Crisis Pregnancy Programme Report No. 26

If I were Jack?
Adolescent males' attitudes and decision-making in relation to an unintended pregnancy

Maria Lohan, Peter O'Halloran, Sharon Cruise, Fiona Alderdice (Queen's University Belfast) and Abbey Hyde (University College Dublin)

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Crisis Pregnancy Agency Research Awards Programme

In 2007, a Research Awards Programme was established by the Crisis Pregnancy Agency for individuals working in academic institutions, not-for-profit research organisations and non-governmental organisations (with a research capacity) wishing to undertake a research project in areas related to the mandates of the Crisis Pregnancy Agency. It was envisaged that the provision of these research awards would help increase knowledge in relation to crisis pregnancy, contribute to the Agency's cultural change programme and help support proficiency and new developments in the field of crisis pregnancy research.

The aims of the research awards were to:

- ensure the Agency keeps abreast of factors related to crisis pregnancy, sexual activity and contraceptive use, reproductive decision-making and health services research
- build upon the range of research commissioned by the Agency and fill knowledge gaps still existing
- stimulate and further strengthen research in the areas of sexual health and sexual health policy, sexual decision-making and crisis pregnancy
- ensure that the Agency's existing research portfolio continues to be used and is part of emerging developments in the field
- further build academic capacity and expertise in areas related to the Agency's work.

In 2010, the Crisis Pregnancy Agency was integrated into the Health Service Executive (HSE) and became the HSE Crisis Pregnancy Programme (CPP).

The CPP is pleased that Dr Maria Lohan and her colleagues from the School of Nursing and Midwifery, Queen's University Belfast, along with Professor Abbey Hyde of University College Dublin, received a research award for a project entitled 'If I were Jack? Adolescent males' attitudes and decision-making in relation to an unintended pregnancy' and welcomes this report, which is the final in the series funded through this Awards Programme.

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Foreword

I am pleased to present this report exploring the psychosocial determinants of adolescent males' attitudes and decision-making in relation to an unplanned pregnancy. This is the third and final report to be published under the HSE Crisis Pregnancy Research Awards Programme.

A key strategic priority of the HSE Crisis Pregnancy Programme is promoting evidence-based practice and policy development by commissioning high-quality research into crisis pregnancy and related issues. To this end the Research Awards Programme was launched in 2007 to make funding available for research into topics related to crisis pregnancy, sexual activity, contraceptive use, reproductive decision-making and health services.

If I were Jack? Adolescent males' attitudes and decision-making in relation to an unintended pregnancy contributes to the Programme's evidence-base by strengthening our understanding of adolescent males' attitudes and decision-making processes in relation to an unplanned pregnancy. This is an area that had largely remained unexplored in Irish research.

Particularly interesting to this research is the method of data collection used to engage the adolescent respondents and to generate data. The research team produced a bespoke film drama, presenting a week in the life of an adolescent male whose girlfriend has become unexpectedly pregnant. The film was presented to over 350 male students in post-primary schools and the students were asked to answer a series of role-play questions designed to explore their own views and responses as if an unintended pregnancy was happening in their lives.

The findings provide some really interesting insights into the attitudes and beliefs of teenagers. They also indicate how adolescent males see their support networks and how they think they would cope if an unplanned pregnancy was to happen to them. It is hoped that this research will provide a better understanding of adolescent male attitudes, opinions and beliefs, will help to respond to the support needs of adolescent fathers and will culminate in the development of an educational resource for use in post-primary schools.

I would like to thank the authors of the study, Dr Maria Lohan, Dr Peter O'Halloran, Dr Sharon Cruise and Professor Fiona Alderdice of Queen's University Belfast and Professor Abbey Hyde from University College Dublin, for their work and commitment to this project.

Thanks also to Maeve O'Brien of the HSE Crisis Pregnancy Programme for managing this project and to Jennifer Armstrong for her work on the report prior to publication.

Finally I offer my sincere thanks to all of the young men, teachers and health and education sector professionals who participated in the data collection for their time and willingness to participate.

Dr Stephanie O'Keeffe
Director
HSE Crisis Pregnancy Programme

About the authors

Dr Maria Lohan is a senior lecturer at the School of Nursing and Midwifery, Queen's University Belfast. A sociologist specialising in research on men's health, particularly men's reproductive and sexual health and health care, she is leading a follow-on project (funded by the Economic and Social Research Council (UK) and the HSE Crisis Pregnancy Programme and the HSC, Public Health Agency (Northern Ireland) to develop a resource on *Teenage Men* and *Unintended Pregnancy*. This educational resource will be developed for integration into relationships and sexuality education curricula in second-level schools in Ireland and Northern Ireland.

Dr Peter O'Halloran is a registered general nurse and lecturer at the School of Nursing and Midwifery, Queen's University Belfast, with specific expertise in the development and evaluation of health and social care interventions.

Dr Sharon Cruise is a chartered psychologist and post-doctoral research fellow at the Centre for Public Health, Queen's University Belfast. Her research interests are focused on health and developmental issues in childhood and adolescence, and psychometric assessment within the areas of psychology and health care.

Professor Fiona Alderdice holds the Chair in Perinatal Health and Well-being at the School of Nursing and Midwifery at Queen's University Belfast. A psychologist, her research expertise lies in the field of complex pregnancy and more specifically in the science of measuring stress and well-being in the perinatal period.

Professor Abbey Hyde is an associate professor at the School of Nursing, Midwifery and Health Systems at University College Dublin. A nurse and sociologist with a special interest in sexual and reproductive health, she has published extensively in leading journals of international standing on gender aspects of sexual health.

Acknowledgements

The authors of this report would like to thank the school principals, relationships and sexuality education (RSE) teachers and administrative and technical (computer) staff who facilitated the research team during the recruitment process for this study. We also thank all those who participated in the study – the adolescent male students, the teachers and the health and education sector professionals.

We are extremely grateful to the Australian research team at the University of Flinders – in particular, Dr Carolyn Corkindale, Department of Sociology – for their generosity in sharing with us their original interactive video drama (IVD). A number of people offered tremendous assistance during the production of the IVD for this study. David Grant, School of Languages, Literatures and Performing Arts, Queen's University Belfast (QUB), assisted in the auditioning and coaching of actors, and Aidan Brown of Belfast Metropolitan College organised script readings and sourced actors. The QUB Media Services Team – Amanda McKittrick (director), Alan Soutar (filming) and John Adams (audio and computer programmer) – produced the IVD and are to be highly commended for their professionalism. We also thank the actors, especially the young people who gave generously of their time to be involved in the production.

Our advisory board members (Rosie Toner, Irish Family Planning Association; Martin Grogan, Health Service Executive (South); Maire Morrissey, The Squashy Couch, Waterford; Sharon McGrath, Marino Institute of Technology; and Frances Shearer, Drumcondra Education Centre) offered advice during script development for the IVD and advice on approaching schools.

We are also grateful to members of the research and policy team of the HSE Crisis Pregnancy Programme, notably Maeve O'Brien and Dr Stephanie O'Keeffe. Finally, we thank Colin Shaw for editorial assistance and the School of Nursing and Midwifery, QUB, for purchasing laptop computers and making them available to us during the project.

Executive summary

Introduction

This study contributes to the development of crisis pregnancy prevention and counselling services for adolescent males by strengthening our understanding of their attitudes and decision-making processes in relation to an unplanned pregnancy. It also expands our knowledge of the underlying psychosocial determinants of adolescent males' attitudes and decisions, which is essential for the effective development of holistic and targeted interventions.

Drawing on earlier research conducted in Australia, the research team developed a computer-based interactive video drama (IVD) for the purposes of the study. The film drama, entitled *If I were Jack*, presents a week in the life of an adolescent male whose girlfriend has just told him she is unexpectedly pregnant. While watching the story unfold, the study participants answer a series of role-play questions designed to explore their views on unintended pregnancy at both an emotional and a cognitive level. It was recognised from the outset that this research tool could potentially be redeveloped as a non-directional educational tool to encourage teenage males to reflect on the real-life consequences of a crisis pregnancy and to raise awareness of the available support services. To this end, the study evaluated the acceptability of the IVD as an appropriate component of relationships and sexuality education (RSE) from the perspectives of young male students, teachers, and health and education sector professionals.

Objectives

The study's objectives are to:

- develop a deeper understanding of the attitudes of a sample of adolescent males towards an unintended pregnancy
- develop a deeper understanding of the decision-making processes of a sample of adolescent males when confronted with a hypothetical unintended pregnancy
- develop a better understanding of the psychosocial determinants and factors underlying adolescent males' decision-making processes in relation to a hypothetical unintended adolescent pregnancy
- pilot the use of a computer-based IVD as a component of adolescent sexuality and pregnancy-prevention programmes.

Existing knowledge in the field

This is the fourth study internationally to research adolescent males' hypothetical pregnancy outcome decisions. There is also a small body of literature describing men's actual pregnancy decision-making experiences; however, only one study explored the processes behind men's decision-making in any detail.

Most of the studies show that adolescent males view adolescent pregnancy as a negative situation, though some are ambivalent about the idea of becoming a parent and a small minority see it as a positive life event.

The overwhelming focus of research in relation to pregnancy outcomes is on attitudes to abortion and on the choice between abortion and keeping the baby. Research on adoption, albeit a less significant choice statistically, is particularly limited.

Arising from the literature, we constructed two sets of hypotheses to predict adolescent males' decision-making:

1. Adolescent males' support for the continuation of the pregnancy is associated with five distal variables: higher idealisation of pregnancy and parenthood, lower stereotypical masculine beliefs, lower self-esteem, higher levels of religiosity and lower social class of parents.
2. Adolescent males' support for the continuation of the pregnancy is associated with two proximal variables: favourable parental attitudes to keeping the baby and favourable respondent attitudes to keeping the baby.

Methodology

The research involved three distinct stages: developing the IVD and research tools; analysing the psychosocial determinants of adolescent males' attitudes and decision-making in relation to an unplanned pregnancy (non-random survey of adolescent males attending schools); and evaluating the IVD (interviews and focus groups with users and key stakeholders).

The development of the IVD involved making an Irish version of an earlier Australian IVD, such that the film authentically presents the scenario of a young Irish teenager who has discovered that his girlfriend is pregnant.

Thirteen schools were recruited for the purposes of the study. We chose six counties across four geographical areas of the Republic of Ireland: north-west (Donegal), west (Galway and Sligo), mid-west (Westmeath) and east (Louth and north Dublin). We made a list of the schools within each county under each of the stratification criteria: socio-economic advantage or disadvantage, urban or rural, religious denomination, single or co-educational. We then randomly selected schools in each of the counties under each of the stratification criteria.

We recruited 360 adolescent males across the 13 schools to participate in Stage 2 of the research, which involved a self-complete paper questionnaire and a role-play questionnaire embedded in the IVD.

For the purposes of evaluation, the adolescent males completed a brief questionnaire at the end of the IVD. In addition, 12 focus-group interviews were conducted with 67 adolescent males within 10 of the 13 schools. Five individual semi-structured interviews were conducted with teachers. A further focus group and one individual interview involved four health and education sector professionals.

Data analysis on the quantitative component of the research was divided into descriptive and explanatory parts. The key phenomenon being studied in the descriptive component was the adolescent males' responses to the on-screen role-play questions that followed each segment of the IVD. These questions concern beliefs, feelings, attitudes and

decisions in relation to the unplanned pregnancy scenario. The explanatory component involved testing the two sets of hypotheses on the underlying psychosocial factors that may influence adolescent males' decision-making processes concerning whether to support the continuation of the pregnancy and whether to continue the relationship with their pregnant partner.

Data analysis on the qualitative component of the research involved modified analytical induction. Essentially, this describes a well-established process of iteratively moving between a *priori* sensitising concepts originating from the literature review or social theory – a deductive analysis, and concepts arising from the data – an inductive analysis. In implementing this strategy in relation to the focus groups with adolescent males, interviews were transcribed verbatim as they got under way. Two researchers developed thematic codes for the data on the first four focus-group interviews. Any discrepancies in how the data were coded were discussed. Analysis on the feedback from teachers and health and education sector professionals was combined as it related to one overarching theme, namely evaluation of the IVD and its potential for raising awareness of unplanned pregnancy amongst adolescent males.

Results

Reactions to the news of an unplanned pregnancy

- Most adolescent males said they would feel shocked and/or frightened by the news that their girlfriend was pregnant (49.7% and 36.7%, respectively); the vast majority would view the news negatively.
- 48.1% would hold themselves responsible for the unplanned pregnancy; 28.6% said they would hold both themselves and their partner responsible.
- A large majority (83.3%) said the news would not change their feelings towards their partner.
- In general, the adolescent males expressed the view that they should take responsibility for the pregnancy and not leave everything up to their girlfriend.

Attitudes towards pregnancy outcomes

- *Abortion:* Respondents rated the following advantageous consequences as most important to them (in order of importance): 'No child of mine will grow up disadvantaged'; 'I can avoid being a really young parent'; and 'I can finish school'. They rated the following disadvantageous consequences as most important to them: 'It's physically risky for girlfriend'; 'I feel it's risky mentally for girlfriend to go through with'; and 'You can't change your mind afterwards'.
- *Keeping the baby:* Respondents rated the following advantageous consequences as most important to them: 'The baby could grow up to have a worthwhile life'; 'I won't have to put girlfriend through the abortion experience'; and 'It will make my relationship with girlfriend stronger'. The following disadvantageous consequences came out in highest importance: 'It's too much responsibility for me now'; 'Babies cost a lot of money'; and 'It would ruin my future'.
- *Adoption:* Respondents rated the following advantageous consequences as most important to them: 'The baby will be adopted by a good family'; 'The child won't be disadvantaged'; and 'I can finish school'. They rated the following disadvantageous consequences as most important to them: 'I will always wonder what has happened to

the child'; 'The child might be unhappy without its natural parents'; and 'I will never be able to forget about it'.

Communication with, and reactions of, significant others

- Most adolescent males would tell their parents; somewhat more would tell their mother than their father (76.1%, compared with 65.3%). Most anticipated that their parents would be supportive; although some predicted negative or very negative reactions. In particular, mothers were perceived as being supportive of keeping the baby.
- Consistent with adolescent males' views on the importance of assuming responsibility, an overwhelming majority (over 90%) disagreed with the friends' suggestions that they should disassociate themselves from their pregnant partner and/or the situation. Friends were not identified as a strong source of support in relation to dealing with an unplanned pregnancy.

Help-seeking and coping behaviours

- The adolescent males had a strong sense of self-efficacy. While more than half (56.7%) admitted to wanting to cry, the vast majority said they were going to be able to 'help with this' (85.8%) and felt that they must have a say (93.3%).
- The vast majority said they would want to get help (85.8%) and/or would go to see a counsellor (91.9%).
- Most respondents assumed that a counselling session would benefit them.

Pregnancy outcome decisions

- Almost half (46.7%) of adolescent males would choose to keep the baby. Abortion was the next most preferred choice (18.9%), closely followed by 'leave it up to her' (18.3%). Adoption was the least preferred option (16.1%).
- The model testing the distal hypotheses is a weak one. The distal predictor variables, as a whole, accounted for relatively small amounts of variance in adolescent males' pregnancy outcome decisions. The only hypothesis that could be supported was that the choice of continuing the pregnancy was associated with high religiosity.
- Idealisation of parenthood was a significant predictor in choosing adoption versus keeping the baby and adoption versus 'leave it up to her'.
- Being from a professional rather than a lower middle-class background predicted the choice of adoption rather than keeping the baby.
- None of the predictor variables proved to be significant in distinguishing 'leave it up to her' versus keeping the baby.
- The relationship between age and outcome choice was not statistically significant.
- 56% of the sample aspired to university while 44% opted for a lower educational level or 'other' option. A dichotomous university-versus-other variable was generated, but no statistically significant relationships emerged.
- In relation to the proximal predictors, the findings support the hypotheses that favourable parental attitudes and favourable respondent attitudes would be associated with the option to keep the baby.
- The explanatory model testing the distal and the proximal hypotheses together is a strong one. The combination of the significant proximal and distal variables explains a substantial amount of the variance in adolescent males' choices in relation to keeping

the baby versus abortion (R^2=77%) and keeping the baby versus adoption (R^2=56%). The model is less strong in relation to abortion versus adoption (R^2=27%).

- *Keeping the baby versus abortion:* The two most significant predictors were the perceived positive attitude of the adolescent male's mother to keeping the baby, and feelings of regret associated with having an abortion. The following predictors, again derived from adolescent males' attitudes, were also significant: not being concerned about losing friends, not being concerned about the financial implications of having a child, wanting a good life for the baby, actually welcoming parenthood, and visualising that he would enjoy fatherhood. The effect of religiosity was subsumed by the proximal variables, which suggests that religiosity underlies these attitudes by acting as a mediator variable in determining whether an adolescent male will opt for keeping the baby or for abortion.
- *Keeping the baby versus adoption:* The most significant predictor was the desire on the part of the adolescent male to avoid early parenthood. However, feelings that keeping the baby would affect the young man's future and concerns about someone else being the child's father were also strong predictors. These findings support the hypotheses that favourable parental attitudes and favourable respondent attitudes would be associated with the option to keep the baby. It should be noted that the effect of both idealisation of parenthood and social class, which had been significant distal predictor variables in choosing to keep the baby over any other options, were subsumed by the proximal variable, although idealisation of parenthood approached significance. This suggests that the influence of idealisation of parenthood underlies attitudes about parenthood and thus acts as a mediator variable in determining whether an adolescent male will opt for keeping the baby or adoption.
- *Abortion versus adoption:* The most significant proximal predictor was that the adolescent male felt he would regret opting for an abortion. The influence of his mother's views in relation to the pregnancy remained significant in the final analysis when combined with his attitudes and religiosity; the magnitude of the effect of this variable is almost as strong as that of regret. However, the effect of religiosity was subsumed in this model by the proximal variables and was no longer significant. This suggests that religiosity underlies attitudes of regret and the influence of the adolescent male's mother's views and thus acts as a mediator variable in determining whether an adolescent male will opt for abortion or adoption.

Relationship outcome decisions

- Adolescent males showed a very strong bias towards continuing the relationship with their pregnant girlfriend through all the options, including abortion and adoption (N=329; 91.4%).
- The most selected preference was to stay with their girlfriend and raise the baby together (N=138; 38.3%).
- Adolescent males were also inclined to continue the relationship, even if their pregnant partner made a pregnancy outcome decision that did not accord with theirs.

Evaluation of the IVD as an educational tool

This study evaluated the IVD in terms of its potential for development as an educational tool aimed at raising awareness of unintended pregnancy in adolescent males' lives in the context of relationships and sexuality education (RSE). RSE is situated within the

Social, Personal and Health Education (SPHE) programme in second-level schools in the Republic of Ireland. We report the views of three groups of primary stakeholders: the adolescent male users, teachers, and health and education sector professionals.

Content

- The IVD was considered across all groups to be authentic (represented a plausible situation with believable characters), engaging (drew people's attention through using the first person, role-play and interactive questions) and unique (for focusing on the male point of view and role, in including the issue of abortion and in its use of high-quality drama).
- Some teachers and some adolescent males noted the mix of social-class accents among the characters. While it was thought that this made the drama less plausible, an advantage was that it broke the stereotype that unplanned pregnancies only happen to people of lower socio-economic status.
- One health and education sector professional commented that the film may have followed an unrealistically smooth path and that the reality could be more acrimonious.

Ease of use

- All groups found the IVD very easy to use.
- Some individuals, across all groups, said there were too many questions.
- Some teachers felt it could pose problems for adolescents with literacy problems.
- Teachers could imagine themselves using it as an individual computer-based tool followed by a group discussion, but their preference was to employ it in a group context through the use of an overhead projector followed by a group discussion.

Usefulness within SPHE for raising awareness

- The adolescent males stated (in the survey and focus groups) that the IVD raised their awareness of issues surrounding unplanned pregnancy, of the consequences of an unplanned pregnancy and of the role of counselling support. Some said it would affect their sexual behaviours and relationships.
- The teachers and health and education sector professionals also thought it would be very useful as a means of raising awareness and opening up a dialogue with adolescent males in relation to the possibility of an unplanned pregnancy in their lives.
- Teachers and professionals agreed that the IVD would be effective only if situated within a broader SPHE programme.
- Teachers and professionals agreed that the IVD would be useful for both adolescent females and adolescent males and, in particular, for generating discussions around gender perspectives on taking responsibility for preventing and dealing with an adolescent pregnancy.

Potential for development as an educational tool for RSE programmes

- The overwhelming message from all groups was a positive endorsement of the IVD's further development as a targeted educational resource on the subject of adolescent males and unintended pregnancy.

- The evaluation was extremely informative in highlighting the steps required to overcome barriers to the introduction of educational materials aimed at adolescent males in schools in Ireland.

Recommendations

A number of recommendations, relevant to particular sectors, emerged from the research findings.

Health and social care

- Programmes to raise awareness among health and social care staff of adolescent males' health and social care needs in relation to an unplanned pregnancy should be developed.
- Relevant service providers (e.g., GPs and crisis pregnancy counsellors) should undertake a review of their portfolio of current health and social care services regarding adolescent pregnancy with a view to adopting an inclusive approach to adolescent males.
- Counselling interventions aimed at addressing adolescent males' experiences of an unplanned pregnancy and pregnancy decision-making, as individuals and as part of a couple-centred approach, should be rigorously evaluated and developed.

Education

- The SPHE curriculum should be reviewed to address adolescent males in relation to adolescent pregnancy.
- Teachers should review their current SPHE teaching practice with a view to addressing adolescent males and adolescent pregnancy.
- Health promotion and educational bodies such as the HSE Crisis Pregnancy Programme and the Department of Education should continue to assist in the development of suitable materials to support educational providers.
- Resources in relation to adolescent males and pregnancy should be further developed for use within SPHE in schools (this is specifically supported by the results of the study).
- Such resources should be rigorously evaluated in terms of their effectiveness (a) in raising awareness of the role of adolescent males in preventing or dealing with an unplanned pregnancy, and (b) in enhancing the perceived self-efficacy of adolescents to communicate with a sexual partner, parents and a counsellor in relation to preventing or dealing with an unplanned pregnancy.

Research

- Research should be carried out on adolescent males' actual experiences of unplanned pregnancy and pregnancy decision-making in relation to decisions to keep the baby, decisions to have the baby adopted and decisions to terminate the pregnancy. Researchers need to consider recruitment strategies that do not involve recruiting through the female partner or clinical environments, as such strategies may disproportionately represent males who are involved in their relationships and/or who are willing to come forward to clinics for help.
- Further qualitative research should be carried out to explore adolescent males' involvement in their partner's pregnancy resolution decision.

- Further research with both adolescent partners (male and female) should be carried out to shed light on the relational and contextual circumstances of adolescent males' experiences.
- Further research should be carried out with adolescent fathers on their experiences of coping with adolescent pregnancy and adolescent parenting.
- Adolescent males' views on (intended/unintended) pregnancy and pregnancy resolution should be more explicitly incorporated into national studies of sexual knowledge, attitudes and behaviours. Such research could generate a public discourse around the role of adolescent males in reproduction and parenting, as well as on male sexuality.
- Irish national surveys of sexual knowledge, attitudes and behaviours should include a sample of 16 to 18 year olds.

1 Introduction

1.1 Introduction

This study contributes to the development of crisis pregnancy prevention and counselling services by strengthening our understanding of adolescent[1] males' attitudes and decisions in relation to a hypothetical unplanned pregnancy. Although researchers and policy-makers have given understanding adolescent pregnancy a high priority, there has been a surprisingly limited focus to date on adolescent males as agents and partners in reproduction, and on their role in pregnancy, pregnancy prevention and pregnancy resolution. The research that has been conducted on the role of males in adolescent pregnancy has tended to consider their views as perceived by their pregnant partner and how these views define and constrain her options (e.g., Broen et al., 2005; Dudgeon and Inhorn, 2004; Farley and Cowley, 2001; Hyde and Howlett, 2004; Larsson et al., 2002; Mahon et al., 1998; Mavroforou et al., 2004; Sihvo et al., 2003; Stevenson et al., 1999). In this introductory chapter we set out the aim and objectives of the study and summarise the structure of this report.

1.2 Aim

This study aims to deepen our understanding of the psychosocial determinants of adolescent males' attitudes and decision-making in relation to a hypothetical unintended pregnancy.

1.3 Objectives

The study's objectives are to:

- develop a deeper understanding of the attitudes of a sample of adolescent males towards an unintended pregnancy
- develop a deeper understanding of the decision-making processes of a sample of adolescent males when confronted with a hypothetical unintended pregnancy
- develop a better understanding of the psychosocial determinants and factors underlying adolescent males' decision-making processes in relation to a hypothetical unintended adolescent pregnancy
- pilot the use of a computer-based interactive video drama (IVD) as a component of adolescent sexuality and pregnancy-prevention programmes.

1.4 Why focus on adolescent males?

Research has shown that attitudes are an important determinant of contraceptive use, childbearing and abortion amongst women (see Barber and Axinn, 2005, for an overview) and that how a female defines and copes with an unintended pregnancy is strongly influenced by the attitudes of her male partner. Thus, any public policy addressing adolescent crisis pregnancy must consider the role of adolescent males in pregnancy prevention and pregnancy resolution. This requires a comprehensive understanding of what young males think about adolescent pregnancy and how they might resolve, or plan to resolve, an unplanned pregnancy. Such knowledge can also inform crisis-pregnancy counselling services on how to engage to a greater degree with adolescent males experiencing a crisis pregnancy.

1 Adolescence is defined in the scientific literature as taking place between 10 and 24 years.

Second, although physiologically the adolescent female is more directly involved in a pregnancy, if the child is born, it will be the adolescent male's child also and, in a growing number of countries, he will be legally obliged to provide for that child. In addition, as gender roles continue to change in society, there are increased expectations that fathers will be involved in parenting their children (Rosenwasser et al., 1987; Fatherhood Institute, 2009; DCSF, 2010).

A third impetus behind the focus on males is a growing awareness that addressing adolescent males' sexual and reproductive health is an important strategy for promoting positive development and improving the lives of young adults, especially among those suffering the effects of various types of disadvantage (AGI, 2006; Lindberg et al., 2008; Marsiglio et al., 2006; Smith et al., 2005). Men's adolescent years are a critical time for health promotion strategies, particularly in relation to sex and reproduction, which can have a sustained impact through adult years (Dodge and Rabiner, 2004; Park and Breland, 2007; Smith et al., 2005).

1.5 Structure of this report

Chapter 2 provides a background for the study by reviewing the literature from 1980 to 2009 on adolescent males' attitudes and behaviours in relation to pregnancy and pregnancy outcomes. This literature review is the first systematic overview of research available internationally on adolescent males and attitudes to pregnancy and pregnancy decision-making. The gaps in the literature that this review highlights demonstrate the necessity for this research.

Chapter 3 outlines the research design and innovative methodological approach of the study. Drawing on earlier research conducted in Australia (Condon et al., 2006; Condon et al., 2001), the research team developed a computer-based interactive video drama (IVD) for the purposes of this study.[2] The film drama, entitled *If I were Jack*, presents a week in the life of an adolescent male whose girlfriend has just told him she is unexpectedly pregnant. As the story unfolds, the research participants answer a series of role-play questions designed to explore their views on an unintended pregnancy at both an emotional and a cognitive level. The responses to these questions are automatically saved to the computer programme. The findings from this research tool are complemented by the findings from a paper questionnaire, interviews and focus groups.

Chapters 4 to 7 set out the response rates and results of the study. In Chapter 4, we outline the socio-demographic profile of the sample. In Chapter 5, we explore adolescent males' predicted attitudes and communication, help-seeking and coping behaviours in relation to an unintended pregnancy. In Chapter 6, we examine adolescent males' decision-making in relation to resolving an adolescent pregnancy and the underlying social and psychological predictors of their decision-making. In Chapter 7, we discuss the main conclusions of the study in relation to the international literature.

2 An excerpt of this film drama may be viewed on the following website: www.mediator.qub.ac.uk/ms/streams/Compilation_384K_Stream.wmv.

Chapter 8 evaluates the IVD in terms of its acceptability as a future component of relationships and sexuality education (RSE) in Ireland. Although the IVD was designed as a research tool, from the outset it was recognised that it could be redeveloped as a non-directional educational tool to encourage adolescent males to think through being in the situation of a crisis pregnancy. The educational objective is to promote reflection on the real-life consequences of a crisis pregnancy as well as raising awareness of the available support services. To this end, we also report on the acceptability of this IVD as an appropriate component of RSE from the perspectives of young male students, teachers, and health and education sector professionals.

Chapter 9 first acknowledges the limitations of this study before listing our recommendations based on the research findings.

The appendices contain a summary table of the empirical studies covered in the literature review; copies of the research instruments (Questionnaires 1 and 2, focus group and interview schedules); copies of the information letters and consent forms for the study participants, as approved by the Research Ethics Committee of the School of Nursing and Midwifery at Queen's University Belfast (QUB); a list of the members of the study's advisory board; and additional statistical models.

2 Literature review

2.1 Introduction

The considerable health and social care consequences of adolescent pregnancy have made it a key focus of scientific research and public policy across Western developed nations for almost three decades. After a general introduction and a discussion of search criteria, this chapter reviews the literature from 1980 to 2009 on adolescent males' attitudes and behaviours in relation to pregnancy and pregnancy outcomes.

The United States of America has the highest incidence of adolescent pregnancy in the Western world, and the United Kingdom has the highest in Western Europe (Lawlor and Shaw, 2004). While rates of teenage pregnancy gradually fell in both these countries during the 1990s and early 2000s, the US has recorded recent rises once again (Santelli et al., 2009). Rates of adolescent pregnancy in the Republic of Ireland are lower than in the US and the UK (O'Keeffe et al., 2006) and have been steadily falling: the pregnancy rate for under 20-year-olds per 1,000 was 26.1 in 1980 and 19.8 in 2009. In line with this trend, the birth rate per 1,000 teenagers has fallen from 23.0 in 1980 to 16.3 in 2009 (CPP, 2010).

While the current adolescent pregnancy rate is lower than it was in 1980, the rate of adolescent females travelling abroad for abortions is about the same. Owing to legal restrictions on abortion in the Republic of Ireland, females who live in Ireland and who decide on abortion/termination as a resolution to pregnancy must travel outside the country (usually to UK) to clinics or hospitals offering such services.[3] The adolescent abortion trend increased in the 1990s, peaking in 2001, and has since been consistently declining. In 1980, the rate of abortion was 3.1 per 1,000 females aged 15 to 19 years, rising to a peak of 6.0 in 2001 and falling back to 3.5 in 2009. However, it is important to note that these rates are based on a very small number of pregnancies; births to teenagers represented only 3% of all live births in 2009 (in 1980, the figure was close to 5%).

Recent age-specific data show a strong shift in post-pregnancy preferences away from adoption for all ages, but especially for mothers under the age of 21, in the Republic of Ireland. In 1986, mothers aged under 21 years accounted for one-third of all adoption orders; by 2006, this proportion had fallen to 5% (Adoption Board, 2008; CPP, 2010). Over the same period, total adoptions dropped from 800 (1986) to 222 (2006). In 2008, just 200 domestic adoption orders were made.

Scientific and policy research on adolescent pregnancy has also examined the significant social, economic and health-related consequences for mothers, their children, society and, to a lesser extent, fathers (see Savio-Beers and Hollo, 2009, and Paranjothy et al., 2009, for an overview). Although the broad thrust of this research suggests that adolescent pregnancies have negative effects on both individuals and societies,

3 The HSE Crisis Pregnancy Programme (CPP) has worked closely with abortion services and the UK Department of Health in order to collect accurate data on people travelling to the UK for abortions. The centralised booking system in the UK means that the UK figures can be considered very accurate. The Netherlands has emerged as the only other jurisdiction to which females from Ireland are travelling for abortion procedures in significant numbers; in 2007, it accounted for less than 10% of all females leaving Ireland to have an abortion (source: CPP, 2010).

some recent research finds that, in many circumstances, the life course of parenting adolescents may not differ substantially from that of their socio-economic peers; at the very least, it indicates that the impact of childbearing in the adolescent years may not be as negative as once thought (Alexander et al., 2010; Bonnell, 2004; Klein, 2005; Savio-Beers and Hollo, 2009).

Closely related to this debate about the negative versus the positive effects of adolescent pregnancy on adolescent lives is a stronger willingness in the research literature to distinguish between 'planned' and 'unplanned' and 'wanted' and 'unwanted' pregnancies during adolescence. Acknowledging that some adolescent pregnancies are, or become, wanted pregnancies challenges the idea of adolescent pregnancy as 'maladaptive'; instead, it moves towards considering adolescent pregnancy as normative and as a potentially positive life event (Alexander et al., 2010; Bonnell, 2004; Klein, 2005; Savio-Beers and Hollo, 2009).

A dominant feature throughout the literature is the limited focus on males as agents and partners in reproduction, and on their role in pregnancy resolution. Although a small but growing literature in relation to adolescent male sexuality has begun to emerge (Lindberg et al., 2008; Smith et al., 2005), it lacks a sustained focus on adolescent males' experiences of pregnancy and pregnancy resolution per se or, more broadly, on what Marsiglio (1993) has referred to as men's 'procreative consciousness' and 'procreative responsibility'. Much of the research that has been conducted has focused on women's perceptions of the views of men. This research demonstrates that how a female defines and copes with an unintended pregnancy is strongly influenced by the attitudes of her male partner and that the support of male partners can ease the burden of the crisis in pregnant women's lives (Broen et al., 2005; Conlon, 2006; Dudgeon and Inhorn, 2004; Hyde and Howlett, 2004; Larsson et al., 2002; Mahon et al., 1998; Mavroforou et al., 2004; Sihvo et al., 2003; Stevenson et al., 1999).

2.2 About this literature review

The aim of this review is to examine the literature in relation to the following issues that are pertinent to the current study:

- adolescent males' attitudes to an unintended adolescent pregnancy (see Section 2.3)
- adolescent males' attitudes and decision-making in relation to pregnancy resolution choices with regard to an unintended adolescent pregnancy (see Section 2.4)
- primary explanations of the underlying attitudes and behaviours in relation to adolescent pregnancy occurrence and adolescent pregnancy resolution (see Section 2.5).

The following electronic databases were searched for the period 1980 to 2009: Psycinfo; Cinahl; British Nursing Index (BNI); Medline; Embase; and Web of Science. Cinahl and BNI were searched simultaneously as they are both supported by the EBSCO platform. The search terms used were 'teenage or adolescent men or males and crisis, unplanned, or unintended pregnancy', and 'teenage or adolescent men or males and abortion or termination or adoption'. Truncations and Boolean phrases were used where appropriate and depending on the search parameters of specific databases.

Grey literature predominantly consisted of HSE Crisis Pregnancy Programme (CPP) reports. Additionally, the Alan Guttmacher Institute (www.guttmacher.org) and the Royal Society for Public Health (www.rsph.org.uk) websites were searched for any reports or publications of pertinence to the present review.

The primary inclusion criteria were:

- papers pertaining to adolescent males aged between 10 and 24 years[4] in relation to pregnancy and pregnancy outcomes (we did not exclude a paper if older men were included in the study, provided there was sub-analysis by age)
- papers written in English and research conducted in Western developed countries and regions (defined in terms of excluding studies from South America, Africa, India and South-East Asia)[5]
- empirical (both quantitative and qualitative) research.

The primary exclusion criteria were:

- PhD and Master's theses because of difficulties of access and the absence of peer review
- literature that pertained primarily to adolescent sexual behaviour/activity and/or contraception (including attitudes to pregnancy prevention)[6]
- papers focused on the effectiveness of interventions/pregnancy-prevention programmes because such studies are already comprehensively reviewed elsewhere (Dixon-Woods et al., 2005; Hawker et al., 2002)
- literature looking at parenting/fatherhood but not examining the point of pregnancy decision-making was not included in order to keep the scientific focus on attitudes to an adolescent pregnancy and pregnancy decision-making rather than more broadly on adolescent parenting[7]
- literature primarily related to adults that did not include sub-analysis of an adolescent population
- literature on involuntary pregnancy outcomes such as still birth and miscarriage.

