partner.

Other studies have also found later sexual initiation to be more associated with being in love.^{29,46} Similar to the ISSHR findings, Dickson *et al* (1998) found that men and women in New Zealand whose first sexual intercourse occurred at 16 or later were significantly more likely (than those whose first sex occurred before 16) to say it seemed like a natural follow-on in the relationship and/or that they were in love.⁴⁶

Table 5.7: Agreement with statements relating to context of first sex among under-30 year-olds, by gender and age at first intercourse (%)

	Men			Women		
	Age at first sex			Age at first sex		
	<17	≥17		<17	≥17	
Curious about what it would be like	95.6	95.5	ns	91.7	91.6	ns
Carried away by feelings	63.5	64.5	ns	63.2	52.4	**
Most people in age group seemed to be doing it	64.4	74.4	**	47.8	60.9 **	
Seemed like natural 'follow-on' in the relationship	72.2	86.0	***	76.1	87.1	***
Self or partner had been drinking or taking drugs	38.2	38.3	ns	24.0	20.1	ns
Wanted to lose virginity	68.1	64.5	ns	41.3	38.0	ns
In love	39.1	54.6	***	67.3	74.9	*
To please partner	55.4	65.4	*	41.3	40.3	ns
Felt ready, that it was the right time	75.4	88.6	***	81.4	91.5	***
Base (range)	305-329	709-734		269-282	961-1004	

*= $p<0.05$; **= $p<0.01$; ***= $p<0.001$; ns=not significant

A number of studies internationally have also looked at the role of alcohol and drugs in sexual encounters, particularly among adolescents. For example, higher levels of alcohol and drug use have been related to an increased likelihood of adolescents experiencing intercourse and to earlier onset of sexual activity.^{11,40-42} It is a positive finding of ISSHR that, among people who first had sex before or after 17, there were no differences in agreement that they or their partner had been drinking or taking drugs.

5.2.5 Age at sexual initiation as a predictor of subsequent sexual experiences

SUMMARY

A number of studies internationally indicate that experiences at sexual initiation are predictors of subsequent sexual behaviour. ISSHR investigated age at sexual initiation as a determinant of subsequent sexual behaviour. It compared those who experienced first intercourse before 17 and those who experienced it later. Behaviours were investigated among 18-29 year-olds only, in order to focus on more recent social trends.

The subsequent sexual behaviours investigated were:

- experience of multiple partners (more than one partner in the previous year)
- experience of an STI (in lifetime)
- experience of crisis pregnancy (in lifetime, women only)
- experience of abortion (in lifetime, women only)
- experience of oral sex and anal sex (in lifetime)

In each case, multivariate analyses were conducted to examine the independent effect of age at first intercourse. Other major socio-demographic variables were controlled for. Current age and educational level were always included. Current relationship status was included if significantly related to age at first intercourse in univariate analysis.

Since the focus of this report is the role of early sexual initiation, relationships involving socio-demographic variables are not stated, but can be found in *The Irish Study of Sexual Health and Relationships: Main Report and Overview and Sub-Report 3: Sexual Knowledge, Attitudes and Behaviours – A Further Analysis*.

- Men aged 18-29 whose first intercourse occurred before 17 (compared to those whose first intercourse occurred at or after 17) were:
 - over three times more likely to have had multiple partners in the previous year
 - over two and a half times more likely to have had an STI
 - eight times more likely to have had oral and twice as likely to have had anal sex
- Women aged 18-29 whose first intercourse occurred before 17 (compared to those whose first intercourse occurred at or after 17) were:
 - two and a half times more likely to have had multiple partners in the previous year
 - over two and a half times more likely to have had an STI
 - over two and a half times more likely to have experienced crisis pregnancy
 - over four times more likely to have had an abortion
 - over three times more likely to have had oral and twice as likely to have had anal sex

PATTERNS of sexual partnerships provide important information about social trends, as well as an indication of possible routes of STI transmission. Identifying socio-demographic determinants of particular patterns of sexual behaviour can identify groups who are at higher risk because of their behaviours. For example, one measurement used is experience of multiple partners over a specified period. Identifying predictors of experience of multiple partners can then highlight groups who may be at increased risk of exposure to STIs.

Chapter seven of *The Irish Study of Sexual Health and Relationships: Main Report and Overview* gives detailed analyses of the number of partners in lifetime across various socio-demographic variables. This sub-section examines the relationship of early sexual intercourse to subsequent experience of multiple partners among 18-29 year-olds. 'Multiple partners' was defined as: having had more than one sexual partner in the previous year (i.e. vaginal, oral or anal sex).

There were significant gender differences in experience of multiple partners in the previous year ($p < 0.001$): 31% of men and 13.6% of women.

Age at first intercourse was significantly related to experience of multiple partners among 18-29 year-olds, when adjusting for current age, educational level and current relationship status:

- Men who experienced first intercourse before 17 were over three times more likely to have had multiple partners in the previous year than men whose first intercourse occurred at or after 17 ($p < 0.001$), and such women were two and a half times more likely ($p < 0.001$).

This finding lends support to a number of studies internationally. In a review of surveys across Europe, Bozon *et al* (1998) also found that earlier sexual initiation was associated with increased likelihood of more than one partner over the last year among both men and women, across all European countries studied.²⁹

In Australia, Rissel *et al* (2003) found that men and women whose first sex had occurred before 16 had significantly more partners over the previous year than those who first had sex at 16 years or later.³⁰ As well, a number of studies have shown that earlier first intercourse is associated with more sexual partners subsequently.^{30,40,102}

In ISSHR, the relationship between early sexual initiation and STI experience was investigated by asking participants if they had ever been diagnosed with an STI. There were no gender differences, among 18-29 year-olds: 3.8% of men and 3.1% of women reported diagnosis of an STI. Earlier age at first intercourse was found to be independently associated with STI experience, after adjusting for current age and educational level:

- Participants who first had sex before 17 were over two and a half times more likely to have had an STI than those whose first intercourse occurred at or after 17 ($p < 0.005$).

These findings support those of a number of studies, which have found earlier sexual initiation to be associated with increased likelihood of subsequent STI infection.^{30,45,46} For example, Rissel *et al* (2003) found that men and women who reported sexual initiation before age 16 were more likely subsequently to have had an STI.³⁰ (Chapter five of the complementary report, 'Sexual Health Challenges and Related Service Provision' provides further analysis of risks of STIs among the youngest group studied – those aged 18-24.)

All women were asked if they had ever experienced an abortion or a crisis pregnancy (see section 3.2.7 for definitions).

A total of 12.9% of women aged 18-29 reported a crisis pregnancy. After adjusting for current age, educational level and marital status, age at first intercourse was independently associated with experience of crisis pregnancy:

- Women who had been under 17 at first intercourse were over two and a half times more likely to report crisis pregnancy than those whose first intercourse occurred at or after 17 ($p < 0.001$).

In total, 3.6% of women aged 18-29 reported having had an abortion. After adjusting for current age and educational level:

- Women whose sexual initiation occurred before 17 were over four times more likely to have had an abortion than those who first had sex at or after 17 ($p < 0.001$).

Few studies internationally have looked at the relationship between early first intercourse and crisis pregnancy or abortion as a marker of long-term sexual-health risks associated with early sexual initiation. The 2000 British Natsal study found that earlier age at first intercourse was associated with motherhood and abortion before age 18.³³ ISSHR extends this finding by indicating that early sexual initiation may be a longer-term risk factor for crisis pregnancy and abortion.

Experience of oral and anal sex was investigated to examine the effect of early sexual intercourse on the likelihood of experiencing either. Overall, 84.8% of men and 73.5% of women aged 18-29 reported oral sex (given or received). After adjusting for current age, educational level and current relationship status, age at first intercourse was significantly associated with experience of oral sex for both men and women aged 18-29.

- Men who had experienced first intercourse before 17 were eight times more likely, and women over three times more likely, to report oral sex than men and women who had experienced first intercourse after 17 ($p < 0.001$; $p < 0.001$).

There were significant gender differences in experience of anal sex ($p < 0.001$); 17% of men and 10.4% of women aged 18-29 reported anal sex. Age at first intercourse was significantly related to experience of anal sex. After controlling for current age, educational level and current relationship status:

- both men and women who had experienced first intercourse before 17 were around twice as likely to report anal sex as those reporting first intercourse after 17.

These results support a number of international findings. Rissel *et al* (2003) found that men and women whose sexual initiation occurred before 16 were more likely to have had oral and anal sex than those whose first intercourse occurred at or after 16.³⁰ Bozon *et al* (1998), reviewing a number of European surveys, found a trend in most countries of increased likelihood of anal sex among those reporting earlier age at first intercourse.²⁹

5.3 Summary

THIS study identified a median age at first vaginal intercourse of 18 for men and 19 for women currently aged 18-64. Median age at first vaginal intercourse was lower among younger age groups. The results suggest a higher median age at first intercourse in Ireland than that reported in many other international studies. However, ISSHR also found the falling age at first sex with younger current age that has been found internationally. This indicates that Ireland is following the pattern of earlier age of sexual initiation seen in other countries.

- The percentage of men and women experiencing first intercourse before 17 has increased considerably in younger age groups.
- More men than women experienced vaginal intercourse before 17.
- Younger current age, lower educational attainment and less religiosity are all strong predictors of intercourse before 17.
- Women who experienced menarche before 13 were more likely to have had first intercourse before 17 than women who experienced it at or after 13.

Investigation of relationship differences across age at sexual initiation among 18-29 year-olds highlighted a number of differences.

For both men and women, earlier intercourse was more likely to occur outside a steady relationship. Men who had first sex at a younger age were more likely to report a first partner who was more than two years older.

More men and women who experienced first intercourse before or at 16 never had sex with their first partner again, compared with those experiencing first intercourse at later ages. Men and women who first experienced intercourse at later ages were considerably less likely to have had sex with another partner and more likely to report that the relationship with their first partner was continuing.

Women who experienced intercourse at a younger age, particularly before 16, were considerably more likely to report that their partner had been more willing for first intercourse.

Women who first experienced intercourse at older ages were more likely to say they had expected intercourse to happen soon or at that time, rather than that it happened 'on the spur of the moment'. A higher proportion of younger people felt they should have waited longer for first intercourse: men who experienced intercourse before 16 and women who experienced it before or at 16 were considerably more likely to say they should have waited longer than those who experienced intercourse at a later age.

The percentage of people who said first intercourse had occurred at about the right time increased with older age at first intercourse. Men and women who experienced it before 17 were significantly less likely than those who experienced it at or after 17 to agree that: they had been in love, it seemed like a natural follow-on in the relationship, and it was the right time.

Women whose sexual initiation occurred before 17 were more likely to say they had been carried away by their feelings than women whose sexual initiation occurred at or after 17.

Earlier sexual initiation was also related to subsequent sexual behaviour and experience. Among 18-29 year-olds, being aged under 17 at first intercourse was significantly related to: experience of oral and anal sex; multiple partners in the previous year, and experience of an STI.

Women who experienced first intercourse before 17 were more likely to report crisis pregnancy and abortion than women whose first intercourse occurred at or after 17.

Overall, these findings provide a unique insight into experiences of sexual initiation in Ireland across differing ages at first intercourse. A lower age for first intercourse in younger age groups is evident. Lower educational attainment and earlier age at menarche are identified as important predictors of earlier first intercourse.

It is clear that earlier age at sexual initiation is associated with a number of experiences that differ from those of people who experienced later initiation. Among the younger age cohort in this study, earlier first intercourse was associated with: being in a casual relationship at the time, feeling coerced at the time (women only) and (for both men and women) feeling regret later that they had not waited longer for first intercourse.

Contraceptive use at first sexual intercourse

THIS chapter investigates in detail contraceptive use at first intercourse.

First, section 6.1 gives an overview of international and Irish literature, beginning with the determinants of contraceptive use at first intercourse identified in international research.

Research relating to contraceptive methods used at first intercourse and reasons for non-use are summarised in the subsequent sections.

- The ISSHR study results are presented in section 6.2, beginning with an overview of levels of contraceptive use across age cohorts and across year of first intercourse, then comparing the results with findings internationally.
- The next sub-section looks at contraceptive use among people at risk of unintended pregnancy, again across age groups and year of first intercourse.
- Sub-section three examines contraceptive methods used at first intercourse, including analyses according to current age and year of sexual initiation, and investigation of socio-demographic determinants of use of common contraceptive methods.
- Individual factors, including socio-demographic, sex-education and parent-child communication as determinants of contraceptive use at first intercourse, are examined in sub-section four.
- Sub-section five further investigates differences in contraceptive use across various relationship measures.
- The sixth sub-section looks at the relationship between situational and contextual factors (such as planning, willingness and regret) and contraceptive use at first intercourse.
- Reasons for not using contraception at first intercourse are examined in the seventh sub-section.
- The final results sub-section investigates contraceptive use at first intercourse as a determinant of adult contraceptive use at most recent intercourse.
- Finally, section 6.3 summarises the chapter's findings.

6.1 Introduction

6.1.1 Determinants of contraceptive use at first intercourse

RESEARCH internationally has reported an increase in contraceptive use at first intercourse with younger age and with more recent year of first intercourse.^{30,32,33,43}

For example, in the British Natsal 2000 study, younger participants reported greater contraceptive use at first intercourse (e.g. 93% of men and 90% of women aged 16-19 compared with 65% of men and 68% of women aged 40-44).³³ The Australian Study of Health and Relationships (ASHR) found that use of contraception at first intercourse had increased from 17% of men whose first intercourse occurred in the 1950s to 90% of men in the 2000s. Similarly, use of contraception by women at first intercourse had increased from 35% to 95% over this period.³⁰

The Irish knowledge base relating to contraceptive use at first intercourse is limited. Information to date has been based on a few small-scale or regional studies.

- In a study of Irish school-going 15-18 year-olds, 21% had experienced intercourse. Of these, 72% of both girls and boys reported condom use at first intercourse. However, this finding was based on the 21% who had experienced intercourse; contraceptive use at first intercourse among the 79% who had not yet experienced intercourse may have differed subsequently.⁹²
- In their non-random survey of 14-25 year-old Northern Irish people, Schubotz *et al* (2002) reported that, of those who had experienced intercourse (53%), 34% of men and 22% of women had not used contraception at first intercourse.³¹

These small-scale studies offer little opportunity to generalise safely to the wider population and illustrate the need for a reliable national survey in Ireland.

International research has found that a number of variables are associated with not using contraception at first intercourse. International research relating to each variable is explained in the following paragraphs.

Age, educational attainment and socio-economic status

A number of studies have found that earlier age at first intercourse is associated with decreased likelihood of using contraception at first intercourse.^{31,34,43,44,103}

Research has also established that lower levels of educational attainment and aspiration are associated not only with first intercourse at a younger age, but also with lower likelihood of using contraception at first intercourse^{33,35,43} and during intercourse generally.³⁴

The relationship between educational level and age, and contraceptive use at first intercourse is complex. Recent research has found that many teenagers have a positive or ambivalent attitude towards pregnancy⁴⁷⁻⁵⁰ and that considerable numbers of pregnant teenagers report having intended or wanted to become pregnant.^{49,113} Among pregnant teenagers who had not used contraception at the time of conception, those who had dropped out of school were

more likely to have an ambivalent or positive attitude towards pregnancy.⁴⁹ Additionally, many studies have found that teenage mothers are more likely to have low educational attainment or aspirations.^{33,34,51-57}

While the relationship was previously assumed to indicate that teenage pregnancy itself reduced educational and career opportunities, more recent interpretations suggest that teenagers with low educational attainment often view pregnancy more positively since it offers them a social identity as a parent, where the possibility of other social roles may be limited. This is further supported by research reporting that young people who felt most strongly about avoiding pregnancy and had other life ambitions (e.g. educational or career aspirations, or travel) reported using contraception.^{34,114}

Some research in Ireland has looked specifically at early school-leavers and those who miss significant portions of the school year. These groups pose a particular challenge for sex education (see section 3.1.1). There is also some Irish evidence indicating that early school-leavers are vulnerable in relation to sexual health.