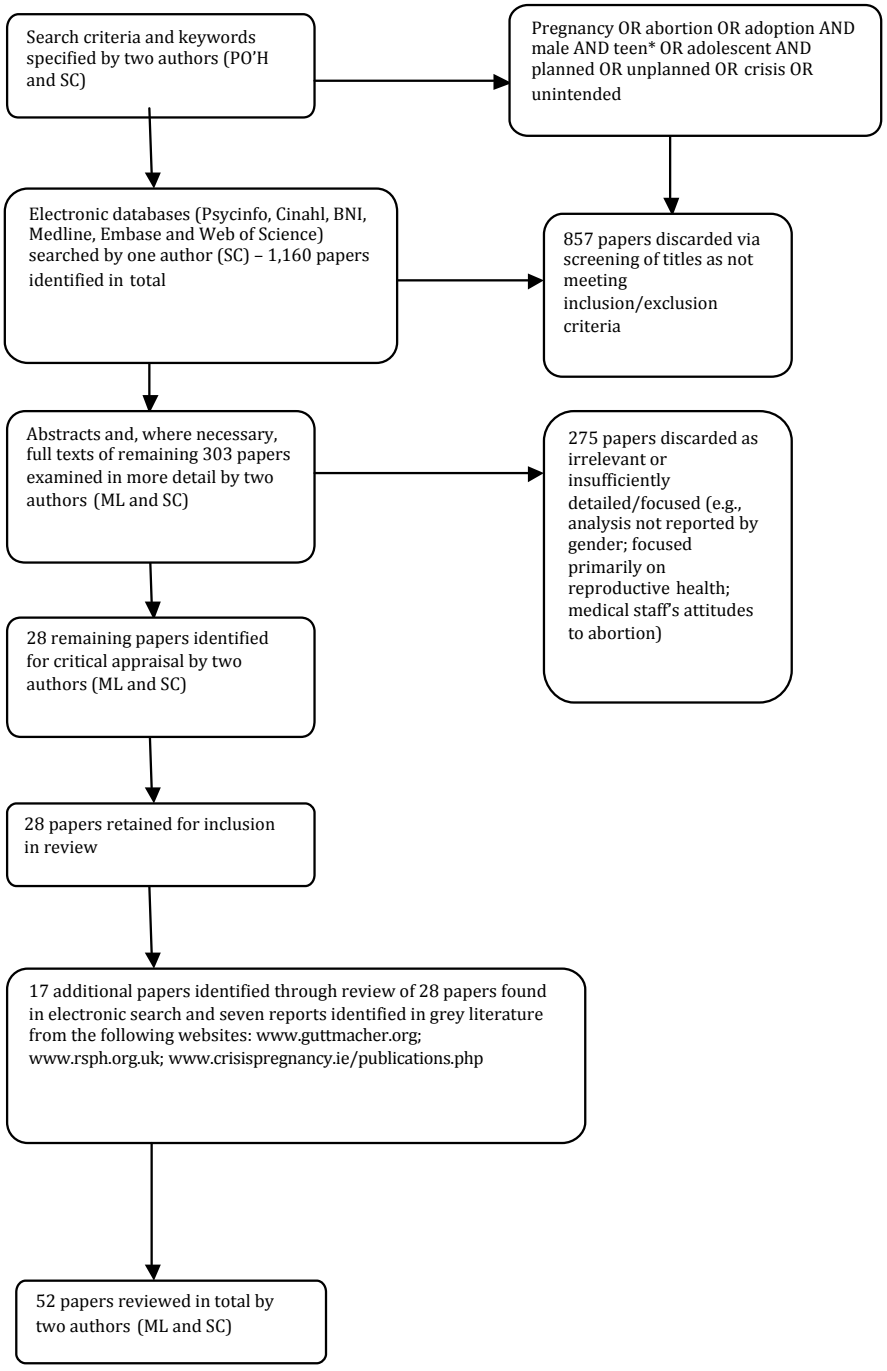
The flowchart in Figure 1 illustrates the literature search process for this review. A systematic search of selected electronic databases for the period 1980 to 2009 yielded a total of 1,160 papers, examination of which resulted in the elimination of 857 papers on the basis of our a priori inclusion/exclusion criteria. Examination of the abstracts (and full texts where necessary) of the remaining 303 papers resulted in an additional 275 papers being discarded as irrelevant or insufficiently focused for the purposes of this review. The remaining 28 papers were subjected to critical appraisal and retained for the review. The Critical Appraisal Skills (CASP) tools of the UK Public Health Research Unit were used to assess the quality of these articles.[8] A further 17 papers were identified

4 This age range represents the outer boundaries used in research on adolescents.
5 This decision was taken in light of the very significant differences in the gender politics of reproduction between Western and non-Western countries.
6 Although these issues are closely related, it was necessary to define the review in relation to the aims of the study. The study is not about attitudes to pregnancy prevention, but about adolescent males' general attitudes to the occurrence of an adolescent pregnancy and, more specifically, about (hypothetical) pregnancy resolution choices. The issue of adolescent males' attitudes and behaviours towards pregnancy prevention is dealt with in other reviews (see Lindberg et al., 2008, and Smith et al., 2005, for recent overviews).
7 We acknowledge that, because we did not use fatherhood as a search term, we may have excluded some studies of fathers who retrospectively talked about their attitudes to the pregnancy and pregnancy decision-making process.
8 See www.casp-uk.net.

through hand searches of the reference lists of those articles retained for the review. We also included seven reports, four from the CPP and three from the Alan Guttmacher Institute.

The review contains 43 quantitative studies and nine qualitative studies. The quantitative studies were further broken down into 16 nationally representative population-based studies, five surveys with sub-national samples and 22 surveys using convenience samples. A complete list of the studies included in this review can be found in Appendix 1.

Figure 1: Flowchart detailing literature search process



2.3 Attitudes to adolescent pregnancy

Numerous studies support the hypothesis that attitudes are an important determinant of contraceptive use, childbearing and abortion, and affect the transition to parenthood among adolescent females (see Barber and Axinn, 2005, for an overview). Of particular note, adolescent females' attitudes towards pregnancy were found to be predictive of the occurrence of a pregnancy one year later (Jaccard et al., 2003). Thus, it is important to also make visible the attitudes of adolescent males (Kero et al., 1999).

Our review of the literature encompassing this point – three large-scale national surveys in the US (Abma et al., 2004; AGI, 2002; Albert, 2007), two smaller non-representative quantitative studies (Robinson et al., 1998; Rosenberg, 1965) and six qualitative studies (Ekstrand et al., 2007; Hyde and Howlett, 2004; Kegler et al., 2001; Marcell et al., 2003; Ferguson and Hogan, 2007; Augustine et al., 2009) suggests that adolescent males viewed a possible unintended pregnancy during their teenage years as a negative event because of the adverse impact of having a baby on future aspirations and life goals, as well as on current freedoms. In addition, one qualitative study among an ethnically diverse sample of US adolescents (51% male) (Kegler et al., 2001) noted that the African American and Vietnamese American male participants cited damage to their reputation as a negative consequence of teen pregnancy, while the American Indian male participants cited increased dependence on their parents.

A minority of males in the reviewed studies expressed ambivalence or positive feelings in relation to an adolescent pregnancy (Albert, 2007; Augustine et al., 2009; Ekstrand et al., 2007; Ferguson and Hogan, 2007; Kegler et al., 2001; Robinson et al., 1998). While some of the ambivalent/positive feelings towards an adolescent birth were associated with an ability to prove 'manliness' through siring a child, two qualitative studies – one among males living in Ireland (N=45) (Ferguson and Hogan, 2007) and one among low-income males living in metropolitan Philadelphia (US) who had become fathers before the age of 25 (N=171) (Augustine et al., 2009) – suggested that some of the males perceived a broader range of benefits, including a desire to be a father and the perception of fatherhood as an opportunity to 'turn one's life around'. In particular for young marginalised working-class males in the Irish study, pregnancy – even when unplanned – was seen as an opportunity for such men to have a meaningful life in the context of failures of employment. Interestingly, such feelings were exclusively (US study) or predominantly (Irish study) expressed by participants who were retrospectively reflecting as fathers on an adolescent pregnancy.

Finally, a gender sub-theme emerged in this research: it would seem that adolescent males and adolescent females agree that an adolescent pregnancy would have a more adverse effect on the pregnant female than on her male partner. For example, a non-representative survey of adolescents (50% males, N=126) from Ayrshire, Scotland (an area with a high rate of teenage pregnancy) (Hooke et al., 2000) found that both males and females agreed that an adolescent father would have fewer restrictions placed on him than would an adolescent mother. This finding was replicated in a qualitative focus-group study in Ireland (Hyde and Howlett, 2004). Likewise, a qualitative study among US adolescents found that males viewed teenage pregnancy as less of a problem in their school and in their community in general than did females (Kegler et al., 2001). Although

scant, the evidence on this gender sub-theme is interesting, as it suggests a continuity of a gendered model of reproduction among adolescents that locates reproductive responsibility more firmly in the arms of females.

2.4 Pregnancy resolution choices

Turning to the larger question of adolescent males' attitudes and decision-making in relation to pregnancy resolution choices with regard to an unintended adolescent pregnancy, we begin by looking at adolescent males' views on pregnancy outcome decisions. Second, we explore adolescent males' views on the right to be involved in decision-making and their experience of being involved in the decision-making process. Finally, we consider adolescent males' need for health and social support in relation to pregnancy decision-making and pregnancy outcomes.

2.4.1 Attitudes to pregnancy outcomes

We look at adolescent males' views on pregnancy outcome decisions by exploring three sets of studies: general attitude surveys, quantitative studies using a vignette methodology, and qualitative studies. The reader will note that the focus of the literature to date has been overwhelmingly on the choice between abortion and keeping the baby. While in the previous section we were able to address, to some extent, attitudes to parenting, most of the research on pregnancy outcomes relates to attitudes and decision-making in relation to abortion. It is also of significance that, in this review, we are unable to identify literature on adolescent males' attitudes to adoption.

In Ireland, a national survey of the Irish population suggests that almost one-third of male and female adolescents living in Ireland (32% of males and 31% of females in the 18 to 24 age group) see abortion as always wrong (under any circumstance) (Layte et al., 2006). A further nationally representative study also sheds light on adolescent males' hypothetical pregnancy resolution choices in Ireland. When asked about the most likely outcome of an unplanned or unwanted pregnancy in their lives, a majority of 18 to 25 year olds (male and female) stated that they would choose parenthood (58%); other responses were unsure (34%), abortion (6%) and adoption (2%) (Rundle et al., 2004). Furthermore, in response to a question about retrospective experiences of a crisis pregnancy, 21 men in the 18 to 25 age group said they had experienced a crisis pregnancy. Their crisis pregnancy outcomes were: miscarriage (48%), live birth (35%) and abortion (17%).

Elsewhere, the National Survey of Adolescent Men (NSAM), a cross-sectional nationally representative survey among US adolescent males, provides the most detailed representative survey information on adolescent males' general views on abortion. The results of the 1988 and 1995 NSAMs show that almost three-quarters of all males agreed (either a little or a lot) that it is acceptable for a female to have an abortion. However, only a small minority (13%) approved of abortion in every circumstance (Boggess and Bradner, 2000). These figures indicate that just over 25% of adolescent males in the US and 32% of males (18 to 24 years) living in Ireland do not think it is acceptable for a female to have an abortion.

Comparative analyses of trends from the 1988 and 1995 NSAMs found a steady decline in acceptance/approval by adolescent males of abortion (Boggess and Bradner, 2000; Ku et al., 1998) and that this decline was driven especially by non-Hispanic white males (Boggess and Bradner, 2000). There is also evidence of a growing conservative attitude to abortion in Australia (Rissel et al., 2003). In contrast, there is evidence of a growing liberal attitude to abortion in Ireland (Layte et al., 2006; Rundle et al., 2004), although international comparisons show that the Irish population as a whole has, on average, less liberal attitudes (Cousins et al., 2008). These results suggest that adolescent male views on abortion vary over time and location and need to be understood with reference to the specific social and historical contexts of abortion within each country. In addition, the results suggest that, while there appears to be a broad endorsement by adolescent males of a female's right to have an abortion, only a minority in the above surveys endorse a de facto right to abortion in 'any circumstance'.

The individual and relational circumstances that influence adolescent males' pregnancy decision-making choices have been investigated using a vignette methodology detailing scenarios of hypothetical unintended pregnancies with reasonably large cross-sectional samples of males in south-west Australia (Condon et al., 2006) and in Mid-West cities in the US (Marsiglio, 1989; Marsiglio and Menaghan, 1990). The Australian study used a stratified random sample of schools (N=386). The US studies used a convenience sample of schools (N=577, 289 males, Marsiglio and Menaghan, 1990; N=298, Marsiglio, 1989). (See Appendix 1 for further details of samples.) In the case of the US studies, participants were presented with a paper-based scenario of an unintended pregnancy in the context of an ongoing relationship. In the Australian study, participants were presented with an interactive video drama – *If I were Ben* (on which we based our production of *If I were Jack*).

Thus, the scenarios of the Irish and Australian studies are directly comparable and, in common with the US studies, illustrate the story of an unintended pregnancy in an ongoing relationship. In one of the US studies, the majority of males (61%) chose to keep the baby, 19% chose abortion and 12% chose adoption (Marsiglio and Menaghan, 1990). In the other US study, precise figures are not available on abortion but, again, this was the least popular of the three options (approximately 10% of blacks and 22% of whites chose abortion) (Marsiglio, 1989). In the Australian study, adolescent males were slightly more likely to choose abortion than other options, which included keeping the baby or leaving it totally up to their pregnant partner (Condon et al., 2006).

Qualitative studies suggest that adolescent males view abortion as a difficult moral dilemma and that they weigh up a variety of instrumental, emotional and moral considerations in attempting to reach a pregnancy outcome decision. In one qualitative study among 18 Swedish males aged 15 to 26 years who had just been informed of a positive pregnancy result for their partners, the pregnancy decision-making process was characterised by concerns about the complications of an abortion for the female and feelings that abortion raised moral issues. This was particularly the case for the younger males in the study. Participants also cited issues such as insufficient money and being in full-time education, the quality of the relationship and guilt about the pregnancy as influencing factors in their decisions about abortion (Holmberg and Wahlberg, 2000).

Likewise, in another qualitative focus-group study among Swedish adolescent males on hypothetical choices in relation to an unintended pregnancy during adolescence, all the focus groups reached a consensus that the choice depended on the circumstances of the pregnancy, the gestation of the pregnancy and/or the financial and emotional capacity of the potential parents (Ekstrand et al., 2007).

2.4.2 The right to be involved in pregnancy decision-making

A tension between the adolescent male's right to be involved and the adolescent female's right to choose is presented in somewhat adversarial terms in some surveys, in part, perhaps, due to the ways in which the questions are posed. For example, over two cycles of the US-based NSAM, a majority of adolescent males agreed with the statement that 'a woman should not have an abortion if her male sex partner objected' (Boggess and Bradner, 2000; Marsiglio and Shehan, 1993). Endorsement of a man's right to be involved has been further explored in a number of studies on college men's views in individual universities in the US (Coleman and Nelson, 1999; Esposito and Basow, 1995; Jones, 2006; Nelson et al., 1997; Ryan and Dunn, 1983).

Overall, the results show male and female endorsement of greater involvement in abortion decision-making by males (Coleman and Nelson, 1999; Jones, 2006; Nelson et al., 1997; Rosenwasser et al., 1987; Ryan and Dunn, 1983). However, these studies also highlight the potential for tension between a man's right to be involved and a woman's right to choose. For example, one such US survey among college students revealed that a majority of the men believed that, while the male sexual partner could not require his female partner to have an abortion, a male partner should have a right to prevent her from having an abortion against his will (Rosenwasser et al., 1987).

Unsurprisingly, qualitative and vignette studies suggest a more nuanced interpretation of this tension between the woman's right to control her body and the man's right to be involved. They indicate that, while adolescent males would want to be involved, that involvement – or any responsibility they might assume – is worked through in the context of the relationship with the adolescent female (see also Ryan and Dunn, 1983). For example, in one vignette study conducted in Ayrshire, Scotland, adolescent males were asked to imagine a pregnancy in a casual relationship (N=123). Significantly more males than females believed that the male partner had an unconditional right to be involved in the decision, but the majority of the adolescent males said the male partner did not have the right to have a say – because the vignette suggested he was uncommitted. The majority believed that he should have the right to a say only if he stands by the female partner and ultimately allows her to make the final decision (Hooke et al., 2000).

The ways in which male involvement is negotiated in the context of relationships is further illustrated in qualitative studies of men's actual experience of pregnancy decision-making (Ferguson and Hogan, 2007; Holmberg and Wahlberg, 2000; Vaz et al., 1983). These studies tend to highlight that the balance of power dictating the male's involvement rests with the female partner. In two of the studies (Cater and Coleman, 2006; Vaz et al., 1983), most adolescent males expressed a sense of exclusion in relation to decisions surrounding the pregnancy, even though they were continuing the relationship with their partner. In contrast, participants in a qualitative study among

Swedish male adolescents (Holmberg and Wahlberg, 2000) highlighted the value to them of being involved in deciding the outcome of their partner's pregnancy and the pregnancy counselling process. These adolescent males (aged 15 to 26) were attending an adolescent outpatient clinic (the first of its kind in Sweden when established in 1970) with their partners who had received a positive pregnancy test. All the adolescent males felt involved in the decision-making process and expressed the view that being involved strengthened both their relationship with the adolescent female and their ability to cope. Similarly, in a study in Ontario, Canada (Redmond, 1985), which recruited male partners who had been involved in pregnancy decision-making (with a disproportionate number who had been involved in an abortion decision), it was reported that being able to talk to their girlfriends about pregnancy options and being involved in the decision was a positive experience.

2.4.3 The need for support in pregnancy decision-making

We identified only three studies that focused on the psychological consequences in adolescence for males involved in an adolescent pregnancy or in pregnancy decision-making (for a review of the impact of abortion on the male population more generally, see Coyle, 2007). One study was conducted with college students who self-reported direct involvement with abortion. The study used hypotheses derived from the female abortion literature and found that, among the men, higher levels of emotional connection to the fetus were associated with greater anxiety after the abortion (Coleman and Nelson, 1998). The other two studies – one a longitudinal follow-up study (Buchanan and Robbins, 1990) and one a case-controlled study (Resnick et al., 1993) – found increased psychological distress in those involved in unintended adolescent pregnancies. This was as true of adolescent males whose girlfriends chose an abortion as of those who went on to become fathers (Buchanan and Robbins, 1990).

More generally, among the few studies of adolescent males' experiences of pregnancy decision-making, adolescent males expressed the desire for counselling and support in making pregnancy outcome decisions. In one study, in which the adolescent males had received support, they acknowledged the importance of this support and also the need for the clinic to respect the confidentiality of adolescent males (Holmberg and Wahlberg, 2000). In a small questionnaire study conducted in Canada (N=41, Vaz et al., 1983) among adolescent males whose partners had chosen to keep the baby, only a small minority of the males had seen a health professional during the decision-making period. Those participants who said they had not been involved in the decision emphasised that they would like to have been. Because of the mental health strain reported by the adolescent males during the decision-making time, the authors of the study iterate the importance of including them in the counselling process.

In a qualitative Irish study of males who faced decisions on abortion, the participants described the decision as an emotional experience and as a fateful moment when their lives could have taken a very different direction. Even for those who experienced the abortion as an overall positive decision, the immediate aftermath of the abortion 'left some men experiencing some guilt, self-recrimination and struggles with intimacy' (Ferguson and Hogan, 2007, p. 94).

2.5 Primary explanations of underlying attitudes and behaviours

Explanations of adolescent males' attitudes to an adolescent pregnancy and pregnancy outcome choices are principally derived from a social constructivist model of human actions, incorporating variables that reflect adolescent males' social context (such as social class) and underlying values (such as religiosity). We refer to these as distal variables.

In addition, we note from prior research the inclusion of explanations derived from social cognitive theory or, more specifically, theory of planned behaviour (TPB) (Ajzen, 1985, 1988; Ajzen and Madden, 1986). TPB suggests that a person's attitude towards a behaviour and his or her perceived belief about the specific attitudes of significant others (subjective norms) are essential elements that lead to behavioural intention and behaviour. We refer to these attitudinal and subjective norm variables as proximal variables, because, relative to distal variables, they tend to be specific immediate precursors of the behaviour – more proximate to the outcome (Carvajal and Granillo, 2006). Nonetheless, proximal variables derived from social cognitive theory fit within an overarching social constructivist model of understanding behaviour, because, unlike other cognition models, this theory acknowledges that behaviours take place within a social context (Bandura, 1977, 1986).

Limited attention has been given to a socio-biological model, which might include an analysis of hormonal variation and pubertal development over time. While research has shown that the timing of puberty appears to be associated with sexual motivation and sexual initiation (Crockett et al., 1996; Smith et al., 2005; Udry and Billy, 1987; Udry et al., 1985), it has not been clearly researched in relation to attitudes to pregnancy and pregnancy resolution.

For conceptual clarity, the evidence for each of the factors under the broad headings of distal and proximal variables is reviewed individually. However, it should be stressed that these factors are unlikely to act in isolation. There is evidence suggesting that factors such as social class, age, ethnicity and perceptions of traditional masculine ideology may influence (singly or in combination) adolescent males' attitudes to adolescent pregnancy and pregnancy decision-making. Finally, where possible, we break down the evidence in relation to, first, adolescent males' attitudes to the occurrence of an unintended adolescent pregnancy and, second, their attitudes and behaviours in relation to pregnancy resolution.

2.5.1 Distal variables

Social class

Adolescents from poorer families tend to view the occurrence of an unplanned adolescent pregnancy somewhat more favourably than adolescents from more affluent backgrounds (AGI, 2002; Rundle et al., 2004; Layte et al., 2006; Marsiglio, 1993; Rosengard et al., 2005). The socio-economic status of parents also has an impact on attitudes and behaviours in relation to adolescent pregnancy resolution; adolescents from the lower classes are less likely to approve of abortion and more likely to choose to keep the baby as a resolution to a pregnancy (Marsiglio, 1989; Marsiglio and Shehan, 1993; Rundle et al., 2004).

Religiosity and religion

We did not identify literature on adolescent males' attitudes in relation to the occurrence of a pregnancy and religiosity. With respect to the relationship between religiosity and pregnancy outcomes, a number of studies in the US and Europe have noted a negative association between religiosity and attitudes to abortion. Adolescents with higher religiosity and/or less liberal moral attitudes are more likely to be anti-abortion (Agostino and Wahlberg, 1991; Boggess and Bradner, 2000; Bryan and Freed, 1993; Esposito and Basow, 1995; Layte et al., 2006; Marsiglio and Shehan, 1993; Ryan and Dunn, 1983). Data on the Irish population as a whole also suggest that higher religiosity is associated with more negative attitudes to abortion (Layte et al., 2006). US data show an increase in the number of US respondents who identify themselves as 'born-again Christians' (from 18% in 1988 to 24% in 1995), accompanied by an increase in ratings of the importance of religion (from 28% in 1988 to 34% in 1995) among non-Hispanic white males, and a concomitant decrease in positive attitudes towards abortion amongst adolescents during this time (Boggess and Bradner, 2000). In addition, being Catholic or, more broadly, being a member of an anti-abortion church is also associated with disapproval of abortion (Esposito and Basow, 1995; Wright and Rogers, 1987).

Masculinity

In relation to masculinity, some studies suggest that getting someone pregnant is a means for some adolescent males to express or validate their masculine identity (Broen et al., 2005; Kegler et al., 2001; Marsiglio, 1993; Pleck et al., 1993). However, only one study has focused on the relationship between masculinity ideology and pregnancy outcome decisions. An Australian study (Condon et al., 2006) found that those male respondents who opt for the continuation of a hypothetical pregnancy are characterised by 'low masculinity', defined in terms of the Male Role Norms Inventory (Thompson and Pleck, 1986).

Age

Research on the influence of age in predicting differences among adolescent males' responses to a pregnancy or their pregnancy decision-making is particularly limited. Only two quantitative studies in the US have measured this and they offer contradictory findings. The smaller, non-representative study found that older undergraduate students have more liberal attitudes to abortion than younger ones (Wright and Rogers, 1987). The larger, representative study found that conservative attitudes to abortion increase significantly between 18 and 21 years of age (Misra and Hohman, 2000). There was also one small qualitative study that examined age. This study, among adolescent Swedish males involved in real pregnancy resolution situations, found that the younger the male is at the time of the pregnancy, the less prepared he is for becoming a father (Holmberg and Wahlberg, 2000).

Ethnicity

Earlier US data tend to show that black and Hispanic males are more likely than other ethnicities to favour continuation of a pregnancy (Buchanan and Robbins, 1990). However, there is also evidence of an increase in 'pro-life' attitudes among adolescent white males in the US; by 1995, blacks appeared to be more accepting of abortion than whites and

Hispanics (Boggess and Bradner, 2000). Overall, the explanatory weight of ethnicity is mediated strongly by social class/neighbourhood quality (Kegler et al., 2001; Marsiglio and Shehan, 1993; Thornberry et al., 1997), religiosity (Boggess and Bradner, 2000) and masculinity ideology (Pleck et al., 1993).

Idealisation of pregnancy and parenthood

In response to earlier work that highlighted the extent to which idealised views of parenthood among adolescent females (LeMasters, 1970; Zabin et al., 1986) and adolescent males (Robinson et al., 1998) may lead to intentional pregnancies, an Australian research team (Condon et al., 2001) developed a measure of idealisation of pregnancy and parenthood among South Australian adolescents. In testing this measure, within the context of a hypothetical pregnancy/relationship scenario among a sample of Australian male adolescents (Condon et al., 2006), it was found that those respondents who opt for continuation of the pregnancy are characterised by high idealisation of parenthood, thus establishing that holding such idealised beliefs does influence pregnancy decision-making. This measure remained untested beyond South Australia until the current study (see Section 6.3).

Self-esteem

The same Australian study (Condon et al., 2006) examined the role of self-esteem in predicting pregnancy decision-making. It found that those respondents who opt for continuation of the hypothetical pregnancy are characterised by low self-esteem.

Relationship status

In common with a qualitative study in Sweden (Holmberg and Wahlberg, 2000), one qualitative study in Ireland suggests that relationship status is a key determinant of choosing to keep the baby versus opting for abortion (Ferguson and Hogan, 2007): where the male partner perceives that, no matter how short the relationship, the couple share some sense of future together, or at least have enough in common to face having the child and sharing parenthood (as a couple or apart), he is inclined to choose to keep the baby.

2.5.2 Proximal variables

Attitude and subjective norms

Research in the US has tested Fishbein and Ajzen's social cognitive model in relation to adolescent males' hypothetical pregnancy decision-making (Marsiglio, 1988, 1989; Marsiglio and Menaghan, 1990). This model, derived from theory of planned behaviour (Ajzen, 1985, 1988; Ajzen and Madden, 1986), suggests that a person's attitude towards a behaviour and his or her perceived belief about the specific attitudes of significant others lead to behavioural intention and behaviour. Results from these US studies show that males' intentions (to live with their child and partner) in the event of an unplanned adolescent pregnancy are significantly related to their personal beliefs about the consequences of the pregnancy outcomes and their perception of how they feel that significant others such as parent(s) and best friend would expect them to behave (Marsiglio, 1989; Marsiglio and Menaghan, 1990).

A further analysis of the Australian study (Condon et al., 2006) also showed the importance of adolescent males' attitudes relating to each of the outcomes (abortion or keeping the baby) in determining their pregnancy outcome choice (Corkindale et al., 2009). Those who chose to maintain the pregnancy were more idealistic and placed greater emphasis on their moral beliefs about abortion; those who chose to discontinue the pregnancy placed greater emphasis on the negative consequences to themselves and the baby. This study did not test the salience of attitudes of significant others on the adolescent males' choices.

A qualitative study in Ireland (Ferguson and Hogan, 2007) indicates the importance of parental attitudes – particularly the perception of family support for keeping the baby in the event of an unplanned pregnancy – in contributing to males' decisions to keep the baby.

2.6 Key points

Overall, there is no sustained body of research in either the adolescent pregnancy or male sexual health literature in relation to adolescent males' attitudes and behaviours to an unintended adolescent pregnancy or pregnancy resolution.

2.6.1 Attitudes to adolescent pregnancy

Most of the studies show that adolescent males view adolescent pregnancy as a negative situation, though some are ambivalent about the idea of becoming a parent and a small minority see it as a positive life event. There is some evidence in the literature that adolescent males and females think that an adolescent pregnancy has a more adverse effect on adolescent females than it has on adolescent males.

2.6.2 Pregnancy resolution choices

Current research in relation to pregnancy outcomes is overwhelmingly focused on pregnancy decisions that centre on the choice between abortion and keeping the baby. Thus, the available research focuses on adolescent males' attitudes to abortion and/or parenting. Research on adolescent males' attitudes to adoption, albeit a less statistically significant choice, is particularly limited.

Almost one-third (32%) of Irish male adolescents aged 18 to 24 years regard abortion as always wrong. Although attitudes to abortion among adolescents in Ireland are becoming more liberal, they tend to be more conservative than those of adolescent males in Australia (Rissel et al., 2003) and the US (Boggess and Bradner, 2000). In general, internationally comparative research on adolescent males' attitudes to abortion is lacking.

In US-based studies that presented adolescent males with a hypothetical unplanned pregnancy scenario, adolescent males were more likely to choose to keep the baby (with a preference to live with their partner) and least likely to choose abortion. In a similar Australian study, adolescent males were slightly more likely to choose abortion over keeping the baby or leaving it up to their partner. In an Irish study, 18 to 25 year olds (male and female) stated that, in the event of an unplanned or unwanted pregnancy in

their lives, they would choose parenthood (58%), this was followed by unsure (34%), abortion (6%) and adoption (2%) (Rundle et al., 2004). The limited quantitative and qualitative studies of males' actual involvement in pregnancy decision-making report abortion as a difficult moral dilemma in which a broad range of instrumental as well as altruistic factors are considered as part of the decision.

Across quantitative and qualitative studies, adolescent males emphasise a desire – if not a right – to be involved in pregnancy outcome decision-making. The limited studies of males' actual experience of confronting pregnancy decision-making have found that males tend to feel excluded and to report feelings of depression and isolation. Where males have had opportunities to be involved, they report the experience as being very positive.

Little research has been conducted with adolescent males in relation to their need for support in dealing with an adolescent pregnancy and pregnancy outcome choices. However, in one qualitative study conducted in Sweden, where adolescent males were involved in the counselling process, the participants reported the benefits to them.

2.6.3 Primary explanations of underlying attitudes and behaviours

Three particular distal explanations of adolescent males' attitudes to pregnancy resolution choices stand out in the literature: religiosity, socio-economic status and masculinity. The evidence for an association between religiosity and pregnancy resolution choices is the strongest. Two proximal explanations stand out: the attitudes of adolescent males to the consequences of pregnancy resolution choices and the perceived attitude of significant others.

2.6.4 Implications for the current study

The current study focuses on adolescent males' attitudes and decision-making in relation to a hypothetical adolescent pregnancy in their lives. By evoking the situation through a role-play scenario, we are able to draw on adolescent males' cognitive and emotional reactions to the situation. We explore questions such as what is their initial reaction, how they might feel in relation to their partner in light of the news, whether they would talk to their parents, and, if so, what they might say. We also inquire into whether they would talk to a counsellor and, more generally, into their ability to cope and sense of self-efficacy in dealing with such a situation.

In relation to pregnancy decision-making, the research design of this study, as described in Chapter 3, addresses the question with a strong theoretical model capable of describing and explaining males' choices. Our thorough analysis of the literature allows us to test – for the first time in the international research on this topic – a comprehensive range of the underlying psychosocial predictors of adolescent males' pregnancy outcome choices in the event of an adolescent pregnancy.

This study involves a sample of adolescent males aged 14 to 18 who are attending second-level schools. The sample size and sampling strategy allow for comparisons to be made with similar research previously conducted in the US and Australia.

3 Methods

3.1 Introduction

The research involved three distinct stages:

1. Developing the interactive video drama (IVD) and research tools.
2. Analysing the psychosocial determinants of adolescent males' attitudes and decision-making in relation to an unplanned pregnancy (non-random survey of adolescent males attending school).
3. Evaluating the IVD (interviews and focus groups with users and key stakeholders: adolescent males, teachers, and health and education sector professionals).

In this chapter we outline the research design and innovative methodological approach of the study. We begin by describing the development of the IVD (Section 3.2) and the recruitment of participants (Section 3.3). We then outline the research measures employed (Section 3.4) and the nature and findings of the pilot test (Section 3.5). Next, we explain the procedures involved in the data collection (Section 3.6) and data analysis (Section 3.7) stages. Finally, we set out the ethical considerations involved in this research (Section 3.8).

3.2 Developing the interactive video drama

The development of the IVD involved making an Irish version of an Australian IVD (Condon et al., 2006) in such a way that the film authentically represented a scenario of a young Irish adolescent male who has discovered his girlfriend is pregnant. Embedded in the screen interface is a questionnaire that asks the viewer to imagine 'If I were Jack'. The film automatically pauses at selected intervals in a week in the life of Jack, asking the viewer to imagine how he might be feeling now, and what sort of decisions he might make, for example if he would talk to his friends, family or a counsellor, and what he might ultimately decide to do in relation to the pregnancy.

Our primary motivation for the use of drama in this project was to enhance the phenomenological aspects of the hypothetical scenario in order to engage with the participants at both an emotional and a cognitive level. Our concern with the phenomenological authenticity of the research tool meant that, from an early point in the development process, it was deemed necessary to make an Irish version of the original Australian IVD. Essentially, we wanted to allow the research participants to have the greatest opportunity to identify with the lead character and his cultural context, especially as legislation and cultural norms on abortion vary considerably internationally (Henshaw et al., 1999; Bender et al., 2003). The process involved adapting the Australian script based on previous Irish research (Hyde et al., 2005; Mayock et al., 2007) and consultations with the study's advisory board (see Appendix 4 for membership), members of the research and policy team of the HSE Crisis Pregnancy Programme (CPP), and adolescents. The consultations with the advisory board and the CPP staff involved each person reading the script and making recommendations. Consultations with young people involved script readings with three youth (adolescent) drama groups.

Some of the changes from the original Australian version resulting from this process were relatively minor. For example, vernacular changes and altered scene-settings

such as swapping beaches for parks and driving cars for strolling around town. Others were more substantive. For example, the Australian version contains a scene where the adolescent male, in a quasi-counselling session, sits down with a platonic female friend to work through on pen and paper all the advantages and disadvantages of the choices before him. The young people in our script-reading groups were of the view that talking to a young female other than his girlfriend was relatively implausible and so we amended this scene to show the lead character working through his options on his own. Similarly, it was thought unlikely that a young Irish male would immediately engage in a frank discussion of his situation with his male friends, so this scene was amended to show conversations with them taking place in his imagination. We also added a friend who expressed non-directive support: 'Don't worry – you'll always have your friends, you know.'

We made a substantial change to the pregnancy outcome choices (dependent variables). In response to a recommendation by the CPP, the research team introduced adoption as a sub-choice under the option to continue the pregnancy and worked this possible choice right through the script and filming. This reflects a growing policy interest in adoption, and small increases in the rates of adoption in some Western countries since the late 1990s, following a steady decline from the 1970s (Resnick, 1992; O'Keeffe, 2004). More specifically in Ireland, legislation on abortion information requires that the adoption option is discussed and raised in crisis pregnancy counselling, and historically adoption was a more common option. We also incorporated additional sociological explanatory variables (independent variables), notably social class and religiosity, based on our review of the literature (see Section 2.5).

The IVD was produced in co-operation with Queen's University Belfast (QUB) Media Services and David Grant, School of Languages, Literatures and Performing Arts, QUB. Again we chose to use Irish actors and Irish settings. The actors were recruited from schools of drama in Dublin. During auditions, a key consideration was the social and geographical significance of the actors' accents, and how these would be understood in semiotic terms by the expected end-users. A further consideration was to choose a young actor for the lead female role who was attractive yet not exceptionally so. In the end we chose an actor with a Dublin working-class accent for the part of Jack – but conducted voice work with the actor to make sure that his words would be clear to a wider audience. The young female's accent is also a Dublin accent, but with a slightly more nuanced class intonation. We also tried to choose a couple who responded to and corresponded with one another well.