- In the mid-1990s, research in Cork, into a large mixed group of young people, suggested that early school-leavers were systematically different to their counterparts who remained in the education system, in terms of early sexual experience; the early school-leavers reported higher rates of pregnancy and STIs.¹¹⁵
- A 1996 Midland Health Board/Regional Youth Council qualitative study of marginalised young people aged 13-18 in the Midlands (early school-leavers or those at risk of becoming early school-leavers) found a major lack of awareness about contraception and protection against STIs, even among those who were already sexually active.⁹⁸
- A recent Irish study which focused on early school-leavers investigated their sexual attitudes, beliefs and behaviour and explored how they constructed and defined their sexuality and sexual practice.¹¹⁶ This research was based on the experiences of 41 young people aged 13-18 from 12 recruitment sites (six in Dublin and six in provincial locations). Many participants were sexually active and first sex was almost always unplanned, and frequently unprotected. There was unanimous agreement among the group that young men were responsible for obtaining and carrying condoms. In broad terms, the research indicated that the young participants showed greater concern about pregnancy than about STIs. While caution is needed in attempting to generalise the results to all early school-leavers, the study provides a wide-ranging and in-depth insight into this relatively invisible group in contemporary Irish society.

The relationship between educational attainment and sexual behaviour has also been examined in relation to socio-economic disadvantage, which has frequently been related to lower levels of contraceptive use at first intercourse and generally among adolescents.

- The US National Survey of Family Growth reported that poor adolescents were less likely to use contraception than others.¹¹³
- Singh *et al* (2001) reported significantly lower contraceptive use at first intercourse among those from economically disadvantaged backgrounds in Britain and the US.³⁵
- Fitzpatrick *et al* (1997) found that 89% of Irish adolescents attending an adolescent antenatal clinic in Ireland were from social classes III-V, with none from the highest social class (Class I).¹⁰⁴

- Babb (1993), reporting on analyses of the General Household Survey of Great Britain and the OPCS Longitudinal Study, found around three times more births to adolescents in manual social classes than to those in non-manual classes.⁵⁶
- Similarly, Kiernan (1997), reporting on the National Child Development Study in the UK, found that people who had children at younger ages were more likely to be from economically disadvantaged families.⁵⁵

As with the effect of low educational attainment, the relationship between socio-economic disadvantage and adolescent pregnancy (and thus non-use of contraception) may reflect a lack of opportunities for people from disadvantaged areas or backgrounds. Thus, pregnancy may offer a social role to young women who have limited opportunities to take on other roles.

Some authors have speculated on the mechanisms by which disadvantage and deprivation increase the likelihood of adolescent pregnancy. Diamond *et al* (1999) suggest that the explanation for some areas having higher rates of adolescent pregnancy involves more than disadvantage alone, since individual factors such as low educational attainment or aspiration, low self-esteem and higher differentials in gender power may be more likely in disadvantaged areas (cf. Fullerton 2004⁷⁹). Adolescent pregnancy may thus represent a wider social failure. UNICEF (2001) suggests:

“In the main, the incentive to avoid early parenthood stems from a stake in the future, a sense of hope, and an expectation of inclusion in the benefits of living in an economically advanced society. Building that sense of inclusion where it is now absent is a task that requires action on a much broader front.”¹¹⁷

Relationship status and communication

Relationship status may influence sexual behaviour and contraceptive use in a number of ways. Research has investigated this area using various methods. For example, retrospective surveys of national populations have examined differences in levels of contraceptive use across relationship types. Some small studies have suggested that people in a casual relationship or not in a relationship with their first sexual partner are less likely to use contraception at first intercourse than those in a steady relationship.^{31,103}

The effect of relationship status on contraceptive use during first intercourse has also been investigated in terms of the mechanisms behind any differences, such as the ability of adolescents to communicate about contraception. Research has found that young people were more likely to use contraception at first intercourse if they had discussed contraception prior to first intercourse,^{38,44} if their relationship lasted longer than one month and if intercourse had been planned.³⁸ They were also more likely to use contraception throughout their first sexual relationship if they had discussed contraception prior to first sex or if they had delayed first sex with a partner for a longer time after the start of the relationship.¹¹⁸

Some research has found gender differences in securing the use of contraception. A comparison of male and female contraceptive ‘self-efficacy’ in sexually active 18-20 year-olds found that both young men and women had low scores for communication about sexual matters, while young women obtained low scores for securing the use of contraception.¹¹⁹

Research has reported greater intention to use condoms among young men with more positive attitudes to contraceptive responsibility¹²⁰ and who indicated willingness to use condoms when encouraged to do so by their partner.¹²¹ Similarly, adolescent women's reports of consistent condom use were associated with their perception that their partner supported the use of condoms and with having asked their partner to use a condom.¹²² Research into adult women supports these findings. It has been found that use of contraception may be less likely if a woman believes that her partner would object and that this objection might jeopardise their relationship.²⁶

Other research indicates the importance of relationship power in a woman's ability to negotiate safe sex.¹²³⁻¹²⁵ It is possible that women's contraceptive negotiation may be impeded by gender-based imbalances of power within relationships. Research has found an association between women's reported power in a sexual relationship and their use of condoms; consistent use of condoms was five times more likely among women who reported high relationship power.¹²⁴ It is important that both young men and women feel they have the ability to discuss contraception and negotiate its use.

Formal sex education

Most research indicates that some sex-education programmes can delay sexual initiation, reduce sexual activity and increase contraceptive use among adolescents.^{17,18,20} For example, Wellings *et al* (2001) found that both men and women were significantly less likely to use contraception at first intercourse if they had learned most about sexual matters from friends and others, compared with those who had learned most from school lessons or parents.³³ Thus, research indicates how sex education may play an important role in educating young people about the need to use contraceptives.

Parent-child communication

Research has linked parent-child communication about sex with increased contraceptive use among adolescents and young people.^{8,44,126} Other research has found that mother-daughter communication about sex increases the likelihood of contraceptive use in adolescents and reduces the likelihood of teenage pregnancy.¹²⁷ Similarly, Wellings *et al* (1999) found that women who found it easier to communicate about sex with their parents were less likely to become teenage mothers.⁵³ Others have suggested that it is also important to consider what has actually been communicated¹²⁶ and that parental attitudes and values may be important determinants of adolescent sexual behaviour.⁷

Few studies have looked at parent-child communication in relation to contraceptive use at first sexual intercourse specifically. Wellings *et al* (2001) found that young men were more likely to report using contraception at first intercourse if they had discussed sexual matters with parents.³³ Stone *et al* (2002) found that students aged 16-18 were more likely to use contraception at first intercourse if they had discussed contraception with their partner prior to sex and if their parents portrayed sexuality positively (this was true of young men only). As well, the likelihood of having discussed contraception with their partner prior to sex was greater among young men who reported that their parents had shown greater openness in talking about sex. Young women who reported greater warmth and availability of parents were more likely to have discussed contraception with their partner prior to first intercourse.

The authors suggest that family communication and openness in discussing sexual matters is important since it may provide young people with the skills to discuss contraception, which can in turn influence their contraceptive behaviour.⁴⁴

Contraceptive practices at first intercourse and later outcomes

Apart from the risks inherent in unprotected sex at first sexual intercourse, a small number of studies have investigated the relationship between not using contraception at first intercourse and continuing risk behaviours and negative outcomes. In their study of 20-29 year-old Danish women, Svare *et al* (2002) noted that non-use of contraception at first intercourse was significantly related to an increased likelihood of: never using condoms, subsequent experience of abortion, and having over 20 sexual partners.⁴³ Conversely, condom use at first intercourse has been related to increased likelihood of subsequent condom use among adolescents.¹²⁸

Contextual factors

The previous sections have summarised research into major socio-demographic and sex-education variables as determinants of contraceptive use at first vaginal intercourse. Situational and contextual factors may further influence contraceptive use. Research data concerning contextual factors is collected in a number of ways. Some studies have collected information about reasons for not using contraception (see section 6.1.3). An alternative method is to ask participants if various situational or contextual factors applied to their intercourse, and subsequently identify those associated with not using contraception.

Situational and contextual factors investigated in studies internationally include: planning for first sexual intercourse, willingness, drinking alcohol, and later regret about its timing.

Role of alcohol

The role of alcohol in sexual encounters is complex. Research suggests that a substantial number of adolescents experience first intercourse after drinking alcohol (as discussed in section 5.1.2). Since alcohol can affect judgement and decision-making, the extent to which alcohol use in sexual situations leads to higher risk behaviour must be determined. Research into the relationship between alcohol use and contraception in sexual encounters across age groups and contexts has come up with conflicting results, but a number of studies have found a relationship between drinking alcohol and contraceptive use at first intercourse.

A meta-analysis of research into the relationship between alcohol and condom use found that adolescents were less likely to use a condom at first intercourse if they had been drinking alcohol.¹²⁹ Other research has found risky sexual behaviour at first intercourse (i.e. non-use of condoms, no risk-related discussion prior to intercourse, and relationship status) to be associated with alcohol use at first intercourse.¹³⁰

In her meta-analysis of the research, Leigh (2002) also noted a trend towards non-use of condoms during intercourse when alcohol had been consumed, among adolescents in sexual encounters generally.¹²⁹ In a survey of American teenagers aged 16-19, Strunin and Hingson (1992) found that, of those who had had intercourse (66%), half (49%) felt that sex was more likely if alcohol had been consumed and 17% said they were less likely to use condoms if they had been drinking alcohol. Those reporting lower likelihood of condom use after drinking were more likely to have first had sex at a younger age.¹³¹ However, other research found no relationship between alcohol use and condom use among Australian adolescents.¹³²

In relation to intercourse more generally among adults, Rundle *et al* (2004) found alcohol/drug use to be a common reason for not using contraception during the previous year among Irish adults, particularly among 18-25 year-olds.²³

As noted above, much of the research into the relationship between drinking alcohol and contraception among adolescents is conflicting. This may be explained by the different measures used. Some studies have investigated the role of alcohol in adolescent sexual behaviour in general; others have gathered situation-specific information on alcohol and contraceptive use at first intercourse. Additionally, while some research has looked at all methods of contraception, much of it has focused on the relationship between alcohol use and use of condoms, so as to investigate STI risk behaviour.

6.1.2 Contraceptive methods used at first intercourse

It is important to consider the types of contraception used by young people during their first sexual experiences. While many contraceptive methods provide protection against pregnancy, only barrier methods protect against STI infection. An increase in condom use has been seen internationally; younger people report considerably greater condom use.^{30,32,33}

- The Australian ASHR study reported a steady increase in condom use – from minimal use at first intercourse occurring in the early 1950s to use by 79% of men and 76% of women at first intercourse occurring in the 2000s.³⁰
- In 2000, the British Natsal study reported an increase in condom use across age cohorts; for example, 83% of men and 80% of women aged 16-19 at the time of interview had used a condom at first intercourse, compared with 30% of men and 37% of women aged 40-44. Use of the contraceptive pill at first intercourse was reported by 23% of men and 26% of women, with little variation across age groups.³³

6.1.3 Reasons for not using contraception

RISK groups for non-use of contraception at first intercourse have been discussed and identified previously in this chapter. Further illumination of factors leading to non-use among these risk groups can be gained by examining the reasons that people gave for not using contraception. Previous research internationally has identified many reasons for non-use; the most common are discussed below, followed by findings from the present study.

Unplanned sex/spontaneity

In a recent nationally representative study of contraceptive use by Irish adults, Rundle *et al* (2004) found that the most common reasons for not using contraception were that sex had not been planned and that alcohol or drugs had been used. These reasons were particularly common among 18-25 year-olds:

- 58% of non-users of contraception (aged 18-25) over the previous year reported that non-use was due to sex having been unplanned, while 33% reported that use of alcohol or drugs was the reason

In a qualitative study of pregnant Irish teenagers, spontaneity of sex was one of the reasons given for erratic use of contraceptives.²⁴

Since these reasons are so prevalent among younger age groups in particular, it is important to determine if they also play a part in non-use of contraception at first intercourse among the Irish population.

A study of first sexual intercourse among 304 university students in the US found low levels of contraceptive use at first intercourse (just 37% of women and 43% of men reported using contraceptives). The two most common reasons for non-use were that sex was unplanned (the reason given by 31% of non-users) and that no contraception was available (28% of non-users).²⁷

Attitudes towards contraception

Attitudes to contraception, and their relationship to behaviour, have also been investigated. Research has found a negative attitude towards condoms among adolescents, particularly boys. This is often due to a feeling that using contraception would lessen sexual pleasure or interrupt sex.¹³³⁻¹³⁵ As well, attitudes towards condoms have been shown to influence condom use and intention to use among adolescents.^{128,134-137} Other studies have identified a moral/judgemental perspective concerning contraception. For example, some studies found that a small number of adolescents believed that contraception is morally wrong,¹³³ or that carrying or using contraceptives gives a message that a person is promiscuous or looking for sex, particularly in the case of women carrying condoms.^{26,133,137}

Accessing contraception and contraceptive services

Access to contraception and contraceptive services may be crucial in determining contraceptive behaviour. Irish research into levels of access to and experiences of contraceptive services is limited. Current information informing service planning is based on mainly small Irish studies and international research.

The Irish Family Planning Association (2002) has suggested that young Irish people may be reluctant to use their family doctor for contraceptive services due to embarrassment.⁹¹ A number of studies have highlighted issues seen by adolescents as preventing them from availing of contraceptive services. For example, Dempsey (2001) noted that pregnant Irish teenagers listed the following reasons as barriers to obtaining or using contraception: 'cost of contraception, relationship with GP, locality and fear of being seen buying contraception, tendency to procrastinate, feeling embarrassed and denial of the possibility of their fertility'.²⁴

Concerning barriers to consultation with a GP about contraception, many adolescents have reported concerns about confidentiality and the possibility that their parents could be informed about these discussions.^{24,26,138,139} Confidentiality and anonymity in accessing services and in behaviour generally may be of particular concern to people living in rural areas, since behaviour in areas with small populations can be scrutinised more closely and lack anonymity. The Scottish report, 'Young people's self-identified health needs', suggests that a rural environment can restrict adolescent behaviour and experimentation.¹⁴⁰ Simply being seen visiting a GP, which may be more likely in rural areas, may lead to teenagers having to explain the visit to family members.¹³⁸ Similarly, Mason (2003) reported that young people were worried about seeing friends or neighbours in waiting rooms, or when buying condoms in pharmacies, in small towns.⁹⁶

It has also been suggested that GPs may further block access by refusing to provide contraception because of a person's age or the GP's own moral attitude towards contraception or sex outside of marriage. Some Irish women, particularly adolescents, have reported avoiding GP visits because they fear disapproval.²⁶ A total of 21% of GPs in a small-scale Irish study by Mason (2003) reported personal objections to at least one contraceptive method; emergency contraception and intrauterine contraceptive devices (IUCDs) were the methods most commonly listed as problematic. Mason (2003) also reported that, while 64% of GPs contacted would provide general advice and prescribe to under-16 year-olds, 18% would only prescribe if a parent was present while 16% would give advice but not prescribe to people under 16.⁹⁶

Another factor that may affect accessing contraception is cost. In Ireland, only lower-income people (holders of 'medical cards', who make up about one in three of the population) can attend a GP and receive prescription contraception without cost. The cost of visiting a doctor and that of contraception itself can further limit access to contraception, particularly for young people on low incomes.^{26,91} A Belgian qualitative study found that the cost of visiting a GP and of contraceptives was one of the biggest obstacles to contraceptive access among 17-year-old girls.¹⁴¹

In Ireland, the Irish Family Planning Association (2002) has recommended that young people have free access to sexual and reproductive health services, in order to increase uptake of and provide choice in contraceptive services.⁹¹

Hosie (2002), in a review of sexual-health policies throughout Europe, put forward a number of important issues concerning availability of sexual-health services for young people. These include:

- convenient geographic locations and suitable opening times
- services away from parental view
- confidentiality
- informal and user-friendly staff
- approachable professionals with a respectful attitude
- youthful 'linguistics' (use of language suitable for young people)
- recognition of the needs of young men⁸⁰

The provision of sexual-health services and preferences about these are considered in more detail in the ISSHR sub-report 'Sexual Health Challenges and Related Service Provision'.

6.2 Results and discussion

6.2.1 Contraceptive use at first intercourse – all participants

SUMMARY

Prevalence of contraceptive use at first intercourse was investigated among all ISSHR participants with experience of vaginal intercourse. A small number of participants (N=43) reported that their first experience was of anal intercourse. This group were excluded from all analyses into contraceptive use since they may differ from those reporting that their first intercourse was vaginal, particularly in their decisions about contraception and protection. Due to small group numbers, it was not possible to investigate contraceptive use among this group.