Finally, making a new version of the IVD allowed us to update the software (to Macromedia Director MX 2004) and produce a more sophisticated user-interface. An excerpt of this film drama may be viewed on the following website: www.mediator.qub.ac.uk/ms/streams/Compilation_384K_Stream.wmv.

This IVD was the basis for exploring a sample of adolescent males' understandings and decision-making processes around an unplanned pregnancy in Stage 2 of the research.

3.3 Recruiting participants

3.3.1 Selection criteria

Principal inclusion criteria for the study:

- adolescent males: 14 to 18 years of age, attending school[9]
- teachers: individuals who normally teach relationships and sexuality education (RSE) in the recruited schools
- health and education sector professionals: individuals recommended by the CPP.

Principal exclusion criteria for the study:

- adolescent males under 14 and over 18 years of age
- those who did not sign the consent forms
- those whose parent/guardian had signed an opt-out form.

In Chapter 4 we report on response rates for each group of research participants and outline the profile of the sample.

3.3.2 Approach to schools

In our selection of schools, we first chose six counties across four geographical areas of the country. The areas and counties were: north-west (Donegal), west (Galway and Sligo), mid-west (Westmeath) and east (Louth and north Dublin). Within each county, we made a list of the schools under each of the stratification criteria: socio-economic advantage or disadvantage, urban or rural, religious denomination, and single sex or co-educational. We then randomly selected schools in each of the counties under each of the stratification criteria.

The researcher telephoned each school on our list to attempt to make contact with the Social, Personal and Health Education (SPHE) coordinator in the school. In most instances, the researcher's first contact was with the school secretary. The researcher introduced herself and the research team, and gave a brief overview of the project. She then asked if it would be possible to speak to the SPHE coordinator. If the relevant teacher was not available, the researcher either left her name and telephone number with a request for the teacher to call her back or asked the secretary for an appropriate time to call back. In most cases the researcher made contact with either the SPHE coordinator or a lead SPHE teacher within three telephone calls.

Once telephone contact had been established with the relevant SPHE teacher, the researcher gave a more detailed overview of the project and suggested sending the teacher an information pack containing a formal letter of invitation to take part in the research, information sheets, copies of information that would be provided to parents and participants, copies of consent forms and opt-out forms, and copies of Questionnaire 1 (see Appendices 2.1, 3.1 to 3.4 and 3.6 to 3.8). The researcher also stressed the IVD component of the research, but did not send out copies of the film at this stage. In only one instance did a school decline to receive the information pack; no reason was provided for declining.

9 Following the pilot study and discussions with peer researchers in the Medical Research Council (Scotland), we amended the minimum age from 16 to 14 years.

It was considered preferable for the IVD to be demonstrated by the researcher once teachers had had a chance to look over the other research materials and discuss the project with their principal, board of management and relevant colleagues. It was made clear to teachers during the first telephone conversation that the researcher would be happy to visit the school at the teacher's convenience to demonstrate the IVD. The motivation behind this strategy was twofold: first, it was felt that demonstration of the IVD by the researcher would allow the researcher to (a) address any queries or concerns that the teacher would have as and when they would arise and (b) contextualise aspects of the IVD; second, setting up a demonstration meeting facilitated the researcher in making face-to-face contact with the teacher as early as possible, allowing the researcher to 'get a feel' for the school and its structure, and usually resulting in the researcher being introduced to other relevant members of staff (e.g., principal/vice-principal, school counsellor/those involved in pastoral care, other SPHE teachers, IT teachers, administrative/support staff). All of this was instrumental in establishing rapport and trust between the researcher and key stakeholders in the schools.

After information packs were sent out, the researcher waited an appropriate length of time (as had been negotiated) to see if the teacher involved would phone back to enquire further about the research and to arrange a time for the IVD demonstration meeting. If more than one further week passed with no phone call from the teacher, the researcher initiated a follow-up phone call. As with the original phone call, the researcher often had to either leave her contact details with the school secretary or arrange an appropriate time to ring the teacher. In many cases the teacher did not respond and after two further phone calls to the school were made with no response we understood this to be a refusal to participate. Other teachers or principals did phone back to state their non-participation (see Section 4.2.1).

For those who responded by phone, the researcher assessed the level of interest in the research and sought to arrange a demonstration meeting as soon as was convenient. For the demonstration meeting, the researcher took a laptop computer on which to show the IVD, and extra copies of the materials that had been sent out to teachers. Usually the meetings with teachers began with questions about the research and research tools, followed by the IVD demonstration. Some teachers were able at this point to indicate that they were happy for the research to go ahead. Other teachers expressed interest but needed to discuss the matter with senior management and colleagues who would have some involvement before deciding whether the research should proceed. In such cases the researcher left a copy of the IVD with the teacher involved, along with instructions on how to run the programme, so that relevant colleagues could watch the film in their own time.

Of the 62 schools approached, 13 agreed to participate. Once the teacher indicated that the school was happy to go ahead, the researcher would ask to examine the computer facilities and to test the IVD and headphones on the type of computer that would be used in the research. If this was not possible at the time of the demonstration, the researcher usually organised to return to the school at the end of that school day (i.e., when the room was no longer in use) or, if that was not possible, made an alternative arrangement to visit the computer lab and examine the computers. This needed to be done at an early

stage (i.e., prior to any parent information packs being sent out) as the research could only proceed if suitable facilities were available. IT facilities had a direct impact on the number of participants who could be included in the research in each school as we were heavily dependent on the number of working computers in the lab and the length of time that could be allocated out of the school timetable for the use of that room. Once we were satisfied that the research was going ahead, and that there were enough working computers, a testing day was selected that was convenient to both the school and the researcher.

The next stage involved agreeing which students might be available to be involved in the research. Then, at least two weeks prior to the research taking place, the parents/guardians of each participant were sent an information pack about the research. This pack included full details of the purpose of the research, how it would be carried out, why their son had been selected to be invited to take part, when the research was going to be taking place, and contact details for the research team in the event of any queries (see Appendix 3.4). The parents/guardians were also given an opportunity to opt their son out of the research if they preferred that he not take part. An opt-out form was included in the pack (see Appendix 3.8), as well as a stamped addressed envelope for return of the opt-out form to the research team.

Although the information packs provided by the research team were complete in themselves, the majority of schools wished to provide a cover letter on their own headed paper in order to assure parents/guardians that the school was fully aware of the research. If the school did not express this wish, the researcher suggested it, as it was felt that this was an important measure that would reassure parents about being approached by the research team. The parents were told in the cover letter when the research would be taking place, and were given adequate time to return the opt-out form before this date. Issues surrounding data protection mean that schools are not allowed to provide names and addresses of the parents/guardians of their students and we therefore relied on the schools' administrative staff being willing to print out address labels for each of the information packs. We provided all other materials (i.e., an information pack for parents/guardians of each potential participant in a QUB envelope, stamped, and ready to be sent out once the cover letter had been inserted, envelope sealed and label attached), and offered practical assistance wherever possible.

Students were initially informed about the research by their teachers, both verbally and via an information sheet relating to Stage 2 of the research (i.e., Questionnaire 1 and the IVD). This information sheet (see Appendix 3.2) was handed out to each student by the RSE/SPHE teacher within one week of the research being scheduled to commence.

3.3.3 Sampling strategies for focus groups and interviews

For the focus groups used in the research, the relevant teacher was asked to pick a sample of six to eight adolescent males from the group to be involved. The teacher followed two inclusion criteria: a cross-section of the class in terms of academic ability, and friendship pairings. The latter was important to allow the participants to feel comfortable in the focus group. At the end of the administration of Questionnaire 1, the researcher spoke to the selected students and invited them to take part in a focus group.

The researcher verbally informed the selected participants what was involved in taking part in a focus group as well as giving the students an information sheet (see Appendix 3.3).

Fourteen teachers from 12 of the 13 participating schools were verbally asked if they wished to receive information about taking part in a semi-structured interview to review the potential of the IVD as an educational tool. In the case of one school, no teacher was asked to take part in an interview because it was evident to the researcher that the teacher would not have been in a position to facilitate any involvement beyond what she was already doing with respect to the research.

The CPP identified five professionals from the health and education sectors with a responsibility for relationships and sexuality education training development and service provision in Ireland. These specialists have experience in the development and delivery of sexual health and education programmes for adolescents and were drawn from various parts of Ireland, covering both urban and rural areas. To progress the research, the health and education sector professionals were sent an information sheet (see Appendix 3.5) about the study and invited to participate in an interview. This correspondence was followed up with a phone call.

3.4 Measures

Research participants (adolescent males) were asked to complete two questionnaires:

- Questionnaire 1 (see Appendix 2.1) relates to our independent variables and was administered prior to viewing the IVD containing Questionnaire 2.
- Questionnaire 2 (see Appendix 2.2) is embedded in the IVD. The participant is asked to answer a series of role-play questions at selected intervals on the computer-based questionnaire. These role-play questions culminate in two key questions which form our dependent variables: (a) the participant's support for the continuation of the pregnancy and (b) his choice to continue the relationship with his pregnant partner. The questionnaire also contains six questions designed to assess the value and appropriateness of the IVD from the perspective of the adolescent male user.

3.4.1 Distal variables

Copies of all the scales may be viewed in Questionnaire 1 (see Appendix 2.1). All the measures of the distal variables, with the exception of parents' profession, were recalibrated to run from 0 to 1. Details of the scales are as follows:

- *Idealisation of Pregnancy and Parenthood Scale (IPPS):* The IPPS (Condon et al., 2001) is a 21-item measure designed to assess the extent to which participants hold idealised views of what it is to experience pregnancy and parenthood. The scale contains two subscales: the Pregnancy subscale, which consists of 10 items (e.g., Item 10: 'Pregnancy is one of the happiest times in most women's lives'), and the Parenthood subscale, which consists of 11 items (e.g., Item 16: 'Parenting is almost always enjoyable'). Participants respond using a five-point Likert-type response format of strongly agree [5], agree [4], not sure [3], disagree [2] and strongly disagree [1]. There is one negatively worded item in the Pregnancy subscale (Item 2), which is reverse-

scored prior to analysis. Scores can range from 10 to 50 for the Pregnancy subscale, and 11 to 55 for the Parenthood subscale. Higher scores in each subscale represent greater levels of idealisation of pregnancy and parenthood. In the development of the scale, Condon et al. (2001) found the internal consistency of both subscales to be reasonably robust, with Cronbach's alpha coefficients of 0.59 and 0.71 for the Pregnancy and Parenthood subscales respectively.

- *Male Role Attitudes Scale (MRAS):* The MRAS (Pleck et al., 1993) is an eight-item measure of masculinity. The social constructionist principle underlying the scale views masculinity not as a dimension of personality (or biology), but rather as a set of culturally derived beliefs and expectations about what men are like and how men behave. The scale tests the extent to which participants identify with these cultural notions of masculinity. Participants respond using a four-point Likert-type response format of strongly agree [4], agree [3], disagree [2] and strongly disagree [1]. All items are positively worded and scores can range from eight to 32. Higher scores represent higher levels of male-role attitude. Items include: 'I admire a guy who is totally sure of himself' (Item 3) and 'It bothers me when a boy acts like a girl' (Item 6). Original scale reliability, as measured by Cronbach's alpha, was 0.56 (Pleck et al., 1993). Loewenthal (1996) suggests that a reliability of 0.6 may be considered acceptable for scales with fewer than 10 items.

- *Rosenberg Self-Esteem Scale (RSES):* The RSES (Rosenberg, 1965) is a 10-item measure of global self-esteem. Participants respond using a four-point Likert-type response format of strongly agree [4], agree [3], disagree [2] and strongly disagree [1]. Five of the items are negatively worded and are reverse-scored prior to analysis. Scores can range from 10 to 40. Higher scores represent higher levels of self-esteem. Items include: 'I feel that I have a number of good qualities' (Item 3) and 'I wish I could have more respect for myself' (Item 8; reverse-scored item). The original reliability of the scale, as measured by Cronbach's alpha, was 0.86 (Rosenberg, 1965).

- *Religiosity:* The following single item was used: 'How important would you say religion is to you? Is it: very important, fairly important, fairly unimportant or very unimportant.' This variable is assumed to be an ordinal level variable, and for the purposes of the present study was recalibrated to run from 0 to 1. We opted to include this variable in analysis in preference to religious attendance primarily because religious importance would be more representative of an intrinsic (or personal) religious orientation, while attendance could be viewed as more representative of an extrinsic (or external) religious orientation (see Allport, 1959).

- *Parents' professions:* Responses to the following questions were used: 'Please indicate which best describes the sort of work your father does. (If he is not working outside the home now, please tell me what he did in his last job.)' Eleven answer categories were supplied: professional or higher technical work; manager or senior administrator; clerical; sales or services; small business owner; foreman or supervisor of other workers; skilled manual work; semi-skilled or unskilled manual work; other; never worked; not applicable. The same question was asked about the student's mother. For each respondent, whichever class position of mother or father

was highest was used. This was recoded into four categories: professional, non-manual, manual and other.

3.4.2 Proximal variables

The phrases for the responses of the proximal variables were derived from the Australian research (Corkindale et al., 2009). They were composed by the researchers following focus-group interviews with adolescent males who had been involved in an unplanned pregnancy in Australia (Corkindale et al., 2009). The items for adoption were added by us. These responses were validated by our advisory board, CPP staff and through our discussions with adolescents prior to producing the film.

- *Mother positive (to keeping the baby):* Reponses to the following question were used: 'What would my Mother say?' [to the hypothetical situation of my girlfriend becoming pregnant]. The seven available answers were: (a) Fantastic, I always wanted to be a granny. (b) She's ruined your life. (c) The best thing she can do is have an abortion. (d) You'll have to have the baby. (e) What are people going to think about us? (f) You're a stupid idiot, you've really messed up. (g) Not applicable.

  (See Appendix 2.2, question 5a.) Categories (a) and (d) were coded as positive and the rest as negative.

- *Father positive (to keeping the baby):* Reponses to the following question were used: 'What would my Father say?' [to the hypothetical situation of my girlfriend becoming pregnant]. The seven available answers were: (a) It's alright son we'll stick by you. (b) She's not living here that's for sure. (c) Well, it's your problem Jack, you're a man now. (d) You're going to have to get married. (e) After all we've done for you; this is how you repay us. (f) Get out of this house, I don't want to see you again. (g) Not applicable.

  (See Appendix 2.2, question 5b.) Category (a) was coded as positive and the rest as negative.

- *Adolescent males' attitudes to pregnancy:* Responses to the questions outlined in Table 1 were used to assess adolescent males' views in relation to the three main outcome options: abortion, keep the baby and adoption. Respondents were presented with a list of advantages and disadvantages to each of the main outcome options. A dichotomous response format of 'important' or 'not important' was used for each of them.

Table 1: Adolescent male attitude items to pregnancy outcomes

	What are the good things for me about going ahead with abortion?
18a	I can forget this ever happened.
18b	I can finish school.
18c	It won't upset the family and no one need know.
18d	I can avoid being a really young parent.
18e	I'm free to split with Emma if I want to.
18f	No child of mine will grow up disadvantaged.
	What are the bad things for me about going ahead with abortion?
19a	It's physically risky for Emma.
19b	There's a bit of me actually wants a baby.
19c	It's morally wrong.
19d	You can't change your mind afterwards.
19e	I'd regret it for the rest of my life.
19f	I feel it's risky mentally for Emma to go through with.
	What are the good things for me about going ahead and having the baby?
20a	It will make my relationship with Emma stronger.
20b	I'll feel better if I take responsibility for my actions.
20c	I won't have to put Emma through the abortion experience.
20d	I'll enjoy being a dad.
20e	It will give me a purpose in life.
20f	The baby could grow up to have a worthwhile life.
	What are the bad things for me about going ahead and having the baby?
21a	It's not fair on the baby.
21b	It would ruin my future.
21c	I'll lose friends.
21d	Babies cost a lot of money.
21e	I'll lose sleep and have to deal with nappies.
21f	I'd be a useless father.
21g	It's too much responsibility for me now.
	What are the good things for me about having the baby adopted?
22a	The baby will be adopted by a good family.
22b	I can forget this ever happened.
22c	I can finish school.
22d	I can avoid being a young parent.
22e	I'm free to split with Emma if I want to.
22f	The child won't be disadvantaged.
	What are the bad things for me about having the baby adopted?
23a	I will always wonder what has happened to the child.
23b	My family will have to get involved with social services.
23c	I will never be able to forget about it.
23d	Someone else will be the child's father.
23e	The child will grow up and not know me.
23f	The child might be unhappy without its natural parents.

3.4.3 Evaluating the IVD

Six questions formed an addendum to Questionnaire 2 and were also completed electronically (see Appendix 2.2). The first five evaluation questions concerned the extent to which the participants felt that watching the IVD helped their understanding of unplanned pregnancy as an issue for teens, helped them think through this issue, helped them to feel involved in the dilemma facing Jack, made them feel that they would not want to be in that situation, and made them aware of the availability and usefulness of counselling. For these five questions, participants responded using a five-point Likert-type response format of strongly agree [5], agree [4], not sure [3], disagree [2] and strongly disagree [1]. The sixth evaluation question related to the functionality of the IVD. Participants responded to this question using a four-point Likert-type response format of very easy [4], easy [3], difficult [2] and very difficult [1].

3.5 Pilot test

We completed a pilot test of the research instruments in one school before going into the field. The primary aim of the test was to assess the logistical challenges of the research process.

A member of the advisory board identified a single-sex (male) secondary school (religious; non-disadvantaged) in a semi-urban area of the country that was willing to facilitate the pilot study. The researcher made contact with the vice-principal of the school, who provided the name of the SPHE teacher who would be facilitating the pilot study. The researcher contacted the SPHE teacher by phone, providing information about the study and organising a visit to the school. This was followed up by a meeting with the teacher at the school to show him the research materials (e.g., the paper questionnaire; demonstration of the IVD) and to address any queries that the teacher had about the research generally and the pilot study in particular. The researcher also took this opportunity to liaise with an IT teacher in the school who had responsibility for the computer facilities in order to ensure that the IVD component of the research was going to be feasible.

Once the SPHE teacher was satisfied with all aspects of the research, a convenient date was scheduled for the researcher to return to the school to carry out the pilot study. The teacher selected 25 participants aged 16 or 17 years (i.e., one fifth-year class) to take part in the pilot study. On the day of testing, only 15 of the 25 selected students were available to take part. Reasons for absenteeism were not provided to the researcher.

For the pilot study, we had decided to ask the participants to complete the IVD (Questionnaire 2) before the paper questionnaire (in the actual study, Questionnaire 1 always preceded the IVD), primarily because we had only two class periods in which to complete the pilot study, and it was imperative to gauge how long the IVD would take to set up and complete. Our concern was that if we left the IVD until after participants had completed Questionnaire 1, they might not have sufficient time to complete the IVD. We decided that if there was enough time left for the participants to complete Questionnaire 1 in class, they could do so; if not, they would be asked to complete Questionnaire 1 in their own time and the researcher would return to collect completed questionnaires.

Setting up the computer lab prior to testing took approximately one hour. The informed-consent process took approximately 10 minutes, and more than 30 minutes was required for the participants to work through the IVD. As anticipated, there was insufficient time to complete Questionnaire 1 during the testing session; therefore, each participant was given a copy of that questionnaire and a sealable (unmarked) envelope, and asked to complete the questionnaire in his own time, seal it in the envelope provided (with no identifying marks on either questionnaire or envelope), and leave the envelope with the SPHE teacher. The researcher collected the envelopes later that day, and also had a debriefing session with the teacher. It should be noted that the administration of Questionnaire 1 always preceded Questionnaire 2 in the rest of the study.

The findings of the pilot test were largely positive. The school principal and RSE teacher were very enthusiastic about the quality of the IVD and its potential uses in their school. The pupils fully engaged with the project. No changes to the questions were deemed necessary. The RSE teacher suggested that we lower the inclusion age to 14 or 15 years (i.e., third-year pupils) as RSE is intensively taught at this stage and the IVD was considered to be highly relevant and appropriate. Findings from our literature review, and consultations with peer researchers in the Medical Research Council (Scotland), corroborated this suggestion. It was decided to ask both the Board of the CPP and the Research Ethics Committee of the School of Nursing and Midwifery, QUB, to lower the minimum age of participation to 14 years – this was granted.

Loading the IVD onto the computers took much longer than envisaged but the IVD worked well on the machines. It was clear, however, that it would be necessary to purchase headphones and bring them with us to each school. In terms of improving time management, it was recommended by a teacher in the pilot school that we split the questionnaires over two sessions separated by one week; that the adolescent males should complete Questionnaire 1 in week one of their RSE class and Questionnaire 2 (the IVD) the following week. We eventually discounted this recommendation as school principals and teachers felt that it made the process overly time-consuming. Furthermore, we found that splitting the testing over two weeks in the first two schools that were tested lessened the sample size (owing to absenteeism of participants in either of the two weeks). Thereafter, we aimed to complete all testing with any one group of participants during the course of one day.

3.6 Data collection

Table 2 summarises the data collection conducted for this project. In Stage 2 of the research we administered 360 questionnaires with adolescent males within schools – first, using a paper-based questionnaire (Questionnaire 1; see Appendix 2.1), and second, using the role-play questionnaire on the IVD (Questionnaire 2; see Appendix 2.2). In Stage 3 of the project we conducted the focus groups with the adolescent males. Interviews with teachers were usually conducted following the completion of the rest of the study in the school.

Interviews with the health and education sector professionals were conducted, following completion of all other data collection, in October 2009. It was felt that a focus-group interview would generate an interesting discussion about the similarities and differences

in their perceptions of the IVD in relation to their work in different parts of the country. Essentially, it was envisaged that focus groups would allow for greater sharing and cross-examination of their views than would be afforded by a single interview with one interviewer. We planned two focus groups: one with three members and one with two. However, in the latter case, one of the education sector professionals declined the offer of the interview as she had moved to different employment. Thus, the final interview was with one education sector professional.

In each case, topic guides were used to structure these sessions (see Appendix 2.3).

Table 2: Summary of data collection

Data collection instrument		Participant details	Average time taken
Stage 2	Questionnaire 1 (paper)	360 adolescent males aged 14 to 18	10 minutes
	Questionnaire 2 (IVD)	360 adolescent males aged 14 to 18	25 minutes
Stage 3	Semi-structured focus groups	12 focus groups, involving 67 participants	20 minutes
	Semi-structured interviews	5 teachers in secondary schools	40 minutes
	Semi-structured focus-group interview	3 health sector professionals	90 minutes
	Semi-structured interview	1 education sector professional	50 minutes

The adolescent male students who participated in Stage 2 of the research were provided with information sheets prior to the researcher arriving on the day of testing (usually between three and seven days in advance). Their parents had also received information packs about the research (approximately two to three weeks prior to the research taking place), and had been given an opportunity to opt their son(s) out by posting a completed opt-out form to the research team in the stamped addressed envelope provided in the information pack.

On first meeting with the participants, the researcher introduced herself, then took a roll-call to assess absenteeism and to ensure that there were no students present who had not been selected by the teacher to take part. Once she had established that she had the correct participants for the study, she asked if there was anyone present who had not received an information sheet. If that was the case, these students were spoken to separately before testing took place to provide them with information sheets and enough time to read the information and ask any questions before being asked if they wished to take part.

The researcher then provided a brief overview of the research, and asked the students if they wished to ask any questions about the research. The researcher emphasised that their participation was voluntary, that they could withdraw at any time without having to provide a reason, and that their participation was anonymous insofar as their names would not appear on either questionnaire. They were informed that the data would be held securely, and that only the research team would have access to the data. They were also advised that we were not interested in individual responses, but rather would be collating all the data gathered to determine group responses. It was pointed out that neither their parents nor their teachers would have access to the raw data, or to their individual responses, and that therefore, if they did choose to participate, they should feel free to respond honestly.

At this point the researcher asked if everyone present was willing to take part in the research. No student indicated that he was unwilling to proceed. This is not surprising – those students who had been selected to take part in the research had been provided with advance information sheets and therefore those who did not wish to participate had either already been opted out by their parents or had tacitly declined to participate by not attending the testing session that day.

The researcher then handed out individual testing packs to each participant. Each envelope contained a consent form and a copy of Questionnaire 1. The researcher went through each aspect of the consent form with the participants. Once all consent forms had been completed, they were collected and the students were told they could proceed with completing the questionnaire. The consent forms were signed by the researcher and photocopied in the school. The photocopies were handed back to each participant prior to the administration of Questionnaire 2.

The participants were reminded that the questionnaire was not a test, in that there are no right or wrong answers, but that they should treat it as if it was a test insofar as they must respect each other's privacy and not confer regarding their responses. They were told that if they had any questions about any aspect of the questionnaire, they should raise their hand and the researcher would address their query. In three instances the class teacher(s) remained in the classroom with the researcher. However, the researcher asked the teachers to respect the participants' privacy by not looking over their responses, and to refer any queries to the researcher.

On completion of Questionnaire 1, each student was asked to place it back in the unmarked envelope provided, to seal it and to hand it to the researcher. All students were given an opportunity to ask questions and were thanked for their participation. They were reminded that they had the researcher's contact details on the information sheet they had been provided with, and that they could address any queries to her. They were also advised that their SPHE teachers and school counsellors were available if they had any further questions or if they had any worries or concerns about the research. School counsellors (or teachers involved in pastoral care) had been approached in each of the schools and provided with information about the research prior to the testing taking place.

The researcher then spoke to the group of students who had been selected by their teacher for participation in a focus group and invited them to take part in the focus group. The selected participants were given verbal information by the researcher about what would be involved in taking part. The researcher also gave them an information sheet (see Appendix 3.3) specific to this part of the study. Participants were given the opportunity to ask questions. They were advised that their participation was voluntary and that they would not have to provide any explanation if they chose not to participate. They were also advised that they could withdraw at any point during the focus group without having to provide a reason. They were given details of when and where the focus groups would be taking place (shortly after completion of the IVD) and were advised that, if they wished to take part in a focus group, they should stay behind at the end of completing the IVD component of the research.

In some schools the administration of Questionnaire 2 followed on directly from Questionnaire 1. However, in most instances there was a break between the two. Owing to the logistical challenges posed by the IVD, the researcher was allowed access to the computer lab prior to the administration of Questionnaire 2. On average, it took between 40 and 60 minutes to set up the lab – each computer had to be booted up, the researcher had to have some means of logging on, and individual memory sticks and headphones (both provided by the researcher) were inserted (and tested) in each available computer. In each instance the researcher had had access to the computer lab before the testing in order to ensure that the IVD was compatible with the school computers. This pre-testing check also provided an opportunity to see how many computers were available and whether there was room to accommodate additional laptops (provided by the researcher) in order to maximise data collection. In this respect the researcher had to liaise with various IT and technical staff (both teaching and support staff) and often received much practical support (i.e., in helping to set up the session and to resolve technical problems) from such individuals.

Technological challenges encountered during data collection included:

- inadequate and heavily booked computer facilities in schools
- variation in computer specifications both between and within schools
- amount of researcher's time spent on pre-checking computers and uploading programmes in advance
- some failures of data-saving and instances where individual computers 'froze' during the course of a participant watching the film.

Once the computer lab was ready for the administration of Questionnaire 2, the participants were brought into the lab. A roll-call was taken to ensure that there were no students present at this session who had been absent for the administration of Questionnaire 1. Each participant was handed a photocopy of his consent form. The group was reminded once again that participation was voluntary, that they were free to withdraw without giving a reason, that their responses were anonymous, and that the data would be treated confidentially. The researcher also emphasised that this part of the research is like the paper questionnaire insofar as it is not a test, that there are no right or wrong answers, but there should be no conferring with others in the class. Participants were advised that if they had any queries or technical difficulties (e.g.,

regarding the headphones or the running of the programme), they should raise their hand and the researcher would address the problem. Once participants reached the end of the IVD they were given an opportunity to ask questions, and were thanked for their participation. With the exception of those who had been approached about participating in focus groups, the participants could then return to their normal class. The researcher collected all memory sticks and headphones, and logged off all computers.

For those participants who remained in class to take part in a focus group, the researcher reviewed the information sheet again to ensure that they fully understood what their involvement would be, and gave them the opportunity to ask questions. Once the participants had been fully informed, they were asked to complete a consent form (see Appendix 3.7). These consent forms were signed by the researcher and photocopies were later returned to each participant for their records. The focus groups then proceeded. With the exception of one focus group, all took place in the room where the students had completed the IVD. In all instances the researcher allowed the participants to have a brief 'comfort break' before starting the focus group.

3.7 Data analysis

3.7.1 Analysis of quantitative component

The analysis of the questionnaire is divided into a descriptive part and an explanatory part. The key phenomenon being studied in the descriptive part is the adolescent males' responses to the on-screen role-play questions that follow each segment of the IVD. These questions concern beliefs, feelings, attitudes and decisions in relation to the unplanned pregnancy. This data analysis forms the basis of Chapter 5 of this report.

The explanatory part involves testing a series of hypotheses drawn from extant theory and research on the factors underlying the adolescent males' decision-making processes concerning two final issues: whether to support the continuation of the pregnancy and whether to continue the relationship with their pregnant partner. These hypotheses are outlined in Chapter 6. To assess the direction and strength of the association between the explanatory and dependent variables, we conducted a series of bivariate (cross-tabulations and correlations) analyses. Next, to isolate the unique impact of each explanatory variable, we conducted logistic multiple regressions. The confidence interval was set at 95%.

3.7.2 Analysis of qualitative component

Data gathered from interviews were analysed using an analytical strategy known as modified analytical induction (Bogden and Biklen, 2007). Essentially, this describes a well-established process of iteratively moving between a priori sensitising concepts originating from the literature review or social theory – a deductive analysis – and concepts arising from the data – an inductive analysis (Hyde et al., 2005).

The steps involved are:

1. At the outset of the research, a rough definition and explanation of the specific phenomenon is created.

2. The definition and explanation are compared with the incoming data as they are gathered.
3. Amendments to the definition and explanation are made, followed by interpretation, if new cases arise that contradict the definition as hitherto constructed.
4. Cases that may be at variance with the emerging interpretation are actively sought.
5. The interpretation is redefined and reworked until a universal relationship is arrived at, taking on board each negative case, to contribute to the final formulation (Bogden and Biklen, 2007).

In implementing this strategy in relation to the focus groups with adolescent males, interviews were transcribed verbatim as they got under way. Two researchers developed thematic codes for the data on the first four focus-group interviews. Coding was usually done sentence by sentence but sometimes by grouped sentences. The coding was then compared. Any discrepancies in how the data were coded were discussed. Usually, both interpretations were retained so that they could be tested through further analysis. We again compared codes on completion of the coding process and discussed the emerging storylines under three key overarching themes:

1. Adolescent males' reactions to an unplanned pregnancy, their communication with relevant others and their views on help-seeking.
2. Adolescent males' decision-making and rationale for their decision-making in relation to the pregnancy outcome.
3. Adolescent males' evaluation of the IVD and its potential for raising awareness of an unplanned pregnancy in their lives.

We paid close attention to inter-group differences, particularly if there were any notable variations across the school strata, for example urban/rural or non-disadvantaged/disadvantaged. We also paid attention to intra-group differences – how homogeneity and variation were built up within the focus group discussion. We looked for the social context of the interview, for example whether the researcher emphasised the importance of a particular issue, whether the researcher probed more deeply and whether one or more participants dominated the conversation or seemed to lead the others in a particular direction. Finally, we looked for disconfirming evidence in relation to emerging analytical statements under each of the themes.

The evaluation results of the focus groups with the adolescent males were combined with adolescent males' responses to the six evaluation questions completed at the end of Questionnaire 2.

The results of the focus groups/interviews with teachers and with health and education sector professionals were also combined as both related to one overarching theme, namely an evaluation of the IVD and its potential for raising awareness of unplanned pregnancy among adolescent males. The analysis proceeded in a similar vein.

3.8 Ethical considerations

The sensitive nature of this research is acknowledged. In particular, we were aware that a small number of the adolescent male participants – perhaps some who had recently

experienced or who were experiencing a crisis pregnancy – could find participating in the study distressing as a result of discussing difficult or upsetting issues.

To address this possible distress, we ensured that participants were fully informed in advance about the nature and requirements of the research, and advised them that they were free to withdraw at any point. We also informed relevant school counsellors and the person responsible for pastoral care about the nature of the research before data collection began in that particular school. We agreed that if a participant showed any visible sign of distress, we would inform the school counsellor; however, this proved not to be necessary. In addition, all students were offered a chance to debrief with their RSE teacher in their class the following week.

We asked our key contact in each school (the RSE/SPHE teacher) to advise us if we needed to involve language assistant teachers or special-needs teachers in informing any of the adolescent males in the designated classes. This was not deemed necessary. However, some of the adolescent males did require additional time and assistance from the researcher to answer Questionnaire 1 because of literacy problems.

The individuals employed to transcribe the interviews were required to sign a confidentiality statement in relation to the content of interviews they were privy to. All details that might reveal the identity of a participant, or any other revealing information, were removed from transcripts by the principal researcher. Tapes/discs have been stored electronically on a password-protected computer. Paper data have been stored in a locked filing cabinet.

This research received ethical clearance from the Research Ethics Committee of the School of Nursing and Midwifery, QUB.

4 Response rates and sample profile

4.1 Introduction

In this chapter we report response rates for each group of research participants (Section 4.2). We then outline the profile of the sample (Section 4.3), looking in turn at the schools recruited into the study, the main adolescent male sample who participated in the paper questionnaire and the IVD role play, the adolescent males who participated in the focus groups, the teachers in terms of the types of schools from which they were drawn, and the health and education sector professionals.

4.2 Response and participation rates

4.2.1 Adolescent males

Sixty-two schools were approached and 13 agreed to participate. This represents an overall response rate of approximately 21%. Reasons cited by schools (RSE teachers or principals) for not participating were: lack of time and lack of resources; timetabling difficulties, especially in relation to exam pressures; that their mixed-sex class/school structure was problematic for the participation of male students only; and lack of computer facilities. It is our perception that resistance to recruitment was generally because school personnel felt 'stretched' while facing resource cutbacks due to the economic recession. Research has shown that financial/resource incentives for schools to participate can facilitate recruitment of schools (Abraham et al., 2004).

It should be noted that the limited computer facilities in some schools had already been identified as an issue by the researcher who was in the field conducting the research. The research team decided to acquire eight laptop computers (which became available at the end of March 2009) in an effort to alleviate or overcome some of these resource problems. This strategy proved advantageous as in one school, only the research team's laptop computers were used in data collection, while in another three schools, these laptop computers were used to supplement existing computer resources, thus increasing the number of participants who could be included in the research.

Within the participating schools, a total of 569 adolescent males were identified by teachers as eligible to take part in the research by virtue of being in particular grade years and classes. Of these, 360 participated, giving a response rate in the schools of 63%. Of the total number of participants identified and invited to participate in the research, a small percentage (7%) were opted out by a parent. An even smaller percentage (2%) of the sample opted out themselves, either by informing their teacher that they did not wish to participate in the research or by withdrawing from the research on the day(s) of testing. With respect to the number of participants who personally decided not to take part in the research on the day, it should be noted that some of those listed as absent on the day of testing may have been 'silently' opting out by not being present. The remaining non-participants (27.8%) were absent for the administration of Questionnaire 1 or for participation in the IVD, or for both parts of the data collection. The achieved sample size is similar to that of comparable studies in the US (N=325, Marsiglio, 1988; N=298, Marsiglio, 1989) and Australia (N=386, Condon et al., 2006). The socio-demographic characteristics of the sample are described further in Section 4.3.

With respect to the small number of instances where participants elected not to participate, there were four patterns of participant opt-out/withdrawal. In one school, two participants indicated to their teacher in advance of the research taking place that they did not want to take part; therefore they did not attend the class where the testing was taking place.

In another school, four participants who had consented to take part in the research and completed the paper questionnaire, discontinued participation at the start of the IVD component. Participants had been assured before signing their consent form that their participation was voluntary and that they were free to withdraw at any stage without giving a reason. It was not, therefore, ethically appropriate to ascertain reasons for withdrawal at this point in the research. However, it should be noted that there were no obvious signs of distress in any of these four participants and it was the opinion of the researcher conducting data collection that withdrawal was associated with a lack of interest in continuing with the research. Moreover, initially only one participant expressed a lack of interest in continuing, but, when he rose to leave the room, three of his classmates indicated that they also did not want to continue. This suggests a degree of peer influence in the withdrawal of three of these four participants. As their reasons for withdrawal were unclear, we treated them as formal withdrawals and excluded their questionnaire data from the research.