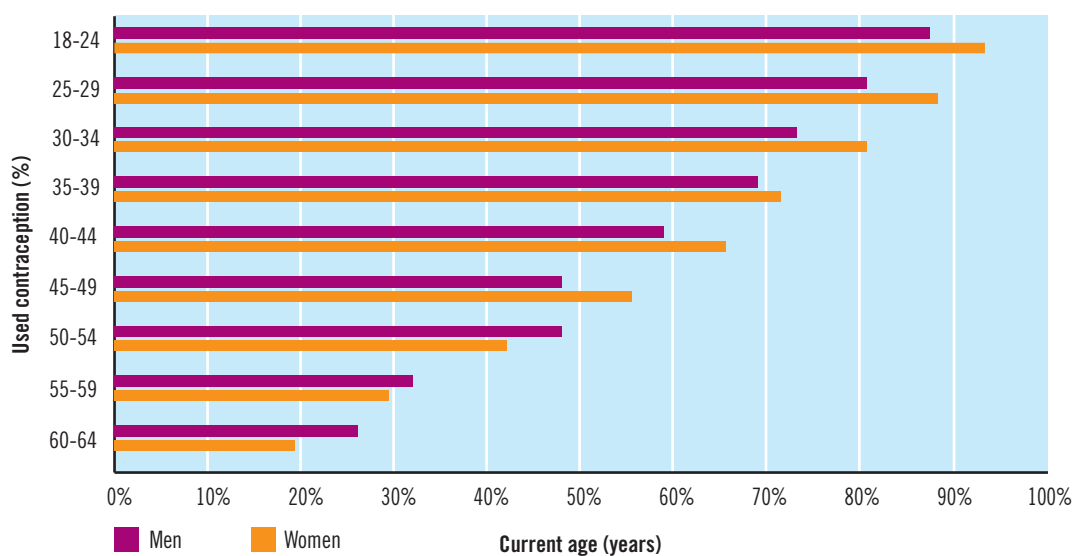
- In total, 62.7% of men and 66.5% of women used contraception at first intercourse.
- Contraceptive use at first vaginal intercourse increases steadily with younger current age: from 25.8% of men and 19.4% of women currently aged 60-64 to 87.5% of men and 93.6% of women aged 18-24.
- In relation to year of first intercourse, 30.7% of men and 22.2% of women who first had vaginal intercourse before 1965 used contraception, whereas 90.9% of men and 94.6% of women who experienced first intercourse in or after 2000 used contraception.

PARTICIPANTS were asked if they or their partner had used any form of contraception the first time they had vaginal sex. It was explained that contraception also included both withdrawal and emergency contraception.

In total, 62.7% of men and 66.5% of women reported using contraception at first intercourse. There were significant gender differences ($p < 0.01$).

Figure 6.1 displays the percentage of participants who used contraception at first vaginal intercourse, by gender and current age. It shows that contraceptive use is higher with every younger current age group, from just 25.8% of men and 19.4% of women currently aged 60-64 to 87.5% of men and 93.6% of women aged 18-24. These findings are in line with those seen in national surveys worldwide,^{32,33,43} including the British Natsal study, which have reported increasing contraceptive use at first intercourse with younger current age.³³

Figure 6.1: Use of contraception at first intercourse, by gender and current age

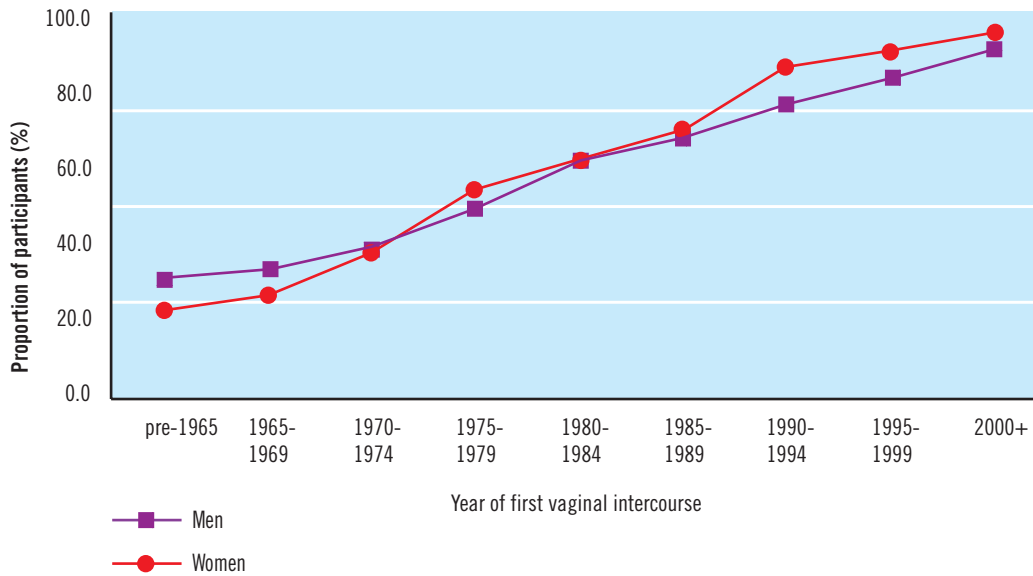


It is also interesting to track trends by investigating year of first intercourse. *Figure 6.2* shows a steady increase in contraceptive use with more recent year of first intercourse. For example:

- 30.7% of men and 22.2% of women who first had vaginal intercourse before 1965 used contraception, whereas 90.9% of men and 94.6% of women who experienced it in or after 2000 did so

The steady increase in contraceptive use is notable in both men and women. There does not appear to be one particular period when practices changed dramatically, even at times of change in the laws covering contraception.

Figure 6.2: Contraceptive use, by year of first vaginal intercourse and gender



This pattern of increasing contraceptive use with more recent year of first intercourse was also found in the Australian ASHR study, where contraceptive use rose steadily from 17% of men and 35% of women who experienced first intercourse in the 1950s to 90% of men and 95% of women first having intercourse in the 2000s.³⁰ Svare *et al* (2002) also reported an increase in contraceptive use with later calendar year of first intercourse among Danish women aged 20-29.⁴³

The higher rates of contraceptive use at first vaginal intercourse with younger age and more recent year of first intercourse are very positive findings. However, it is important to consider these changes within the context of lower age at first intercourse in younger groups, changing relationship status and the context in which intercourse occurs. These factors are further investigated below. One of the first issues to consider is whether participants wanted to avoid pregnancy at first intercourse.

While the above information is useful as it provides data that can be compared with international findings, the following sections investigate contraceptive use only among those at risk of *unintended* pregnancy, in order to understand further the determinants of use and non-use of contraception when pregnancy is not desired.

6.2.2 Contraceptive use at first intercourse among those who risk unintended pregnancy

SUMMARY

All participants who said that neither they nor their partner had used contraception at first intercourse (N=2,174) were asked to explain why they had not used it in order to avoid pregnancy.

Responses were open-ended to enable collection of the maximum amount of data, and re-coded into a number of categories. Participants were asked to give all reasons for non-use, and interviewers used probes to ensure they had gathered information about all reasons.

– Of all participants who had not used contraception at first intercourse, 15.8% of men and 30.4% of women said they had not used it because they or their partner were trying to become pregnant or did not mind becoming pregnant.

A small number of participants (N=7) reported not using contraception at first intercourse because of infertility, a hysterectomy or being post-menopausal. This group, along with those who were trying to become pregnant or did not mind if they became pregnant, were excluded from further analyses in order to focus on those non-users for whom pregnancy was possible but not desired, i.e. those at risk of unintended pregnancy.

- In total, 66.7% of men and 74.1% of women at risk of unintended pregnancy used contraception at first intercourse.
- Contraceptive use at first intercourse among those at risk of unintended pregnancy was much higher among younger age groups and by more recent year of first intercourse.

THIS section investigates contraceptive use at first intercourse among people who risked unintended pregnancy.

In total, 66.7% of men and 74.1% of women at risk of unintended pregnancy used contraception at first intercourse. Figure 6.3 shows levels of contraceptive use among those at risk of unintended pregnancy, by current age.

Figure 6.3: Use of contraception at first intercourse among people at risk of unintended pregnancy, by gender and current age

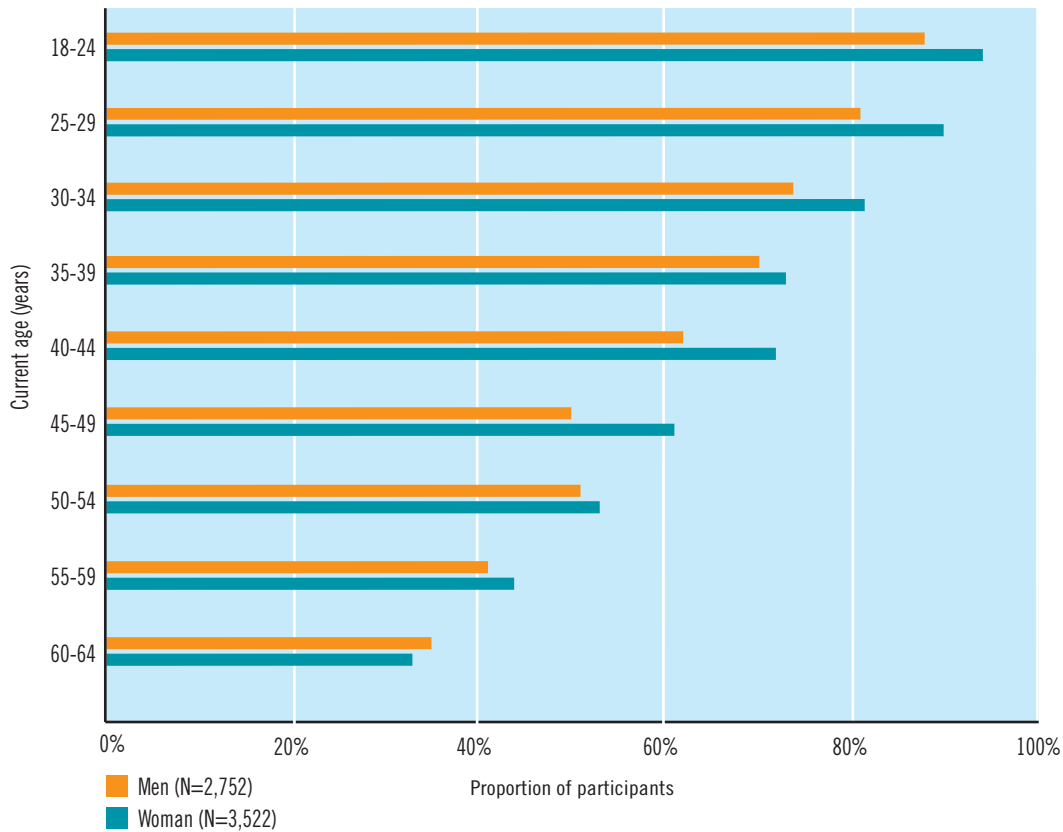
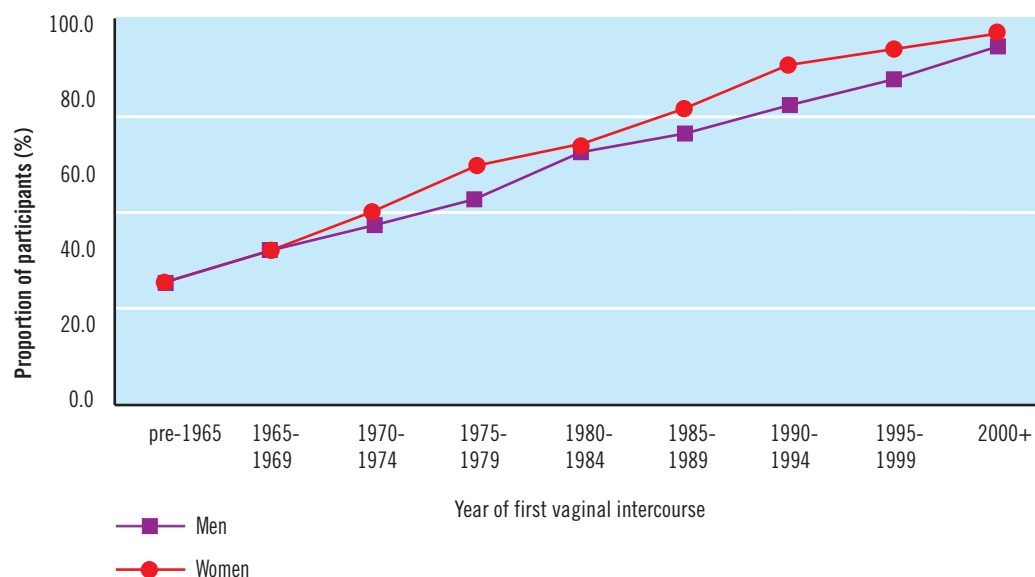


Figure 6.1 shows use of contraception at first intercourse among all participants. In Figure 6.3, in which participants not at risk of unintended pregnancy (i.e. they were trying to become pregnant or unable to conceive) are removed, a slightly different picture emerges.

The percentage of older participants who used contraception at first intercourse remains relatively low, but it is notably higher once those who were trying to become pregnant have been removed.

A similar pattern is seen when looking at contraceptive use by year of first intercourse (Figure 6.4). Again, contraceptive use is higher when only those at risk of unintended pregnancy are included. This difference is less obvious among people whose first intercourse occurred more recently, indicating that they were less likely to be trying to become pregnant at first intercourse.

Figure 6.4: Contraceptive use among people at risk of unintended pregnancy, by year of first vaginal intercourse and gender



While *Figure 6.4* shows higher contraceptive use at first intercourse in more recent years among people who did not want to become pregnant, it still shows that 7.6% of men and 4.3% of women who first had intercourse after 1999 did not use contraception. Similarly, *Figure 6.3* shows that 12.2% of men and 5.9% of women aged 18-24 who were at risk of unintended pregnancy did not use contraception at first intercourse.

Sections 6.2.4 and 6.2.5 will investigate determinants of contraceptive use at first intercourse, such as individual and contextual factors.

While this section has reported increasing levels of contraceptive use, and use of contraception by most young people (18-24), at first intercourse, this to some extent reflects the changing context of first intercourse, such as changes in relationship status (see section 4.2.3). In addition, choice of contraceptive method at first intercourse is likely to reflect these changes, along with the increased availability of different methods of contraception over recent decades.

The following section examines trends in use of the various methods of contraception.

6.2.3 Contraceptive methods used

SUMMARY

Participants who reported contraceptive use at first intercourse were asked which method(s) they had used.

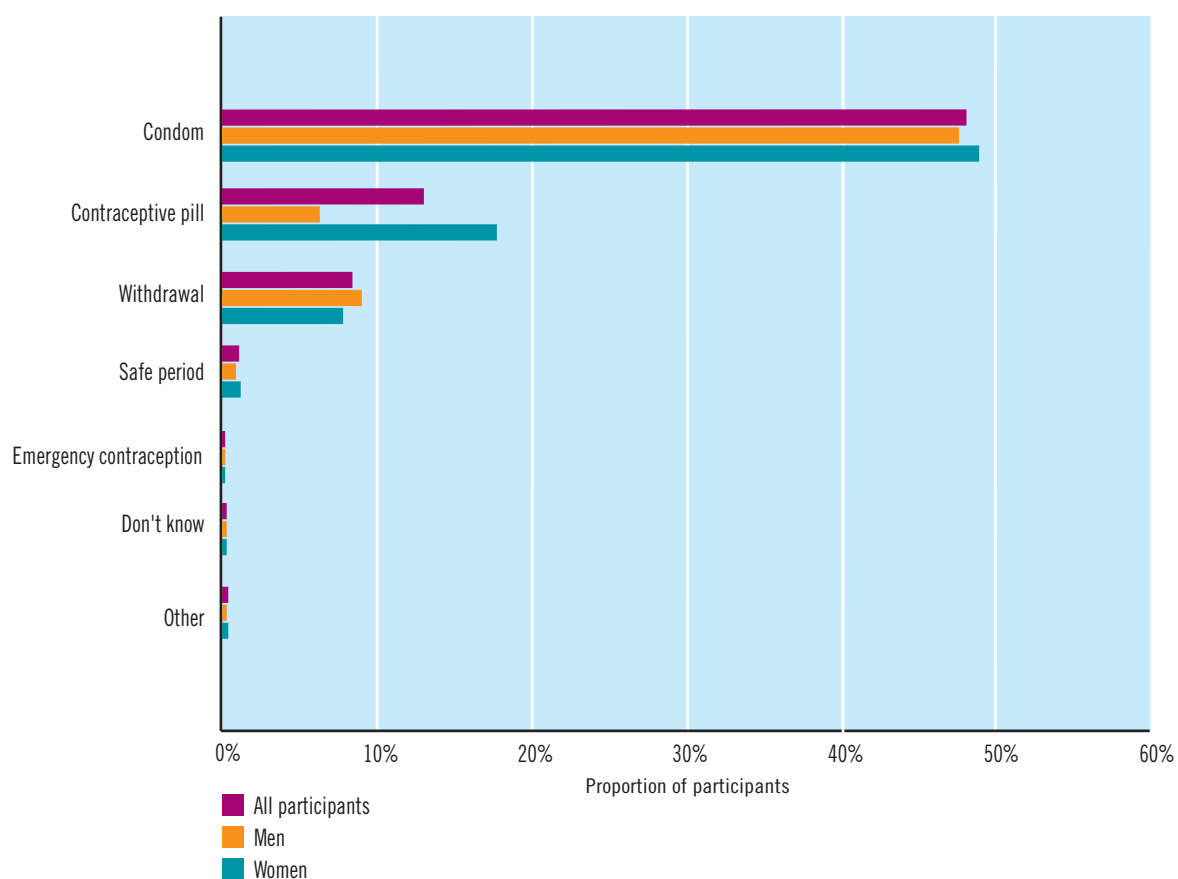
- The condom was the most common method used at first vaginal intercourse: almost half of all men and women (48.2%) used it.
- The contraceptive pill (13%) and withdrawal (8.4%) were also common. Few people used the safe period (1.2%) and emergency contraception (0.2%).
- There is a dramatic increase in condom use with younger current age. Just 7.8% of men and 4.8% of women currently aged 60-64 used a condom at first intercourse, compared with 82.4% of men and 88.9% of women currently aged 18-24.
- Condom use at first intercourse is increasingly likely with higher educational level.
- People in a steady relationship with their first partner were more likely to have used a condom than those who had just met/did not know their first partner, those who knew their partner but were not in a relationship with them and those who were married to their first partner.
- Being 17 or older at first intercourse was associated with increased likelihood of condom use at first intercourse.
- Use of the contraceptive pill at first intercourse was much higher among younger women. It ranged from minimal use among the older age groups to 29% among women currently aged 18-24.
- Few older men (55-59 and 60-64) reported that their partner used the contraceptive pill at first intercourse (3.8% and 0.5% respectively). Its use was much higher among younger groups, from 8.2% of men aged 50-54 to 12.5% for 18-24 year-olds.
- Men in a steady relationship/cohabiting/engaged with their first partner were significantly more likely to report that their partner used the contraceptive pill at first intercourse (than those who had just met/did not know their first partner or knew their first partner but were not in a steady relationship with them).
- Women in a steady relationship with their first partner were more likely to have used the contraceptive pill at first intercourse than those who had known their first partner but were not in a steady relationship with them, and less likely to have done so than women who were married to their first partner.
- Younger age at first intercourse (<17 years) is associated with considerably lower likelihood of using the contraceptive pill use at first intercourse, among both men and women.
- Use of the withdrawal method at first intercourse was less common in younger age groups.

THIS section examines contraceptive methods used at first vaginal intercourse. *Figure 6.5* provides an overview of the methods used, by all participants who had experienced vaginal intercourse (i.e. including people who did not use contraception at first intercourse). Participants indicated all methods used.

- The condom – reported by almost half of both men (47.6%) and women (48.7%) – was the most common method.
- The contraceptive pill and withdrawal were also common, while few participants used the safe period (1.2%) and emergency contraception (0.2%).

There were gender differences in use of the contraceptive pill; significantly more women (17.7%) than men (8.3%) reported its use at first intercourse. One possible explanation is that men may not be aware that their partner is using the pill. There were no significant gender differences in use of any other method.

Figure 6.5: Contraceptive methods used at first intercourse (as a percentage of all participants with experience of vaginal intercourse), by gender



Combined use of more than one contraceptive method was also examined. Of all contraceptive users at first intercourse, 9.8% reported combined condom and contraceptive pill. All other combinations used were reported by less than 1% of contraceptive users.

Use of common contraceptive methods was further investigated by current age, to determine any changes across age groups. Methods reported by less than 5% of the population were not investigated further due to small participant numbers (safe period: 1.1%, N=82; emergency contraception: 0.2%, N=15).

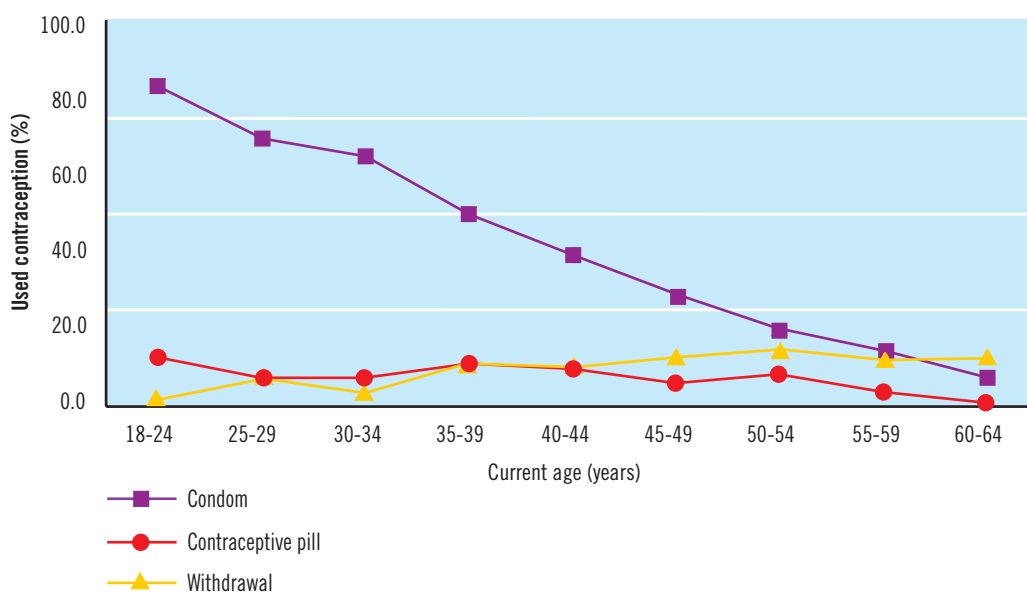
Figure 6.6 shows levels of use of condom, contraceptive pill and withdrawal at first vaginal intercourse among men. There were striking rates of increase in condom use among younger men:

- just 7.8% of men currently aged 60-64 had used a condom at first intercourse, compared with 82.4% of those currently aged 18-24

Few older men (55-59 and 60-64) reported that their partner had used the contraceptive pill at first intercourse (3.8% and 0.5% respectively). However, reported use increased to 8.2% of men aged 50-54 and has remained somewhat stable among younger groups, ranging from 6.2% to 12.5%.

Reported use of withdrawal at first intercourse remained relatively stable among men older than 34, at 11.5% to 14.7%; lower levels of use were reported by younger age groups – for example, just 2.1% of men aged 18-24.

Figure 6.6: Men’s use of most popular methods of contraception at first vaginal intercourse, by current age

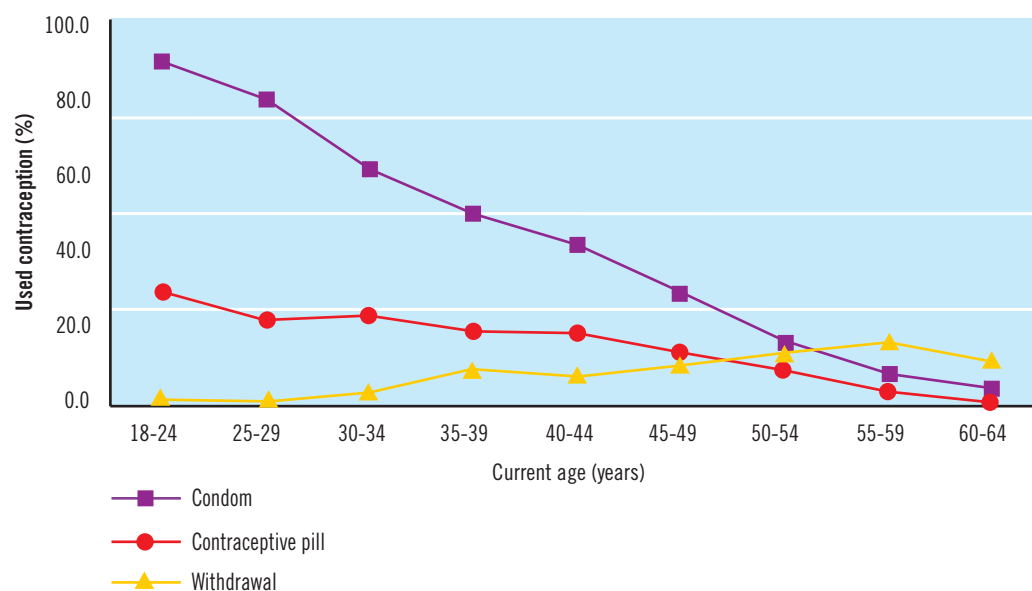


A similar pattern of higher levels of condom use with younger age was seen among women: 4.8% of women aged 60-64 had used a condom at first intercourse, compared with 88.9% of women currently aged 18-24 (Figure 6.7).

Use of the contraceptive pill at first intercourse was also much higher in younger groups of women, from minimal use among older age groups to use by 29% of women currently 18-24.

A greater number of older women reported use of the withdrawal method at first intercourse; the proportion ranged from 12.2% to 16.4% among women currently aged above 49, but declined steadily among younger women, to just 1.7% of those aged 18-24.

Figure 6.7: Women’s use of most popular methods of contraception at first vaginal intercourse, by current age



An alternative way to investigate trends in contraceptive use at first intercourse over time is to look at the year of first intercourse. This may provide a more accurate depiction of trends since analysis by current age alone does not provide information about when first intercourse occurred. Figures 6.8 and 6.9 provide an overview of use of condom, contraceptive pill and withdrawal at first intercourse across all men and women respectively, by year of first intercourse.

The striking pattern of increasing use of condoms by young people is also seen in Figure 6.8, showing men’s condom use by year of first vaginal intercourse:

- just 10.1% of men who first had sex before 1965 used condoms, compared with 85.8% of those whose first intercourse occurred after 2000

A similar pattern of young men reporting greater use of the contraceptive pill is also apparent; few men who first had sex in or before the 1960s reported use of the pill, but use gradually increases – to 13.6% among those whose first sex occurred after 2000.

Men's reported use of withdrawal remained relatively stable, at 12.3-13.5%, for first sex occurring between 1965 and 1985, but declining to 1.6% for first intercourse occurring after 2000.

Figure 6.8: Men's use of most popular methods of contraception at first vaginal intercourse, by year of first vaginal intercourse

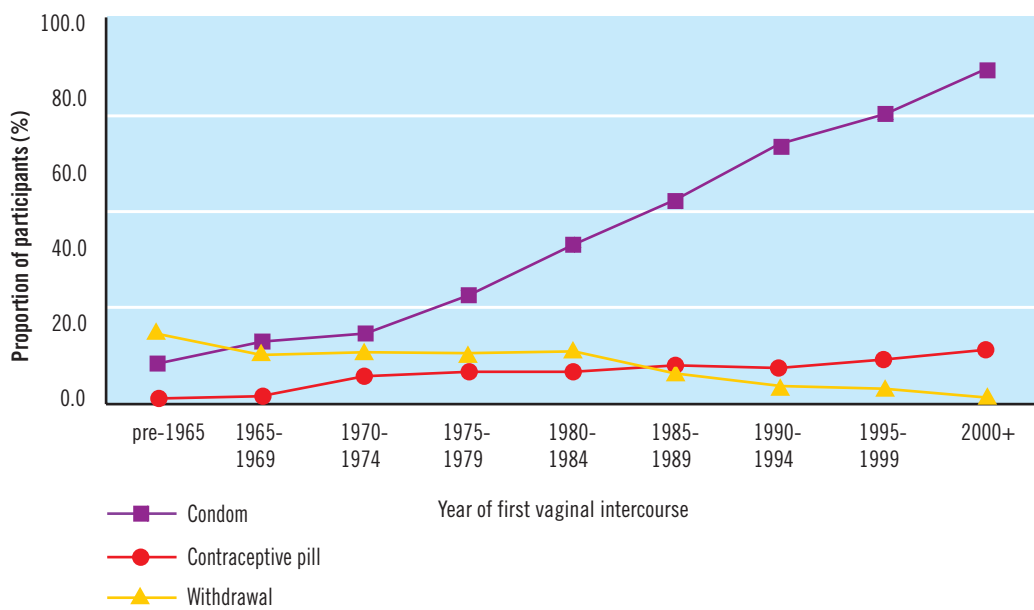
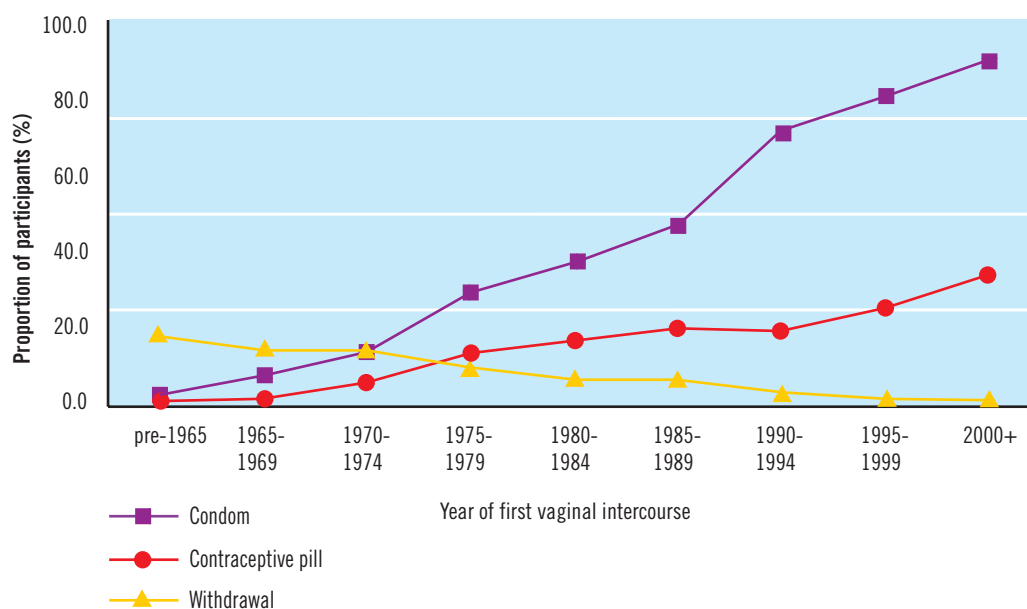


Figure 6.9 shows women's use of the condom, contraceptive pill and withdrawal at first vaginal intercourse by year of first intercourse. Again, the proportions of younger groups using condoms are dramatically higher:

- just 3.7% of women who first had intercourse before 1965 reported using condoms, compared to 89.2% of those whose first sex occurred since 2000

Figure 6.9: Women’s use of most popular methods of contraception at first vaginal intercourse, by year of first vaginal intercourse



The proportion of younger groups using the contraceptive pill also rises steadily; few women who first had sex before the mid-1970s reported using the pill at first intercourse. After the mid-1970s, a striking rise in use is seen – to 34% of women whose first intercourse occurred after 2000.

The decline in use of withdrawal seen among men is also clear among women; 18.1% among those who first had sex before 1965 and just 1.4% of those whose first sex occurred since 2000.

The previous analyses looking at differences in contraceptive methods used according to current age and year of first sex have shown some clear trends. Among both men and women, the proportion using condoms has increased dramatically with more recent year of first intercourse and younger current age. The same is true of use of the contraceptive pill, although the increase is less dramatic, and more marked for women. On the other hand, reported use of withdrawal is lower with younger age and more recent year of first intercourse, among both men and women.

In terms of both contraception and protection against STIs, these patterns are very positive. The withdrawal method of contraception has virtually disappeared. It was the only contraceptive method used in around one in six experiences of first sex in the 1960s, but since 2000 the proportion of both men and women reporting it has fallen to less than 2%.

Research internationally has also found an increase in condom use with younger age.^{30,32,33} For example, the 2000 British Natsal study reported that 83% of men and 80% of women aged 16-19 at the time of interview had used a condom at first intercourse, compared with 30% of men and 37% of women aged 40-44. However, unlike ISSHR, Natsal reported little variation in use of the contraceptive pill at first intercourse across age groups.³³

It is useful to determine whether other variables influence use of various contraceptive methods at first intercourse. The roles of age, gender, educational level, social class, relationship status and age at first intercourse were investigated to determine which were important in influencing use of condom, contraceptive pill and withdrawal (among all participants, including non-users of contraception at first intercourse).