In a third school, three participants informed the researcher at the start of the testing session that they would have to leave after a specific period in order to attend a scheduled sporting event. However, they all expressed a great deal of willingness to participate in any aspect of the research that was possible within the time they had available to them. It was, therefore, agreed by all concerned that their participation in the research would be limited to the paper questionnaire, and the participants consented to this. These participants were not considered formal withdrawals by the researcher; however, as there was no matching IVD data from them, their data are not included in this report.

Finally, two participants in one school attempted the paper questionnaire, but then clearly indicated to the teacher administering the questionnaire that they wished to withdraw from the research. Again, participants were not required to provide a reason for withdrawal; however, it was the teacher's belief that the participants became disinterested in continuing as a result of the literacy demands of the questionnaire (i.e., number of pages to be completed, amount of reading required) rather than because they were upset by any aspect of the content of the questionnaire. These participants were obvious withdrawals and any data provided by them were excluded from the research.

4.2.2 Focus groups with adolescent males

There were 12 focus groups involving 10 schools. There was one focus group per school for eight of the schools, and two focus groups each for two of the schools. Three of the schools did not hold focus groups owing to lack of time/available facilities. The number of participants in each focus group ranged from five to eight. In total, 67 participants were involved in focus groups.

4.2.3 Teachers

Of the 14 teachers who were approached to take part in an interview, two verbally declined to be involved, citing pressure of work as the reason. The remaining 12 teachers expressed interest in being involved, and received an information pack (see Appendix 3.5). However, only six teachers formally agreed to take part. One of them subsequently had to withdraw owing to a change of circumstances, thus leaving five teachers who were able to take part in an interview within the allotted data-collection time frame.

The researcher attempted to increase the teacher sample size by following up initial formal requests with informal telephone calls. However, although teachers had indicated their willingness to participate on first being approached, actual involvement appeared to be hindered by time constraints and workloads, especially towards the end of the school year.

4.2.4 Health and education sector professionals

Four of the five selected health and education sector professionals participated. One of the education sector professionals declined the offer of the interview as she had moved to different employment.

4.3 Profile of sample

4.3.1 Participating schools

A total of 13 schools participated in the study. These schools represent a spectrum of schools across the stratification criteria, and include those in: urban, semi-urban and rural areas; co-educational and single-sex schools; schools with high and low levels of social deprivation; and schools with either a specific religious (e.g., Roman Catholic, Church of Ireland) or an interdenominational orientation (see Table 3).

Table 3: School types by socio-economic status, location, religious status and gender (N=13)

School	Socio-economic status	Location	Religious status	Gender
1	Disadvantaged	Rural	Interdenominational	Co-educational
2	Non-disadvantaged	Semi-urban	Roman Catholic	Co-educational
3	Disadvantaged	Rural	Church of Ireland	Co-educational
4	Non-disadvantaged	Semi-urban	Roman Catholic	Single sex
5	Non-disadvantaged	Urban	Interdenominational	Co-educational
6	Disadvantaged	Semi-urban	Roman Catholic	Co-educational
7	Non-disadvantaged	Urban	Interdenominational	Co-educational
8	Non-disadvantaged	Rural	Roman Catholic	Co-educational
9	Non-disadvantaged	Urban	Interdenominational	Co-educational
10	Disadvantaged	Urban	Interdenominational	Co-educational
11	Non-disadvantaged	Semi-urban	Roman Catholic	Co-educational
12	Disadvantaged	Urban	Interdenominational	Co-educational
13	Non-disadvantaged	Urban	Interdenominational	Co-educational

To summarise schools by type, 12 were co-educational, one was single-sex; six were religious schools, seven were interdenominational; six were in urban areas, four in semi-urban areas (a medium-sized/large town in a rural area) and three in rural areas; eight were considered to be 'non-disadvantaged' schools and five 'disadvantaged' schools, according to the Department of Education.

Table 4: Summary of school types in sample (N=13)

Socio-economic status		Location		Religious status		Gender	
Non-disadvantaged	8	Urban	6	Religious	6	Co-educational	12
Disadvantaged	5	Semi-urban	4	Interdenominational	7	Single sex	1
		Rural	3				

We managed to recruit just one single-sex school; however, only 15% of all schools in Ireland in 2007 were all-male schools – see Table 5.

Table 5: Gender and denominational profile of schools in the Republic of Ireland, 2007

Profile	No.	%
Male	110	15.0
Female	144	19.7
Mixed	478	65.3
Total	732	100

Denomination	No.	%
Catholic	368	50.3
Church of Ireland	25	3.4
Jewish	1	0.1
Interdenominational	333	45.5
Quaker	1	0.1
Other	4	0.5
Total	732	100

Source: Department of Education, 2007: www.education.ie (last accessed February 2007).

4.3.2 Adolescent males (main sample)

A total of 360 adolescent male participants completed both the paper questionnaire and the questionnaire embedded within the IVD.

Ethnicity

Table 6 shows that the large majority of participants were of Irish or other white origin, while Irish Travellers and those of African, Asian or mixed background formed only a very small proportion of the sample (approximately 3%).

Age

Four participants did not report their age. Of the remaining 356 participants, ages ranged from 14 to 18 years, with a mean age of 15.41 (SD 0.89); 54.5% were 15 years and under. For a further breakdown of the different age groups included in the research, see Table 6.

Social class

With respect to the balance of social class (see Table 6), 43.1% of the sample came from a higher professional or professional class; 28.3% were manual or lower middle class; 20.6% were manual or working class. The 'other' category (8.1%) is a combination of those who indicated that their parent(s) had businesses (included in 'other' since

business size was not specified) and those who identified as 'other' during data collection. The profile of the sample is skewed towards the middle-class category.

Religion

Table 6 shows that just over 78% of participants were Roman Catholic. Over 11% were members of Protestant denominations. Other religions barely featured. Almost 7% identified as being of no religion. In relation to religiosity, 60% of the sample stated that religion was very important or fairly important to them and 40% that religion was fairly or very unimportant to them.

Family structure

Table 6 indicates that the majority of participants (77.7%) lived with both their parents, while approximately 12% of participants lived with their mother alone and a much smaller proportion (approximately 1.7%) lived with their father alone.

Educational aspirations

The majority of the sample (55.7%) aspired on completion of school to go to university; 14.5% to complete a diploma or certificate; and 17.7% to complete a training course. A small proportion (0.9%) aspired to being unemployed and 11.3% indicated 'other'.

Table 6: Demographic characteristics of adolescent male sample

		N (% of total sample)
Ethnicity (N=351)*		
	Irish	305 (86.9)
	Irish Traveller	2 (0.6)
	Other white	35 (10.0)
	African	3 (0.9)
	Asian	2 (0.6)
	Other, mixed background	4 (1.1)
Age (N=356)*		
	14	54 (15.2)
	15	140 (39.3)
	16	128 (36.0)
	17	29 (8.1)
	18	5 (1.4)
Social class (N=360)		
	Professional	155 (43.1)
	Non-manual	102 (28.3)
	Manual	74 (20.6)
	Other	29 (8.1)
Religious affiliation (N=352)*		
	Roman Catholic	276 (78.4)
	Church of Ireland	32 (9.1)
	Presbyterian	7 (2.0)
	Methodist	1 (0.3)
	Islam	1 (0.3)
	Other	11 (3.1)
	No religion	24 (6.8)
Family structure (N=355)*		
	Both parents	276 (77.7)
	Mother only	41 (11.5)
	Father only	6 (1.7)
	Mother and partner	19 (5.4)
	Father and partner	4 (1.1)
	Others	9 (2.5)
Educational aspirations (N=345)*		
	University degree	192 (55.7)
	Diploma or certificate	50 (14.5)
	Training scheme	61 (17.7)
	Unemployed	3 (0.9)
	Other	39 (11.3)

* A reduced N is due to missing data on these individual socio-demographic variables.

4.3.3 Focus groups with adolescent males

Seven of the groups involved senior-cycle or transition-year pupils and five involved junior-cycle pupils.

Table 7: Summary profile of the focus group sample

Number of focus groups	12
Total number of participants	67
Number of senior-cycle transition-year groups	7
Number of junior-cycle groups	5

In terms of the traits of the 10 schools from which the 12 focus groups were drawn, Table 8 shows that seven of the schools were classed as non-disadvantaged and three as disadvantaged. Five of the schools were in urban areas, three were semi-urban (a medium-sized/large town in a rural area) and two were in rural locations. Five of the schools were religious schools: four Roman Catholic and one Church of Ireland; and five were interdenominational schools. Only one school was a single-sex school; the other nine were co-educational. The adolescent males who took part in the 12 focus groups were aged between 14 and 18 years; in four of the groups, the sample comprised 14 and 15 year olds or 15 year olds only.

Table 8: Focus group profile (adolescent males)

Focus group	Socio-economic status	Location	Religious status	Gender	Age profile
1	Non-disadvantaged	Semi-urban	Catholic	Single sex	16/17
2	Disadvantaged	Rural	Church of Ireland	Co-educational	14/15
3*	Non-disadvantaged	Rural	Catholic	Co-educational	15–17
4	Non-disadvantaged	Urban	Interdenominational	Co-educational	15–17
5	Non-disadvantaged	Urban	Interdenominational	Co-educational	15–17
6	Non-disadvantaged	Urban	Interdenominational	Co-educational	15–18
7	Disadvantaged	Urban	Interdenominational	Co-educational	15/16
8	Non-disadvantaged	Semi-urban	Catholic	Co-educational	15–17
9*	Non-disadvantaged	Semi-urban	Catholic	Co-educational	14/15
10*	Non-disadvantaged	Semi-urban	Catholic	Co-educational	14/15
11	Disadvantaged	Urban	Interdenominational	Co-educational	15/16
12*	Non-disadvantaged	Rural	Catholic	Co-educational	All 15

*Focus groups 3 and 12 were from one school and focus groups 9 and 10 were from one school.

4.3.4 Teachers

The five teachers (three female and two male) were drawn from five schools. All five teachers were teaching RSE in co-educational schools. Four were in interdenominational schools and one was in a Church of Ireland school. Three were in schools in rural areas and two in schools in urban areas. Four of the schools were classified as disadvantaged and one as non-disadvantaged.

Table 9: School types for teacher interviews

Gender		Religious status		Location		Socio-economic status	
Co-educational	5	Church of Ireland	1	Urban	2	Non-disadvantaged	1
Single sex	0	Interdenominational	4	Rural	3	Disadvantaged	4

4.3.5 Health and education sector professionals

We interviewed four health and education sector professionals: one educational development specialist from the Department of Education (Ireland) with special expertise in relationships and sexuality education (RSE), and three directors of local sexual and reproductive health services, specialising in services for adolescents such as family planning and crisis pregnancy counselling, sex education with adolescents in schools and community groups and, more broadly, adolescent health promotion. These service development/educational professionals all have specific experience in developing educational programmes for second-level schools.

5 Results: descriptive component

5.1 Introduction

This chapter focuses on the emotional and cognitive reactions of adolescent males on hearing about an unplanned pregnancy. The data are drawn from the role-play questionnaire embedded in the IVD (Questionnaire 2). We begin by exploring adolescent males' reactions to the situation and their predicted feelings towards their pregnant girlfriend (Section 5.2). Then we consider the adolescent males' predictions about the reactions of their 'significant others': parents and friends (Section 5.3) and their own views on the consequences of each of the pregnancy outcomes (Section 5.4). Finally, we move to adolescent males' perceived ability to cope and their views on attending a counsellor (Section 5.5).

5.2 Attitudes and affective reactions to unintended pregnancy

How would the adolescent males react to the news that their girlfriend was pregnant? Table 10 reports that almost half of the sample said they would be 'shocked', and over one-third thought they would be 'frightened'. The least common predicted reaction would be 'happy'.

Table 10: Feeling on getting the news

Feeling	N	%
Shocked	179	49.7
Happy	3	0.8
Guilty	26	7.2
Angry	16	4.4
Sad	4	1.1
Frightened	132	36.7
Total	360	100

Table 11 reports the thoughts of the adolescent males on who they would blame in the event of an unintended pregnancy. The IVD began at the point of Jack being told by his girlfriend (whom he had been going out with 'for a while') that she was pregnant. The respondents were not provided with any contextual information about the circumstances of the conception in this scenario. Participants were thus asked to rely on their own perceptions of who they would blame were they to get the news that their girlfriend was pregnant.

The most common individual answer was 'both' (blaming himself and his partner) because they got carried away (28.6%), followed by blaming 'himself' because of not taking adequate contraceptive precautions (24.7%) or because he did not think it would happen so easily (19.2%). Participants were less likely to blame 'her' because she said it was okay (1.9%) or because she did it on purpose (0.8%). The least common answer was blaming friends (0.3%).

Looking across the responses cumulatively suggests that a greater proportion of the male respondents (48.1%) would hold themselves responsible (rather than blaming 'her' or holding 'both' responsible) – adding together the responses of those who said they would hold themselves responsible because of not taking adequate contraceptive precautions, because they probably would have underestimated how easily a pregnancy can occur or because they might have drunk too much.

Table 11: Who is to blame for unintended pregnancy?

Feeling	N	%
Me – didn't think it would happen so easily	69	19.2
Me – no precautions	89	24.7
Me – too much drink	15	4.2
Her – she said it was ok	16	1.9
Her – did it on purpose	4	0.8
Both – got carried away	103	28.6
Friends – egged me on	1	0.3
Fate – condom broke	46	12.8
Fate – bad luck	27	7.5
Total	360	100

Next, we consider adolescent males' predicted reactions to their girlfriend, when they received the news of the unplanned pregnancy. Table 12 shows that the adolescent males predicted they would retain mostly affectionate feelings for their girlfriend: over 80% of the sample said they would still fancy their girlfriend, would not think that she had got pregnant on purpose and/or would feel protective towards her. Just over one in five (21.7%) reported that they would feel angry and/or wish she would disappear. A small minority (13.9%) stated that they would think that their girlfriend had done it on purpose.

Table 12: Reactions to girlfriend

Feeling	Yes N (% of total sample)	No N (% of total sample)	Total
Do I still fancy her?	300 (83.3)	60 (16.7)	360
Do I feel protective of her?	319 (88.6)	41 (11.4)	360
Do I feel angry?	75 (20.8)	285 (79.2)	360
Did she do it on purpose?	50 (13.9)	310 (86.1)	360
Do I wish she would disappear?	78 (21.7)	282 (78.3)	360

5.3 Predicted reactions of significant others

The adolescent males were asked to imagine what their parents (mother and father separately) might say in response to the news. The phrases for these responses were originally drawn from focus-group interviews with adolescent males who had been involved in an unplanned pregnancy in Australia (Corkindale et al., 2009). These responses were also validated by our advisory board and by our discussions with adolescents prior to producing the film. Thus, the IVD shows different predicted responses from mothers and fathers. Respondents were asked to specify the reaction they thought most realistic given their circumstances, rather than stating what people say in general.

In relation to the predicted views of their mothers (see Table 13), what is most noteworthy is the predicted strong support for keeping the baby (48.1%). When this view is coupled with 'always wanted to be granny' (5%), this gives a cumulative 53.1% of mothers predicted as reacting to the news with a 'keep the baby' response. It is understood that these responses do not signify the actual existence of such a pro-parenting attitude among the mothers of these adolescent males. Rather, these are the stated perceptions of the adolescent males in relation to how their mothers might react. The fathers' predicted reactions are similarly understood.

Table 13: What would mother say?

Predicted reaction	N	%
Always wanted to be granny	18	5.0
She's ruined your life	12	3.3
Have an abortion	17	4.7
Should have the baby	173	48.1
What will people think?	27	7.5
You've really messed up	83	23.1
Not applicable	30	8.3
Total	360	100

The predicted responses of their fathers, as shown in Table 14, are less explicitly about what should be done about the baby (the pregnancy decision). Nonetheless, the majority predicted response – 'we'll stick by you' (36.9%) – is not only suggestive of the father's support for his son but also a tacit acceptance of keeping the baby. The next most common predicted response from fathers – 'your problem – you're a man now' (23.9%) – suggests that it is entirely up to the adolescent male to decide what to do and that he should sort it out (assume responsibility). Only a minority of the respondents anticipate the most negative of reactions – being thrown out of the house (6.4%).

Table 14: What would father say?

Predicted reaction	N	%
We'll stick by you	133	36.9
She's not living here	15	4.2
Your problem – you're a man now	86	23.9
You'll have to get married	5	1.4
This is how you repay us	73	20.3
Get out of the house	23	6.4
Not applicable	25	6.9
Total	360	100

The importance of speaking to one's parents, however difficult it might be, also emerged in the responses to the IVD (see Table 15). The majority of the respondents said they would tell their mother and their father, although they were somewhat more likely to tell their mother (76.1%) than their father (65.3%).

Table 15: Would I tell my mother/father?

	Yes N (% of total sample)	No N (% of total sample)	Not applicable N (% of total sample)	Total
Would I tell my mother?	274 (76.1)	66 (18.3)	20 (5.6)	360
Would I tell my father?	235 (65.3)	92 (25.6)	33 (9.2)	360

We addressed the views of friends somewhat differently. Instead of asking the respondents for their views on what their friends would say, we asked them to consider their response (agree, strongly agree, disagree, strongly disagree) to a range of statements suggested in the role-play drama as to 'what their friends might say'. These imagined views of friends represent a spectrum of opinions in relation to the relationship: those that suggest the adolescent male should 'stand by the girl' and those that suggest he should abandon her immediately. They also represent a spectrum of views in relation to the pregnancy decision: those in favour of keeping the baby and those suggesting abortion or adoption. Table 16 reports the results.

Table 16: Reactions to friends' views

Friend's view	Agree strongly N (% of total sample)	Agree N (% of total sample)	Disagree N (% of total sample)	Strongly disagree N (% of total sample)	Total
Cool to be a dad	6 (1.7)	134 (37.2)	150 (41.7)	70 (19.4)	360
She's a slapper, tell her it's not yours	5 (1.4)	22 (6.12)	157 (43.6)	176 (48.9)	360
At least I'm not firing blanks	46 (12.8)	154 (42.8)	103 (28.6)	57 (15.8)	360
You should marry her	4 (1.1)	67 (18.6)	219 (60.8)	70 (19.4)	360
Just break up with her	3 (0.8)	21 (5.8)	213 (59.2)	123 (34.2)	360
Tell her to get rid of it	13 (3.6)	53 (14.7)	192 (53.3)	102 (28.3)	360
What about getting the kid adopted?	15 (4.2)	122 (33.9)	165 (45.8)	58 (16.1)	360
It's her problem not yours	5 (1.4)	7 (1.9)	154 (42.8)	194 (53.9)	360
You've always got your mates	164 (45.6)	166 (46.1)	28 (7.8)	2 (0.6)	360

In their reactions to the pregnancy and to the girlfriend, it is noteworthy that a majority of the adolescent males stressed the importance of assuming responsibility. The responses in the next set of questions, concerning reactions to friends' views, are consistent with this: the adolescent males overwhelmingly indicated that they would want to take ownership of the problem and support their pregnant partner. A total of 93.4% either disagreed or strongly disagreed with the friend's view that he should 'just break up with her' (girlfriend); 92.5% disagreed or strongly disagreed with the view that 'she's a slapper, tell her it's not yours'; and 96.7% disagreed with the view that he should tell his girlfriend it was 'her problem'.

In relation to early thoughts on the pregnancy decision, the least favoured option at this stage was abortion. Only 18.3% agreed or strongly agreed with this view, which is consistent with the end choices as reported in Chapter 6. A total of 38.1% agreed or strongly agreed with the idea of getting the child adopted. Although we note that these questions are posed quite early on in the film drama (in the initial reaction stage), they are nonetheless interesting. Of particular significance is the relatively large minority (38.9%) of the adolescent males who, at this stage of the IVD, agree or strongly agree with the 'cool to be a dad' statement. A cross-tabulation between those who endorsed this view by age of the respondent, career aspirations, religiosity and social class revealed no significant differences across the sample. The relatively strong positive reaction to parenthood here may have been due to the fact that the statement is somewhat more abstract than the question 'how would you feel if your girlfriend told you she was pregnant?' – to which a majority replied 'shocked' and 'frightened' (as reported above). We return to the end decisions about the relationship and the pregnancy in Chapter 6.

Finally, it was interesting that, for many of the adolescent males, one consolation seemed to be that they would still have their friends (91.7% agreed/strongly agreed) and over half (55.6%) thought it positive that they had proved that at least they were not 'firing blanks'.[10]

Overall, in relation to communication with friends and family, it was apparent that the respondents judged their parents to be more important confidants than their friends would be. Nonetheless, communication with parents was not anticipated to be straightforward. Mothers were expected to be somewhat more supportive than fathers, especially in relation to a decision to keep the baby.

5.4 Attitudes to the consequences of each pregnancy outcome

In the literature review (Chapter 2), we noted that social cognitive theories of decision-making, and particularly theory of planned behaviour (Ajzen, 1985; Ajzen and Madden, 1986), suggest that individuals' attitudes towards the consequences of actions constitute an important element in understanding those decisions. In addition, we observed that attitudes are an important determinant of contraceptive use, childbearing and abortion, and affect the transition to parenthood among adolescent females (Barber and Axinn, 2005).

10 Some respondents may not be interpreting proof of virility as a consolation but merely as fact.

The responses to the following questions are derived from a section of the role-play questionnaire where the respondent has to think through his attitudes to the consequences of each of the outcome choices.

Respondents were presented with a list of advantageous and disadvantageous consequences of each pregnancy outcome under study (abortion, keeping the baby and adoption) and were asked to use a dichotomous response format of 'important' or 'not important' for each. The original items for abortion and keeping the baby were derived from earlier Australian research (Condon et al., 2006), but the items for adoption were composed by the current research team.

In relation to abortion (see Table 17), the results show that the following advantageous consequences of abortion came out in highest importance: 'No child of mine will grow up disadvantaged' (78.3% held as important); 'I can avoid being a really young parent' (67.5%); and 'I can finish school' (60.6%). The following disadvantageous consequences came out in highest importance: 'It's physically risky for girlfriend' (88.6%); 'I feel it's risky mentally for girlfriend to go through with' (85.8%); and 'You can't change your mind afterwards' (74.2%).

Table 17: Attitudes to the consequences of abortion

What are the good things for me about going ahead with abortion?	Important to me N	%
I can forget this ever happened	194	53.9
I can finish school	219	60.6
It won't upset the family and no-one need know	209	58.1
I can avoid being a really young parent	243	67.5
I'm free to split with girlfriend if I want to	131	36.4
No child of mine will grow up disadvantaged	282	78.3
What are the bad things for me about going ahead with abortion?	**Important to me N**	**%**
It's physically risky for girlfriend	319	88.6
There's a bit of me actually wants a baby	256	71.1
It's morally wrong	215	59.7
You can't change your mind afterwards	267	74.2
I'd regret it for the rest of my life	257	71.4
I feel it's risky mentally for girlfriend to go through with	309	85.8

In relation to keeping the baby (see Table 18), the results show that the following advantageous consequences of keeping the baby came out in highest importance: 'The baby could grow up to have a worthwhile life' (85.8%); 'I won't have to put girlfriend through the abortion experience' (79.7%); and 'It will make my relationship with girlfriend stronger' (71.7%). The following disadvantageous consequences came out in highest importance: 'It's too much responsibility for me now' (68.3%); 'Babies cost a lot of money' (63.1%); and 'It would ruin my future' (61.1%).

Table 18: Attitudes to the consequences of keeping the baby

What are the good things for me about going ahead and keeping the baby?	Important to me N	%
It will make my relationship with girlfriend stronger	258	71.7
I'll feel better if I take responsibility for my actions	256	71.1
I won't have to put girlfriend through the abortion experience	287	79.7
I'll enjoy being a dad	236	65.6
It will give me a purpose in life	231	64.2
The baby could grow up to have a worthwhile life	309	85.8
What are the bad things for me about going ahead and keeping the baby?	**Important to me N**	**%**
It would ruin my future	220	61.1
I'll lose friends	155	43.1
Babies cost a lot of money	227	63.1
I'll lose sleep and have to deal with nappies	86	23.9
I'd be a useless father	213	59.2
It's too much responsibility for me now	246	68.3

In relation to adoption (see Table 19), the results show that the following advantageous consequences of adoption came out in highest importance: 'The baby will be adopted by a good family' (81.4%); 'The child won't be disadvantaged' (74.4%); and 'I can finish school' (62.8%). The following disadvantageous consequences came out in highest importance: 'I will always wonder what has happened to the child' (82.8%); 'The child might be unhappy without its natural parents' (81.9%); and 'I will never be able to forget about it' (78.1%).

Table 19: Attitudes to the consequences of adoption

What are the good things for me about having the baby adopted?	Important to me N	%
The baby will be adopted by a good family	293	81.4
I can forget this ever happened	142	39.4
I can finish school	226	62.8
I can avoid being a young parent	210	58.3
I'm free to split with girlfriend if I want to	108	30.0
The child won't be disadvantaged	268	74.4
What are the bad things for me about having the baby adopted?	**Important to me N**	**%**
I will always wonder what has happened to the child	298	82.8
My family will have to get involved with social services	202	56.1
I will never be able to forget about it	281	78.1
Someone else will be the child's father	250	69.4
The child will grow up and not know me	264	73.3
The child might be unhappy without its natural parents	295	81.9

Overall, the results confirm, as in the Australian study (Condon et al., 2006; Corkindale et al., 2009), that the adolescent males showed a willingness to think through the advantageous and disadvantageous consequences of each of the options during this hypothetical scenario of an unplanned adolescent pregnancy and that they placed importance on considering the implications for themselves, the child and their pregnant partner in imagining this situation. In Chapter 6 we enter these attitudes into logistic regressions in order to ascertain which were the most important in predicting their final outcome choice.

5.5 Perceived ability to cope and views on help-seeking behaviours

We turn now to look at the adolescent males' feelings about coping with this crisis in their lives. The concept of self-efficacy – also known as perceived behavioural control – as derived from theory of planned behaviour (Ajzen, 1985; Ajzen and Madden, 1986) refers to the person's appraisal of their ability to perform a particular behaviour. Two of the questions presented in Table 20 inquire into the adolescent males' predicted sense of being able to cope (alongside the girlfriend) with the situation and the possibility of parenthood: 'Am I going to be able to help with this?' and 'Could I cope with fatherhood?'

Here, 85.8% of the adolescent males believed that they could help out. Indeed, more of the adolescent males felt they could cope with fatherhood than believed the fictional

girlfriend could cope with motherhood: 39.4% said they could cope with fatherhood but only 22.5% maintained that 'Emma' could cope with motherhood. Despite this sense of self-efficacy, over half of the sample said they felt like 'crying too' (in response to a scene where Emma is seen to be upset), which demonstrates their fear and sense of vulnerability in this situation.

Table 20: Anticipated ability to cope

Attitude	Yes N (% of total sample)	No N (% of total sample)	Total
Am I going to be able to help with this?	309 (85.8)	51 (14.2)	360
Do I feel like crying too?	204 (56.7)	156 (43.3)	360
Could I cope with fatherhood?	142 (39.4)	218 (60.6)	360
Could Emma (girlfriend) cope with motherhood?	81 (22.5)	279 (77.5)	360

The adolescent males clearly felt that they should have a say in the decision-making process (see Table 21): 93.3% either agreed or strongly agreed that they must have a say.

Table 21: I must have a say

I must have a say	N	%
Strongly agree	129	35.8
Agree	207	57.5
Disagree	22	6.1
Strongly disagree	2	0.6
Total	360	100

Table 22 reports on adolescent males' desire for help in dealing with the situation and whether they believe they would go to a counsellor. The vast majority said they would want to get help (86.1%) and would go to see a counsellor (91.9%). A cross-tabulation among those who said they would go to see a counsellor by age, location (urban versus rural), career aspirations and social class revealed no significant differences across the sample.[11]

11 In reality, the figure for males attending crisis-pregnancy counselling with their partners in Ireland is approximately 13% of all female partners attending (CPP, 2010). We suggest that the high figure in the current study is due to adolescent males imagining themselves in this situation and feeling that they would want help. This question comes prior to 'the counselling scene' so it is not primed in response to a particular image of counselling. Throughout the focus groups, the adolescent males reiterated that they felt such counselling was primarily set up for adolescent females.

Table 22: Seeking help from a counsellor

Attitude	Yes N (% of total sample)	No N (% of total sample)	Total
Do I want to get help?	310 (86.1)	50 (13.9)	360
Will I go to see a counsellor?	331 (91.9)	29 (8.1)	360

The next set of questions probe how the respondent might feel while sitting in a counselling session alongside his girlfriend, as depicted in the IVD. Overall, the adolescent males' views on participating in a counselling session were very positive (see Table 23). Only 10.6% said they would feel they had been 'dragged along'. Almost two-thirds (64.7%) predicted that they would feel supported by a joint counselling session; and a significant majority stated that they would not feel excluded while in a counselling session (78.9%) and indeed would feel relieved as a result of talking to a counsellor (83.6%). However, almost half of the respondents (48.6%) admitted that they would probably feel embarrassed talking about such personal matters with a counsellor.

Table 23: Reactions to being in a counselling session

Attitude	Yes N (% of total sample)	No N (% of total sample)	Total
I feel angry that I have been dragged in to visit the counsellor	38 (10.6)	322 (89.4)	360
I feel embarrassed talking about personal things in front of a counsellor	175 (48.6)	185 (51.4)	360
I feel excluded from what is happening	76 (21.1)	284 (78.9)	360
I feel supported	233 (64.7)	127 (35.3)	360
I feel relieved to talk to someone	301 (83.6)	59 (16.4)	360

5.6 Key points

5.6.1 Attitudes to an adolescent pregnancy

- Most adolescent males said they would be shocked or frightened by the news that their girlfriend was pregnant (49.7% and 36.7%, respectively); the vast majority would view the news negatively.
- 48.1% would hold themselves responsible for the unplanned pregnancy; 28.6% said they would hold both themselves and their partner responsible.

- A large majority said the news would not change their feelings towards their pregnant partner (83.3%). In general, the adolescent males expressed the view that they should take responsibility for the pregnancy and not leave it totally up to their girlfriend.

5.6.2 Predicted reactions of significant others

- Most adolescent males would tell their parents; marginally more would tell their mother than their father (76.1%, compared with 65.3%). Most anticipated that their parents would be supportive but some predicted negative or very negative reactions. In particular, mothers were perceived as being supportive of keeping the baby.
- Consistent with adolescent males' views on the importance of assuming responsibility, an overwhelming majority (over 90%) disagreed with the friends' suggestions that they should disassociate themselves from their pregnant partner and/or the situation. Friends were not identified as a strong source of support in relation to dealing with an unplanned pregnancy.

5.6.3 Attitudes to pregnancy resolution choices

- Respondents rated the following advantageous consequences of abortion as most important to them (in order of importance): 'No child of mine will grow up disadvantaged'; 'I can avoid being a really young parent'; and 'I can finish school'. Respondents rated the following disadvantageous consequences of abortion as most important to them: 'It's physically risky for girlfriend'; 'I feel it's risky mentally for girlfriend to go through with'; and 'You can't change your mind afterwards'.
- Respondents rated the following advantageous consequences of keeping the baby as most important to them (in order of importance): 'The baby could grow up to have a worthwhile life'; 'I won't have to put girlfriend through the abortion experience'; and 'It will make my relationship with girlfriend stronger'. The following disadvantageous consequences came out in highest importance: 'It's too much responsibility for me now'; 'Babies cost a lot of money'; and 'It would ruin my future'.
- Respondents rated the following advantageous consequences of adoption as most important to them (in order of importance): 'The baby will be adopted by a good family'; 'The child won't be disadvantaged'; and 'I can finish school'. They rated the following disadvantageous consequences of adoption as most important to them: 'I will always wonder what has happened to the child'; 'The child might be unhappy without its natural parents'; and 'I will never be able to forget about it'.

5.6.4 Perceived ability to cope and seek support

- The adolescent males had a strong sense of self-efficacy. While more than half (56.7%) admitted to wanting to cry, the vast majority said they were going to be able to 'help with this' (85.8%) and felt that they must have a say (93.3%).
- The vast majority said they would want to get help (85.8%) and would go to see a counsellor (91.9%). Most respondents also assumed that a counselling session would benefit them.

6 Results: explanatory component

6.1 Introduction

In this chapter we focus on adolescent males' pregnancy outcome choices. First, we present the results of adolescent males' pregnancy outcome choices (Section 6.2). Second, we test hypotheses in relation to the underlying psychosocial factors predicting adolescent males' choices (Section 6.3), by (1) testing the distal hypotheses (multinomial regressions), (2) conducting a set of binomial regressions testing the proximal hypotheses, and (3) conducting a set of binomial regressions combining the distal and proximal hypotheses for all the outcome choices: keeping the baby versus abortion; keeping the baby versus adoption; and abortion versus adoption. (A summary of the results for each of these choices is provided within the text, and tables for two of the models can be found in Appendix 5.) In Section 6.4, we address the question of adolescent males' choices in relation to continuing or discontinuing the relationship with their girlfriend in light of their pregnancy outcome decision.[12]

6.2 Decision-making in relation to the unintended pregnancy

The results presented in Table 24 clearly show that almost half of adolescent males would choose to keep the baby. In combination, the categories of 'keep the baby' and 'adoption' account for 62.8% of the sample. Abortion (18.9%) was the next most preferred choice after keeping the baby, closely followed by 'leave it up to her' (18.3%). Adoption was the least preferred option (16.1%).

Table 24: Adolescent males' decision-making

Choice	N	%
Keep the baby	168	46.7
Adoption	58	16.1
Abortion	68	18.9
Leave it up to her	66	18.3
Total	360	100

6.3 Key predictors underlying decision-making

Arising from our literature review, we constructed two sets of hypotheses to predict adolescent males' decision-making. The first set contains variables that reflect their social context and underlying values – referred to as distal variables. Adolescent males' support for the continuation of the pregnancy is associated with five distal variables:

- higher idealisation of pregnancy and parenthood
- higher stereotypical masculine beliefs
- lower self-esteem
- higher levels of religiosity
- lower social class of parents.

12 Data were also analysed using a random effects logistic regression model allowing for variation between schools (using Stata 11 and the 'cluster' option). The reported results that follow were robust to this type of analysis also – the substantive findings remained the same irrespective of whether the analysis was 'clustered' or not.

The second set contains variables derived from social cognitive theory measuring adolescent males' attitudes in relation to particular phenomena and the attitudes of significant others (here defined as parental attitudes). These are referred to as proximal variables. Adolescent males' support for the continuation of the pregnancy is associated with two proximal variables:

- favourable parental attitudes to keeping the baby
- favourable respondent attitudes to keeping the baby.

In relation to the scaled variables, each was recalibrated to run from 0 to 1. Results of the scales in the present study are as follows:

- The Rosenberg Self-Esteem Scale (RSES) demonstrated robust internal consistency, with an alpha of 0.80. The mean score prior to recalibration was 30.37 (SD 4.20).
- The reliability of the Male Role Attitudes Scale (MRAS) was 0.65, which is higher than that reported by Pleck et al. (1993) and reasonably robust for a scale that comprises only eight items (see Loewenthal, 1996). The mean score prior to recalibration was 20.56 (SD 3.43).
- The Idealisation of Pregnancy and Parenthood Scale (IPPS) achieved an alpha coefficient of 0.65 for both subscales.[13] Mean scores prior to recalibration were 30.48 (SD 4.57) and 32.25 (SD 5.36) for the Idealisation of Pregnancy and Idealisation of Parenthood subscales respectively.[14]

6.3.1 Multinomial regression with first set of hypotheses (distal variables)

To examine the influence of the variables in explaining variance in four possible pregnancy outcome choices – namely, keep the baby, abortion, adoption and 'leave it up to her' – we conducted a series of multinomial regressions. This allowed in-depth examination of the hypotheses in relation to the reference category, in comparison with all other choices. The widely used ordinary least squares linear regression analysis was not appropriate in the present research given the non-continuous (i.e., categorical) nature of the outcome variable. Furthermore, as there were more than two categories in the outcome variable, multinomial rather than binary logistic regression analysis was used.