First, prevalence of condom use across major socio-demographic variables is shown in Table 6.1. Since there were no significant gender differences in use of the condom at first intercourse, results for men and women are combined.

Table 6.1: Use of condom at first vaginal intercourse, by socio-demographic factors

	Used condom (%)	Base	MV+
All participants	48.2	6,827	
Gender			
Men	47.6	2,921	ns
Women	48.7	3,906	C
Current age (years)			
18-24	85.6	1,359	***
25-34	68.7	1,578	***
35-44	45.3	1,595	***
45-54	23.8	1,268	***
55-64	9.5	1,027	C
Education (highest level attained)			
Primary	15.9	525	C
Lower secondary	38.3	1,108	**
Higher secondary	56.0	2,726	***
Third level	63.9	2,468	***
Relationship with first sexual partner			
Just met/didn't know each other	48.2	286	**
Knew each other but not steady relationship	49.4	1,283	***
Steady relationship/cohabiting/engaged	57.2	4,183	***
Married	11.1	1,060	C

+ Multivariate analysis: logistic regression adjusting for all variables in the table
 *= $p < 0.05$; **= $p < 0.01$; ***= $p < 0.001$; ns=not significant; C=comparison group

Independent age and educational differences were found; the proportions using condoms increased with younger age group and higher educational level.

Participants who had just met/did not know their first partner, those who knew their partner but were not in a relationship and those in a steady relationship with their first partner were more likely to have used a condom at first intercourse than those who were married to their first partner.

Age at first intercourse (before or after 17) was next added to the model. After adjusting for gender, current age, educational level and relationship status at first intercourse, those aged over 17 at sexual initiation were significantly more likely to have used a condom at first intercourse than under-17s ($p < 0.001$).

An additional analysis was carried out to determine the role of social class, controlling for gender, current age and relationship status at first intercourse. Participants in social classes III, IV and V were significantly less likely to have used a condom than those in the highest social class (class I) ($p < 0.05$, $p < 0.05$ and $p < 0.001$ respectively). There were no differences between social classes I and II.

Table 6.2 displays the percentage of men and women who reported using the contraceptive pill, across major socio-demographic variables, along with the results of multivariate analyses. Independent age differences were again confirmed; men and women aged 55-64 were less likely to report using the pill at first intercourse than all younger age groups.

A pattern of greater use of the pill among younger groups was particularly notable among women. Among men, those aged 18-24 and 35-44 were most likely to report use of the pill at first intercourse.

There were no clear educational differences in use of the pill among men. Among women, after controlling for current age and relationship status at first intercourse, those with primary education only were around half as likely to have used the pill at first intercourse as women with lower secondary, higher secondary or third-level education.

Table 6.2: Use of pill at first vaginal intercourse, by socio-demographic factors

	Men			Women		
	Used pill (%)	Base	MV+	Used pill (%)	Base	MV+
All participants	8.3	2,921		17.7	3,906	
Current age (years)						
18-24	12.5	626	***	29.0	733	***
25-34	7.7	661	**	22.7	917	***
35-44	10.3	622	***	18.9	973	***
45-54	7.1	544	**	11.6	724	***
55-64	2.6	468	C	2.5	559	C
Education (highest level attained)						
Primary	4.4	242	C	5.5	283	C
Lower secondary	6.1	508	ns	16.4	600	*
Higher secondary	9.6	1,087	ns	19.4	1,639	*
Third level	11.5	1,084	ns	22.3	1,384	*
Relationship with first sexual partner						
Just met/didn't know each other	4.4	240	**	13.8	46	*
Knew each other but not in steady relationship	5.8	821	***	8.3	462	***
Steady relationship/cohabiting/engaged	10.4	1,575	ns	20.8	2,608	**
Married	8.3	273	C	13.6	787	C

+ Multivariate analysis: logistic regression adjusting for all variables in the table
 *= $p < 0.05$; **= $p < 0.01$; ***= $p < 0.001$; ns=not significant; C=comparison group

After controlling for current age and educational level, men who were married to their first partner were more likely to have used the contraceptive pill at first intercourse than men who knew their first partner but were not in a steady relationship with her and men who had just met/did not know their first partner.

Women who were married to their first partner were more likely to have used the pill at first intercourse than women in a steady relationship with him, women who had known their first partner but were not in a steady relationship with him and women who had just met/did not know their first partner.

Age at first intercourse was added to the models in Table 6.2. Among both men and women, younger age at first intercourse (<17 years) was associated with considerably lower likelihood of using the contraceptive pill at first intercourse than was older age at first intercourse (17+ years).

Additional models examined the influence of social class on use of the contraceptive pill at first intercourse, controlling for current age and relationship status at first intercourse. Among both men and women, there were no significant social-class differences.

The percentage of participants using the withdrawal method at first intercourse is displayed in *Table 6.3*, across major socio-demographic variables. Use of withdrawal was lower among younger age groups. The only significant difference across educational level was that participants with lower secondary education were more likely to have used withdrawal than those with third-level education.

Table 6.3: Use of withdrawal method at first vaginal intercourse, by socio-demographic factors			
	Used withdrawal method (%)	Base	MV+
Gender			
Men	9.0	2,921	ns
Women	7.8	3,906	C
Current age (years)			
18-24	1.9	1,359	***
25-34	4.5	1,578	***
35-44	9.9	1,595	***
45-54	12.8	1,268	**
55-64	13.8	1,027	C
Education (highest level attained)			
Primary	12.1	525	ns
Lower secondary	10.5	1,108	*
Higher secondary	7.2	2,726	ns
Third level	6.3	2,468	C
Relationship with first sexual partner			
Just met/didn't know each other	3.7	286	*
Knew each other but not in steady relationship	9.4	1,283	***
Steady relationship/ cohabiting/engaged	9.6	4,183	***
Married	3.8	1,060	C

+ Multivariate analysis: logistic regression adjusting for all variables in the table
 *= $p < 0.05$; **= $p < 0.01$; ***= $p < 0.001$; ns=not significant; C=comparison group

Participants who were married to their first partner were less likely to have used withdrawal at first intercourse than those who were in a steady relationship, those who knew their partner but were not in a steady relationship and those who had just met/did not know their first partner.

When age at first intercourse was added to the model in *Table 6.3*, no significant differences were found between those who experienced first intercourse before and after age 17.

Finally, an additional analysis examined the influence of social class on use of the withdrawal method at first intercourse. After controlling for gender, current age and relationship status at first intercourse, there were no significant social-class differences.

The major predictor of use of the withdrawal method appears to be age; younger groups are increasingly less likely to have used it. Since a woman can become pregnant when using the withdrawal method,¹⁴² it is a positive finding that use of this method is considerably lower among younger people.

It is estimated that, with correct and careful use of the contraceptive pill over a one-year period, fewer than one in 100 women would become pregnant. With correct and careful use of the condom for one year, the failure rate is estimated at two in 100 women.^{142,143}

6.2.4 Individual factors in contraceptive use at first intercourse

SUMMARY

The previous sections have found a pattern of increasing use of contraceptives at first intercourse among younger people and with more recent year of first intercourse. This section attempts to identify further individual factors associated with contraceptive use and non-use at first vaginal intercourse. It also investigates the role in contraceptive use of learning about sex and discussion about sex with parents.

As in the previous section, contraceptive use among those at risk of unintended pregnancy is investigated. Thus the analyses exclude women who were, and men whose partners were, trying to become pregnant or unable to conceive.

- *Higher educational level is a significant predictor of use of contraception at first intercourse.*
- *Men who had just met/did not know their first partner or who knew their first partner but were not in a steady relationship with her were considerably less likely to have used contraception at first intercourse than men in a steady relationship with their first partner.*
- *Women who knew their partner but were not in a relationship with him were less likely to have used contraception at first intercourse than those in a steady relationship.*
- *Age at first intercourse was significantly associated with use of contraception; both men and women aged under 17 at first intercourse were around half as likely to have used contraception as those aged 17 or older.*
- *Men and women who had received sex education about contraception were more likely than those who did not to report contraceptive use.*
- *Men and women who had found it easy to communicate with their mother and father about sex when growing up were more likely to use contraception at first intercourse than those who did not find it easy.*

THIS section investigates further factors associated with contraceptive use and non-use at first vaginal intercourse. It also examines the role of learning about sex and discussion about sex with parents in contraceptive use.

First, *Table 6.4* shows levels of contraceptive use at first intercourse among men and women at risk of unintended pregnancy, by major socio-demographic variables. The table also indicates the results of multivariate analyses.

Independent age differences identified in the previous section were confirmed in multivariate analysis. The younger age groups were considerably more likely than older groups to have used contraception. For example, after controlling for educational level and relationship status at first intercourse:

- men aged 18-24 were over 11 times more likely and men aged 25-34 over five times more likely to have used contraception at first intercourse than those aged 55-64
- similarly, women aged 18-24 were over 20 times more likely and women aged 25-34 over eight times more likely to have used contraception than 55-64 year-old women

A pattern of greater likelihood of contraceptive use at first intercourse with higher educational level was found:

- compared with men with primary education, those with higher secondary education were twice as likely and men with third-level education nearly three times more likely to have used contraception at first intercourse
- similarly, compared with women with primary education, women with lower secondary education were nearly twice as likely, women with higher secondary education were two and a half times more likely and women with third-level education were three and a half times more likely to have used contraception at first intercourse

The association found between educational level and contraceptive use at first intercourse supports international research, which has found lower likelihood of contraceptive use at first intercourse among people with lower levels of educational attainment and aspiration.^{33,35,43} There are a number of possible explanations for this finding. Lower educational attainment may be directly related to lack of knowledge or understanding about the risk of pregnancy through unprotected sex. On the other hand, researchers have discussed this relationship in terms of attitude towards pregnancy and parenthood, in that those with lower educational attainment, and thus fewer employment opportunities, may view pregnancy more positively since it provides a social role. These possible reasons will be investigated further in section 6.2.7, which explores reasons for not using contraception at first intercourse.

Table 6.4: Use of contraception at first vaginal intercourse among those at risk of unintended pregnancy, by socio-demographic variables

	Men			Women		
	Used contraception (%)	Base	MV+	Used contraception (%)	Base	MV+
All participants	66.7	2,752		74.1	3,522	
Current age (years)						
18-24	87.8	625	***	94.1	730	***
25-34	77.4	654	***	86.0	905	***
35-44	66.6	601	***	73.4	918	***
45-54	50.7	511	*	57.9	614	***
55-64	38.8	361	C	39.8	355	C
Education (highest level attained)						
Primary	42.7	206	C	42.1	207	C
Lower secondary	60.1	471	ns	66.0	506	**
Higher secondary	72.7	1,035	**	78.6	1,497	***
Third level	78.7	1,040	***	85.8	1,312	***
Relationship with first sexual partner						
Just met/did not know each other	53.3	239	***	77.0	45	Ns
Knew each other, not steady relationship	60.3	819	***	70.3	460	***
Steady relationship/cohabiting/engaged	72.6	1,563	ns	77.5	2,587	Ns
Married	61.1	121	C	58.8	427	C

+ Multivariate analysis: logistic regression adjusting for all variables in the table

*= $p < 0.05$; **= $p < 0.01$; ***= $p < 0.001$; ns=not significant; C=comparison group

Interesting differences relating to relationship status were found:

- compared with men married to their first partner, men who had just met/did not know their first partner and men who knew their first partner but were not in a steady relationship with her were considerably less likely to have used contraception at first intercourse
- women who knew their partner but were not in a relationship with him were also less likely to have used contraception at first intercourse than women who were married to their first partner

Among both men and women, after controlling for current age and relationship status at first intercourse, there were no significant differences in contraceptive use between those who had been in a steady relationship with their first partner and those who were married to their first partner. Women who had just met or did not know their partner were not significantly less likely to have used contraception than those who were married, but this may reflect the small participant numbers in this group.

International research has examined differences in contraceptive use between people in casual or steady relationships at first intercourse. For example, being in a steady relationship at first intercourse has been associated with use of contraception at first intercourse among American women¹⁰³ and Northern Irish young people.³¹ Some researchers suggest that these differences reflect communication issues. In support of this theory, research has found that young people were more likely to use contraception at first intercourse if they had discussed contraception before intercourse.^{38,44} Again, these issues are explored further in section 6.2.7, which investigates reasons for not using contraception at first intercourse.

Additional multivariate models examined the relationship between social class and contraceptive use at first intercourse, controlling for current age and relationship status at first intercourse.

When men in the lowest social classes (V/VI) are compared with those in other social classes, only those in the higher and lower professional classes (I and II) were significantly more likely to have used contraception at first intercourse. When women in the lowest social classes (V/VI) are compared with those in all other classes, only the lower professional (II) and administrative/clerical (III) classes were significantly more likely to have used contraception than the lowest social classes (V/VI).

The independent effect of age at sexual initiation and various sex-education variables were next examined. Since it is likely that some of these factors are related to each other, each variable was added separately to the model in *Table 6.4*. Results thus refer to the independent effect of the variable after controlling for current age, educational level and relationship status at first intercourse.

First, after controlling for age, education and relationship status at first intercourse, men ($p < 0.001$) and women ($p < 0.001$) aged under 17 at first intercourse were around half as likely to have used contraception as those aged 17 or above.

A number of studies internationally have also reported a decreased likelihood of using contraception at first intercourse with earlier age at first intercourse.^{31,34,43,44,103} Some researchers discuss this finding in terms of a set of risk behaviours, leading to various negative outcomes. For example, a study of Danish women aged 20-29 found that not using contraception at first intercourse was significantly related to an increased likelihood of never using condoms, of subsequent experience of abortion, and of having over 20 sexual partners.⁴³ However, it is possible that these relationships reflect increased risk of specific outcomes in certain high-risk groups. Section 5.2.5 and section 6.2.8 examine these issues further by investigating relationships between early first intercourse and not using contraception at first intercourse, and subsequent sexual behaviours and outcomes.

After controlling for current age, educational level and relationship status at first intercourse, men ($p < 0.001$) and women ($p < 0.001$) who received sex education about contraception were over one and a half times more likely to report contraceptive use at first intercourse than those who did not receive this education. A number of international studies and reviews have found that sex education can increase contraceptive use among adolescents.^{17,18,20} The ISSHR study supports this finding.

Finally, after controlling for current age, educational level and relationship status at first intercourse:

- men ($p < 0.001$) and women ($p < 0.05$) who said it was easy to communicate with their father about sex were around twice as likely to have used contraception at first intercourse as those who did not find it easy
- men ($p < 0.001$) and women ($p < 0.010$) who reported that it was easy to discuss sexual matters with their mother were over one and a half times more likely to have used contraception at first intercourse than those who did not find it easy

These findings indicate that parent-child communication about sex can influence contraceptive use at first intercourse. A number of studies have linked parent-child communication in general about sex with increased contraceptive use among young people.^{8,44,126} A small number have looked more closely at the mother-daughter relationship; for example, Pick and Palos (1995) found mother-daughter communication about sex to increase the likelihood of contraceptive use and reduce the likelihood of adolescent pregnancy.¹²⁷ Wellings *et al* (1999) also found that women who found it easier to communicate about sex with their parents were less likely to be adolescent mothers.⁵³ In relation to first intercourse specifically, Wellings *et al* (2001) found that young men were more likely to report using contraception at first intercourse if they had discussed sexual matters with parents.³³

However, these findings do not consider what has actually been communicated. While the ISSHR findings indicate that parent-child communication may play an important role, this complex area needs more in-depth research to understand the function of factors such as parental attitudes and values, and how they affect young people's sexual and contraceptive behaviour.

In summary, the major factors associated with use of contraception at first intercourse among both men and women were:

- younger age
- higher educational level
- being in a steady relationship with, or married to, their first partner

Other notable factors were:

- being aged 17 or older at first intercourse
- having received sex education about contraception
- having found it easy to communicate with their mother and father about sex

The following section further investigates differences in contraceptive use across relationship status.

6.2.5 Further investigation of relationship differences

SUMMARY

The effect of relationship type on contraceptive use at first intercourse was further investigated by examining differences across length of relationship and age of partner among 18-29 year-olds. It was decided to focus on this younger cohort only since age differences have been identified across a number of variables. Additionally, experiences of first intercourse among this younger age group are likely to more closely represent the experiences of young people today. As in the previous sections, analyses focused on people at risk of unintended pregnancy (i.e. excluding women who were, and men whose partners were, trying to become pregnant or unable to conceive).