13 This is approaching 0.7, which is considered by Kline (2000) to be the minimum cut-off point for establishing internal consistency/reliability in this length of scale

14 Examination of histograms showing the distribution of scores for both subscales of the IPPS showed no evidence of skew for the Pregnancy subscale, and only a very slight negative skew for the Parenthood subscale. Both subscales showed some evidence of positive kurtosis; however, the large sample size in the present research would counter the effects of both skewness and kurtosis (see Tabachnick and Fidell, 2007).

For multinomial regression analysis, one of the categories of the outcome variable is chosen as the 'reference' category, and all other categories are compared against this category.[15] The six distal predictor variables are the Idealisation of Pregnancy subscale (of the IPPS); the Idealisation of Parenthood subscale (of the IPPS); the Rosenberg Self-Esteem Scale; the Male Role Attitudes Scale; religiosity; and social class. In the analysis that follows we report that the distal variables as a whole showed poor explanatory power; however, among them, religiosity proved to be the strongest and most consistent predictor.

Model 1 presents 'keep the baby' as the reference category and compares it with each of the remaining three categories (i.e., abortion, adoption and 'leave it up to her'). As shown in Model 1 (see Table 25), adolescent males who opt for abortion, rather than keeping the baby, do not view religion as being important in their lives. Being non-religious (viewing religion as unimportant in one's life) was the only significant predictor of increasing the likelihood that participants would choose abortion rather than keeping the baby in terms of resolving an unplanned pregnancy outcome (β=–1.83, p=0.001). The data thus support only one of our distal hypotheses: support for continuing the pregnancy is associated with high religiosity.

The results also show that low levels of idealisation of parenthood predicted the choice of adoption rather than keeping the baby (β=–4.32, $p<0.05$). Also, being from a professional rather than a lower middle-class background predicted the choice of adoption rather than keeping the baby (β=–0.96, $p<0.05$).[16] Specifically, none of the predictor variables proved to be significant in distinguishing 'leave it up to her' versus 'keep the baby'.

15 In terms of presentation of the data, we draw the reader's attention to the following. Those predictor variables that are based on continuous scales have been recalibrated to run on the same metric from 0 to 1, such that the beta coefficients (identified in the tables as β) are directly comparable. The two recalibrated scales are obviously still different, in the sense that they are measuring different phenomena. However, the results can be compared as they represent the highest possible 'effect' of each variable. Throughout the reporting of our analysis, we refer to beta coefficients. The larger the beta values (closer to 1), the greater the effect. Asterisks (*) beside the beta coefficients indicate that the predictor variables are having a 'significant effect'. One asterisk indicates statistical significance at the .05 level; two asterisks indicate statistical significance at the 0.01 level; and three asterisks indicate statistical significance at the 0.001 level. Where the beta coefficients of predictor variables are large (close to 1) but are not indicated as being significant, it is because their effect is subject to a good deal of standard error (SE). The Nagelkerke statistic is shown in all tables and provides an estimate of the overall amount of variance in the outcome variables that is accounted for by the combined effect of all predictor variables. The Nagelkerke statistic can also be interpreted as an R^2 value by moving the decimal point of the value two points to the right and presenting this figure as a percentage. Higher R^2 values equate to a greater predictive power of the predictor variables in accounting for overall variance in the outcome variables (i.e., the decisions).

16 The analyses were re-run with father's education instead of parental class; in no instance was father's education found to be a statistically significant predictor.

Table 25: Multinomial logistic regression: keep the baby (Model 1)

Beta coefficients, standard error, odds ratios and confidence intervals for multinomial logistic regression examining distal predictor variables with 'keep the baby' as reference category (N=312)

'Keep the baby' as reference category	Abortion			Adoption			Leave it up to her		
	β (SE)	Sig	OR (95% CI)	β (SE)	Sig	OR (95% CI)	β (SE)	Sig	OR (95% CI)
IPPS Pregnancy	−0.52 (1.78)	0.770	0.60 (0.02–19.30)	−0.74 (1.83)	0.687	0.48 (0.01–17.34)	1.86 (1.72)	0.278	6.44 (0.22–186.85)
IPPS Parenthood	−1.56 (1.63)	0.339	0.21 (0.01–5.15)	−4.32* (1.77)	0.015	0.01 (0.00–0.43)	−0.06 (1.59)	0.970	0.94 (0.04–21.38)
Self-esteem	0.37 (1.15)	0.747	1.45 (0.15–13.66)	−0.08 (1.17)	0.945	0.92 (0.09–9.12)	−1.55 (1.18)	0.188	0.21 (0.02–2.13)
Masculinity	1.55 (1.13)	0.167	4.73 (0.52–42.87)	−0.40 (1.22)	0.743	0.67 (0.06–7.26)	0.54 (1.22)	0.659	1.71 (0.16–18.67)
Religiosity	−1.83*** (0.56)	0.001	6.23 (2.10–18.49)	0.16 (0.57)	0.776	0.85 (0.28–2.58)	−0.41 (0.57)	0.469	1.51 (0.50–4.60)
Social class (ref=prof)									
Other	−0.61 (0.83)	0.459	0.54 (0.11–2.75)	−0.01 (0.66)	0.983	0.99 (0.27–3.58)	0.03 (0.62)	0.963	1.03 (0.31–3.46)
Manual	0.07 (0.43)	0.878	1.07 (0.46–2.48)	−0.84 (0.49)	0.086	0.43 (0.17–1.13)	−0.34 (0.44)	0.436	0.71 (0.30–1.68)
Lower middle	−0.19 (0.39)	0.635	0.83 (0.39–1.78)	−0.96* (0.44)	0.029	0.38 (0.16–0.91)	−0.36 (0.39)	0.364	0.70 (0.32–1.51)

Nagelkerke = 0.15
* p<0.05; *** p≤0.001

Model 2 (see Appendix 5.1) presents 'abortion' as the reference category and allows us to compare this category with each of the other categories. Results concerning abortion versus keeping the baby have been addressed above. Here, we turn our attention to adoption versus abortion, and 'leave it to her' versus abortion. Results indicate that adolescent males who chose adoption rather than abortion viewed religion as important in their lives. Being religious was the only significant predictor of increasing the likelihood that participants would choose adoption rather than abortion in terms of resolving an unplanned pregnancy outcome (β=1.99, $p<0.01$). This finding, therefore, supports one of our distal hypotheses: support for continuing the pregnancy is associated with high religiosity.

Results indicate that adolescent males who chose 'leave it up to her' rather than opting for abortion also viewed religion as important in their lives. Being religious was the only significant predictor in increasing the likelihood that adolescent males would choose 'leave it up to her' rather than abortion in terms of resolving an unplanned pregnancy outcome (β=1.42, $p<0.05$).

Model 3 (see Appendix 5.2) presents 'adoption' as the reference category and allows us to compare this category with each of the other categories. Results concerning keeping the baby versus adoption have been addressed in Model 1. Results concerning abortion versus adoption have been addressed in Model 2. Here, we turn our attention to the only remaining comparison, which is 'leave it up to her' versus adoption. Results indicate that adolescent males who chose to leave the decision to their girlfriend rather than opting for adoption hold idealised views of parenthood. Higher idealisation of parenthood, therefore, was the only significant predictor of increasing the likelihood that participants would choose 'leave it up to her' rather than adoption in terms of resolving an unplanned pregnancy outcome (β=4.26, $p<0.05$).

The relationship between educational aspirations and outcome choice was also investigated. Over half (56%) of the sample aspired to university while the remainder opted for a lower educational level or 'other' option. A dichotomous university-versus-other variable was generated. No statistically significant relationships emerged at the bivariate level. Unsurprisingly, when this variable was included in all relevant tables in which the social class variable was used, no statistically significant results emerged.

To summarise, the only hypothesis that could be supported was that continuing the pregnancy was associated with high religiosity. However, we also found that high religiosity was significant in predicting whether the adolescent males chose abortion rather than adoption or 'leave it up to her'. In essence, high religiosity is a very strong predictor of adolescent males not choosing an abortion and instead choosing any other option available to them. Overall, we may conclude that the model testing the distal hypotheses is a weak one. The distal predictor variables, as a whole, accounted for relatively small amounts of variance (R^2=15%). Religiosity proved to be the most consistent predictor, being significant in two out of the three regression models described above.

6.3.2 Binomial regression with both sets of hypotheses

A series of binomial logistic regression analyses were conducted to examine the influence of the proximal predictor variables (attitudes of respondents to outcome choices and predicted parents' reactions to outcome choices) on three possible pregnancy outcome choices: abortion in preference to keeping the baby; adoption in preference to keeping the baby; and adoption in preference to abortion.

First, a binomial logistic regression was conducted to examine the influence of parents' views on outcome preferences (see mother positive and father positive variables described in Section 3.4.2). The result of this regression was that only the mother's views were significant. This predictor variable has been inserted into an analysis that combines the proximal and distal variables below as 'mother positive'.

Second, we turned to the responses of the adolescent males in relation to their attitudes to the pregnancy outcomes. Of particular interest were those questions that assessed the participants' attitudes to the advantages and disadvantages of each of the pregnancy outcome resolution choices (see Section 5.4, Tables 17 to 19). In order to be able to specify a final regression model that incorporates only significant predictors for each of these choices, a series of regression analyses was initially conducted to establish which of the attitudinal variables were significant predictors of the relevant outcome (abortion, adoption or keeping the baby). For brevity, full details of each set of regression analyses used to establish significant predictors are not reported. However, significant predictor variables were identified for each of the choices, as outlined next.

'Keep the baby' versus 'abortion'

First, we conducted a binomial regression with the proximal predictor variables only. Second, we conducted a binomial regression with both the distal and the proximal predictor variables. Below we discuss the results.

Three advantages to keeping the baby were found to be significant: taking responsibility, enjoying fatherhood, and the baby having a worthwhile life. The four disadvantages to keeping the baby were: disadvantaging the baby, ruining the adolescent male's future, losing friends, and incurring financial costs. The two advantages to having an abortion were: being able to forget that the pregnancy had happened, and avoiding early parenthood. The two disadvantages to having an abortion were: the adolescent male actually welcoming fatherhood, and feeling that he would have regrets about an abortion for the rest of his life. Hence, the initial process distilled 11 of a possible 25 significant 'keep the baby' and 'abortion' variables describing attitudes to the consequences of the outcomes.

A binomial regression analysis was then conducted to examine the influence of the above-identified 11 proximal variables in predicting the likelihood of opting for abortion rather than choosing to keep the baby in a pregnancy resolution scenario. Overall, the variables accounted for a substantial amount of variance (R^2=70%). However, three of the 11 variables were not significant predictors (taking responsibility; not wanting to disadvantage the baby – 'not fair on baby'; feeling that keeping the baby would ruin the adolescent male's future).

In order to specify the most parsimonious model, the next stage of analysis involved stepwise hierarchical variable deletion of each of the three non-significant predictor variables from the analysis above, starting with the least significant (e.g., 'not fair on baby'). A binomial regression was then conducted (see Table 26) to examine the influence of only the significant variables identified above. A substantial amount of variance was still accounted for (R^2=69%), with all eight predictor variables remaining significant in this model.

Table 26: Binomial logistic regression: keep the baby versus abortion (Model 4)

Beta coefficients, standard error, odds ratios and confidence intervals for binomial logistic regression examining proximal variables in relation to 'keep the baby' versus 'abortion' (N=236)

Predictor variables	β (SE)	Sig	OR (95% CI)
Abortion – good: Forget it happened	–1.28* (0.53)	0.016	0.28 (0.10–0.79)
Avoid parenthood	–1.55* (0.64)	0.015	0.21 (0.06–0.74)
Abortion – bad: Wants parenthood	1.54** (0.53)	0.004	4.67 (1.64–13.31)
Regret	2.42*** (0.54)	0.000	11.27 (3.92–32.41)
Keep baby – good: Enjoy fatherhood	1.05* (0.50)	0.036	2.85 (1.07–7.60)
Good life for baby	1.70** (0.63)	0.007	5.48 (1.59–18.85)
Keep baby – bad: Lose friends	–1.23* (0.48)	0.011	0.29 (0.11–0.75)
Babies cost money	–1.84** (0.63)	0.004	0.16 (0.05–0.55)

Nagelkerke = 0.69

* p<0.05; ** p<0.01; *** p<0.001

A binomial regression analysis was then specified in relation to examining the significant proximal and distal predictors of 'keep the baby' versus 'abortion' (see Table 27). The analysis comprised eight significant proximal predictor variables derived from the above regression, along with the other significant proximal predictor variable (perceived mother's approval for keeping the baby) and one significant distal predictor variable (religiosity) derived from Model 1. This regression thus combines our proximal and distal hypotheses into one analysis in relation to 'keep the baby' versus 'abortion'.

Table 27: Binomial logistic regression: keep the baby versus abortion (Model 5)

Beta coefficients, standard errors, odds ratios and confidence intervals for binomial logistic regression examining distal and proximal variables in relation to 'keep the baby' versus 'abortion' (N=230)

Predictor variables	β (SE)	Sig	OR (95% CI)
Abortion – good: Forget it happened	–0.85 (0.63)	0.180	0.43 (0.12–1.48)
Avoid parenthood	–1.31 (0.69)	0.058	0.27 (0.07–1.04)
Abortion – bad: Wants parenthood	1.52* (0.61)	0.013	4.56 (1.38–15.13)
Regret	2.35*** (0.62)	0.000	10.46 (3.12–35.14)
Keep baby – good: Enjoy fatherhood	1.28* (0.61)	0.035	3.58 (1.09–11.73)
Good life for baby	1.84** (0.71)	0.009	6.28 (1.58-24.99)
Keep baby – bad: Lose friends	–2.00*** (0.61)	0.001	0.14 (0.04–0.44)
Babies cost money	–1.64* (0.71)	0.020	0.19 (0.05–0.77)
Religiosity	–0.58 (0.32)	0.071	0.56 (0.30–1.05)
Mother positive	–2.37*** (0.62)	0.000	0.09 (0.03–0.32)

Nagelkerke = 0.77

* p<0.05; ** p<0.01; *** p≤0.001

In summary, a substantial amount of variance (R^2=77%) was accounted for by the combined proximal and distal variables as a whole. Seven of the 10 predictor variables included in Table 27 contributed significantly to variance in the decision to keep the baby in preference to opting for an abortion. Results indicate that anticipated positive views about the pregnancy from his mother (β=–2.37, p<0.001) and feelings of regret in relation to abortion (β=2.35, p<0.001) were almost equally strong predictors, as derived from the attitudes of the adolescent males. The following predictors (also derived from adolescent males' attitudes) were also significant: not being concerned about losing friends (β=–2.00, p=0.001), not being concerned about the financial implications of having a child (β=–1.64, p<0.05), wanting a good life for the baby (β=1.84, p<0.01), actually welcoming parenthood (β=1.52, p<0.05) and visualising that he would enjoy fatherhood (β=1.28, p<0.05). These findings support the hypotheses in relation to the proximal variables that favourable parental attitudes and favourable respondent attitudes would be associated with the option to keep the baby.

Overall, the two most significant predictors in this final analysis in relation to 'keep the baby' versus 'abortion' were the mother's perceived attitude to the possibility of the adolescent male becoming a parent and feelings of regret associated with having an abortion rather than keeping the baby. As we will discuss in Chapter 7, this finding supports research that points to the importance of communication with parents, and particularly mothers, in relation to adolescent sexual health outcomes and also supports research that suggests that 'anticipated regret' in particular could augment the predictive utility of the theory of planned behaviour in relation to sexual and reproductive choices (see Abraham et al., 2004, for an overview). The effect of religiosity, which proved a significant predictor in terms of the distal variables, has been subsumed here by the proximal variables (i.e., adolescent males' attitudes towards the pregnancy outcomes). This suggests that attitudes in relation to the consequences of abortion mediate the impact of religiosity on the outcome choice.

'Keep the baby' versus 'adoption'

First, we conducted binomial regressions with the proximal predictor variables only. In total, there were nine significant proximal predictors of the decision to 'keep the baby' versus 'adoption'. Three that represented the advantages of keeping the baby were: strengthening the adolescent male's relationship with his female partner, enjoying fatherhood, and giving him a purpose in life. Three that represented the disadvantages of keeping the baby were: that it would ruin his future, the financial costs of keeping a baby, and too much responsibility. Two that represented the advantages of adoption were: avoiding early parenthood and the baby not being disadvantaged. One that represented the disadvantage of adoption was that someone else would be the child's father.

A binomial regression analysis was then conducted to examine the influence of the above-identified nine proximal variables in predicting the likelihood of opting to keep the baby rather than opting for adoption in a pregnancy resolution scenario. Overall, the variables accounted for a large amount of variance (R^2=51%). However, three of the nine variables (enjoying fatherhood; the financial costs of keeping the baby; the baby not being disadvantaged) were not significant predictors.

In order to specify the most parsimonious model, the next stage of analysis involved stepwise hierarchical variable deletion of each of the three non-significant predictor variables, starting with the least significant (financial costs). A binomial regression was then conducted (see Table 28) to examine the influence of only the significant variables remaining after the hierarchical stepwise deletion described above. A large amount of variance was still accounted for (R^2=48%): all six variables remained significant in this model.

Table 28: Binomial logistic regression: keep the baby versus adoption (Model 6)

Beta coefficients, standard error, odds ratios and confidence intervals for binomial logistic regression examining proximal variables in relation to 'keep the baby' versus 'adoption' (N=226)

Predictor variables	β (SE)	Sig	OR (95% CI)
Keep baby – good: Strengthen relationship	–1.02* (0.45)	0.023	0.36 (0.15–0.87)
Have a purpose in life	–1.13** (0.42)	0.007	0.32 (0.14–0.73)
Keep baby – bad: Ruin future	1.67*** (0.49)	0.001	5.30 (2.03–13.80)
Too much responsibility	1.27* (0.51)	0.013	3.56 (1.31–9.66)
Adoption – good: Avoid early parenthood	1.46*** (0.45)	0.001	4.32 (1.81–10.34)
Adoption – bad: Someone else will be child's father	–1.28** (0.44)	0.004	0.28 (0.12–0.66)

Nagelkerke = 0.48

* p<0.05; ** p<0.01; *** p≤0.001

A binomial regression model was then specified (see Table 29) comprising six significant proximal predictor variables as derived from Table 28, along with the other significant proximal predictor variable (perceived mother's approval for keeping the baby) and two significant distal predictor variables (idealisation of parenthood and social class). This analysis thus combines our proximal and distal hypotheses into one model in relation to 'keep the baby' versus 'adoption'.

Table 29: Binomial logistic regression: keep the baby versus adoption (Model 7)

Beta coefficients, standard error, odds ratios and confidence intervals for binomial logistic regression examining distal and proximal variables in relation to 'keep the baby' versus 'adoption' (N=219)

Predictor variables	β (SE)	Sig	OR (95% CI)
Keep baby – good: Strengthen relationship	–0.83 (0.49)	0.093	0.44 (0.17–1.15)
Have a purpose in life	–1.22** (0.47)	0.010	0.30 (0.12–0.75)
Keep baby – bad: Ruin future	1.52** (0.54)	0.005	4.58 (1.58–13.29)
Too much responsibility	1.15* (0.57)	0.045	3.16 (1.03–9.73)
Adoption – good: Avoid early parenthood	1.67*** (0.50)	0.001	5.31 (1.99–14.18)
Adoption – bad: Someone else will be child's father	–1.51** (0.49)	0.002	0.22 (0.09–0.58)
Social class (ref=prof)			
Other	0.31 (0.78)	0.693	1.36 (0.29–6.33)
Manual	–0.63 (0.62)	0.310	0.54 (0.16–1.79)
Lower middle	–0.67 (0.53)	0.207	0.51 (0.18–1.45)
IPPS Parenthood	–3.49 (1.95)	0.074	0.03 (0.00–1.40)
Mother positive	1.08* (0.45)	0.017	2.93 (1.22–7.06)

Nagelkerke = 0.56

* p<0.05; ** p<0.01; *** p≤0.001

In summary, a large amount of variance (R^2=56%) was accounted for by the analysis of the proximal and distal predictors as a whole. Six of the nine predictor variables contributed significantly to variance in the decision to keep the baby in preference to opting for adoption; wanting to avoid early parenthood was the most significant (β=1.67, p=0.001), followed by concerns about someone else being the child's father (β=–1.51, p<0.01), the perceived negative impact on the adolescent male's future life (β=1.52, p<0.01), feeling that parenthood is too much responsibility (β=1.15, p<0.05), feeling that having a baby

would give him a purpose in life (β=–1.22, p=0.01) and positive views from his mother about the pregnancy (β=1.08, p<0.05). These findings support the hypotheses in relation to the proximal variables that favourable parental attitudes and favourable respondent attitudes would be associated with the option to keep the baby.

Overall, the most significant predictor in this final analysis of 'keep the baby' versus 'adoption' was the desire on the part of the adolescent male to avoid early parenthood. However, concerns about someone else being the child's father and feelings that keeping the baby would affect the adolescent male's future were also (equally) strong predictors. It should be noted that the effect of both idealisation of parenthood and social class, which had been significant distal predictor variables in Model 1 of choosing to keep the baby over any other options, were subsumed in this model, though idealisation of parenthood approached significance (p=0.07). This suggests that the influence of idealisation of parenthood underlies attitudes about parenthood and thus acts as a mediator variable in determining whether an adolescent male will opt for keeping the baby or adoption.

'Abortion' versus 'adoption'

In total, there were two significant proximal predictors arising from the adolescent males' attitudes towards abortion and adoption. The significant predictor that represented the disadvantages of abortion was regret in relation to the abortion. The significant predictor that represented the advantages of adoption was being able to forget that the pregnancy had ever happened.

First, a binomial regression analysis was conducted to examine the influence of these two proximal variables in predicting the likelihood of opting for abortion rather than adoption in a pregnancy resolution scenario. Only 'regret' was a significant predictor of opting for abortion versus adoption. This variable alone accounted for 17% of the variance, which for a single variable is a large amount (R^2=17%). As only one significant predictor remained from the analysis, there was no necessity for a stepwise hierarchical variable deletion process (as in the preceding models). A binomial regression was then conducted (Table 30) to examine the influence of the one remaining significant proximal variable, 'regret'. This single predictor variable remained significant in this model.

Table 30: Binomial logistic regression: abortion versus adoption (Model 8)

Beta coefficients, standard error, odds ratios and confidence intervals for binomial logistic regression examining proximal variables in relation to 'abortion' versus 'adoption' (N=126)

Predictor variables	β (SE)	Sig	OR (95% CI)
Abortion – bad: Regret	1.41*** (0.38)	0.000	4.07 (1.93–8.59)

Nagelkerke = 0.15

*** p<0.001

Second, a binomial regression model was specified (see Table 31) comprising one significant proximal predictor variable (regret), along with the other significant proximal predictor variable (perceived mother's approval for keeping the baby) and one significant distal predictor variable (religiosity). Table 31 thus combines our proximal and distal hypotheses into one final analysis.

Table 31: Binomial logistic regression: abortion versus adoption (Model 9)

Beta coefficients, standard error, odds ratios and confidence intervals for binomial logistic regression examining distal and proximal variables in relation to 'abortion' versus 'adoption' (N=123)

Predictor variables	β (SE)	Sig	OR (95% CI)
Abortion – bad: Regret	1.58*** (0.43)	0.000	4.87 (2.08–11.40)
Religiosity	0.31 (0.22)	0.163	1.36 (0.88–2.08)
Mother positive	–1.40** (0.47)	0.003	0.25 (0.10–0.62)

Nagelkerke = 0.27

** p<0.01; *** p<0.001

In summary, a moderate amount of variance (R^2=27%) was accounted for by the model as a whole. Two of the three predictor variables contributed significantly to variance in the decision to opt for abortion in preference to adoption, with regret being the most significant (β=1.58, p<0.001), followed by positive views from the adolescent male's mother about the pregnancy (β=–1.40, p<0.01). Overall, the most significant proximal predictor in this final model was that adolescent males felt they would regret opting for an abortion rather than adoption as the pregnancy outcome.

The influence of the mother's views in relation to the pregnancy, which had also been a significant proximal predictor in initial analyses, remained significant in this model. Furthermore, the magnitude of effect of this variable (mother's views) is almost as strong as that of the most significant predictor (regret). However, the effect of religiosity, which had been a significant distal predictor variable in Model 3, has been subsumed here by the proximal variables and is no longer significant. This suggests that religiosity underlies attitudes of regret and the influence of the mother's views, and thus acts as a mediator variable in determining whether an adolescent male will opt for abortion or adoption.

6.4 Decision-making in relation to the relationship with pregnant partner

In this final section, we turn our attention to adolescent males' decision-making in relation to the relationship with the pregnant partner. The sequence of the decision-making is: first, the respondent is asked to decide his view on the pregnancy outcome

decision; and then, he is asked to decide whether he would want to continue the relationship with his pregnant partner.

The overwhelming response of the adolescent males was to choose to stay with their pregnant partner (N=329; 91.4%). Only 31 respondents stated that they would leave their girlfriend. The results in Table 32 show that the modal – or most preferred – choice was to stay with the girlfriend and keep the baby (N=138; 38.3% of the sample).

In addition, the adolescent males' preference to stay with their pregnant partner ran right through all the outcome choices:

- of those who elected to keep the baby, 94.6% said they would stay with their girlfriend regardless of her decision (stay and look after the baby, or stay anyway if not keeping the baby)
- of those who elected for an abortion, 82.3% said they would stay regardless of their girlfriend's decision
- of those who elected for adoption, 91.4% said they would stay regardless of their girlfriend's decision
- of those who elected for 'can't decide', 92.4% said they would stay with their girlfriend regardless of her decision.

Table 32: Decisions in relation to continuing the relationship (N=360)

Decision re. pregnancy	Decision re. relationship	N	% of (pregnancy decision) sub-group	% of total sample
Keep baby – what now?	Stay, look after the baby together	138	82.1	38.3
	Stay anyway, if she doesn't keep the baby	21	12.5	5.8
	Leave, if she doesn't keep the baby	9	5.4	2.5
	Total	168	100	
Abortion – what now?	Stay through abortion	43	63.2	11.9
	Stay anyway, if she keeps the baby	13	19.1	3.6
	Leave, if she the keeps baby	7	10.3	1.9
	Leave anyway	5	7.4	1.4
	Total	68	100	
Adoption – what now?	Stay through adoption	34	58.6	9.4
	Stay, if she keeps the baby	19	32.8	5.3
	Leave, if she keeps the baby	5	8.6	1.4
	Total	58	100	
Can't decide – what now?	Stay whatever	61	92.4	16.9
	Leave whatever	5	7.6	1.4
	Total	66	100	100

What we may also conclude from this is that more adolescent males stated that, in the event that their girlfriend made a decision in relation to the pregnancy that was against their wishes, they would choose to stay with her than said they would leave her as a result of her decision (14.7% versus 5.8% of the total sample respectively; see Table 33).

Table 33: Decisions in relation to continuing the relationship if outcome goes against his wishes (N=74)

	Keep the baby N (% of total sample)	Abortion N (% of total sample)	Adoption N (% of total sample)
Stay despite outcome going against his wishes	21 (5.8%)	13 (3.6%)	19 (5.3%)
Leave if outcome goes against his wishes	9 (2.5%)	7 (1.9%)	5 (1.4%)

In summary, adolescent males showed a very strong bias towards choosing to continue the relationship with their pregnant partner through all the options, including abortion and adoption (N=329; 91.4%). Given the strong bias in the sample of a decision to stay in the relationship, the sample size of the alternative – leaving her – is very small (N=31; 8.6%). We have, therefore, chosen not to examine any predictor variables for continuing/discontinuing the relationship with the girlfriend in a multinomial model.

6.5 Key points

6.5.1 Pregnancy outcome decisions

- Almost half (46.7%) of adolescent males would choose to keep the baby. Abortion was the next most preferred choice (18.9%), closely followed by 'leave it up to her' (18.3%). Adoption was the least preferred option (16.1%).
- The model testing the distal hypotheses (religiosity, masculinity, social class, idealisation of pregnancy and parenthood, and self-esteem) is a weak one. The distal predictor variables, as a whole, accounted for relatively small amounts of variance in adolescent males' pregnancy outcome decisions (R^2=15%). The only hypothesis that could be supported was that the choice of continuing the pregnancy was associated with high religiosity. Religiosity proved to be the strongest and most consistent predictor among the distal variables. It significantly predicted opting to keep the baby versus abortion (significant at p=0.001); adoption versus abortion ($p<0.01$); and adoption versus 'leave it up to her' ($p<0.05$).
- Idealisation of parenthood was a significant predictor, not in relation to our original hypotheses, but in predicting adoption versus keep the baby ($\beta=-4.32$, $p<0.05$) and adoption versus 'leave it up to her' ($\beta=4.26$, $p<0.05$). Also, being from a professional rather than a lower middle-class background predicted the choice of adoption rather than keeping the baby ($\beta=-0.96$, $p<0.05$). Specifically, none of the predictor variables proved to be significant in distinguishing 'leave it up to her' versus keep the baby.
- The relationship between age and outcome choice was investigated and found to be not statistically significant. The mean respondent age was identified and analysis of variance used to assess whether any mean differences were statistically significant for each outcome choice.
- 56% of the sample aspired to university while 44% opted for a lower educational level or 'other' option. A dichotomous university-versus-other variable was generated. No statistically significant relationships emerged at the bivariate level between this variable and outcome choice. When this variable was included in all relevant tables in which the social class variable was used, no statistically significant results emerged.

- In relation to the proximal predictors, the findings support the hypotheses that favourable parental attitudes and favourable respondent attitudes would be associated with the option to keep the baby.
- The explanatory model testing the distal and the proximal hypotheses together is a strong one. The combination of the significant proximal and distal variables explains a substantial amount of the variance in adolescent males' choices in relation to keeping the baby versus abortion (R^2=77%) and keeping the baby versus adoption (R^2=56%). The model is less strong in relation to abortion versus adoption (R^2=27%). The combinations of the final predictor distal and proximal variables that account for these decisions are outlined below.
- *Keeping the baby versus abortion*: The two most significant predictors were the perceived mother's positive attitude to keeping the baby and feelings of regret associated with having an abortion. The following predictors, also derived from adolescent males' attitudes, were also significant: not being concerned about losing friends (β=–2.00, p=0.001), not being concerned about the financial implications of having a child (β=–1.64, p<0.05), wanting a good life for the baby (β=1.84, p<0.01), actually welcoming parenthood (β=1.52, p<0.05) and visualising that he would enjoy fatherhood (β=1.28, p<0.05). The effect of religiosity, which proved a significant predictor in terms of the distal variables, was subsumed by the proximal variables (i.e., adolescent males' attitudes towards the pregnancy outcomes). This suggests that religiosity underlies these attitudes by acting as a mediator variable in determining whether an adolescent male will opt for keeping the baby or for abortion.
- *Keeping the baby versus adoption*: The most significant predictor was the desire on the part of the adolescent male to avoid early parenthood (β=1.67, p=0.001). However, feelings that keeping the baby would affect the adolescent male's future and concerns about someone else being the child's father were also strong predictors (β=1.52, p<0.01 and β=–1.51, p<0.01, respectively). These findings support the hypotheses in relation to the proximal variables that favourable parental attitudes and favourable respondent attitudes would be associated with the option to keep the baby. It should be noted that the effect of both idealisation of parenthood and social class, which had been significant distal predictor variables in Model 1 of choosing to keep the baby over any other options, were subsumed by the proximal variables, although idealisation of parenthood approached significance (p=0.07). This suggests that the influence of idealisation of parenthood underlies attitudes about parenthood and thus acts as a mediator variable in determining whether an adolescent male will opt for keeping the baby or adoption.
- *Abortion versus adoption*: The most significant proximal predictor was the feeling that he would regret opting for an abortion in resolving the pregnancy outcome (β=1.58, p<0.001). The influence of his mother's views in relation to the pregnancy, which had also been a significant proximal predictor in initial analyses, remained significant in the final analysis when combined with his attitudes and the distal predictor (religiosity) (β=–1.40, p<0.01). Furthermore, the magnitude of the effect of this variable is almost as strong as that of the most significant predictor (regret). However, the effect of religiosity, which had been a significant distal predictor variable, was subsumed in this model by the proximal variables and was no longer significant. This suggests that religiosity underlies attitudes of regret and the influence of the

adolescent male's mother's views and thus acts as a mediator variable in determining whether an adolescent male will opt for abortion or adoption.

6.5.2 Relationship outcome decisions

- Adolescent males showed a very strong bias towards continuing the relationship with their pregnant girlfriend through all the options, including abortion and adoption (N=329; 91.4%).
- The most selected preference was to stay with their girlfriend and raise the baby together (N=138; 38.3%).
- Adolescent males were also inclined to continue the relationship, even if their partner made a pregnancy decision that did not accord with theirs.

7 Main findings in an international context

7.1 Introduction

In this chapter we briefly draw out how the results compare and contrast with internationally available research. In turn, we look at the main findings of the research under the following headings: pregnancy outcome decisions (Section 7.2); explanations for pregnancy outcome decisions (Section 7.3); relationship outcome decisions (Section 7.4); and communication and help-seeking needs (Section 7.5).

7.2 Pregnancy outcome decisions

This is only the fourth study internationally to research adolescent males' hypothetical pregnancy outcome decisions. Two of the previous studies were conducted in the US (see three results papers: Marsiglio, 1988, 1989; Marsiglio and Menaghan, 1990) and one in Australia (see two results papers: Condon et al., 2006; Corkindale et al., 2009). All of these previous studies also used a role-play or vignette to probe adolescent males' hypothetical decisions and combined this with a questionnaire. Our study was designed to use an audio-visual role-play scenario similar to that of the Australian study (Condon et al., 2006). The US and Australian studies also had comparable sample sizes of adolescent males attending school, but the US studies used convenience samples only. The age range of the sample was 15 to 16 years in the US studies and 15 to 18 years in the Australian study. In our study, the age range was 14 to 18 years (see Section 4.3.2 for full details).

As noted in Chapter 2, there is a further small body of literature that describes men's actual pregnancy decision-making experiences (Cater and Coleman, 2006; Holmberg and Wahlberg, 2000; Redmond, 1985; Vaz et al., 1983). However, only in one of these studies were the processes behind men's decision-making explored in detail (Holmberg and Wahlberg, 2000). More broadly than these five specific studies, there is a larger body of literature on adolescent males' attitudes to reproduction and abortion, as outlined in Chapter 2, on which we also draw in this discussion.

From our study, we may conclude that Irish male adolescents show a similar pattern of pregnancy outcome choices to that found in the two similar US studies. In our study, almost half (47%) of the adolescent males chose to keep the baby, 19% chose abortion, 18% chose to 'leave it up to her' and 16% chose adoption. In one of the US studies, the majority of males (61%) chose to keep the baby, 19% chose abortion and 12% chose adoption (Marsiglio and Menaghan, 1990). In the other US study, precise figures on the outcome decisions are not available but the choice to keep the baby was, again, the most popular of the three options. Approximately 10% of blacks and 22% of whites chose abortion; approximately 46% of the sample (both blacks and whites) chose to live with the child; and 45% of blacks and 32% of whites chose some other arrangement (either not living with the child or adoption) (Marsiglio, 1989).

The results of our study show a contrasting pattern to the one other similar study, conducted in south-west Australia (Condon et al., 2006), where adolescent males seemed slightly more likely to choose abortion (39.1%) over the other available options:

keeping the baby (30.0%) or 'leave it up to her' (30.9%). Explanations for these similarities and differences are discussed below.

7.3 Explaining pregnancy outcome decisions

In relation to the evidence on the explanations that underlie the choices of adolescent males, our study is the first to test a comprehensive range of social and psychological factors. The explanatory model used in our study included theoretically important social context (distal) variables – social class, religiosity, gender (masculine) identities, and idealisation of pregnancy and parenthood – along with important proximal variables derived from social cognitive theory – adolescent males' attitudes and the perceived attitudes of parents. Thus, we have been able to explain the reasons behind males' pregnancy decision-making to a far greater extent than was possible in any previous research study.