- Men aged 18-29 who never had sex with their first partner again were less likely to have used contraception at first intercourse than men who reported that the relationship continued for a period.
- Among men aged 18-29, those whose first partner was of similar age (+/-2 years older or younger) were most likely to have used contraception.

THIS section further investigates the effect of relationship type on use of contraceptives at first intercourse by examining differences across length of relationship and age of partner among 18-29 year-olds.

In total, 85.3% of men and 92% of women aged 18-29 used contraception at first intercourse ($p < 0.001$). Table 6.5 provides an overview of contraceptive use across different durations of first sexual relationship for men and women aged 18-29.

Significant differences were found among men ($p < 0.001$) but not women. However, among men in particular and among women to a certain extent, those who never had sex with their first partner again were less likely than all other groups to have used contraception at first intercourse. These findings lend some support to those of Henderson et al³⁸ who found that young people were more likely to use contraception at first intercourse if their relationship lasted longer than one month. Among men in particular, contraceptive use was less likely among those whose first relationship lasted for one month or less, and particularly among those who never had sex with their first partner again.

Table 6.5: Use of contraception at first vaginal intercourse among 18-29 year-olds at risk of unintended pregnancy, by duration of first relationship and gender

	Men		Women	
	Used contraception (%)	N	Used contraception (%)	N
Still in a relationship with this partner	94.3	185	92.5	398
More than one year	87.3	182	92.8	348
More than one month but less than one year	89.1	368	93.0	342
One month or less	83.7	123	89.7	89
Never had sex with this partner again	67.9	188	85.6	99

Table 6.6 examines relationship differences further by investigating differences in contraceptive use and age of partner among under-30s. Differences in contraceptive use according to age of partner were again significant for men ($p < 0.001$) but not for women.

Table 6.6: Use of contraception at first vaginal intercourse among 18-29 year-olds at risk of unintended pregnancy, by partner age and gender

	Men		Women	
	Used contraception (%)	N	Used contraception (%)	N
Partner was >5 years younger	-	0	100	1
Partner was 3-5 years younger	56.0	10	100	3
Partner was same age +/-2 years	87.7	916	92.8	899
Partner was 3-5 years older	72.8	83	91.7	247
Partner was >5 years older	67.4	33	86.0	118

Interestingly, very few men or women aged 18-29 reported a first partner who was more than two years younger; thus, few conclusions can be drawn about this group.

Men the same age +/-2 years as their partner were considerably more likely to have used contraception than men whose first partner was more than two years older. Relatively few men in this age group experienced first intercourse with a partner who was more than two years older.

Among women, there were few clear patterns, although women whose partner was more than five years older reported slightly less contraceptive use at first intercourse.

The next section examines the situation or context in which first intercourse occurs since these may further determine use or non-use of contraception.

6.2.6 Situational and contextual factors in contraceptive use at first intercourse

SUMMARY

In this section, major situational and contextual factors in contraceptive use at first intercourse are investigated among 18-29 year-olds. As in the previous section, analyses focused on this younger cohort since significant situational and contextual differences have been identified across age groups (see section 4.2.4) and this younger group is most likely to represent the experiences of young people today. (Again, use of contraception at first intercourse is investigated among those at risk of unintended pregnancy; i.e. women who were, and men whose partners were, trying to become pregnant or unable to conceive were excluded).

- *Fewer men and women aged 18-29 who said first intercourse happened on the spur of the moment used contraception (77.7% and 84.7% respectively) than men and women who had expected first intercourse to happen soon or at that time (94.8% and 97.5% respectively).*
- *Among 18-29 year-old men, those who said that they and their partner were equally willing to have sex were more likely to have used contraception at first intercourse (86.5%), compared with those more willing (75.8%) or less willing (72.3%) than their partner.*
- *Among 18-29 year-old women, those who said they and their partner had been equally willing were more likely to have used contraception at first intercourse (94.1%) than those who said their partner was more willing (81.4%).*
- *Men aged 18-29 who said they should have waited longer before having sex with anyone were considerably less likely to have used contraception (72.2%) than those who said they should not have waited so long (84.4%) or that it happened at about the right time (88%).*
- *Women aged 18-29 who said their first intercourse happened at about the right time were more likely to have used contraception (95%) than those who said they should have waited longer (84.4%) or should not have waited so long (80.3%).*
- *For both men and women aged 18-29, an increased likelihood of using contraception at first intercourse was associated with agreement that: intercourse seemed like a natural follow-on in the relationship, they were in love and they felt ready/it was the right time.*
- *Men and women aged 18-29 who said they or their partner had been drinking or taking drugs were significantly less likely, than those who did not, to have used contraception.*

THIS section investigates major situational and contextual factors in contraceptive use at first intercourse among people aged 18-29.

In relation to planning for first intercourse, significantly fewer men ($p<0.001$) and women ($p<0.001$) who reported that their first intercourse happened on the spur of the moment used contraception (77.7% and 84.7% respectively), compared with men and women who had expected first intercourse to happen soon or at that time (94.8% and 97.5% respectively) – as shown in Table 6.7.

Research internationally and in Ireland has found that young people commonly cite unplanned sex/spontaneity of sex as a reason for not using contraception at first intercourse²⁷ and in intercourse generally.^{23,24} The ISSHR findings support this finding.

Significant differences in contraceptive use according to the sexual willingness of partners were identified for men ($p < 0.05$) and women ($p < 0.001$) aged 18-29 (Table 6.7). Among men, those who reported that they and their partner had been equally willing to have sex on their first occasion were more likely to have used contraception (86.5%), compared with those who were more willing (75.8%) or less willing (72.3%). However, few men reported being more (N=24) or less (N=51) willing than their partner, so these findings should be interpreted with caution.

While women who said they had been more willing than their partner were most likely to have used contraception (100%), the small participant numbers in this group (N=9) make this finding unreliable. More women who reported equal willingness used contraception (94.1%) than those who said their partner had been more willing (81.4%).

Table 6.7: Use of contraception at first vaginal intercourse among 18-29 year-olds at risk of unintended pregnancy, by planning, coercion and regret, and by gender

	Men		Women	
	Used contraception (%)	Base	Used contraception (%)	Base
Planning				
Happened on the 'spur of the moment'	77.7	579	84.7	507
Expected it to happen soon or at that time	94.8	460	97.5	763
Willingness				
Both equally willing	86.5	965	94.1	1,127
Respondent more willing	75.8	24	100	9
Partner more willing	72.3	51	81.4	136
Regret				
Should have waited longer	72.2	168	84.4	305
Should not have waited so long	84.4	21	80.3	15
It was about the right time	88.0	852	95.0	947

There were significant relationships between contraceptive use and regret concerning first intercourse among both men ($p < 0.01$) and women ($p < 0.001$) (Table 6.7).

Men who said they should have waited longer before having sex with anyone were considerably less likely to have used contraception (72.2%) than those who said they should not have waited so long (84.4%) or that it happened at about the right time (88%).

Among women, those who said their first intercourse happened at about the right time were more likely to have used contraception (95%) than those who said they should have waited longer (84.4%) or should not have waited so long (80.3%).

Interestingly, very few men (N=21) or women (N=15) in this age group felt they should not have waited so long before first intercourse. Because of this, few conclusions can be drawn about levels of contraceptive use among this group.

A number of statements concerning contexts that are sometimes associated with first intercourse were included in the interview. Participants were asked whether or not each statement applied to their first experience of intercourse ('yes', 'no' or 'don't know'). Those who responded 'don't know' were excluded.

Table 6.8 shows differences in contraceptive use among 18-29 year-olds according to whether the statements did or did not apply to their first experience of intercourse. Both men and women were significantly more likely to have used contraception at first intercourse if they agreed that:

- intercourse seemed like a natural follow-on in the relationship
- they were in love
- they felt ready/it was the right time

On the other hand, men and women who said they or their partner had been drinking or taking illicit drugs were significantly less likely, than those who did not, to have used contraception.

Women who agreed that they had been carried away by their feelings or that most people of the same age had seemed to be doing it were significantly less likely to have used contraception than those who did not agree.

Table 6.8: Participants aged 18-29 at risk of unintended pregnancy who used contraception at first vaginal intercourse, by agreement with statements

	Used contraception (%)					
	Men			Women		
	Yes	No		Yes	No	
Curious about what it would be like	86.2	75.4	ns	93.1	80.6	***
Carried away by feelings	84.0	87.3	ns	90.0	94.5	*
Most people of same age seemed to be doing it	85.9	87.0	ns	89.3	95.0	**
Seemed like a natural 'follow-on' in the relationship	88.5	72.3	***	94.0	81.1	***
Self or partner had been drinking or taking drugs	77.7	90.5	***	83.1	94.4	***
Wanted to lose virginity	86.0	86.4	ns	92.3	91.6	ns
In love	90.8	79.8	***	95.2	85.4	***
To please partner	88.4	80.6	**	91.6	92.4	ns
Felt ready, that it was the right time	90.1	63.2	***	94.2	74.2	***

+ Multivariate analysis: logistic regression adjusting for all variables in the table
 *= $p<0.05$; **= $p<0.01$; ***= $p<0.001$; ns=not significant; C=comparison group

These context statements have been used in other studies in a different format. These studies asked participants which was the main reason for having sex on the first occasion. Schubotz *et al* (2002) found that people who said the main reason for first intercourse was that it was a 'natural follow-on in the relationship' or that they were in love were most likely to have used contraception.³¹ The British Natsal 2000 study found that men and women aged 16-24 whose first intercourse occurred at 18-24 were less likely to report peer pressure as the main reason for first intercourse than those whose first intercourse occurred at younger ages. However, there were no differences across different ages at first intercourse in reporting that being drunk was the main reason.³³

Research into the relationship between alcohol and contraceptive use has come up with conflicting findings. While Wellings *et al* (2001) did not find a relationship, a meta-analysis of research into alcohol and condom use did find that adolescents were less likely to use a condom at first intercourse if they had been drinking alcohol.^{33,129} Dermen *et al* (1998) found that risky sexual behaviour at first intercourse – such as not using condoms, no discussion before intercourse about risks and relationship status – was associated with drinking alcohol at first intercourse.¹³⁰

ISSHR found that contraceptive use was significantly less likely among men and women who said they or their partner had been drinking or taking drugs at first intercourse. However, while this finding suggests a link between the two, the precise influence of alcohol on contraceptive use cannot be determined. The relationship between alcohol and contraceptive use may reflect a third variable that influences both drinking alcohol and using contraception. The role of alcohol is examined further in the following section, which looks at reasons given for not using contraception.

6.2.7 Reasons for not using contraception

SUMMARY

Participants who did not use contraception at first intercourse were asked to explain why they had not done so, to avoid pregnancy. They were prompted for all reasons and their open-ended responses were re-coded to a number of categories. Those who specified that they had not used contraception because they or their partner were trying to become pregnant or did not mind becoming pregnant were excluded from the following analyses, as were the small number of participants (N=7) who did not use contraception due to infertility, hysterectomy or because they were post-menopausal.

- *Of all participants who had not used contraception at first intercourse, 15.8% of men and 30.4% of women said they had not done so because they or their partner were trying to become pregnant or did not mind becoming pregnant.*
- *The most common reason for non-use among men (31.3%) and women (23.6%) who did not wish for pregnancy was that no contraception was available. Older men and women were more likely to give this reason.*
- *Unplanned/unexpected sex was the second most common reason given by men (17.3%) and women (18.9%), and was more likely among under-45 year-olds.*
- *There were significant age differences for citing alcohol/drug use; considerably more under-30s gave this reason.*

THIS section investigates the reasons that participants who were not, or whose partners were not, trying to become pregnant or did not mind becoming pregnant gave for not using contraception at first intercourse.

Since individual experiences of first intercourse vary widely, participants gave many different reasons for non-use. Some declined to specify a reason and some could not remember any reason. After re-coding, only those reasons given by more than 1% of non-users are included in the following analyses.

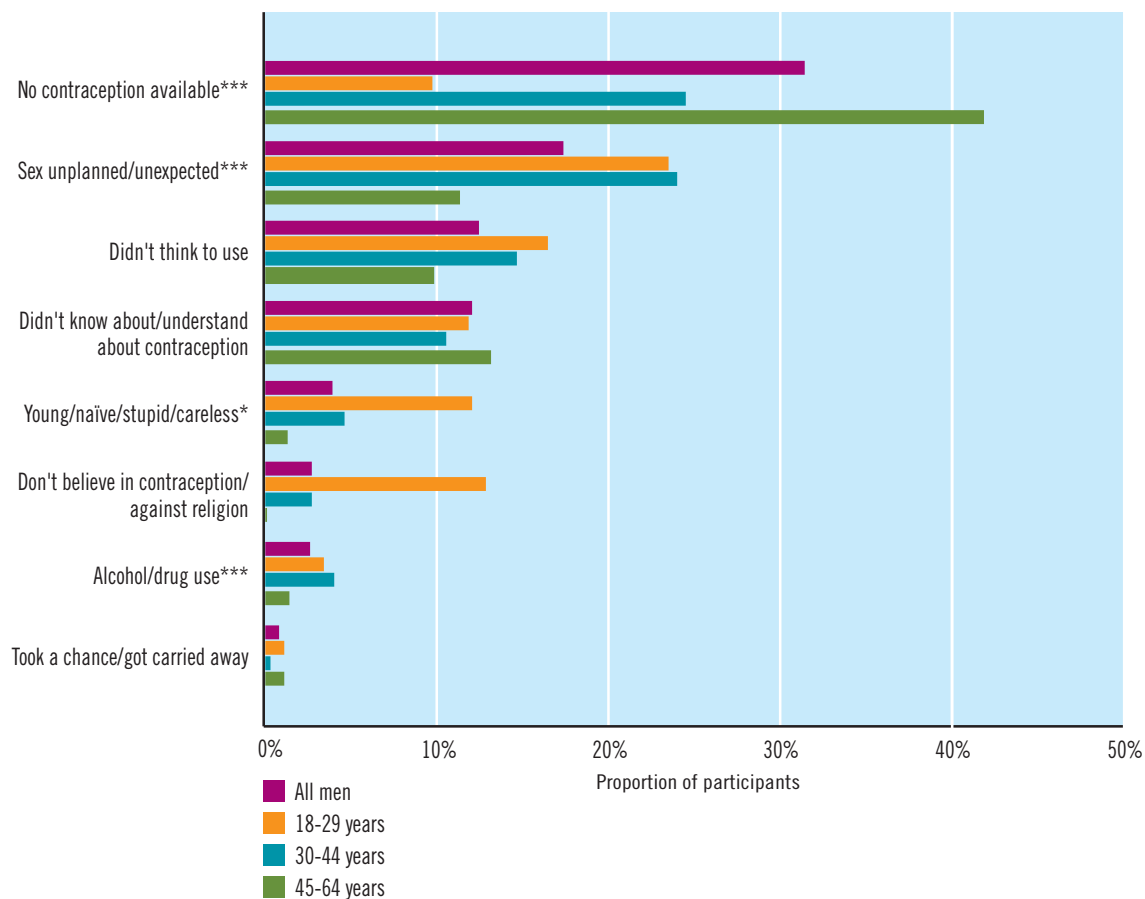
Figure 6.10 provides an overview of the main reasons for not using contraception at first intercourse given by men whose partners were at risk of unintended pregnancy, by current age.

The most common reason that men gave for not using contraception was that none was available. However, there were significant differences across age groups; a high number of 45-64 year-olds gave this reason, but it was cited less commonly by men aged 18-29.

Unplanned/unexpected sex was the second most common reason given by all men. Again, there were significant age differences; this reason was more commonly cited by men under 45.

There were also significant age differences for citing alcohol/drug use and being young/naïve/stupid/careless. Considerably more men aged 18-29 gave these reasons than did older men.

Figure 6.10: Men’s reasons for not using contraception at first intercourse, by current age (N=827)

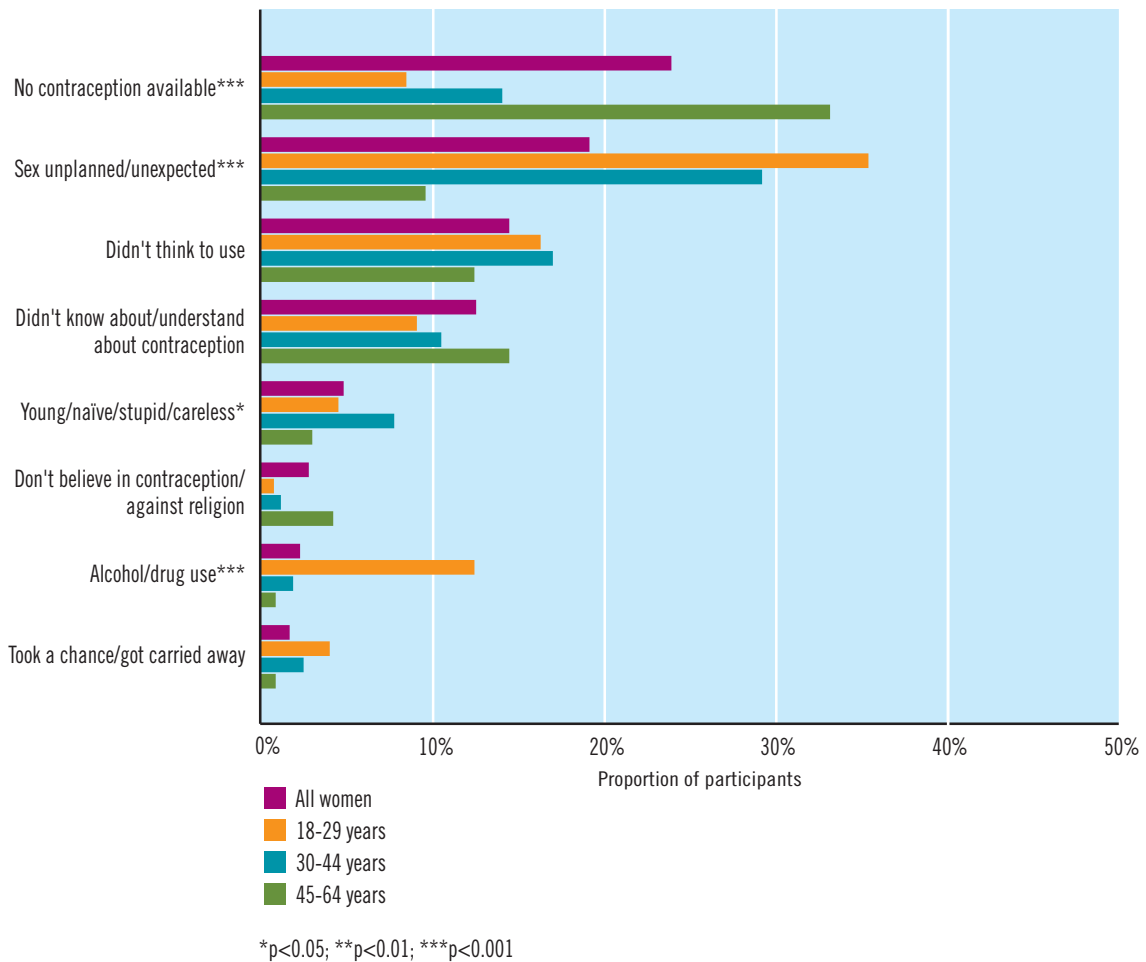


*p<0.05; **p<0.01; ***p<0.001

Figure 6.11 shows the reasons for not using contraception at first intercourse given by women who were at risk of unintended pregnancy. As among men, the reason most commonly given was that no contraception was available. Again, there were significant age-group differences; considerably more older women gave this reason.

There were also significant age-group differences in reporting that non-use was because sex was unplanned/unexpected and because of alcohol/drug use. A greater proportion of younger women cited these reasons.

Figure 6.11: Women’s reasons for not using contraception at first intercourse, by current age (N=790)



In summary, the major issue for older men and women who did not use contraception at first intercourse appears to be that contraception was not available. There is evidence that not having thought about or known about contraception and unplanned/unexpected sex were also a problem for older people. However, of greater concern is the fact that:

- among people aged 18-29, unplanned or unexpected sex is the most common reason given for not using contraception

This younger age group also cited as common reasons:

- not having thought to use contraception
- not knowing about/understanding about contraception
- alcohol/drug use

Younger men also cited being young/naïve/stupid/careless.

Next, analyses were carried out to investigate socio-demographic and sex-education determinants of the two most common reasons for not using contraception at first intercourse (other common reasons were not investigated further due to small participant numbers). This enabled more accurate identification of the role of risk factors found in previous sections. All participants who had experience of vaginal intercourse were included in the analyses in order to determine non-use of contraception at first intercourse due to specific factors across the whole population.

First, *Table 6.9* displays the proportions of participants who reported not using contraception at first intercourse because no contraception was available, by socio-demographic variables. There were significant gender differences; 9.7% of men and 5.4% of women reported non-use because no contraception was available ($p < 0.001$).

Table 6.9: Non-use of contraception at first intercourse because no contraception was available, by socio-demographic factors¹

	Men			Women		
	(%)	Base	MV+	(%)	Base	MV+
All participants	9.7	2,957		5.4	3,982	
Current age (years)						
18-29 years	1.4	1,067	C	0.6	1,303	C
30-44 years	7.3	866	***	3.2	1,362	**
45-64 years	19.3	1,024	***	11.7	1,317	***
Education (highest level attained)						
Primary	16.4	242	ns	11.3	291	*
Lower secondary	10.5	514	ns	7.5	617	ns
Higher secondary	8.3	1,101	ns	4.0	1,666	ns
Third level	6.5	1,100	C	2.8	1,408	C
Relationship with first sexual partner						
Just met/didn't know each other	12.3	243	***	5.2	52	ns
Knew each other but not in steady relationship	11.6	833	***	5.8	476	***
Steady relationship/cohabiting/engaged	9.3	1,583	***	5.7	2,633	***
Married	4.2	278	C	4.3	804	C

¹All participants aged 18-64 with experience of vaginal intercourse
+ Multivariate analysis: logistic regression adjusting for all variables in the table
*= $p<0.05$; **= $p<0.01$; ***= $p<0.001$; ns=not significant; C=comparison group

After controlling for educational level and relationship status at first intercourse, an independent age effect was confirmed; the likelihood of non-use due to contraception not being available increased with age. For example:

- compared with 18-29 year-old men, 45-64 year-olds were nearly 24 times more likely and 30-44 year-old men were six and a half times more likely to report non-use due to lack of availability
- compared with women aged 18-29, those aged 45-64 were almost 30 times more likely and women aged 30-44 were over five times more likely to report non-use due to lack of availability

There were no educational differences among men; among women, only those with primary education were significantly more likely (twice as likely) to report not using contraception at first intercourse due to lack of availability.

After adjusting for current age and educational level, there were significant relationship-status differences:

- compared with married men, men who had just met/did not know their first partner were nearly 10 times more likely, men who had known their first partner but were not in a relationship with her were over seven times more likely, and men in a steady relationship were five times more likely to report non-use of contraception due to lack of availability
- compared with married women, women who had known their first partner but were not in a relationship with him were over six times more likely, and women in a steady relationship with their first partner were nearly four times more likely to report non-use of contraception due to lack of availability

Women who were married to their first partner did not differ significantly from women who had just met/did not know their first partner, but this may be due to small participant numbers in the latter group.

Because of the relationship between educational level and social class, separate models investigated the role of social class in determining non-use of contraception at first intercourse due to no contraception being available.

After controlling for current age and relationship status at first intercourse, the only significant class differences among men were that those in the skilled manual class (class IV) were significantly more likely than those in the higher professional ($p < 0.05$) and lower professional ($p < 0.05$) classes (classes I and II) to report non-use due to unavailability.

Among women, the only significant differences were that those in the lowest social classes (classes V and VI) were around twice as likely to report non-use due to unavailability as those in the lower professional ($p < 0.05$) and administrative/clerical ($p < 0.01$) classes (classes II and III).

The role of age at first intercourse was examined next, by adding the variable to the models in *Table 6.9*. After controlling for current age, educational level and relationship status at first intercourse, men who experienced first intercourse before 17 were twice as likely, as those who experienced it when 17 or later, to report non-use due to unavailability ($p < 0.001$). No effect was found for women.

Next, sex-education variables were examined, by adding them to the models in *Table 6.9*. Because of the possible relationships between these variables, each was added individually. After controlling for current age, educational level and relationship status at first intercourse, women who had received sex education about contraception were around half as likely to report non-use due to no availability of contraception as those who had not received it ($p < 0.01$). Among men, there were no significant differences between those who did and did not receive education about contraception.

After controlling for current age, educational level and relationship status at first intercourse, women who reported that it was easy to communicate with their mother about sex were around half as likely to report non-use due to unavailability as women who did not find it easy ($p < 0.05$). There were no significant differences among men reporting ease or lack of ease.

Finally, after controlling for the same factors, ease of communication with their father about sexual matters was not related to non-use due to unavailability, for men or women.

The second most common reason that non-users gave for not using contraception at first intercourse was that sex had been unplanned or unexpected. This was further investigated to determine influencing factors. *Table 6.10* shows levels of non-use due to unplanned or unexpected sex, as a percentage of all participants who had experience of vaginal intercourse, and results of multivariate analysis. While there were no significant gender differences, men and women are examined separately to check for possible gender differences across socio-demographic variables.

After controlling for educational level and relationship status at first intercourse, there were significant age-group differences:

- compared with men aged 18-29, those aged 30-64 were around twice as likely to report not using contraception because sex was unplanned/unexpected
- women aged 30-64 were around three times more likely than women aged 18-29 to say they had not used contraception because sex was unplanned/unexpected

Among men, the only significant difference across educational groups was that those with lower secondary education were over twice as likely as those with third-level education to say they had not used contraception because sex was unplanned/unexpected. There were no educational differences among women.

After controlling for current age and educational level, there were large differences across relationship status at first intercourse.

Compared with men who were married at first intercourse:

- men who had just met/did not know their partner were 26 times more likely
- those who knew their partner but were not in a steady relationship with her were over 11 times more likely
- men in a steady relationship at first intercourse were eight times more likely

to report not using contraception due to unplanned/unexpected sex.

Compared with women who were married at first intercourse:

- women who had just met/did not know their partner were 54 times more likely
- women who knew their partner but were not in a steady relationship with him were over 55 times more likely
- women in a steady relationship at first intercourse were over 26 times more likely

to report not using contraception due to unplanned/unexpected sex.

Table 6.10: Non-use of contraception because sex was unplanned/unexpected, by socio-demographic and relationship factors ¹						
	Men			Women		
	(%)	Base	MV+	(%)	Base	MV+
All participants	5.4	2,957		4.3	3,982	
Current age (years)						
18-29 years	3.4	1,067	C	2.6	1,303	C
30-44 years	7.2	866	**	6.6	1,362	***
45-64 years	5.2	1,024	*	3.4	1,317	**
Education (highest level attained)						
Primary	5.7	242	ns	3.9	291	ns
Lower secondary	7.8	514	**	4.4	617	ns
Higher secondary	4.9	1,101	ns	4.6	1,666	ns
Third level	3.2	1,100	C	3.7	1,408	C
Relationship with first sexual partner						
Just met/didn't know each other	12.9	243	***	7.3	52	***
Knew each other but not in steady relationship	6.3	833	**	8.3	476	***
Steady relationship/cohabiting/engaged	4.7	1,583	*	4.8	2,633	***
Married	0.7	278	C	0.2	804	C

¹All participants aged 18-64 with experience of vaginal intercourse
+ Multivariate analysis: logistic regression adjusting for all variables in the table
*=p<0.05; **=p<0.01; ***=p<0.001; ns=not significant; C=comparison group

Because of the relationship between educational level and social class, the latter was examined in separate models, controlling for current age and relationship with first sexual partner.

Compared with men in the highest social class (class I), men in social classes II (p<0.05) and III (p<0.05) were around twice as likely to report not using contraception due to unplanned/unexpected sex. There were no significant differences between men in the highest class and those in the lowest classes (classes IV to VI).

After controlling for current age and relationship status at first intercourse, only women in the skilled manual class (class IV) differed significantly from women in the highest class (class I). Women in the highest class were around four times more likely than women in the skilled-manual class to report non-use due to unplanned/unexpected sex (p<0.05).

Age at first intercourse was next added to the models in *Table 6.10*. After controlling for current age, educational level and relationship status at first intercourse, among both men and women there were no significant differences in reporting non-use due to unplanned/unexpected sex between those who experienced first intercourse before or after age 17.

Next, sex-education and parent-child communication variables were examined, again by adding them to the models in *Table 6.10*. Because of the possible relationships between these variables, each was added individually. After controlling for current age, educational level and relationship status at first intercourse, among both men and women there were no significant differences in reporting not using contraception due to unplanned/unexpected sex between those who did and did not receive sex education about contraception.

After controlling for current age, educational level and relationship status at first intercourse, women who found it easy to communicate with their mother about sexual matters were around half as likely to report non-use due to unplanned or unexpected sex as women who did not find it easy ($p < 0.01$). There were no significant differences between women who did or did not find it easy to discuss sexual matters with their father.

There were no significant differences among men who did and did not find it easy to communicate with their mother about sex, but men who found it easy to communicate with their father were less likely to report not using contraception due to unplanned/unexpected sex than those who did not find it easy ($p < 0.05$).

This chapter has identified a number of determinants of non-use of contraception, as well as situational or contextual factors that contribute to non-use. The final results sub-section looks at the relationship between contraceptive use at first intercourse and adult use of contraceptives.

6.2.8 Contraceptive use at first intercourse as a determinant of adult contraceptive use

SUMMARY

All participants with experience of vaginal intercourse were asked if they had used contraception or protection at their most recent vaginal intercourse. Those who said they had not were asked why they had not used contraception specifically to avoid pregnancy. Those who reported not using contraception because they or their partner were pregnant, trying to become pregnant, infertile or sterilised were excluded from the following analysis.

Contraceptive use at first intercourse as a determinant of adult contraceptive use (at most recent intercourse) was then investigated among 18-29 year-olds, using multivariate analysis.

- *Men and women aged 18-29 who used contraception at first vaginal intercourse were over two times more likely, than those who did not, to report contraceptive use at most recent vaginal intercourse.*

THIS section investigates the relationship between people's use of contraceptives at first intercourse and their continued use of contraception subsequently.

After excluding people not at risk of unintended pregnancy, 92.4% of men and 92.1% of women aged 18-29 reported contraceptive use at most recent intercourse.

Adjusting for current age, educational level, current relationship status and age at first sex, use of contraception at first intercourse was independently associated with use of contraception at most recent intercourse:

- men and women aged 18-29 who used contraception at first vaginal intercourse were over two times more likely than those who did not to report contraceptive use at most recent vaginal intercourse

6.3 Summary

THIS chapter has investigated in detail contraceptive use at first intercourse.

Of all participants with experience of intercourse, 62.7% of men and 66.5% of women used contraception at first intercourse.

Contraceptive use at first vaginal intercourse was notably higher in younger current age groups:

- 25.8% of men and 19.4% of women currently aged 60-64 had used contraception at first intercourse compared to 87.5% of men and 93.6% of women aged 18-24

There was also a notably higher rate of contraceptive use with more recent year of first intercourse.

Use of contraception by people at risk of unintended pregnancy (i.e. excluding people who were, or whose partner was, trying to become pregnant) was also examined. In total:

- 66.7% of men and 74.1% of women at risk of unintended pregnancy used contraception at first intercourse

Women were thus significantly more likely to report contraceptive use.

Again, contraceptive use at first intercourse was considerably higher among younger people and those reporting a more recent year of first intercourse:

- most men (87.8%) and women (94.1%) aged 18-24 at risk of unintended pregnancy used contraception at first intercourse

This positive finding has also been found in studies worldwide. It is likely to reflect changes in contraceptive availability and awareness (these issues were identified by older participants in particular as reasons for not using contraception at first intercourse), as well as the changing context of first intercourse.

These issues were examined further by looking at contraceptive methods used at first intercourse. The condom was the most common method, followed by the contraceptive pill and withdrawal. Few participants used the safe period (1.2%) and emergency contraception (0.2%).

The striking increase in condom use with more recent year of first intercourse and among younger participants, from 7.8% of men and 4.8% of women currently aged 60-64 to 82.4% of men and 88.9% of women currently aged 18-24, probably reflects to a large extent the increasing availability of condoms in Ireland.

Use of the contraceptive pill has also increased steadily among women, which again reflects increased availability. Reported use of the withdrawal method at first intercourse has declined to around 2% of men and women aged 18-24.