In the first instance, our study has been able to validate previously identified explanations. In particular, our research strongly reinforces the saliency of social cognitive theory (Bandura, 1977, 1986) and, specifically, theory of planned behaviour (TPB) (Ajzen, 1985, 1988; Ajzen and Madden, 1986) in explaining adolescent males' choices. TPB proposes that an individual's attitudes and his or her perceived attitudes of significant others (subjective norms) influence his or her behaviour. Previous research indicates that this theory provides a good basis for understanding a broad range of health behaviours (Conner and Sparks, 1995; Godin and Kok, 1996). In the comparable US studies of adolescent male pregnancy decision-making, observed differences in the choice to keep the baby and form a two-parent household versus abortion and adoption were significantly explained by adolescents' beliefs about their parents' and friends' expectations and their personal concerns about having their educational career adversely affected (Marsiglio, 1988). The Australian study also confirmed that adolescent males' attitudes in relation to the consequences of the pregnancy outcomes (keeping the baby or abortion) were related to their pregnancy outcome choices.[17] 'Those who chose to maintain the pregnancy were more idealistic and gave weight to their moral beliefs, whilst those who chose abortion were more concerned about the negative consequences to themselves of keeping the baby' (Corkindale et al., 2009, p. 1005).

In our study, we find that the combination of the following subjective norm and attitudinal variables – anticipated positive views about the pregnancy from the adolescent male's mother and feelings of regret in relation to an abortion – offer a strong model of understanding of the process of adolescent males' decision-making when faced with the decision to keep the baby or choose an abortion. Our study also shows that other (but somewhat less) significant predictors of the same choice are: not being concerned about losing friends, not being concerned about the financial implications of having a child, wanting a good life for the baby, actually welcoming parenthood, and visualising that he would enjoy fatherhood. In combination, these attitudinal and subjective norm variables explain 77% of the total variance in adolescent males' choice to keep the baby over abortion.

17 As reported in Section 3.4, we used the same attitudinal items as Corkindale et al. (2009) but included further items in relation to adoption, which was not part of the Australian study. The Australian study did not analyse parental attitudes.

In addition, our analysis extends understanding of the gender dynamics in relation to the influence of parents. In our research we were able to distinguish between a mother's and a father's influence. The results show that it was the predicted mother's reaction to the news of the unplanned pregnancy, rather than the father's, that was significantly influential in adolescent males' decision-making. The more in favour his mother was perceived to be towards keeping the baby, the more likely was the adolescent male to want to keep the baby.

The influence of mothers more than fathers in the area of relationships and sexuality is consistent with recent research on parents' approaches to educating their adolescent and pre-adolescent children in Ireland; this research indicates that mothers provide more education on relationships and sexuality than fathers do (Hyde et al., 2009).[18] Given that this gender division of labour in relation to sex education with children is a broader trend identified elsewhere (Hutchinson, 2002; Hutchinson and Cooney, 1998; Schubotz et al., 2002; Sprecher et al., 2008; Walker, 2001), it will be important to include such a distinction in future studies of adolescent males and pregnancy/pregnancy decision-making.

The results of our study also show that, of the social context (distal) variables, religiosity is the strongest and most consistent predictor of adolescent males' choices. However, the results indicate that the effect of religiosity, when looked at in combination with the proximal (attitudinal and subjective norm) variables, becomes subsumed in the attitudinal explanations. This suggests that religiosity underlies adolescent males' attitudes such as 'regret about abortion'. Our finding that religiosity is an important underlying social value that influences adolescent males' choice of keeping the baby – and, in particular, that dissuades adolescent males from choosing abortion – concurs with a number of studies on adolescents' attitudes (more generally) to abortion in the US and Europe (Agostino and Wahlberg, 1991; Boggess and Bradner, 2000; Bryan and Freed, 1993; Esposito and Basow, 1995; Layte et al., 2006; Marsiglio and Shehan, 1993; Misra and Hohman, 2000; Ryan and Dunn, 1983). Of note, religiosity emerged as the strongest predictor of attitudes to abortion in one large representative study in the US (Misra and Hohman, 2000). The importance of religiosity in relation to adolescent attitudes to abortion is also consistent with evidence in the adult population (see Esposito and Basow, 1995, for an overview).

This finding is also understandable in relation to a broader sociological understanding of Irish society. Ireland has shown trends of becoming an increasingly secularised society. For example, Cassidy's review of religious trends in Ireland, taken from the 1981, 1990 and 1999 European Values Surveys, showed that weekly (or more) attendance at religious services declined from 83% in 1981 to 59% in 1999; however, recent research shows that in comparison with Sweden, the Netherlands, Finland, Germany and Britain, Ireland continues to be a religious society (Cassidy, 2002). For example, a recent large-scale European survey of attitudes to religion, religious education, religious institutions and religious worldviews among European adolescents (aged 16 to 20 years) found that

18 The results of this qualitative study showed that even though fathers regard themselves as open and willing to participate in conversations about relationships and sexuality with their children, fathers indicated that children are more likely to approach their mother, and many fathers had undertaken little or no sexuality education with their children. Furthermore, mothers indicated that, in discussions surrounding sexuality, some fathers appeared to be reluctant to engage with their sons.

the levels of religiosity of Irish adolescents were among the highest of the European countries included in the survey, and were comparable with results from Poland, Croatia and Turkey (Ziebertz and Kay, 2006). In relation to the Irish results from this European survey, Lewis et al. (2006) found that 62% of young people reported attending religious services regularly; over 70% regarded themselves as being a believer; over 80% considered it to be important that their future marriage be within the context of a religious service; 90% believed it important that any future children they had be baptised; and 96% believed it important to honour deceased relatives or friends through a religious service. It is evident, therefore, that religion still plays a pivotal role in Irish society and thus, in many ways, it is unsurprising that levels of religiosity should affect adolescent pregnancy decision-making.

Our research offers weak validation of other explanations found in previous research, notably the idealisation of parenthood, and social class. There is limited evidence in studies of adolescent males internationally that suggests that those from working-class backgrounds are less likely to approve of abortion as a resolution to a pregnancy (Marsiglio, 1989; Marsiglio and Shehan, 1993; Rundle et al., 2004). In our study, social class was not a significant predictor of adolescent males' propensity to choose abortion to resolve a pregnancy. It was significant only in explaining adolescent males' choice between adoption and keeping the baby: males from professional backgrounds were more likely to choose adoption.

Idealisation of parenthood was found to be predictive of the choice to continue the pregnancy (over abortion or leaving it up to the pregnant girlfriend) in the Australian study (Condon et al., 2006). Those respondents who opted for a continuation of the pregnancy were characterised by high idealisation of parenthood. However, in our study, idealisation of parenthood helped to explain only why adolescent males chose to keep the baby over adoption. The adolescent males who opted for adoption rather than to keep the baby did not hold idealised views of parenthood. While this scale achieved reasonable reliability and consistency in its developmental stage in the Australian research, the current study is the first in which it is used outside its geographical origins. We propose to conduct further psychometric testing of the scale, which may enhance its usefulness/sensitivity in future research on adolescent pregnancy decision-making.

Overall, our contribution to the literature on understanding explanations for adolescent males' pregnancy decisions rests not only with the validation and extension of the above explanations but also in being able to test their relative salience through a comprehensive model. Understanding the social context and social cognitive antecedents of adolescent males' choices gives us a richer understanding of adolescent males' decision-making processes and is also an important prerequisite in the development of interventions with adolescent males around the issue of adolescent pregnancy and adolescent pregnancy decision-making.

7.4 Relationship outcome decisions

The results clearly show that adolescent males would choose to continue the relationship with their pregnant partner in the event of an unplanned pregnancy. The majority suggested that they would stay with their partner regardless of her pregnancy outcome decision, even if it went against their own preferred decision. These results correspond with those in the aforementioned US study (Marsiglio and Menaghan, 1990), where over two-thirds of the males stated that they would choose to stay with their partner, either as a married couple or cohabiting. In the Australian study (Condon et al., 2006), results were not clearly defined in relation to relationship choices, except that, among the one-third of the sample who elected to continue the pregnancy, almost all believed they should continue the relationship and almost half thought they should marry their girlfriend.

The strong numerical bias towards continuing the relationship prevented us from conducting regression analysis to test explanations of the relationship choices in greater detail. However, we suggest that the hypotheses, both distal and proximal (social class, religiosity, self-esteem, perceived parental attitudes, etc.), that we proposed in relation to decisions regarding the pregnancy would also be salient in relation to the relationship with the girlfriend. From the literature on men, masculinities and fatherhood (e.g., Haywood and Mac an Ghaill, 2003), we know that contemporary culture has manifestly witnessed a turn towards a new construction of the 'good father', with the expectation that males be more intensely involved with their children and share parenting to a greater extent with their female partners. Equally, we have seen the construction of its antithesis, the 'feckless father', who does not take economic responsibility for his 'offspring', leading to state policies being developed across many neo-liberal countries to try to enforce paternal economic responsibility.

7.5 Communication and help-seeking behaviour

An unplanned adolescent pregnancy can be one of the most profound physical and emotional crises that can beset a young person. Furthermore, pregnancy decision-making in the context of an unplanned pregnancy is an intense, emotionally charged experience in which life-changing decisions have to be taken within a short time frame. Although the positive and negative impacts of an adolescent pregnancy on the mental health of females are well documented (e.g., Liao, 2003; Moffitt et al., 2002), little is known about the impact of an adolescent pregnancy on the mental health of adolescent males (Paranjothy et al., 2009). Our study sheds light on the under-explored area of how adolescent males might perceive this crisis in their lives and on their anticipated coping strategies in terms of who they might speak to, what they might expect others' reactions to be, and how they might seek formal help.

The results show that adolescent males would be shocked and frightened to hear that their girlfriend was pregnant. However, they seemed to be very willing to assume responsibility for their part in the pregnancy as well as for pregnancy outcome decision-making. This was notable in their responses across a number of questions. In relation to who they might blame for the pregnancy, the majority of the adolescent males (over half) stated that they would blame themselves for the pregnancy, with just a tiny minority (2.7%) saying that they would blame the female partner.

A total of 28.6% said both partners would be to blame because 'they got carried away'. The notion of 'getting carried away' is interesting as it has previously been suggested in Irish research that there is a reluctance among young females to be seen to be prepared for sex, for example by carrying condoms (Hyde and Howlett, 2004). Our study suggests that a desire to preserve the passionate notion of 'getting carried away' may also be a factor in adolescent males' reluctance to carry condoms. We found that over one-quarter of adolescent males were willing to admit to 'getting carried away' and, in one of the focus groups, one participant explained how adolescent males might find it difficult to appear to be 'preparing for sex' with a girlfriend:

> *If the guy is expected to have a condom in his back pocket and he pulls it out, she's going to go 'Wait a minute. Have you been planning this for a while?' and stuff.*
> *[FG2 Dis-Rur-CoI-Mix]*[19]

More broadly, the belief expressed in our study by adolescent males that they have an equal role to play in assuming responsibility for contraception is consistent with empirical literature on adolescent sexuality, which suggests that adolescents (male and female) believe they should take joint responsibility for contraception (Albert, 2007; Ekstrand et al., 2007; Hooke et al., 2000; Hyde and Howlett, 2004).

The sense of responsibility that the adolescent males were willing to assume was also evident in how they perceived themselves as coping with an unplanned pregnancy. In responses to the role-play questionnaire, they overwhelmingly disagreed with any view that suggested they should disown the problem and leave it up to the female partner to sort out. In the focus groups, also, there was much animated discussion about the notion of responsibility, in which the adolescent males both acknowledged and challenged the stereotypical male response of 'clearing off'.

On the one hand, these results may signify a level of naivety among the adolescent males in terms of an exaggerated sense of self-confidence and resilience to 'stick around' through these problems. On the other, they may signify a reaction to an underlying knowledge that adolescent males can be formally excluded from the process. Research with adolescent females suggests that they consider the views of their male partner to be an important influence on how they would view and deal with an unplanned pregnancy (Broen et al., 2005; Cowley et al., 2002; Dudgeon and Inhorn, 2004; Hyde and Howlett, 2004; Larsson et al., 2002; Mahon et al., 1998; Mavroforou et al., 2004; Sihvo et al., 2003; Stevenson et al., 1999). However, in the limited number of studies of male experiences of confronting pregnancy decision-making, males state that they feel excluded and report feelings of depression and isolation (Cater and Coleman, 2006; Vaz et al., 1983). In these studies, adolescent males express the need for information and to be kept involved in the process. Where they have had opportunities to be involved with their female partner's decision, they have reported the experience as being very positive (Holmberg and Wahlberg, 2000; Redmond, 1985). This was also true of a recent Irish study of adult males (Ferguson and Hogan, 2007).

19 Abbreviated socio-demographic details for focus group 2: Dis: disadvantaged school; Semi: semi-urban school; CoI: Church of Ireland school; and Mix: co-educational school.

The overwhelming sense of responsibility that adolescent males demonstrated in this study and the desire they expressed to be involved in pregnancy decision-making suggest that there is a need for more positive policy and practice responses for adolescent males. Perhaps the clearest way of responding to this desire is to foster informal and formal systems of communication with, and support for, adolescent males in this situation.

The study shows that adolescent males regard communication with their parents in the event of an unplanned pregnancy as being very important. Almost all respondents said they would tell their parents; with marginally more saying they would tell their mother over their father. In relation to formal support, the study results show that the vast majority (91.9%) of adolescent males said they would go to a counsellor in the event of an unplanned pregnancy and the majority assumed that a counselling session would be beneficial, indicating, for example, that they would not feel 'dragged along', that they would not feel excluded while in the counselling session and that it would be of help in considering their options. In the focus groups, however, adolescent males acknowledged that help and support in relation to an unplanned pregnancy is largely directed at adolescent females and suggested the need for counselling sessions that addressed adolescent males' needs. They further suggested that counselling sessions held separately from their pregnant partner, and which were confidential, might be beneficial.

There is not a strong international literature base with which we can compare these findings. Only one previous study reported on adolescent males' perceptions of counselling support in relation to an adolescent pregnancy (Holmberg and Wahlberg, 2000). Importantly, this was a qualitative study with adolescent males who had received support in relation to an unplanned pregnancy. The support, provided in an adolescent males' health clinic in a town in Sweden, was regarded very positively by the recipients, particularly with respect to its confidentiality. More broadly, among the other studies of male experiences of pregnancy decision-making, adolescent males expressed the desire for counselling and support in making such decisions (Cater and Coleman, 2006; Redmond, 1985; Vaz et al., 1983).

Collectively, this small body of research suggests that reproductive and sexual health services could usefully reach out to adolescent males to give support in relation to an unplanned pregnancy. It is clear from research with females that reproductive and sexual health creates a formal link between them and health and social care providers from an early age, and that this can foster a broader set of help-seeking behaviours in relation to health and well-being (see Annandale, 2008, for an overview). In contrast, males lack such an early introduction to formal health and social care services. However, adolescent sexual health and reproductive health services, in particular, have the potential to be an important conduit for health services to reach out to men early in their lives, which could have a sustained impact through their adult years (Dodge and Rabiner, 2004; Park and Breland, 2007; Smith et al., 2005). In particular, reaching out to adolescent males through sexual health services might encourage them to come forward in times of crisis – for example, in the event of an unplanned pregnancy.

8 Evaluation of the IVD

8.1 Introduction

In this chapter we report on the results of the evaluation of the *If I were Jack* IVD by the three primary stakeholders: the adolescent male users (Section 8.2), a small sample of teachers (Section 8.3) and a small sample of health and education sector professionals (Section 8.4). The evaluation seeks to determine the IVD's potential for development as an educational tool in the context of relationships and sexuality education (RSE), which is a module situated within the Social, Personal and Health Education (SPHE) programme in second-level schools in the Republic of Ireland.

8.2 Adolescent males' views

Initial evaluation of the *If I were Jack* IVD was through an embedded survey at the end of the IVD, which all adolescent male participants were asked to complete. Results were obtained from 320 adolescent males (Table 34). Further data are drawn from the focus-group interviews with the adolescent males.

8.2.1 Evaluation by IVD survey

The response from the adolescent males was very positive in terms of their reports of the immediate impact of the IVD on their thinking. A total of 71.9% agreed or strongly agreed with the statement that the IVD 'got me involved in Jack's situation'; 78.5% agreed or strongly agreed that it 'made me think about issues I hadn't thought about before'; 85% agreed or strongly agreed that it 'helped me understand the effect an unplanned pregnancy would have on a guy like me'; 75.4% agreed or strongly agreed that it 'made me think that I should never get myself in that situation'; and 83.5% agreed or strongly agreed that it 'made me aware that I could talk to a counselling service if I were in Jack's situation'. In addition, 92% found the screen interface easy or very easy to use.

Table 34: Adolescent males' evaluation of immediate impact of IVD

If I were Jack ...		Strongly agree N (% of total sample)	Agree N (% of total sample)	Not sure N (% of total sample)	Disagree N (% of total sample)	Strongly disagree N (% of total sample)	*Total*
1	Got me involved in Jack's situation	37 (11.6)	193 (60.3)	49 (15.3)	28 (8.8)	13 (4.1)	*320*
2	Made me think about issues I hadn't thought about before	46 (14.4)	205 (64.1)	28 (8.8)	33 (10.3)	8 (2.5)	*320*
3	Helped me understand the effect an unplanned pregnancy would have on a guy like me	71 (22.2)	201 (62.8)	33 (10.3)	11 (3.4)	4 (1.3)	*320*
4	Made me think that I should never get myself in that situation	92 (28.8)	149 (46.6)	51 (15.9)	22 (6.9)	6 (1.9)	*320*
5	Made me aware that I could talk to a counselling service if I were in Jack's situation	61 (19.1)	206 (64.4)	32 (10.0)	15 (4.7)	6 (1.9)	*320*

We conducted further analysis to look for any differences within the sample of adolescent males in terms of how they evaluated the IVD. There was only one significant result: those participants in the non-manual class gave significantly higher ratings than those in the manual class for the 'helped me understand' item. We now present further details of the evaluation results.

Age group

A one-way analysis of variance (ANOVA) examining mean scores on the evaluation items for participants aged 14 or 15 years and those aged 16 years and over indicated one significant difference for the item 'got me involved in Jack's situation' (see Table 35). However, the Levene's test of homogeneity of variance was significant for this item (implying that observed differences between groups could be a function of something other than the construct being examined). A more stringent alpha level was applied to this item (i.e., $p<.01$), which rendered it non-significant.

Social class

A one-way ANOVA examining mean scores on the evaluation items for participants in four social classes (i.e., professional, non-manual, manual, other) indicated significant differences for the items 'helped me understand' and 'I should never get into that situation' (see Table 35). Post hoc tests indicated that for the 'helped me understand' item, those participants in the non-manual class gave significantly higher ratings than those in the manual class. However, the Levene's test of homogeneity of variance was

significant for the 'I should never get into that situation' item. A more stringent alpha level was applied to this item (i.e., $p<.01$), which rendered it non-significant.

Area/location

A one-way ANOVA examining mean scores on the evaluation items for participants from urban, semi-urban and rural areas indicated no significant differences for any of the items (see Table 35).

Career aspirations

A one-way ANOVA examining mean scores on the evaluation items for participants intending to go on to university, those intending to do diploma or training courses, and those endorsing unemployment or other aspirations indicated no significant differences for any of the items (see Table 35).

Table 35: Means, standard deviations and results of ANOVA for group differences in evaluation items

Age group	14/15 (N=172)	16+ (N=144)			F	Sig
Understanding	3.95 (0.86)	4.10 (0.61)			3.120	0.078
Issues	3.80 (0.90)	3.74 (0.92)			0.416	0.519
Involved	3.57 (1.00)	3.79 (0.84)			4.424	0.036†
Situation	3.86 (0.98)	4.05 (0.89)			3.164	0.076
Counselling	3.95 (0.82)	3.94 (0.79)			0.001	0.972
Social class	**Other (N=23)**	**Manual (N=56)**	**Non-manual (N=96)**	**Professional (N=145)**		
Understanding	4.04 (0.71)	3.73 (0.80)	4.18 (0.73)	4.01 (0.75)	4.185**	0.006
Issues	3.91 (0.60)	3.64 (0.98)	3.96 (0.82)	3.68 (0.96)	2.419	0.066
Involved	3.35 (0.94)	3.55 (0.99)	3.75 (1.03)	3.70 (0.84)	1.499	0.215
Situation	4.09 (0.90)	3.59 (1.04)	3.91 (0.99)	4.06 (0.85)	3.708	0.012†
Counselling	3.91 (0.79)	3.89 (0.89)	4.06 (0.83)	3.88 (0.75)	1.063	0.365
Area/location	**Urban (N=132)**	**Semi-urban (N=122)**	**Rural (N=66)**			
Understanding	4.05 (0.72)	4.03 (0.76)	3.89 (0.83)		1.036	0.356
Issues	3.82 (0.92)	3.79 (0.87)	3.67 (0.97)		0.631	0.533
Involved	3.71 (0.90)	3.70 (0.92)	3.52 (1.03)		1.085	0.339
Situation	3.93 (0.95)	4.03 (0.90)	3.76 (0.99)		1.835	0.161
Counselling	4.05 (0.67)	3.87 (0.92)	3.85 (0.81)		2.230	0.109
Career aspirations	**University (N=177)**	**Dipl./train. (N=99)**	**Other (N=33)**			
Understanding	4.05 (0.76)	3.99 (0.78)	3.91 (0.72)		0.573	0.565
Issues	3.74 (0.95)	3.88 (0.84)	3.61 (0.90)		1.333	0.265
Involved	3.73 (0.92)	3.52 (1.01)	3.85 (0.71)		2.321	0.100
Situation	4.01 (0.88)	3.86 (1.03)	3.82 (1.04)		1.066	0.346
Counselling	3.99 (0.80)	3.84 (0.91)	3.94 (0.50)		1.168	0.312

** p<.01

† Levene's test for homogeneity of variance was significant for these items, therefore a more stringent alpha level (p<.01) was applied

8.2.2 Evaluation in focus groups

We move now to the focus-group data. Here we sought to address three main questions: to what extent the adolescent males felt they could identify with the actors and the situation of an unplanned pregnancy as presented through the medium of the IVD; to what extent they believed the IVD might be useful in raising their awareness of the issue of an unplanned pregnancy in their lives; and what they thought about the actual interface and question formats.

Identifying with Jack and his situation

In the focus groups, the adolescent males were asked how they responded to Jack and Emma's situation and to the format and content of the IVD. Most groups expressed an ability to 'believe in' Jack. The most common reason for this identification was that the situation (an unplanned pregnancy) was not atypical:

> *But the situation is believable. It happens all the time. [FG5 NDis-Urb-Inter-Mix][20]*

> *He could be anyone, that's right. It could happen to anyone. So it was believable enough. [FG3 NDis-Rur-RC-Mix]*

> *Yeah. It was something that could happen a lot of people. You can relate to what he was going through and you can see people that could get into this sort of situation that he's been in. [FG2 Dis-Rur-CoI-Mix]*

Beyond the credibility of the situation, several participants identified with Jack as an individual, as illustrated in the following exchange:

> *Participant A: I have to agree with the moods. He did go through a lot of stages, which kind of shows a lot of different ways people would react to different stages of it.*
> *Participant B: It sort of reflects humans though because people go through stages and they go through different mindsets. So it made it just a wee bit even more believable throughout the mood swings because people—*
> *Participant C: Have mood swings! [FG2 Dis-Rur-CoI-Mix]*

Some responded to the first-person perspective of the film, saying it allowed them to put themselves in Jack's shoes:

> *[I]t is like you were him in a kind of a certain way and the decisions that he makes. [FG11 Dis-Urb-Inter-Mix]*

> *Made it more interesting, like, you know – wasn't really boring because you were, like, involved in the story. [FG7 Dis-Urb-Inter-Mix]*

20 Socio-demographic details of the individual focus groups (FG) are abbreviated as follows:
Dis: disadvantaged school; NDis: non-disadvantaged school
Rur: rural school; Semi: semi-urban school; Urb: urban school
CoI: Church of Ireland school; Inter: interdenominational school; RC: Roman Catholic school
Mix: co-educational school; Sing: single-sex school.

I could imagine myself being the person in those exact situations. After I thought Jack looked like him and then I kind of replaced Jack and Emma with myself and someone else and I was sort of thinking how I would go through it instead of what was actually happening. [FG2 Dis-Rur-CoI-Mix]

Some participants approved of the portrayal of Jack's actions:

Participant A: He wrote down the pros and cons and he worked out the end and he said his answer in the end up.
Participant B: He didn't say things that he would regret later. He kind of thought about it before he said anything. [FG10 NDis-Semi-RC-Mix]

He seemed to care about other people's opinion. He went to his family and his friends and what his friends would say to him, what his friends' friends would think. [FG2 Dis-Rur-CoI-Mix]

However, some participants had difficulty separating their individual responses to the situation from those of the characters as represented by the actors:

Even though he was supposed to be really general and anyone could fit in with him, it was … he still did have some background kind of and it was difficult to know whether you should answer as him or as yourself. [FG5 NDis-Urb-Inter-Mix]

A few participants from the Dublin area found the mixture of accents for different social classes confusing and found the pairing of Jack and Emma unrealistic:

The accent. The friends were … they all kind of had different accents and they all seemed like they came from different backgrounds. So you wouldn't really believe that they all hung out with each other all the time. [FG5 NDis-Urb-Inter-Mix]

Participant A: Yeah, the accents didn't gel very well.
Participant B: It's hard to do, but he didn't … the mix of accents was kind of … made it seem very weird. She was very posh compared to him. [FG4 NDis-Urb-Inter-Mix]

Raising awareness

A strong majority of participants said that the IVD, despite any issues of identification, made them face a situation they would generally have avoided thinking about:

It's not a situation you'd think about every day so that's why the DVD makes you think along those lines. [FG5 NDis-Urb-Inter-Mix]

Participant A: Because it's not one of the things … it wouldn't be coming into your mind every day. So it brings it up and it gives you all the options.
Participant B: Seeing the DVD was kind of helping to make you aware that there is help. [FG11 Dis-Urb-Inter-Mix]

Several participants responded to the way the IVD presented an array of complex, sometimes contradictory, choices that involve a number of people (and not just Jack or the adolescent male). These difficult choices helped them think more deeply about the issues and more broadly about the people involved:

> *The film does help you because sometimes you never thought of about the whole … the girl, what she is going to feel emotionally. Her life's wrecked, your life's ruined and it helps you know that there is things out there to help you, there is doctors, there is support services there to help you make your decisions. [FG2 Dis-Rur-CoI-Mix]*

Whereas most reactions to the IVD were that it raised awareness generally, some participants said it actually made a direct impact on their decision-making:

> *Yeah, it changed my mind anyway. I came in here thinking this is obviously the right choice but then it was changed by that obviously. I was choosing something completely different. [FG5 NDis-Urb-Inter-Mix]*

> *Participant A: It would definitely make you think more about contraception, the risks.*
> *Participant B: Make you think twice. [FG1 NDis-Semi-RC-Sing]*

However, one participant doubted the long-term impact of the IVD:

> *I'd say people will forget about it. [FG2 Dis-Rur-CoI-Mix]*

One participant acknowledged how it raised his awareness of the support services available to a young person facing such a situation:

> *It's certainly educating anyway. Like it's stuff I would never even have known, stuff like the counsellors, I didn't know they actually had proper counsellors just for that particular reason. [FG4 NDis-Urb-Inter-Mix]*

IVD interface and question formats

As reflected in the survey data, the adolescent males in all the focus groups found the interface easy to use:

> *You would have to be pretty retarded not to be able to click. It is quite simple, even if you have no basic computer skills whatsoever. It is quite easy. [FG2 Dis-Rur-CoI-Mix]*

Some participants responded well to the range and character of the questions:

> *All the questions helped you think about it more and more. [FG6 NDis-Urb-Inter-Mix]*

> *I thought some of the questions where you really had to give your opinion on a certain topic or really state what you think about even a certain area of a certain topic, they were fairly hard because you had to think so deeply about it. [FG3 NDis-Rur-RC-Mix]*

However, a number of participants said there were too many questions:

A wild lot of clicking though. [FG9 NDis-Semi-RC-Mix]

I thought the questions were repetitive as well. [FG1 NDis-Semi-RC-Sing]

And some felt that opting for a single preference was difficult at times:

Some of them, it was some of the easiest phrased questions that were the hardest to answer because they were just so blunt, direct and to the point and to honestly, truthfully answer that question, you would have to feel. There were so many variables if you were going to influence certain situations. [FG2 Dis-Rur-CoI-Mix]

It kind of restricted you. It was either a 'yes' or a 'no', or a 'yes', a 'no' or a 'maybe'. [FG8 NDis-Semi-RC-Mix]

Some of the answers were a bit too direct. There was alternative answers you could have answered but not available to click on. [FG10 NDis-Semi-RC-Mix]

Two participants requested more options to choose from:

I think you could add more options in because it's kind of stick with her forever or leave. [Maybe] 'See how things go'. [FG4 NDis-Urb-Inter-Mix]

Some of the questions I wish they could tick two or more because there's opinions where I was undecided and some of the questions do give you that option, saying that you weren't sure. [FG2 Dis-Rur-CoI-Mix]

8.2.3 Summary of adolescent males' evaluation

The survey and focus-group data are broadly in agreement, with the adolescent male participants indicating that they were able to get involved with Jack's situation; that the IVD made them think about the issues; and that the exercise raised their awareness of the risks and consequences of such a situation.

In terms of differences within the sample in relation to the evaluation of the IVD, there was only one significant result: those participants in the non-manual class gave significantly higher ratings than those in the manual class for the 'helped me understand the effect an unplanned pregnancy would have on a guy like me' item.

The IVD was widely appreciated by members of the focus groups. Only a few individuals found it difficult to relate to either Jack as a character or the situation itself. Dublin-based groups picked up on the mixture of accents, which some judged unrealistic, but that did not seem to impinge on their discussion of the substantive issues. The topic of unplanned pregnancy evoked in the IVD seemed to resonate well with all groups; those groups that said it was not a frequently discussed topic of conversation indicated that the IVD had broadly raised their awareness of the issue and said it had made them more aware of their role in an unintended pregnancy and of the role of counselling in relation to

such an event. The format of the questions was well received throughout; some felt that the choices to be made were a little stark or binary and some that the overall number of questions could be reduced.

8.3 Teachers' views

Five SPHE teachers were interviewed; three of whom were also guidance counsellors (teachers 1, 3 and 5). All five teachers were employed in co-educational schools; four were in schools classified as disadvantaged; four were in interdenominational schools and one in a Church of Ireland school; three were in rural and two in urban schools. Teachers 2 and 3 were employed in the same school. When quoted in the text, teachers are identified by the numbers 1 to 5, by gender and by the characteristics of the schools where they are employed.

The interviews were semi-structured and the teachers were asked to consider four issues: the degree of believability or authenticity of the IVD and its relevance to adolescent males; the ease of use of the IVD; the suitability of the IVD for SPHE; and the likely impact of the IVD on adolescent males.

8.3.1 Authenticity and relevance

All the teachers found the drama believable:

> *The actors were very good. Yes, definitely believable. Even the parents when they got angry and the door was closed, it was very realistic! [Teacher 3, female, Dis-Rur-Inter-Mix]*

> *I found it very plausible. I found it pretty realistic, the character's situation, all the permutations, I thought it was very plausible, yes … I felt it was very believable. The acting was good. I thought that the scene-setting was good. I thought the types of places where the film was shot were very authentic and believable and the types of activities that were going on in their lives. I definitely felt that it was pretty believable – or very believable. [Teacher 4, male, Dis-Rur-Col-Mix]*

The reactions and dialogue were thought to be typical of the target group:

> *Well, I think, particularly the characters in the beginning and the portrayal of the different types of characters, from the range of reactions; that is what you think would be typical of what young men would say. He was imagining that this is what his friends would say, but from working with kids in school, they would be the kind of things that I would hear as well but funny enough, possibly erring on the more: 'sure, it'll be all right, we'll accept it', not realising the responsibility maybe. But I thought it was a very good visualisation of what his friends would think. [Teacher 1, female, Dis-Urb-Inter-Mix]*

However, one teacher felt that the drama followed an unrealistically smooth path:

> *The process went perhaps a little too smoothly. I think, first of all, obviously the girl had done her homework, she knew about the availability of a pregnancy counsellor. Some girls may not be as tuned in. They may not know who to ask, … and sometimes the information*

is not readily available. We think it might be but young people find it difficult sometimes to access the information they need. His reaction, okay he had the normal reaction at first and he came round through the process but I think he may have been in the 30%/40% rather than the 60%. I think a lot of boys may have, maybe, been more angry, maybe more angry with themselves, more angry with her, may not have gone to the pregnancy counsellor, may not have supported her initially as much. They may have come around to it at a later stage but ... well, when you've only 40 minutes you have to squeeze everything together. [Teacher 4, male, Dis-Rur-CoI-Mix]

Two teachers thought that the urban setting for the drama may have made it difficult for adolescent males from rural areas to identify with the characters:

Again, I suppose, to some extent, it was urban in the sense that the settings were urban, the various places that they would visit were urban, the availability of a pregnancy counsellor, maybe in the rural areas it may be a bit more difficult to access. Some of those things were perhaps a little urban but no, very contemporary and very believable. [Teacher 4, male, Dis-Rur-CoI-Mix]

The accent or if it was done outside of Dublin maybe they would say oh well, they're 'Dubs' or 'city slickers' or whatever. But for here, I thought it was very appropriate. [Teacher 5, male, NDis-Urb-Inter-Mix]

One teacher believed that class differences associated with accents might make identifying with the characters more difficult; although this might also serve to undermine the stereotypes young people may have about adolescents from middle-class backgrounds being less likely to become pregnant:

He was your typical fellow. She was very well-spoken and perhaps maybe seen as from a wealthier middle-class section of the community. Kids relate to accent, they relate to speech sometimes and I think some girls would maybe see her as being a little more middle class than perhaps them or whatever. But, in a way, that was a good thing because sometimes it's drummed into them almost that because of their class and their position in society that these things happen only to them and it happens to them because they're poor or because they're living in a council estate and it's good that they know that it's not just quite like that. [Teacher 4, male, Dis-Rur-CoI-Mix]

8.3.2 Ease of use

The teachers mostly found the IVD technically easy to use:

I have found it easy. I found it very straightforward. It was nearly foolproof! [Teacher 2, female, Dis-Rur-Inter-Mix]

The only one that I found myself, and of course you wonder then that they possibly would too, was that one at the end where it changes and you've to change your answer. That's the only one that I found difficult. The rest of them were fine. [Teacher 3, female, Dis-Rur-Inter-Mix]

The number of questions was thought likely to confuse or discourage young people:

> *I thought it took quite a bit of time to read through all the options and young people, I don't know how well they like having to read all the options just to find the most suitable one. [Teacher 2, female, Dis-Rur-Inter-Mix]*

> *Personally, I would have felt some of [the questions] would have been quite difficult. Even as I was looking through it – I filled it in myself just to see how quickly you would need to think and the ones especially where there were five or six or seven parts, it can be … it was quite tricky, it was hard to think it through, even for me, an adult, and I've seen it all pretty much, I would have thought that the boys, it would have been difficult for them to answer some of the questions, to put themselves in that position. [Teacher 4, male, Dis-Rur-Col-Mix]*

Two teachers identified lack of access to computers as a potential problem:

> *I suppose not all schools would be as well equipped as we are in that every student could go into a computer lab. So I suppose it would be in DVD format and it would stop and they would have a worksheet where they would put the answers on. [Teacher 1, female, Dis-Urb-Inter-Mix]*

> *Now, in practice, even though we've got three computer labs, in practice you wouldn't have SPHE or RSE classes in labs. So it wouldn't be a case of them sitting working at their own keyboard. [Teacher 2, female, Dis-Rur-Inter-Mix]*

8.3.3 Suitability for SPHE

Teachers were broadly positive about the suitability of the IVD for SPHE. Some thought it could be used without much change to its format or to the approach taken in the research, but others suggested a number of ways in which the IVD could be adapted.