The increased use of both contraception and protection from STIs is a positive trend.

- Condom use was increasingly likely with higher educational level.
- People in a steady relationship with their first partner were more likely to have used a condom than those who had just met/did not know their first partner, those who knew their partner but were not in a relationship with them, and those who were married to their first partner.
- Being aged 17 or older at first intercourse was also associated with increased likelihood of condom use.

These findings offer some indication of higher-risk groups. While it is possible that people in these groups used other forms of contraception, barrier methods also protect against STIs. It is a matter of concern that people who were not in a relationship with their first partner (i.e. they had just met or known but not been in a relationship with them) were less likely to use a condom than those who were in a steady relationship.

This finding was extended by examining the determinants of using contraception at first intercourse among those at risk of unintended pregnancy. Those who were more likely to report using contraception included:

- people in a steady relationship, compared with those who were not in a relationship or who were married
- those with higher levels of education
- people aged 17 or older at first intercourse
- those who had received sex education about contraception
- men who had found it easy to communicate with their father about sex
- women who had found it easy to communicate with their mother

Thus, risk factors for non-use of contraception at first intercourse were:

- lower educational level
- casual relationship status
- earlier sexual initiation
- not having received sex education about contraception
- difficulty in communicating about sex with parents (father/son and mother/daughter)

Next, contextual aspects of first intercourse – willingness, regret and coercion – were considered among 18-29 year-olds.

- Fewer of those whose first intercourse happened on the spur of the moment used contraception than those who had expected first intercourse to happen soon or at that time.
- Men and women who said their first intercourse happened at about the right time were more likely to have used contraception than those who had regrets about the timing.
- For both men and women aged 18-29, agreement that intercourse seemed like a natural follow-on in the relationship, that they were in love and that they felt ready/it was the right time was associated with significantly greater likelihood of using contraception.
- Men and women aged 18-29 who said they or their partner had been drinking or taking illicit drugs were significantly less likely (than those who did not) to have used contraception.
- Women who agreed that they had been carried away by their feelings or that most people of the same age had seemed to be doing it were significantly less likely (than those who did not) to have used contraception.

These contextual factors provide further insight into the experience of first intercourse among participants aged 18-29. It seems that planning and intimacy (being in love, a natural follow-on in the relationship, etc) at first intercourse can increase the likelihood that contraception is used. On the other hand, drinking alcohol or using drugs are associated with decreased use of contraceptives.

Additional information was gained from looking at the reasons that non-users gave for not using contraception. The major reason among older men and women appears to be that contraception was not available. However, the most common reason for non-use among the under-30s was that sex had been unplanned or unexpected – which is a matter of concern. This younger group also commonly cite: not having thought to use contraception, not knowing about/understanding about contraception and alcohol/drug use, while men also cite being young/naïve/stupid/careless.

Interestingly, use of contraception at first intercourse was independently associated with use of contraception at most recent intercourse. Men and women aged 18-29 who had used contraception at first intercourse were more likely to have used contraception at their most recent intercourse. (It is not possible to ascertain from the present study if this association represents a pattern of risk among non-users of contraception, which begins with non-use at sexual initiation.)

The ISSHR study supports international research in finding that contraceptive use at first intercourse has increased steadily with younger age and more recent year of first intercourse. This has been discussed in relation to changes that have occurred in context and relationship status at first intercourse. Similarly, choices of contraceptive methods have changed over time for many reasons, including the introduction and increased availability and acceptability of new methods, as well as the additional demands made of contraception (e.g. dual protection from STIs and pregnancy). Thus changes in use of contraceptive methods over recent decades must also be viewed within the context of the social changes that have taken place over this period.

Conclusions and recommendations

THE final chapter gathers together the findings of this report to draw conclusions about the education of young people about sex and their first sexual experiences. Given the dramatic changes in sexual practices across cohorts seen in ISSHR, it is clear that policy-makers and service providers need to focus on today's young people, including adolescents, to determine what they need and how to best support them. Since the findings have been summarised in the final section of each chapter, this chapter focuses on issues identified throughout the report and draws on the material to recommend possible policy responses.

7.1 Early first sexual experiences and sexual competence

THIS study found a median age at first vaginal intercourse of 18 for men and 19 for women (currently aged 18-64). The percentage experiencing first intercourse before the legal age of consent (17) is notably higher in younger groups. Just 11% of men and 2% of women aged 55-64 experienced first intercourse before 17, compared to 31% of men and 22% of women aged 18-24.

Apart from the legal issue, the relationship between early sexual initiation and poor sexual-health outcomes both at the time and later in life is a matter of concern. For example, among 18-29 year-olds, men and women who had first intercourse before 17 were:

- less likely to have used contraception and less likely to have used a condom
- more likely to experience regret ('should have waited longer' before first sex)

In addition, women whose sexual initiation occurred before 17 were:

- more likely to report that their partner was more willing and less likely to report equal willingness to have sex at the time
- less likely to have planned intercourse (i.e. it occurred 'on the spur of the moment')

As well, relationship differences were found. First intercourse before age 17 was significantly more likely to occur outside a steady relationship, and more likely to have been with a partner with whom a person did not have sex again. Men and women who experienced first intercourse before 17 were significantly less likely to agree that: they had been in love, it seemed like a natural follow-on in the relationship, and they felt ready/it was the right time. Women whose initiation occurred before 17 were more likely to say they had been carried away by their feelings.

Additionally, earlier sexual initiation was related to subsequent sexual behaviour and health outcomes in later life. Among 18-29 year-olds, being under 17 at first intercourse was significantly related to:

- experience of multiple partners in the previous year
- experience of an STI
- experience of crisis pregnancy and abortion, among women

International research has found that structured sex-education programmes can increase age at sexual initiation. However, the negative outcomes from early sex appear to arise more from lack of sexual competence than from age *per se*. Encouraging young people to wait until a later age and giving them the confidence to do so may thus be one answer to improving outcomes. However, investment in sex education may also be beneficial. Some sex-education programmes internationally have begun teaching interpersonal skills, such as negotiation and assertiveness, to provide adolescents with the skills to avoid unwanted sexual interactions and to secure the use of contraception. Evidence is growing internationally that programmes teaching such skills may be more effective in delaying sexual initiation and increasing contraceptive use.

Relationships and Sexuality Education (RSE) is now mandatory in Irish schools. It includes, in the guidelines, information on both negotiation in sexual partnerships and the use of contraception and protection. However, it is clear that programme delivery – in terms of providing the courses in schools and delivering the course content – is not universal.

The ISSHR study found huge public support for providing sex education; the vast majority of men and women believe that young people should receive formal sex education and that it should be provided at school. Further support for the value of sex education is given by the findings that both men and women who had received sex education, including about contraception, were more likely to use contraception at first intercourse. Women who received sex education which covered the themes of sexual feelings, relationships and emotions were less likely to have had their first sexual experience in a casual (compared to committed) relationship than those who had not received this education.

The combination of the above evidence with that in international studies shows that it is now essential that RSE programmes be fully implemented, that they include course content to promote the formation of positive sexual identities and healthy sexual relationships, and that they be evaluated to assess delivery and ensure further development on the basis of experience.

RECOMMENDATION: A holistic programme of relationships and sexuality education needs to be fully implemented as appropriate in all schools nationally. The capability of these programmes to increase aspects of sexual competence should be evaluated and augmented where necessary.

The ISSHR study also shows that men and women with lower educational levels were more likely to experience sexual initiation at earlier ages, less likely to have used contraception and less likely to use a condom. Since these groups are already disadvantaged in various dimensions of their lives, their greater exposure to negative outcomes through sexual behaviour is a major concern.

The reasons for this differential across education is not entirely clear, although those with lower levels of education were less likely to have received sex education. Research in other countries has suggested that disadvantaged young people tend to be more fatalistic about their behaviours and do not protect themselves against risks because they perceive that they have fewer future opportunities to protect than young people who come from more advantaged backgrounds. It is difficult to test such hypotheses in the context of a large-scale, general social survey such as ISSHR. There is a need for more, in-depth Irish research in this area.

It is clear that RSE should be tailored to the needs of young people from disadvantaged backgrounds and those who are likely to leave school before upper secondary education. However, as suggested by research elsewhere, the primary reason why disadvantaged young people do not protect themselves may be lack of perceived opportunities. In that case, a truly effective response must include a more structural change, such as an increase in the proportion of young people getting higher levels of education, along with increased social mobility. These actions are not mutually exclusive; the goal to achieve is a combination of targeted and improved sex education plus a changed opportunity structure. Such structural changes are difficult to bring about and require long-term public and government commitment to change that may be costly for advantaged groups (in terms of increased taxes and more competition between social groups). They also require strong cooperation between relevant agencies.

RECOMMENDATION: Sex education needs to be tailored to the needs of all groups, and to those of disadvantaged groups in particular.

RECOMMENDATION: More generally, health and education policy-makers need to work with the wider policy community and government to improve both the educational attainment and perceived opportunities of disadvantaged groups.

7.2 The role of parents in sex education

THE ISSHR study found that sex education at home was still uncommon among men – received by just 21% of 18-24 year-olds – and relatively uncommon among women: received by 38% of 18-24 year-olds.

While sex education at home increases with younger age, it is clear that many Irish men and women are not receiving it. This issue is compounded by the difficulty experienced in discussing sexual matters with parents. Ease in parent-child discussion about sex increases among younger men and women but, even among 18-24 year-olds, nearly two-thirds of men and almost half of women did not find it easy to talk to their mother about sex. Even fewer men (28%) and women (15%) found it easy to talk to their father about sex.

The fact that people of lower educational level were less likely to have received sex education at home revealed a further risk category. In particular, men with lower levels of education experienced difficulty with parent-child discussions about sex.

School plays an important part in educating young people about sex. The vast majority of men and women thought that young people should receive school-based sex education. However, most (68%-74% of men and 79%-83% of women) also thought young people should receive sex education at home. Numerous studies have discussed the role of parents in educating their children about sex. While this study did not find a relationship between age of sexual initiation and ease of parent-child discussion, use of contraception at first intercourse was associated with parent-child discussion. Specifically, men were more likely to have used contraception at first intercourse if they had found it easy to communicate with their father about sex and women were more likely to do so if they had found it easy to communicate with their mother.

These results indicate that parents can play an important part in the sex education of their children. However, the evidence is that sex education was not provided at home for many, including even the youngest age group (aged 18-24). Current practice – education by parents of children now aged 10-17 – is unknown. Since so many aspects of Irish society are changing rapidly, it cannot be assumed that current parents are behaving in the same way as did the parents of those now aged 18-24. There is a ten-year gap between current practice and the level of sex education by parents that is assessed in ISSHR. Thus information on the sex education provided by parents who currently have pre-adolescent and early adolescent children is needed to inform the best approach to supporting parents now faced with these challenges.

RECOMMENDATION: Parents need to be acknowledged as the primary relationships and sexuality educators of their children, and to be supported in that role. They need supports provided through a range of initiatives. These supports should particularly address the needs of parents who most need assistance in sex education, such as those in lower socio-economic groups.

7.3 Planning for sexual encounters and the role of alcohol

THE Irish Study of Sexual Health and Relationships: Main Report and Overview has found that the main reasons for non-use of contraception at most recent sexual intercourse were lack of planning and the unexpected nature of some sexual opportunities. This corroborates what was found in the ICCP study. Both studies also found lack of planning and unexpectedness to be a major issue in contraceptive use at first intercourse, particularly among younger people (18-29). This younger group also commonly cited: not having thought to use contraception, not knowing about or understanding about contraception, and drinking alcohol or taking illicit drugs. Men also mentioned being young, naïve, stupid or careless.

Further evidence about non-use of contraception is found by looking at the role of context and situation. Contraceptive use at first intercourse among 18-29 year-olds was less likely if intercourse happened on the spur of the moment. Men and women aged 18-29 were more likely to have used contraceptives if they agreed that first intercourse was a natural follow-on in the

relationship, that they were in love, that they felt ready/it was the right time. On the other hand, use of alcohol or illicit drugs was associated with less contraceptive use. Women who said they had been carried away by their feelings were also significantly less likely (than those who did not) to have used contraception.

These findings indicate that factors such as planning and intimacy (being in love, a natural follow-on in the relationship, etc) at first intercourse can increase the likelihood that contraception is used, whereas alcohol or illicit drug use is associated with decreased use.

While a lot has been achieved to ensure safer sexual practices, by many younger people in particular, it is clear that more positive attitudes to contraceptive planning and to responsibility in sexual behaviour are needed. This is particularly important in the case of first sexual experiences.

As in many other aspects of human behaviour, past behaviour is the best predictor of future behaviour. In ISSHR it is clear that people who took risks in their first sexual experiences were more likely to continue to take risks in later sexual encounters. The message has to be about consistent, universal protection. This is a difficult social challenge: to provide clear messages about planning to ensure safe sex from the very first sexual experience, while realistically acknowledging that this first experience may be at an age that parents and other people may find unpalatable.

RECOMMENDATION: Health-promotion strategies need to foster more responsible public attitudes to individual planning for safe sex, including consistent use of effective methods of both contraception and protection.

Planning for safe sex needs to take into account the fact that the context within which an encounter occurs may not encourage responsible behaviour. Of particular concern in Irish society is the role of alcohol, but also increasingly illicit drugs, in shaping behaviour.

To reduce the negative impact of alcohol and illicit drugs on contraceptive and safe-sex practices, all sectors providing education, information and services relating to sexual health and contraception need to develop a stronger, clearer policy focus. Activities to implement the recommendations of the National Alcohol Policy should be planned to take account of the clear link between alcohol and unprotected sexual behaviour. Similarly, the life-skills courses provided as part of the RSE and SPHE programmes in schools (which include an exploration of the impact of alcohol on sexual and particularly risk-taking behaviour) need to be considered as an important vehicle for conveying messages about the importance of responsibility in the drinking of alcohol and safe sex.

RECOMMENDATION: Health-promotion strategies need to foster more responsible public behaviour concerning the use of alcohol and illicit drugs, given their role in unprotected sexual encounters.

7.4 Information needs into the future

HAVING access to up-to-date, valid and reliable information is a prerequisite for effective policy and planning. The ISSHR survey and study provides a much-improved database of information on sexual knowledge, attitudes and behaviours among the Irish population. However, it raises as many questions as it answers. The large-scale findings it provides need to be followed up with more detailed research.

There is a particular need for more detailed research on specific sub-groups of the population, such as lower socio-economic groups, in order to investigate further the reasons for the higher prevalence of risk factors among them. Future research on this and other groups should attempt where possible to use compatible concepts and develop from the research carried out by ISSHR and other recent studies such as the ICCP survey.

Since ISSHR, as the first major Irish KAB study, adopted a sampling frame of the non-institutionalised population in private residential housing, many sub-groups were not represented in a way that yields findings that are immediately useful for policy-makers. Further studies need to focus on many under-represented groups, such as early school-leavers, people with physical or learning disabilities, and people with different cultural beliefs such as Travellers and some groups of migrants to Ireland. Findings in this sub-report indicate that the next focus of attention should be on people who are most vulnerable in terms of poor early sexual experiences, such as early school-leavers.

The ISSHR survey should be seen as the baseline data for future research on sexual knowledge, attitudes and behaviours. Its findings show that both sexual attitudes and behaviour have been and are rapidly changing in Ireland, particularly among young people. It is imperative to build on ISSHR by collecting regularly evidence on trends. Doing so will provide the information needed to develop and amend policies for maximum effectiveness.

Lastly, it is important to note that the evidence provided by ISSHR does not represent the experiences of people aged under 18, particularly given the rapid pace of change in this country. It can, however, provide pointers. The study shows that, among the current generation of adults, early initiation of sexual intercourse is strongly associated with poor outcomes in sexual health, both in adolescence and later in life. In this regard, effective sexual-health intervention among young people requires an up-to-date base of evidence. There is no national source of information on the sexual knowledge, attitudes and behaviours of people under 18. This is a major gap. It is imperative that a national survey similar to ISSHR, but designed in association with young people, be carried out among Irish adolescents.

RECOMMENDATION: Research on sexual knowledge, attitudes, behaviours and health in Ireland should be integrated to ensure best use of public resources in developing a knowledge base capable of informing policy and practice.

RECOMMENDATION: More detailed research needs to be carried out into the sexual knowledge, attitudes and behaviours of people in lower socio-economic groups in addition to other sub-groups not adequately represented in a national household survey.

RECOMMENDATION: A national survey of sexual knowledge, attitudes and behaviours should be carried out among adolescents in Ireland.

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