Two teachers thought the IVD would fit quite easily into the current SPHE curriculum. In response to the question '[D]o you think it could be integrated as part of the standard, what's currently in existence in terms of SPHE, the RSE part of SPHE?', they said:

> *Absolutely, very neatly, and it looks at roles and responsibilities and I think it brings up the thorny issue of abortion, which is a difficult one to face. And again, it doesn't over-labour it but it looks at the options. [Teacher 1, female, Dis-Urb-Inter-Mix]*

> *I could see myself using it. Now not exactly in the same form that it is now but I could see myself using something like that in the future and in an SPHE class, most definitely, and very likely around the 15-year-old group. [Teacher 2, female, Dis-Rur-Inter-Mix]*

Enthusiasm for the IVD was rooted partly in the perceived weaknesses of similar material on offer:

> *Well, for one thing, video material in the RSE area is very, very limited. There is very little in relation to scenarios. We've wonderful videos all about reproduction and sort of clinical,*

almost clinical, ends of things. Real-life scenarios, we're very, very poor on. [Teacher 2, female, Dis-Rur-Inter-Mix]

Very good, very modern. These things, when you see them, are normally very dated and not nice. But it was very good for that age group … I'm glad to see something modern coming on compared to what we used to have to show! [Teacher 3, female, Dis-Rur-Inter-Mix]

The IVD was thought to be a good springboard for discussion:

And it would be nice, as we saw on the day of the research, they were a young group and there were giggles around it and everything but they did settle down. But there was a period afterwards where they were very eager to discuss it and I could imagine in a classroom situation that being a very real opportunity … To elicit further responses and exploration on the topic and to maybe take some of the glory out of it, fathering a child, and a little more of the reality and the problems associated with it. So, I think it would be a very useful tool, yes. [Teacher 1, female, Dis-Urb-Inter-Mix]

Two teachers felt that the IVD would be particularly helpful in opening up a male point of view for debate:

Oh yeah. I did feel that [the questions] were very appropriate and they opened up this whole area of how does the boy think, because nobody ever thinks about what the boy thinks. He is the demonised person usually, and consequently, we don't even want to hear what he has to say on the topic. We're out to almost malign him in some way for doing what he has done. [Teacher 2, female, Dis-Rur-Inter-Mix]

And, as well as that, if you are ever doing debates on abortion or anything like that in class, the boys never get a say; it's all the girls do the talking, whereas this focuses entirely from the boys' point of view. They should have a say too and that is a good thing. [Teacher 3, female, Dis-Rur-Inter-Mix]

Interestingly, one teacher believed the IVD would be useful for introducing general decision-making skills:

Yes I think it would be a very good module, not just alone from the point of view of adolescent pregnancy but just from the point of view of the whole thought process of a decision that has to be made and how to think it through and how to work out the positives and negatives … I don't think he knew how to make a decision as such. He could only see the negatives of it at the beginning; it was going to ruin his life, what would his mother and father say. But when he was shown how to look at positives, negatives, good consequences, bad consequences, he was able then, by writing it down, to weigh up and remove the ones that he didn't totally agree with and then work on the ones that … So I think it was very good on that whole thought-provoking, decision-making process. I thought it was a good template for that – definitely. [Teacher 4, male, Dis-Rur-CoI-Mix]

Another teacher thought the way the IVD was designed to be used (i.e., an individual interacting with a computer) might enable adolescent males to be honest with themselves by reducing peer pressure:

> *And I suppose if they could be honest, if it could be a tool where they can be absolutely honest with themselves … because I think we even saw that peer pressure on the day of the testing, it's very difficult for boys to acknowledge how they're really feeling about something like that. [Teacher 1, female, Dis-Urb-Inter-Mix]*

However, it was noted that adolescent males with literacy problems had difficulty in reading the questions when using the IVD alone:

> *[W]e had a literacy problem with some of the boys and that's something that maybe we may not have anticipated or you may not have anticipated. And maybe the fact that we are a disadvantaged school means that there were a higher proportion of them. But there were quite a few who wouldn't have been either able to answer the questionnaire on their own or respond to the questions. So, I suppose maybe if there was another delivery or method of responding to that … It sounds like an awful thing, illiterate, but we saw it in action … they were very engaged in the film but couldn't read the questions. And it's such a sensitive thing, where they would be used to their SNAs [special-needs assistants] working with them on ordinary schoolwork but this is very personal and sexual and very embarrassing for them really. So, I'm just not sure how you would get around that. [Teacher 1, female, Dis-Urb-Inter-Mix]*

The majority of teachers thought that a group approach would be most suitable and that the IVD could be used over several lessons, with time for further discussion around each of the stages:

> *I could see a video like that, it should be broken down into small segments … Now, videos of a length of maybe 10 minutes, but no more, would be ideal. So, you could break that scenario up into she's discovering she's pregnant and she's thinking about ringing him. And then … a discussion and all of that at the end of that. And then the next day then looking at reactions of parents, friends and school and so on and that would be another lesson and then the options. So, as it stands at the minute I couldn't see it being any use just the way it is at the minute because, first of all, I think it's more than 40 minutes long … I could see putting it onto a data projector and discussing the options … [Teacher 2, female, Dis-Rur-Inter-Mix]*

> *I think maybe some form of group work where this is one solution, i.e., she had an abortion. This is another solution, adoption. This is the other solution, she had the baby. And try and map her life out for a few weeks after each decision rather than just stopping it in case if any of them were in a situation and they say, say you were thinking back, 'I saw a video at school one time and this …' You're not given any information on what would happen next. So just to take it that bit further maybe. I don't think you would need much more than that. That would take you a full class, if not more. Maybe you would watch half and discuss it and then do the second half then. But I think you'd need a further, a back-up class, 'what would you do if …' And divide them into groups … [Teacher 3, female, Dis-Rur-Inter-Mix]*

Two teachers envisaged the IVD being used in the context of a wider course:

> *It would be a waste to introduce that without having covered previous issues around feelings, about expressing their feelings. So, if it was to come in a package, I think that there could be preparation for it in the first place … around feeling comfortable about expressing your feelings, and ground rules in relation to feeling confident about expressing your opinion in the class. [Teacher 1, female, Dis-Urb-Inter-Mix]*

> *And then I would see it as part of a wider module, the whole issue of adolescent pregnancy and other issues for young people and the whole idea of decision-making for young adults. I would envisage possibly case studies of various teenage pregnancy scenarios and other things, maybe a visit from a pregnancy counsellor or from someone else in social work … or even someone who's been through it and come out the other end – now without glorifying the whole thing, because it is a sensitive issue. [Teacher 4, male, Dis-Rur-CoI-Mix]*

The IVD is aimed at adolescent males, so teachers in co-educational schools were asked what they would do with their female students while the male students used the IVD. One teacher anticipated difficulties dividing the class because of the resource implications. Two teachers argued that the IVD could be used by both male and female students together:

> *But I would say there is some value for it because from a girl's point of view there is brothers in the house that might be in the situation and I mean it is a boy/girl thing. It's 50/50. Now I know it concentrates on the boy's views and not the girl's but girls tend to know girls' views very well but they don't often think about the boys and for a girl who is pushing the fella out, 'Go away; I don't want to hear from you again', I think she could learn quite a bit from that. [Teacher 2, female, Dis-Rur-Inter-Mix]*

> *I think it would be very useful too, to even show it to girls without changing the questions and just let them see that the man has a say too … So I would leave them together for that … And you can have fun! It's a learning experience for them because the boys will back down by the time the girls are finished with them – in this school anyway! [Teacher 3, female, Dis-Rur-Inter-Mix]*

8.3.4 Likely impact on adolescent males

Teachers were asked whether they thought the IVD would have any impact on the lives of the adolescent males who had watched it, and on those who might watch it in the future as part of SPHE. Most of the teachers thought the IVD would help adolescent males to imagine themselves in the situation portrayed, particularly because it took a male point of view. The teachers argued that the IVD, by helping adolescent males to think more seriously about the consequences of their actions, could help to prevent unplanned pregnancies:

> *In general, young people tend to be conservative but they don't think of the consequences of accepting a teenage pregnancy. Particularly because our school is in a disadvantaged area, it would be less seen as something to disrupt their studies and more seen as a feather in your hat and that kind of thing. So I think it helped them see, 'Well I'm not ready*

for this' or 'Am I just going to leave her or am I just going to leave the decision up to her or am I going to be part of the decision?' I actually felt sorry for the boy in it because he nearly didn't have … he was being a really nice guy but he nearly didn't have any ownership of the situation at all, which I suppose is the case … But I would still hope, if I was using it, that I could use it as a tool to prevent! … and I think most of them would agree to that. But I think it is addressing a gap, a very definite gap there between the knowing how a girl gets pregnant and the actual consequences of somebody saying it to you, 'I'm pregnant', and all the feelings that would go through them. [Teacher 1, female, Dis-Urb-Inter-Mix]

[T]hey saw a side to it that they never thought about before and even I wouldn't have thought very much about the males' point of view before. I really do think that when they hear of young boys becoming fathers in the future that they will start to think of what it really means in a way that they never would have imagined before. [Teacher 2, female, Dis-Rur-Inter-Mix]

8.3.5 Summary of teachers' views

These five experienced teachers were broadly very positive about the IVD. All found the drama believable; reactions and speech were thought to be typical of the target group, although there was some reservation that the urban setting for the drama may have made it difficult for users from rural areas to identify with the characters. One teacher believed that class differences associated with accents might make identifying with the characters more difficult, but suggested that this might also serve to undermine the stereotypes young people may have about adolescents from middle-class backgrounds being less likely to become pregnant. Overall, the teachers found the IVD technically easy to use, although they thought the number of questions was likely to confuse or discourage young people. Two teachers identified lack of access to computers as a potential problem.

Teachers were broadly positive about the suitability of the IVD for SPHE, an enthusiasm rooted partly in the perceived weaknesses of similar material on offer. Some thought the IVD could be used without much change to its format or to the approach taken in the research. One teacher argued that the way the IVD was designed to be used (i.e., an individual interacting with a computer) might enable adolescent males to be honest with themselves by reducing peer pressure, but also noted that those with literacy problems had difficulty in reading the questions when using the IVD alone. Others suggested ways in which the IVD could be adapted, for example by embedding the IVD within a wider course and using a group approach over several lessons, with time for further discussion. One teacher envisaged the IVD being used only for male students, which would have resource issues in co-educational schools. However, two teachers argued that the IVD could be used by both male and female students together to enable young females to see something of a male point of view and to provoke discussion.

The IVD was thought to be a good springboard for discussion, and especially helpful in opening up a male point of view for debate. Most of the teachers thought the IVD would help adolescent males to imagine themselves in the situation portrayed, particularly because it took a male point of view, and so think more seriously about the consequences of their actions. The IVD was thought to provide a helpful model for addressing the issues

raised. One teacher argued that the IVD would be useful for enabling general decision-making skills.

8.4 Health and education sector professionals' views

Data were collected through a focus group with three health sector professionals and an interview with one education sector professional. These professionals worked in senior roles in the area of sexual health promotion in the Health Service Executive (HSE), in the Irish Family Planning Association, and in the Department of Education (Ireland). The interview and focus group were semi-structured, with all participants asked to discuss three broad areas: evaluation of the content of the IVD; possible future implementation in the context of SPHE; and the usefulness of the IVD as a resource outside the classroom. When quoted in the text, these professionals are identified by the numbers 1 to 4.

8.4.1 Content

The drama was thought to be authentic and engaging, particularly as it focused on a male point of view:

> *My general impression was, as I say, I thought it was very engaging and interesting. I thought the boy character was … boys would relate to. He was quite a tough lad and he wasn't terribly expressive and yet he wasn't unable to express his feelings. I thought boys would relate … Girls will sit around forever saying 'I think she'd feel this' and 'I think she'd feel that' and 'She'd be devastated'. The boys would say 'Ah sure, he'd be pissed off'. You know … the fact also that it is devoted to boys. A lot of sex education is taught by women, taught in a kind of maybe feminine sort of way in terms of processing feelings and that sort of thing. So I think the fact that it is from a boy's perspective … it's for boys but actually I think anybody would find it really interesting. I think teenage girls would love it as well. But the boy is the focus of it and the boy's feelings and the boy's experience, whereas an awful lot of RSE-type work is … maybe doesn't focus enough on boys. Male teachers could use it as easily … [Professional 4]*

The language used was considered to be appropriate in terms of its style:

> *My initial impression was I think that this is great. What I liked most is the language that is used in it, particularly the young group together … And I think then the way it was utilised around the discussions and 'Well, I don't know' and 'I don't know how I feel' and then going back to the young woman and every so often she came into his thoughts. 'Well, I don't really know. We haven't talked about it.' And I thought it was good and the process of getting to the counsellor, where do you go or how do you do it? What happens? … I think it would be very useful. It's so different from the … mainstream stuff … just the tone of it is completely different, the setting is completely different, the language is completely different. [The mainstream stuff] is almost sterile in its content in comparison. [Professional 1]*

The interactive approach was seen as a strength of the IVD:

> *I loved the use of text piece option at the change [the opportunity to mimic drafting a text message]. I liked that. It was a very good one because you can go back. So I liked*

that interactive piece. That's a very useful educational piece for kids to interact with it. [Professional 3]

I strongly recommend that you take it forward as an educational tool. I'd love to be able to give that to teachers. It is so different, it is so different, the perspective, the interactiveness, the boy's perspective and it is very good quality and the quality of the filming and everything is very good. [Professional 4]

On the other hand, three of the professionals thought the number of questions made the IVD slow and repetitive:

But my main criticism was there were too many questions. Boys do like to be kind of busy and doing things and I think the novelty of all those questions will wear off … [Professional 4]

8.4.2 Use in the context of SPHE

Two of the professionals thought the first-person approach would help adolescent males to discuss and think through the consequences of a crisis pregnancy. One of the professionals had shown it to a group of adolescent males who commented that they thought it was a good tool to raise awareness around preventing an unplanned pregnancy:

I suppose in terms of the young people, they thought it was a very good tool in terms of preventing pregnancy and I suppose the issue that comes up for us again and again is about raising awareness, it's about having some kind of an open dialogue with young people about the whole area of sexual health, and [to help them] learn or process what the realities are and what the realities might be, and I think the young men thought that they were – what did they say? 'More likely to think about preventing a pregnancy' … it gets them to go backwards in terms of thinking about prevention and they thought it was quite useful for 15 to 16 [year olds]. [Professional 2]

I think it is a very different approach, very engaging for boys, I've never seen anything like it and I really, really like it. I think it's a very positive resource and I think it will help boys to reflect on casual sex and not taking precautions and not really thinking about it. I mean this just sort of hits them like a bolt from the blue. He obviously hasn't really considered that it might happen and I think that's just probably what it is like for a young person whose girlfriend gets pregnant. [Professional 4]

The professionals believed the IVD could be effective in schools as part of the wider SPHE programme:

Yes, I think that would work. It would mean that young people get to look at it individually and then process it and have a facilitated opportunity to process the information in the classroom. It would work in schools where there is sex education, in schools where it's already on the agenda. It's not something that could be done in isolation. You couldn't do it as a once off. [Professional 2]

One professional suggested it might be better located in the senior cycle of SPHE:

> *I think you would have to frame it with something. I suppose one of the considerations is that there are a lot of people developing resources for RSE and schools get a bit snowed under with resources. But, actually, I think that this is such an unusual resource that it would be very well worth developing a couple of lessons around it for maybe a 4th year transition-year class or a 5th year class. Maybe don't deal with it under 3rd year because it would be quite difficult to discuss topics like abortion I think with junior-cycle children because they are quite young and they wouldn't maybe have the maturity. I think you would have to be quite explicit with schools. [Professional 4]*

Generally, the language used was considered to be appropriate in terms of the degree of explicitness about the issues raised, especially in relation to abortion and adoption:

> *I liked the way the three issues were brought out, the parenting, adoption and abortion, because a lot of the stuff that we use or have seen over the years, we try to work with, it never talks about abortion. It is always left and not to be quoted … So, to see something that will be clear about the three issues is great. It's just a relief … I mean I would love to see it as it is, using the word abortion, being clear about it and getting it into the schools, because the schools use anti-abortion literature all of the time. [Professional 1]*

> *I like the tone of it … one of the first things I was looking at was when they were using the language that, in the group of guys, that 'Oh, you can get rid of it'. But then when he was talking about adoption he used the word adoption rather than saying you can give it away. So I'm saying where is the abortion word? But then, thankfully, abortion came into it, which was a named word, because it exists as a word and I think we shy away from it. [Professional 3]*

On the other hand, most of the professionals anticipated major problems in using the IVD as part of the curriculum because the IVD raised 'abortion' as one of the possibilities for the young people:

> *I could never see it working in the schools I think in its current format and you would never get it past the door, and that is being very honest … [because of] the word 'abortion', it just wouldn't get in there. I think if the language was changed it might get in but then it would weaken it if you take the language down. [Professional 3]*

> *… take the abortion questions out of it and you wouldn't have a problem. [Professional 2]*

> *It's the sensitivity, not of the issue so much but of the … you know, there's very explicit language like 'get rid of it'. It's just there is such an issue around abortion here. It's a sensitive issue in any culture, in any place, but the fact that young people don't have access to abortion here; they would have to go somewhere else, which of course they do in large numbers. So the reality is there. That was my concern from the beginning, that … and you can't leave it out really because obviously it is something that a young person is going to consider along with adoption and keeping the baby. [Professional 4]*

The difficulty in gaining access to schools with material of this sort was thought to be particularly acute in all-male schools:

> *Whether you would get it past some of the boards of management is another thing because I know historically that we've always found a great difficulty in getting into all-male schools. [Professional 3]*

> *We couldn't even get an evaluator in to look at that [a sex education programme] in some of the boys' schools, and I rang them and asked them and I was told that they had somebody coming from Dublin to discuss the sanctity of life and they felt that young men didn't need sexual health education because they weren't at risk. That's exactly what they told me. [Professional 2]*

Part of the sensitivity around speaking of abortion was that raising the issue would be likely to give rise to further questions and so raise awareness of abortion as a viable possibility for a young person:

> *But the reality is if you raise the issues and you raise awareness of them, then the follow-on from that is that you are educating … the young people want to know what they are. What is adoption? What is abortion? So there is an education aspect to that. You're raising awareness and you don't talk about abortion without telling young people what it actually is. You can't do that. You need to process the information … the reality is you raise the issue of abortion so they need to know what abortion is. [Professional 2]*

> *It's not so much the word 'abortion' itself; it's a case of what you do then with the subject. [Professional 3]*

Given the sensitivities around the areas addressed by the IVD, the professionals thought that it would be necessary to do two things in order to introduce it into schools: first, to be explicit in the accompanying information that the IVD addressed the issue of abortion (but in a non-directional manner) and that it complied with Irish law in relation to abortion; and second, to gain the support of major stakeholders in the area of SPHE:

> *The resource would have to make it quite clear that it's not … directing anybody in the direction of any choice but it is facilitating young people to have discussion about the options that are available and schools just need to be aware that there are references to abortion and they need to be okay about using it. And that's what we have put at the top of all our stuff, that RSE is taught within the context of the school's ethos and policy and it's the responsibility of schools to check that the resource meets the [requirements] … So I think a lot of schools would really welcome that type of material and I definitely think you should work around sort of framing it a little bit with some lessons and with an introduction for schools that quite clearly states what is happening in this resource and it doesn't try to hide that issue that you explicitly give the young person an option of … considering the character in a drama situation, that it is not a real situation, and then see how it goes. [Professional 4]*

For me, I think if I were doing this and I was given the task of doing it, I think I would just be upfront and very clearly work within the confines of the law … We work within that context and it is upfront beforehand … There is a national curriculum [body] who define, decide and control the whole school curriculum. They would have to be on board this as well. You would have to have the National Parents Council on board as well. You're not getting anywhere without the National Parents Council. [Professional 3]

On the other hand, two professionals argued that complete consensus among stakeholders was unlikely:

I don't think you would ever, in my professional and personal opinion, I don't think you would ever get a situation where you would have consensus on this particular subject. I don't think you are going to get a happy position where everyone is going to be supportive of this. [Professional 3]

I mean there are some schools that show anti-abortion videos. I think fewer but I've had phone calls from parents of kids who have been traumatised by … very explicit abortion films. So those types of schools, which are in a tiny minority I think, will not show that DVD and they won't use it. But every school doesn't use every resource anyway. [Professional 4]

Finally, it was felt by all the professionals that the IVD would also be of interest to adolescent females in the context of SPHE:

I think [girls] would be interested in running through it with boys having given answers to see how boys think, because again, the girls' schools, they are always very interested in how boys think. [Professional 2]

Girls would be very interested in it, just as much as boys … I think there is potential to develop that side of it maybe. The way you described it, it was the girl thinking about the boy. That's fine, but also, how did it feel for her to hear the boy saying, 'Oh I don't care about babies. I hate children.' That sort of thing. I think there is a lot of scope there. [Professional 4]

8.4.3 Use as a resource outside the classroom

The main identified potential use of the IVD outside the classroom was as a supportive resource for parents as the primary educators of their children and as a means of initiating parent–child discussion around this topic. In terms of providing the resource to parents, the professionals suggested that it could be either sent out to parents by the schools or made available directly from service providers such as the HSE Crisis Pregnancy Programme (CPP) or the National Parents Council.

If provided through the schools, it was felt that some further parent-specific questions could be developed.

Well, perhaps you could promote it as well to the school boards and say that there is a section in it for parents, there is a dialogue for family around pregnancy which is promoting positive sexual health within the family unit because they are the primary educator … So, I think this kind of a thing, bring kids in with the parents and all of that and it would be great.

'What do you think your parents would think?' 'Have you shown this to your parents?' 'Have you talked about this with your parents?' 'Could you ask your parents to fill this section out?' Even if you had to bribe, there is a competition if you complete it! That's my comments anyway. [Professional 3]

Interviewer: Do you think we should generate specific questions for the parents?

Yes. I think it's more interactive then because it becomes almost like a family educational key. It creates good conversation because you could actually ask specific questions like: 'Have you talked to your child about this particular subject? Would you feel comfortable?' ... I also have a sense as well from working over the years with families and with parents ... that I think if they were given useful pieces, that would help them initiate conversations. [Professional 3]

... the Crisis Pregnancy Programme are developing a website called b4UDecide.ie as well, which could be linked in to something like this and there is a parents' section on that too in terms of information or whatever as well. [Professional 2]

I think expecting schools to somehow try and access parents as part of this project is unrealistic, in terms of my experience of trying to involve parents, because they tend not to ... you know, schools are absolutely at their limit in terms of what they're trying to cope with as well. But, I think if you made that resource available through say, here it's the National Parents Council Post Primary, you know, maybe interest some of the parent organisations in it ... I think if you sat a couple of parents down with that resource, I think they would love it and say 'Yeah, we'll show it', 'We'll sit down with ... or we'll give this to our children' ... It would be a great prompt to parents to start a conversation with their son. [Professional 4]

8.4.4 Summary of professionals' views

As might be expected, the four professionals were alive to both the problems and the possibilities opened up by the IVD. They described the drama as authentic and engaging; appropriate in terms of its language; and helpfully focused on a male point of view. It was thought that the identificational, interactive approach would help adolescent males to discuss and think through the consequences of a crisis pregnancy, and that the language used was appropriate in terms of the degree of explicitness about the issues raised, especially in relation to abortion and adoption. On the other hand, they thought that the very fact that abortion was put forward for consideration could lead to strong objections by some stakeholders to using the IVD as part of the curriculum, and so limit access to schools. This difficulty in access was believed to be particularly acute in all-male schools. Part of the sensitivity around speaking of abortion was that discussing the issue would likely give rise to further questions and so raise awareness of abortion as a viable possibility for a young person.

Given the sensitivities around the areas addressed by the IVD, the professionals thought that it would be necessary to gain the support of major stakeholders in the area of SPHE if the IVD were to be used in schools; although they felt that attaining complete consensus among stakeholders was unlikely. Most of the professionals considered that, if stakeholders agreed to use the IVD, it would need to be embedded in a suitable

SPHE context. It was felt that the IVD would also be of interest to female students and that there was scope for using the IVD as a means to support parents as the primary educators of their children.

8.5 Key points

8.5.1 IVD content

- The IVD was considered across all of the groups to be authentic (represented a plausible situation with believable characters), engaging (drew people's attention through using the first person, role-play and interactive questions) and unique (for focusing on the male point of view and role, in including the issue of abortion and in its use of high-quality drama).
- Some teachers and some adolescent males noted the mix of social-class accents among the characters. While it was thought that this made the drama less plausible, an advantage was that it broke the stereotype that unplanned pregnancies only happen to people of lower socio-economic status.
- One educational professional commented that the film may have followed an unrealistically smooth path and that the reality could be more acrimonious.

8.5.2 IVD use

- All users found it very easy to use.
- Across all groups, some individuals commented that there were too many questions.
- Some teachers commented that it could pose problems for adolescents with literacy problems.
- Teachers could imagine themselves using it as an individual computer-based tool but their preference was to employ it in a group context through the use of an overhead projector, in both cases followed by group discussion.

8.5.3 IVD usefulness within SPHE for raising awareness

- The adolescent males stated (in the survey and focus groups) that the IVD raised their awareness of issues surrounding unplanned pregnancy in general, and, especially, of the consequences of an unplanned pregnancy and the role of counselling support. Some said it would affect their sexual behaviours and relationships.
- The teachers and health and education sector professionals also thought it would be very useful as a means of raising awareness and opening up a dialogue with adolescent males in relation to the possibility of an unplanned pregnancy in their lives.
- Teachers and professionals agreed that the IVD would be useful for both adolescent females and adolescent males and, in particular, for generating discussions around gender perspectives on taking responsibility for preventing and dealing with an adolescent pregnancy.
- Teachers and professionals concurred on the point that the IVD would be effective only if situated within a broader SPHE programme.

8.5.4 IVD acceptability in schools

- Although both teachers and health and education sector professionals believed that pregnancy outcome options were dealt with sensitively and in a balanced, non-directional manner, the professionals were acutely aware of the barriers to introducing such material into schools, with particular reference being made to all-male schools. The issue of barriers to the implementation of RSE in all-male schools was also identified in previous Irish research (Mayock et al., 2007).
- For RSE resources to be successfully introduced in schools, the professionals recommended that accompanying information be explicit in stating that the IVD addresses the issue of abortion, but in a non-directional manner, and that it complies with Irish abortion law, and that the resources would come to schools under the recommendations of major stakeholders such as the Department of Education and the National Parents Council.

8.5.5 IVD usefulness outside a classroom setting

- Health and education sector professionals recommended further development of the IVD as a resource for parents to facilitate discussion with their children around unplanned pregnancy. It was envisaged that such a resource be delivered either directly to parents through agencies such as the CPP or National Parents Council, or through the schools by incorporating a parental component into the lesson plans or the IVD.

9 Limitations and recommendations

9.1 Introduction

In this chapter we discuss some of the limitations of the study (Section 9.2) before setting out a number of recommendations based on the research findings (Section 9.3).

9.2 Limitations

9.2.1 Adolescent males' attitudes to adolescent pregnancy and pregnancy decision-making

The hypothetical nature of our data does not permit us to draw conclusions about adolescent males' actual experiences of an unplanned pregnancy or pregnancy decision-making. The sensitivity of the issues in question and the absence of any clinical or social space in which we might recruit adolescent males who are, or have been, involved in making pregnancy outcome decisions means it would be exceedingly difficult to collect data on actual pregnancy decisions among adolescent males – especially in the numbers required to test the saliency of the psychosocial determinants in a quantitative design (Marsiglio and Menaghan, 1990). Nonetheless, the advantage of the research design of this study – and particularly the use of the IVD created specifically for the study – is that it allows a relatively large sample size of adolescent males to think themselves into the hypothetical situation and enables a deeper exploration of the issues than would be possible using a paper-based survey. The focus-group interviews with the adolescent males provide evidence to suggest that the participants were able to identify with the lead character and to imagine themselves in that situation (see Section 8.2). Thus, the use of an audio-visual scenario to generate an authentic situation and to allow the participants to imagine being Jack appears to have good face validity or acceptance among the participants.

The study findings are not generalisable to adolescent males attending schools in the Republic of Ireland. In addition, the findings are affected by a potential bias introduced by the low response rate from schools – albeit that we did include schools across all the stratification criteria. The ethnic homogeneity of our sample meant that we were unable to include this variable. The considerable challenges of recruiting schools for research are well recognised by fellow researchers (Abraham et al., 2004; Hyde and Howlett, 2004) and are understandable when one considers the educational priorities of schools. In this project, recruitment within schools became slower, and more protracted than anticipated, in the spring 2009 term, despite the widespread and intense interest of the schools in the topic and the project materials. In Section 4.2, we noted the stated reasons why some schools declined. Recruitment of schools during this time took place against a backdrop of national economic uncertainty. Though it is not possible to establish a direct causal link between the adverse economic climate and reduced recruitment rates, it is the belief of the researcher who was in direct contact with schools and teachers that the resulting staff and resource cutbacks had an unsettling effect that impacted negatively on facilitation of the research.

The questionnaires used in this study (both paper and screen-based) require relatively high literacy levels and a degree of literacy stamina to complete. Informal feedback from teachers suggests that completing the questionnaires may be challenging for some students. Were we to repeat the study, this issue would require further consideration.

One suggestion may be to have aural presentation of the questions – for example, using a separate voiceover for the role-play questions on the IVD.

The study did not contain a measure of peer influences on the decision-making process to include in the regression analysis.

Our failure to find a significant association between some of the predictor variables, notably the Idealisation of Pregnancy and Parenthood Scales, indicates only reasonable internal consistency. We propose to conduct further psychometric testing of these scales that may enhance their usefulness/sensitivity in further research on adolescent pregnancy decision-making.

In common with previous research (Condon et al., 2006), we did not include the 'leave it up to her' option in the regression analyses, as the specific hypotheses do not relate to this outcome choice. However, further qualitative research might explore reasons why adolescent males choose or choose not to become involved in their partner's pregnancy resolution decision.

Given the lack of research on adolescent males and adoption, we did not have a strong literature base within which we could situate our hypotheses or findings. More qualitative research is required to better understand adolescent males' reasons for continuing the pregnancy with the intention of placing the child for adoption.

9.2.2 Evaluation of the IVD

The sample sizes of teachers and health and education sector professionals are small – five and four respectively – and cannot be regarded as representative of these communities. In particular, the teacher sample is biased towards disadvantaged and co-educational schools and those teachers who volunteered for participation in the study. In addition, the perspective of parents is absent from the evaluation of the IVD. Although we tried to recruit parents of the male participants for focus-group interviews, we dropped this part of the study because of poor response rates. In future research, we would try to recruit parents through parent organisations and snowball sampling.

9.3 Recommendations

A number of recommendations emerging from the research findings are made below. These recommendations are outlined on the basis of their relevance to particular sectors.

9.3.1 Health and social care

- Programmes to raise awareness among health and social care staff of adolescent males' health and social care needs in relation to an unplanned pregnancy should be developed.
- Relevant service providers (e.g., GPs and crisis pregnancy counsellors) should undertake a review of their portfolio of current health and social care services regarding adolescent pregnancy with a view to adopting an inclusive approach to adolescent males.

- Counselling interventions aimed at addressing adolescent males' experiences of an unplanned pregnancy and pregnancy decision-making, as individuals and as part of a couple-centred approach, should be rigorously evaluated and developed.

9.3.2 Education

- The SPHE curriculum should be reviewed to address adolescent males in relation to adolescent pregnancy.
- Teachers should review their current SPHE teaching practice with a view to addressing adolescent males and adolescent pregnancy.
- Health promotion and educational bodies such as the HSE Crisis Pregnancy Programme and the Department of Education should continue to assist in the development of suitable educational materials to support educational providers.
- Resources in relation to adolescent males and pregnancy should be further developed for use within SPHE in schools in Ireland (this is specifically supported by the results of the study).
- Such educational resources should be rigorously evaluated in terms of their effectiveness in (a) raising awareness of the role of adolescent males in preventing or dealing with an unplanned pregnancy, and (b) in enhancing the perceived self-efficacy of adolescents to communicate with a sexual partner, parents and a counsellor in relation to preventing or dealing with an unplanned pregnancy.

9.3.3 Research

- Further research should be carried out on adolescent males' actual experiences of an unplanned pregnancy and pregnancy decision-making in relation to decisions to keep the baby, decisions to have the baby adopted and decisions to terminate the pregnancy. Researchers need to consider recruitment strategies that do not involve recruiting through the female partner or clinical environments, as such strategies may disproportionately represent males who are involved in their relationships and/or who are willing to come forward to clinics for help.
- Further qualitative research should be carried out to explore young males' involvement in their partner's pregnancy resolution decision.
- Further research with both adolescent partners (male and female) should be carried out to shed light on the relational and contextual circumstances of males' experiences.
- Further research should be carried out with adolescent fathers on their experiences of coping with an adolescent pregnancy and adolescent parenting.
- Adolescents' views on (intended/unintended) pregnancy and pregnancy resolution should be more explicitly incorporated into national studies of sexual knowledge, attitudes and behaviours. Such research could generate a public discourse around the role of adolescent males in reproduction and parenting, as well as on male sexuality.
- Irish national surveys of sexual knowledge, attitudes and behaviours should include a sample of 16 to 18 year olds.

Appendix 1: List of studies included

Appendix 1.1: Cross-sectional nationally representative studies			
Title (author, date)	**Study design**	**Participants**	**Relevant results**
With One Voice: America's Adults and Teens Sound Off About Teen Pregnancy (Albert, 2007)	Nationally representative (weighted) surveys (one of adolescents, one of adults) in 2006 *Sampling strategy:* Random-digit dialling (RDD) of a sample of households with telephones and a database with households of adolescents aged 12 to 19 *Data collection:* Computer-assisted telephone interviews	N=1,037 male and female adolescents (number of males/females not reported) Age:12–19	Almost half of adolescents (48% overall; 50% of males, 45% of females) say they have not given adolescent parenthood any in-depth thought. Many adolescents (41%) say being an adolescent parent would at least delay or prevent young people from reaching their future goals. 29% of adolescents say teen pregnancy and parenthood in their community 'is no big deal'.
The Irish Study of Sexual Health and Relationships (ISSHR) (Layte et al., 2006)	Cross-sectional nationally representative (weighted) survey (over-sampled for participants aged 18 to 29) of adults carried out between August 2004 and April 2005 *Sampling strategy:* RDD of a sample of households with landline telephones *Data collection:* Computer-aided telephone interviews (structured)	N=7,441 (3,188 males) Age: 18–64 Sub-analysis by age	There has been an increase over the past 30 years in liberal attitudes to abortion, with young people (male and female) more likely to approve of abortion than older people. Attitudes to abortion did not vary by sex: 30.5% of females under 25 agreed that abortion is always wrong, compared with 31.8% of males. Higher levels of education and non-manual social class are associated with more favourable attitudes to abortion. Higher religiosity is associated with less favourable attitudes to abortion.
'Teenagers in the United States: sexual activity, contraceptive use, and childbearing, 2002' (Abma et al., 2004)	Cross-sectional nationally representative study in the US. Secondary analysis of National Survey of Family Growth (NSFG) 1988, 1995 and 2003 and National Survey of Adolescent Males (NSAM) 1998 and 1995 *Data collection:* Structured face-to-face interviews	N=2,271 (1,150 males) Age: 15–19	Births to adolescents are very likely to be unintended (unwanted or mistimed) at conception: 88% of births (in the past five years) to adolescents aged 17 or younger were unintended. Most adolescents reported that they would be upset if they got pregnant (or got a partner pregnant).

'Sex in Australia: attitudes towards sex in a representative sample of adults' (Rissel et al., 2003)	Cross-sectional nationally representative Australian Study of Health Relationships (ASHR) conducted between 2001 and 2002 *Sampling strategy:* Sample selected by modified RDD, with males and residents of some geographical areas over-sampled *Data collection:* Computer-assisted telephone interviews (structured)	N=18,715 (9,432 males) Age: 16–59 Sub-analysis by age	Males and females aged 16 to 19 were significantly more likely than older males and females to believe that abortion was always wrong, but differences across ages were small.
In their own right: Addressing the Sexual and Reproductive Health Needs of American Men (AGI, 2002)	Secondary data analysis from published reports of US national surveys in the 1990s including: Current Population Survey, 1970–2000; National Survey of Adolescent Males, 1995; National Health and Social Life Survey 1992	Age: Three successive age groups: adolescents (15–19), young adults (20–29) and mature adult males (30–49)	69% of males aged 15 to 19 said they would be very upset if their female friend was pregnant. This reaction is less common among young males living in poor neighbourhoods (46%) than among those living in more favourable conditions (57–77%). Only 4% of all adolescent males reported that getting someone pregnant would make them feel a lot like a man, and 60% said it would have no such effect.
'Sexual behaviour in Britain: early heterosexual experience' (Wellings et al., 2001)	Cross-sectional nationally representative survey of Britain between 1999 and 2001 *Sampling strategy:* Probability *Data collection:* Computer-assisted face-to-face interviews and self-completion questionnaires	N=11,161 (4,762 males) Age: 16–44 Sub-analysis by age	Low educational attainment was associated with motherhood before 18 years, but not abortion.
Irish Contraception and Crisis Pregnancy [ICCP] Study: A Survey of the General Population (Rundle et al., 2004)	Cross-sectional nationally representative survey of the Republic of Ireland *Sampling strategy:* Quota sampling for gender, age, educational attainment, employment status and region *Data collection:* Telephone interviews	N=3,317 Age: 18–45 Sub-analysis by age	In this Irish study, 18 to 25 year olds (male and female) stated that in the event of an unplanned or unwanted pregnancy in their lives, their response would be to choose parenthood (58%), followed by unsure (34%), abortion (6%) and adoption (2%). 10% of all pregnancies experienced by all men (ages 18 to 45) were defined as crisis pregnancies. In the 18–25 age group, 21 men said they had experienced a crisis pregnancy. Their crisis pregnancy outcomes were: 48% miscarriage, 35% live birth and 17% abortion.

'The effect of partners' characteristics on teenage pregnancy and its resolution' (Zavodny, 2001)	Secondary data analysis of the 1995 National Survey of Family Growth (NSFG), a cross-sectional national survey of US female fertility, including a detailed pregnancy history	N=1,514 females only Age: 15–44 Some sub-analysis by age	Higher education of the male partner is associated with the female partner choosing an abortion. Male's religious affiliation appears to have some influence on how a non-marital pregnancy is resolved – the partners of Protestant males are less likely to choose abortion but there is no effect found for the female's affiliation.
'Unwanted pregnancies involving young women and men in a New Zealand birth cohort' (Dickson et al., 2002)	*Sampling strategy:* National cohort study using 95% of surviving cohort *Data collection:* Computer-presented questionnaire	N=966 (489 males) Age: 26 years Results pertain to under 25 year olds	29% of the men had experienced a pregnancy before the age of 25, 73% of which were 'unwanted'. Wantedness of pregnancy increased with age and length of relationship, for men.
'Trends in adolescent males' abortion attitudes, 1988–1995: differences by race and ethnicity' (Boggess and Bradner, 2000)	Secondary data analysis of 1988 and 1995 National Survey of Adolescent Males (US). Nationally representative samples of 15 to 19 year olds in the contiguous US as part of a longitudinally collected cohort study *Sampling strategy:* Multi-stage area probability sample over-sampling for blacks and Hispanics	N=1,880 (1988) and 1,729 (1995) males only Age: 14–15	More than three-quarters of all males agreed (either a little or a lot) that it is all right for a female to have an abortion. However, the majority did not support abortion for monetary reasons or in cases where the male partner does not support the abortion. Between 1988 and 1995, young males' approval of abortion decreased significantly. In 1995, 24% of US males aged 15 to 19 agreed that it was all right for a female to have an abortion 'for any reason', down from 37% in 1988. This decrease was driven almost entirely by non-Hispanic white males; there was little change in the abortion attitudes of non-Hispanic blacks and Hispanics. The decrease in white males' approval of abortion coincides with a significant increase in the self-reported importance of religion and in the proportion of whites who identified themselves as born-again Christians. The proportion of non-Hispanic white males indicating that religion was very important increased from 28% in 1988 to 34% in 1995, while the proportion identifying themselves as born-again Christians increased from 18% to 24%.

'Trends in abortion attitudes among young adults: 1977–1993' (Misra and Hohman, 2000)	Secondary analysis of the General Social Survey (US) based on a national probability sample *Data collection:* Face-to-face structured interviews	N=2,429 Age: 18–25	The majority endorsed the right to an abortion and there was an increase in liberal attitudes from 1977 to 1993. Religiosity (church attendance and strong religious affiliation) was the strongest predictor of abortion attitudes, with those most religious being most 'pro-life'. Males were slightly more pro-choice than females at all ages (but not statistically significantly). Male support for abortion, like that of females, was more for social reasons than medical reasons. Living in an urban area was a significant predictor of pro-choice views.
'Understanding changes in sexual activity among young metropolitan men: 1979–1995' (Ku et al., 1998)	Secondary data analysis of the 1979 National Survey of Young Men and 1995 National Survey of Adolescent Males (US) *Sampling strategy:* Multi-stage area probability sample, over-sampling for blacks and Hispanics	N=2,087 never-married metropolitan males Age: 17–19	Over time, young males were increasingly likely to prefer having and supporting a baby to marriage, abortion or adoption as the resolution to a non-marital pregnancy. Trends in attitudes were strongly associated with sexual behaviours, with more conservative attitudes predicting less sexual activity.
'Adolescent males' orientation toward paternity and contraception' (Marsiglio, 1993)	National Survey of Adolescent Males (NSAM) in the US in 1988 *Sampling strategy:* Random stratified sample to be representative of non-institutionalised males aged 15 to 19 in the contiguous US, stratified to over-represent blacks and Hispanics *Data collection:* Face-to-face structured interviews	N=1,880 males only Age: 15–19	Neighbourhood quality, parental education, race and attitudes about male roles are related to young males' attitudes towards an unplanned pregnancy and contraception. Males living in poor neighbourhoods are more likely to be pleased about an unplanned pregnancy and view fathering as enhancing their masculinity. Young males whose parents have less education and traditional male role attitudes are more likely to view fathering a child as enhancing masculinity.

'Adolescent males' abortion attitudes: data from a national survey' (Marsiglio and Shehan, 1993)	As above	As above	13% of males approved of abortion in each of the eight circumstances presented to them, while 4% disapproved in every instance. The proportions agreeing that abortion is acceptable ranged from 85% to 90% if the pregnancy endangers the female's health or results from rape. Religious affiliation and religiosity are related to weaker support for abortion. Abortion attitudes vary little by race after other social background factors are controlled. Those with liberal attitudes towards premarital sex and who express upset at the prospect of being a father in the immediate term are likely to express acceptance of abortion. 61% did not feel that it would be right for a female to have an abortion if her partner objects (indicating a possible gender conflict over abortion).
'Masculinity ideology: its impact on adolescent males' heterosexual relationship' (Pleck et al., 1993)	Secondary analysis of the National Survey of Adolescent Males (NSAM) 1988	As above	After controlling for social background and personal characteristics, traditional attitudes to masculinity are associated with less consistent use of condoms, less belief in male responsibility to prevent pregnancy, and greater belief that pregnancy validates masculinity.
'Becoming a young parent: a longitudinal study of associated factors' (Kiernan, 1997)	Secondary data analysis of the National Child Development Study (NCDS), Great Britain *Sampling strategy:* Census of children born in England and Wales in the first week of March 1958 *Data collection:* Face-to-face survey interviews	N=17,414 (original sample). Follow-up sample ranges between 70% and 90% of original sample Age: Follow-up at ages 7, 11, 16, 23 and 33 years	Young fathers (under 22 years) were more likely than other fathers to have had their child prior to being in a partnership. Young fathers were more likely to come from economically disadvantaged backgrounds and to have lower educational attainment. Some men who had become young fathers expressed a desire for young parenthood while in school.

Appendix 1.2: Cross-sectional sub-national representative surveys			
Title (author, date)	**Study design**	**Participants**	**Relevant results**
'Factors that adolescent males take into account in decisions about an unplanned pregnancy' (Corkindale et al., 2009)	*Sampling strategy:* Cluster sampling, stratified by type of school in South Australia. All male school students aged between 15 and 18 who agreed to participate *Data collection:* Participants' responses to a computerised simulation game depicting an unintended teenage pregnancy	N=330 males only Age: 15–18	The results focus on adolescent males' decision-making processes in relation to pregnancy resolution in response to a hypothetical scenario. The majority of the participants (80.6%) fell into the 'well-balanced group' who took almost all the decision-making issues into account. There were two minority groups – an 'unready/unwilling group' who were more concerned about the consequences to self and a 'family-centred group' who were more concerned about the importance of parenthood. Group membership was strongly predictive of their final decision regarding the hypothetical pregnancy outcome.
'Processes and factors underlying adolescent males' attitudes and decision-making in relation to an unplanned pregnancy' (Condon et al., 2006)	As above	N=386 males only Age: 15–18	Approximately half of the sample elected to continue the pregnancy. One-third of males said they could cope with a pregnancy. High idealisation of parenting was the strongest predictor of continuation of pregnancy, followed by low self-esteem and low anti-femininity (acceptance of nurturance and tenderness as part of male gender identity). Most young males elected to continue the relationship. Leaving the relationship was predicted by higher self-esteem and more stereotypical attitudes to masculinity.
'Australian adolescents' attitudes and beliefs concerning pregnancy, childbirth and parenthood: the development, psychometric testing and results of a new scale' (Condon et al., 2001)	*Sampling strategy:* Random stratified (urban/rural; single sex/co-educational; religious/non-religious) sample of schools in South Australia *Data collection:* Self-administered questionnaire	N=1,546 male and female students from classes year 11 and 12 Mean age: 16.2 (SD: 0.8)	The development of a 21-item Idealisation of Pregnancy and Parenthood Scale. Data supporting its reliability and validity. The Pregnancy subscale has 10 items and an internal consistency of alpha = 0.6. The Parenthood subscale has 11 items with an internal consistency of alpha = 0.7.

'Early adult psychological consequences for males of adolescent pregnancy and its resolution' (Buchanan and Robbins, 1990)	Longitudinal study of adolescents (7th grade students) in 1971 and 1980 in Houston, Texas *Sampling strategy:* Random (half of the junior high schools in the Houston independent school district) *Data collection:* Self-administered questionnaire	Time 1: N=2,179 Time 2: N=326 (15% of sample who experienced an adolescent pregnancy)	By age 21, 15% of the young males were involved in a non-marital pregnancy. Rates were higher for blacks (24%) than for whites (12%) or Hispanics (16%). Among whites, most adolescent pregnancies were ended by abortion (58%). Adolescent pregnancies among blacks most often resulted in single parenthood (56%). Hispanics tended to have the child, and marry or live together (55%). Consistent with the life-course perspective, young males involved in adolescent pregnancies were more psychologically distressed as young adults than those who did not have a female friend become pregnant in adolescence. The greater distress in adulthood is not simply a function of 'accelerated role transitions', because males whose female friends had abortions are also distressed, and those who let their female friends assume major parenting responsibility are no less distressed than those who became fathers and married or lived with their female friends. Sub-group comparisons revealed that young black males' psychological distress levels were not influenced by adolescent pregnancy.
'Health and risk behaviors of urban adolescent males involved in pregnancy' (Resnick et al., 1993)	*Sampling strategy:* Sub-sample of the Minnesota Adolescent Health Survey (a state-wide school survey) *Data collection:* Self-administered questionnaire	N=235 males only Age: 12–20; mean: 15.4 years Mixed ethnicity and socio-economic status	Adolescents involved in pregnancies were more distressed than a control group of men who had not experienced a pregnancy. Pregnancy-involved males were more likely to report causing a pregnancy as a sign of manhood.

Appendix 1.3: Cross-sectional surveys with convenience samples			
Title (author, date)	Study design	Participants	Relevant results
'Male involvement in the abortion decision and college students' attitudes on the subject' (Jones, 2006)	*Sampling strategy:* Convenience (cross-section of undergraduate students in one university in US)	N=94 (33 males) Age: 18–38; mean: 20; modal: 19[21] Ethnicity: mixed	No significant sex differences in levels of male involvement in abortion decision-making. 'Pro-life' participants were more likely to endorse higher levels of male involvement. Religiosity was not associated with endorsing higher levels of male involvement.
'Psychosocial correlates of adolescent males' pregnancy intention' (Rosengard et al., 2005)	*Sampling strategy:* Convenience (in waiting room of an STD clinic in a metropolitan area of northern California) *Data collection:* Structured face-to-face (survey) interview *Compensation:* $15	N=101 males only Age: 15–19; mean: 18.13 (SD: 1.11) Ethnicity: Mainly non-white SES: Mixed	Attitudes to pregnancy and participants' mothers' educational attainment differentiated those with clear pregnancy intentions (planning and likely) from those with clear intentions to avoid pregnancy (not planning and not likely). To reduce the rates of adolescent childbearing, males' pregnancy intentions should be assessed in multiple ways.
'College students' attitudes toward abortion and commitment to the issue' (Carlton et al., 2000)	*Sampling strategy:* Convenience (sample in one department in one university) *Data collection:* Self-complete questionnaire	N=1,118 (350 males; 33.6%) Age: 18–19 (70.1%) 20 or 21 (19.2%) >18 (4.2%) 22 or 23 (3.9%) <24 (2.5%)	Results revealed a normal distribution of abortion attitudes. No significant sex difference observed in overall abortion attitudes. Individuals with direct abortion experience were found to have significantly stronger pro-choice attitudes than individuals without direct abortion experience. Overall, college students reported a moderate degree of commitment to the issue of abortion.
'College students' attitudes toward abortion' (Bailey et al., 1993)	*Sampling strategy:* Convenience (sample in one department in one US university) *Data collection:* Self-administered questionnaire	N=207 (44% male) Age: 17–24; mean: 19.7	Feminists did not score higher on abortion attitudes and feminist women were not more approving than men or traditional women.

[21] We include this study as the modal age indicates the majority were within age range.

'Abortion attitudes as determinants of perceptions regarding male involvement in abortion decisions' (Coleman and Nelson, 1999)	*Sampling strategy:* Convenience (sample in one department of one university in US) *Data collection:* Self-administered questionnaire	N=1,387 (429 males; 34.5%) Age: 18–19 (70.4%) 20–21 (19.4%) >18 and <22 (10.2%)	The sample largely endorsed higher than moderate levels of male involvement in abortion decisions. Three factors were associated with support for higher levels of male involvement in pregnancy decision-making, in this order: disagreement with the statement 'Abortion is strictly a female issue'; holding a 'pro-life' position; and interest in the topic of abortion (but to a far lesser extent).
'Revisiting a pilot survey involving contraception and teenage pregnancy in Ayrshire and Arran' (Salihi et al., 2002)	*Sampling strategy:* Convenience (school sex education classes in schools) *Data collection:* Self-administered questionnaire	N=80 (30 males) Age: 11–15	Most of the teenagers did not feel responsible enough to be parents and some said they would be frightened.
'Gender differences in Ayrshire teenagers' attitudes to sexual relationships, responsibility and unintended pregnancies' (Hooke et al., 2000)	*Sampling strategy:* Convenience (sample in two secondary schools in Ayrshire, Scotland – an area of high rates of teenage pregnancy) *Data collection:* An illustrated vignette concerning a male who unintentionally gets a female pregnant, followed by a self-complete questionnaire	N=126 (63 males) Age: 14–15	Females were more likely than males to believe that both the male and the female are equally responsible for the pregnancy described in the vignette, while males were more likely than females to believe the male to be responsible. Significantly more females than males defended the female's right to decide about the pregnancy. Far more females than males favoured parental involvement in the decision, but the final decision should remain with the female. Significantly more males than females believed that the male (father) had an unconditional right to be involved in the decision. Significantly more males than females said the right of the hypothetical character in the vignette to contribute to the decision was conditional on his support for the female and the baby. Males and females agreed that adolescent fathers would be expected to experience fewer restrictions than mothers. However, very few said that adolescent males would be unaffected by fatherhood.

'The quality of abortion decisions and college students' reports of post abortion emotional sequelae and abortion attitudes' (Coleman and Nelson, 1998)	*Sampling strategy:* Convenience (sample of participants who indicated that they had direct abortion experience; this sample was derived from a larger participant pool in one department in one university in the US) *Data collection:* Self-administered questionnaire	N=63 (32 males) Age: 18–23 (96.6%); modal age: 18–19	23% of females and 37% of males found the decision to abort very difficult. Emotional connections to the fetus were associated with enhanced anxiety after the abortion. High levels of connection to the fetus and regret surrounding the abortion decision were significantly associated with the tendency to have 'pro-life' attitudes. No significant sex differences in post-abortion anxiety but significant sex differences were detected in relation to post-abortion depression, with females experiencing more.
'Rural junior high school students' risk factors for and perceptions of teen-age parenthood' (Robinson et al., 1998)	*Sampling strategy:* Convenience (sample across five rural junior high schools in two counties of north-west Ohio in 1996) *Data collection:* Self-administered questionnaire	N=689 (330 males) Mixed ethnic and social class groups	Females had stronger attitudes of not becoming an adolescent parent than males (believed in fewer benefits and scored higher on barriers).
'Attitudes toward the level of men's involvement in abortion decisions' (Nelson et al., 1997)	*Sampling strategy:* Convenience (one department in one university) *Data collection:* Self-administered questionnaire	N=366 (98 males) Age: 18–23 (96.6%) Religion: Catholic 27.9% Protestant 30.9% Jewish 3.3% Other 18% None 16.9%	Overall both men and women thought that men should have some degree of involvement in the abortion decision. However, men indicated a desire for more responsibility in the abortion decision than women thought men should have. The majority of women and men disagreed with the idea that abortion is strictly a women's issue. The majority of men (81.6%) agreed with the statement 'Abortion is a decision in which the male partner has a right to assume an active role'. Men also strongly believed that they should be informed of their partner's decision to abort, even if they were firm in their decision to do so. The majority of men (68.4%) agreed/agreed strongly that it was acceptable for the man to encourage his partner to carry to term if he was willing to assume sole responsibility for the child.

'College students' attitudes toward abortion: the role of knowledge and demographic variables' (Esposito and Basow, 1995)	*Sampling strategy:* Convenience (one Catholic university in the US) *Data collection:* Self-administered questionnaire	N=119 (51 males) Age: 17–42; average: 19.6 (SD2.2)[22] Religion: Catholic 52% Protestant 24% Jewish 7% None. 6% Ethnicity: Predominantly white	Respondents who indicated approval of abortion scored significantly higher on the Abortion Knowledge Test (greatest significance) and tended to be older, less religious, and non-Catholic, compared with those who disapproved of abortion. No significant gender differences were found.
'Abortion research: attitudes, sexual behavior, and problems in a community college population' (Bryan and Freed, 1993)	*Sampling strategy:* Convenience (sample of one community college – variety of classes – in the Boston area) *Data collection:* Self-administered questionnaire	N=150 (70 males) Ethnicity: Mostly white and Catholic SES: Middle and lower middle class	Males were slightly more likely to be pro-abortion. When anti-abortion students were compared with pro-abortion students, they had more religiosity, believed that abortion was murder, were more punitive towards the female and medical personnel involved, were less sexually active and were less likely to know someone who had an abortion. They were more likely than their pro-abortion peers to have less sexual experience and to have more physical and interpersonal difficulties.
'Adolescents' attitudes to abortion in samples from Italy and Sweden' (Agostino and Wahlberg, 1991)	*Sampling strategy:* Convenience (sample of schools in Italy and Sweden – in urban and rural areas of Italy only because of large regional differences) *Data collection:* Self-complete questionnaire and a small number of short debriefing sessions	N=400: 177 Sweden; 233 Italy (116 males) Age: 17–22 SES: 40% middle class	Nearly all adolescents in both countries were concerned about abortion and its consequences, although their concern was expressed differently in accordance with their religious and cultural norms and also with their background in sex education. The Italian sample (especially rural) held more restrictive views on abortion. The Swedish sample had more conflicting views. Psychological consequences of abortion were the primary worry for males and females. Males expressed worries caused by their own psychological conflict and concern for their female friend.

[22] We include this study as the standard deviation of the average indicates that the majority of students are in our adolescent range of 10 to 24 years.

'Pregnancy resolution and family formation. Understanding gender differences in adolescents' preferences and beliefs' (Marsiglio and Menaghan, 1990)	*Sampling strategy:* Convenience (sample drawn from schools in a metropolitan Mid-West US city) *Data collection:* Self-complete survey in response to a vignette (unplanned pregnancy in the context of an ongoing stable relationship)	N=577 (289 males) Age: 15–16 Ethnicity: White (188 males/181 females) and black (101 males and 107 females)	The majority of males (61%) chose to keep the baby, 12% chose adoption and 19% chose abortion. Similar numbers of males and females chose abortion and adoption. Females were more likely to select arrangements that involved living with children and to choose single custodial parenting as their first preference. (Of the males who rejected abortion, 70% preferred to establish a two-parent household – co-residential with partner, by comparison with only 30% of females). Females were more likely to choose single parenthood. Observed differences in forming a two-parent household were explained by adolescents' beliefs about their parents' and friends' expectations and their personal concerns about the adverse effect on their educational career.
'Adolescent males' pregnancy resolution preferences and family formation intentions: does family background make a difference for blacks and whites?' (Marsiglio, 1989)	As above	N=298 males Age: 15–16	Across blacks and whites, 46% of the sample chose to live with the child. Precise figures are not available on abortion but this was the least popular of three options (approximately 10% of blacks and 22% of whites). Blacks have views similar to whites on average, but when parental education is controlled, blacks are more homogenous in their views than whites. There was a tendency for blacks from family backgrounds represented by low parental education to be more inclined to prefer arrangements to live with their child than blacks with better educational backgrounds.
'Commitment to social fatherhood: predicting adolescent males' intentions to live with their child and partner' (Marsiglio, 1988)	As above	N=325 males Age: 15–16	Almost 48% of respondents indicated that they would be quite likely to live with their child and partner. Whites and blacks had similar intentions.

'The rights and responsibilities of men in abortion situations' (Rosenwasser et al., 1987)	*Sampling strategy:* Convenience (two classes in university) *Data collection:* Self-complete questionnaire	Study 1: N=371 (151 males) Study 2: N=302 (129 males) Age: 18–23 Ethnicity: Mostly white SES: Upper SES	In both studies the majority of the students believed that the final pregnancy outcome decision should be the female's, but that she should consider the male's opinion. Practically all students across the two studies agreed that males do not have the right to require a female to have an abortion, but over one-third in Study 1 believed that they have the right to prevent a female from having an abortion. Participants felt that males should have greater rights in more 'intimate' relationships (i.e., dating more than six months).
'Variables related to pro-choice attitudes among undergraduates' (Wright and Rogers, 1987)	*Sampling strategy:* Convenience (one class in one university) *Data collection:* Self-administered questionnaire	N=840 (401 males) Age: ≥18: 296 19–21: 456 ≤22: 88	More liberal attitudes to abortion are associated with being male, being a younger undergraduate, having experience of being involved in an abortion and not belonging (presently or in the past) to an anti-abortion church.
'Attitudes of adolescent males toward adolescent pregnancy and fatherhood' (Redmond, 1985)	*Sampling strategy:* Convenience (males in contact with five health and social care agencies in the Kitchener-Waterloo area of Ontario, Canada) *Data collection:* Self-administered, pre-coded questionnaire containing closed and open-ended items	N=74 males only Age: <21 Greater number of males involved in abortion than keeping the child	In both casual and serious dating relationships, all males wished to be told if a pregnancy occurred. Most were willing to talk to their female friends about pregnancy options. Participants were most likely to include the female friend and parents in the pregnancy decision-making and to exclude peers. Males might not accept the female friend's resolution of the pregnancy, but were willing to cooperate with the outcome. Generally, males included in pregnancy decision-making found this to be a positive experience. Most adolescent males wish to be included in the decision-making process and to receive emotional and social support during this time.

'Adolescent pregnancy. Involvement of the male partner' (Vaz et al., 1983)	*Sampling strategy:* Convenience (through partners) *Data collection:* Self-complete questionnaire by male contacted through female partner	N=41 partners of adolescent females who continued/were continuing their pregnancy to term and attended an optional education programme Mean age: 18.9 Ethnicity: All black SES: Lower SES	Most fathers (81%) maintained an ongoing relationship with the mother and informed their own family about the pregnancy. Only 48% helped with the pregnancy outcome decision. Only 19% saw a health care professional to discuss the pregnancy. A significant number suffered negative psychosocial consequences, such as depression and increased isolation. Effort should be made to include fathers who want involvement and to offer them counselling and support.
'Association of race, sex, religion, family size, and desired number of children on college students' preferred methods of dealing with unplanned pregnancy' (Ryan and Dunn, 1988)	*Sampling strategy:* Convenience (from two south-eastern US universities) *Data collection:* Self-administered questionnaire	N=704 One university mainly black; one university mainly white	First preference was to marry (and keep the baby); second was abortion; third was raising child as a single parent. Adoption was the least preferred option. Race, sex, religiosity, religious preference, number of siblings and number of desired children were significantly associated with student preferences.
'College students' attitudes toward shared responsibility in decisions about abortion: implications for counseling' (Ryan and Dunn, 1983)	*Sampling strategy:* Convenience (one department in one US university) *Data collection:* Self-complete questionnaire	N=274 (122 males) Age: 18–24 Ethnicity: largely white; 51% Protestant	Students (81.8%) agree on shared responsibility for an abortion decision when a couple is married and to a lesser extent if engaged and to a much lesser extent in other situations of unplanned pregnancy. In the situation of a single sexual encounter, most females indicated that the male should not share in the responsibility for an abortion decision. Students who indicated a high level of religious activity desired both male and female to be either completely or very much involved in the responsibility for the abortion.

Appendix 1.4: Qualitative studies			
Title (author, date)	**Study design**	**Participants**	**Relevant results**
'Why do poor men have children? Fertility intentions among low-income unmarried U.S. fathers' (Augustine et al., 2009)	*Sampling strategy:* Purposive to include diverse ethnic groups and age groups *Data collection:* In-depth interviews (on experience retrospectively)	N=171 males (fathers) Average age at interview: 34; average age on becoming a father: 23 SES: Lower SES	Young males' views on how a pregnancy occurred deconstruct the duality of planned/unplanned. Instead, they may be classified in terms of inductively derived terms: accidental, just not thinking, unplanned but not unexpected, and planned. Some low-income, non-custodial fathers view an adolescent pregnancy as a validation of masculinity and a means of turning one's life around.
Men, Sexuality and Crisis Pregnancy: A Study of Men's Experiences (Ferguson and Hogan, 2007)	*Sampling strategy:* Purposive *Data collection:* In-depth interviews	N=45 males only Age: 18–57	Pregnancy decision-making in the event of an unplanned pregnancy was mediated by relationship status; social class (and the notion of being a 'high achiever'); the existence of a vision for fatherhood; the man's willingness to state his wishes in relation to the pregnancy; the man's willingness to have a flexible approach to his involvement with childrearing and the mother; and the couple's perception of parental and family support.
'"Planned" teenage pregnancy: views and experiences of young people' (Cater and Coleman, 2006)	*Sampling strategy:* Purposive sample of young females who had reported a 'planned pregnancy' and their male partners in different parts of Great Britain *Data collection:* In-depth interview	N=51 (10 males) Age: Not reported Ethnicity: White, British	Some young males were not very active in the planning stage and did not feel in control (young females reported not discussing it in any detail with their partners). Fathers found it difficult to articulate why they wanted a child. Some partners felt used by their partner just to have a child. Most of the fathers did not have a steady father figure when they were growing up.

'Preventing pregnancy: a girls' issue. Seventeen-year-old Swedish boys' perceptions on abortion, reproduction and use of contraception' (Ekstrand et al., 2007)	*Sampling strategy:* Convenience (participants selected from six classes across four schools). Schools were varied by SES in a medium-sized town in Sweden *Data collection:* Six focus-group interviews	N=40 males only Age: 17	Adolescent pregnancy was considered a catastrophe, and abortion a moral dilemma. Most agreed that the right to decide on abortion rests with the female, but some were frustrated by not having any legal right to influence the decision. Males perceived females as having a greater responsibility in avoiding pregnancy.
Understanding Teenage Sexuality in Ireland (Hyde and Howlett, 2004)	*Sampling strategy:* Convenience (sample of schools in Republic of Ireland); stratified by type of school *Data collection:* 29 focus groups	N=226 (124 males) Age: 14–18	Young females were more likely to have used sexual health services. Contraceptive use was perceived as joint but young males were perceived as having greater responsibility for condoms. Younger males said they would be particularly at a loss to know how to cope with an adolescent pregnancy.
'Attitudes of young African American fathers toward early childbearing' (Davies et al., 2004)	*Sampling strategy:* Convenience (sample of unmarried male partners of adolescent females who had become pregnant while participating in a HIV-prevention trial in Birmingham, Alabama) *Data collection:* Four focus groups *Compensation:* $45.00	N=26 males only Age: 17–23	Most participants indicated that they did not intentionally impregnate their partner because of the responsibility associated with fatherhood. However, absent from the discussion were comments conveying a commitment to avoid this consequence. Many believed females were more likely than males to desire a pregnancy. Many believed that young females had intentionally become pregnant, and disapproved of this. However, participants were also generally favourable about becoming a father at an early age.
'Where does reproductive health fit into the lives of adolescent males?' (Marcell et al., 2003)	*Sampling strategy:* Convenience (sample within two schools in ethnically mixed areas of San Francisco, California) *Data collection:* Three group sessions	N=32 males only Age: 15–19 Ethnicity: Mixed	Pregnancy was perceived as a negative event that could prevent achievement of life goals.

'Understanding teen pregnancy from the perspective of young adolescents in Oklahoma city' (Kegler et al., 2001)	*Sampling strategy:* Purposive, recruited through key community workers *Data collection:* 13 focus groups 1996–1997; groups were stratified by sex, neighbourhood and age *Compensation:* Paid $20 and pizza provided	N=102 (52 males) Mean age: 13.7 Ethnicity: Mixed	Most viewed an adolescent pregnancy as negative in terms of loss of freedom, increased responsibility and effects on future. The male groups identified negative aspects of becoming a father: damage to reputation (African American and Vietnamese American) and dependence on parents (American Indian). There were more similarities than dissimilarities across the ethnic and gender groups. Differences tended to be gender-based, with males viewing teen pregnancy as less of a problem than females. Positive aspects for males were being able to prove manliness and sexual experience.
'The process of decision-making on abortion: a grounded theory study of young men in Sweden' (Holmberg and Wahlberg, 2000)	*Sampling strategy:* Convenience (recruited from an adolescent outpatient clinic in Borlänge, Sweden between 1995 and 1998) *Data collection:* Short individual interviews	N=18 males only Age: 15–26; median: 18	Argued that the decision-making process can be understood by three concepts: Reactions: Concerns expressed about complications of abortion for female partner and some expressed moral ambivalence about abortion. Impact factors: Mostly participants mentioned social contextual issues such as insufficient economic resources, in full-time education, etc., as reasons for choosing abortion. Other impact factors were the quality of the relationship, and males sometimes felt guilty about pregnancy. Tools for process: All males in the study felt involved in decision-making and felt that this strengthened the relationship.

Appendix 2: Research instruments

Appendix 2.1: Questionnaire 1

Teenage Men and Pregnancy

SURVEY NUMBER:

1. BELIEFS ABOUT PREGNANCY and PARENTHOOD

On the following pages are some statements about pregnancy and being a parent of a young baby.

Please decide how strongly you *agree* or *disagree* with each statement.

Tick the one box which best describes your *own personal opinion or view* about that statement.

There is also a box to tick if you really are *not sure* or have no opinion on this issue.

		Strongly Agree	Agree	Not sure	Disagree	Strongly Disagree
1.	Most women feel better emotionally when they are pregnant.	☐	☐	☐	☐	☐
2.	Men tend to find their partners' pregnancies quite stressful.	☐	☐	☐	☐	☐
3.	A couple's relationship is usually closer during pregnancy.	☐	☐	☐	☐	☐
4.	It is easy for a woman to adjust to the physical and emotional changes of pregnancy.	☐	☐	☐	☐	☐
5.	Most men feel emotionally involved towards their unborn baby.	☐	☐	☐	☐	☐
6.	Having a baby makes a relationship complete.	☐	☐	☐	☐	☐
7.	Almost all women feel very affectionate towards their newborn baby when they first see him/her.	☐	☐	☐	☐	☐
8.	Most women who smoke find it easy to quit if they get pregnant.	☐	☐	☐	☐	☐

		Strongly Agree	Agree	Not sure	Disagree	Strongly Disagree
9.	Childless couples tend to end up lonely and unhappy.	☐	☐	☐	☐	☐
10.	Pregnancy is one of the happiest times in most women's lives.	☐	☐	☐	☐	☐
11.	During pregnancy, men feel closer to their partners than at most other times.	☐	☐	☐	☐	☐
12.	A pregnant woman would never feel anger towards her unborn baby.	☐	☐	☐	☐	☐
13.	Having children usually improves the couple's relationship.	☐	☐	☐	☐	☐
14.	Children will turn out well if they have caring parents.	☐	☐	☐	☐	☐
15.	You don't have to learn how to be a competent parent – it just comes naturally.	☐	☐	☐	☐	☐
16.	Parenting is almost always enjoyable.	☐	☐	☐	☐	☐
17.	Parents instinctively know how to cope with changes that occur in their lives after the birth of a new baby.	☐	☐	☐	☐	☐
18.	Becoming a mother need not change a woman's lifestyle very much.	☐	☐	☐	☐	☐
19.	It is very unusual for a parent to feel angry enough to want to physically hurt their young baby.	☐	☐	☐	☐	☐
20.	Most men don't resent the attention their partner gives to the baby.	☐	☐	☐	☐	☐
21.	Becoming a father need not change a man's lifestyle very much.	☐	☐	☐	☐	☐

2. BELIEFS ABOUT YOURSELF

Below is a list of statements dealing with your general feelings about yourself. If you strongly agree, circle SA. If you agree with the statement, circle A. If you disagree, circle D. If you strongly disagree, circle SD.

1.	On the whole, I am satisfied with myself.	SA	A	D	SD
2.	At times, I think I am no good at all.	SA	A	D	SD
3.	I feel that I have a number of good qualities.	SA	A	D	SD
4.	I am able to do things as well as most other people.	SA	A	D	SD
5.	I feel I do not have much to be proud of.	SA	A	D	SD
6.	I certainly feel useless at times.	SA	A	D	SD
7.	I feel that I'm a person of worth, at least on an equal plane with others.	SA	A	D	SD
8.	I wish I could have more respect for myself.	SA	A	D	SD
9.	All in all, I am inclined to feel that I am a failure.	SA	A	D	SD
10.	I take a positive attitude toward myself.	SA	A	D	SD

3. BELIEFS ABOUT BEING A MAN

Please mark the box that matches your opinion about these statements concerning a man's role. Mark one box only for each question.

		Strongly Agree	**Agree**	**Disagree**	**Strongly Disagree**
1.	It is essential for a guy to get respect from others.	☐	☐	☐	☐
2.	A man always deserves the respect of his wife/partner and children.	☐	☐	☐	☐
3.	I admire a guy who is totally sure of himself.	☐	☐	☐	☐
4.	A guy will lose respect if he talks about his problems.	☐	☐	☐	☐
5.	A young man should be physically tough, even if he is not big.	☐	☐	☐	☐
6.	It bothers me when a boy acts like a girl.	☐	☐	☐	☐
7.	I don't think that a husband/partner should have to do housework.	☐	☐	☐	☐
8.	Men are always ready for sex.	☐	☐	☐	☐

4. BELIEFS ABOUT PREGNANCY

If you found out that your girlfriend was pregnant in the next six months would you be .....

1. Very happy ☐
2. Happy ☐
3. Unsure ☐
4. Unhappy ☐
5. Very unhappy ☐

(Please tick one box only)

5. BACKGROUND DETAILS

Please indicate which best describes the sort of work your **FATHER** does. (If he is not working outside the home now, please tell me what he did in his last job.)
(Please tick one box only)

a. Professional or higher technical work
Work that requires at least degree-level qualifications, for example, doctor, accountant, school teacher, university lecturer, social worker, systems analyst ☐

b. Manager or senior administrator
For example, company director, finance manager, personnel manager, senior sales manager, senior local government officer ☐

c. Clerical
For example, clerk, secretary ☐

d. Sales or services
For example, commercial traveller, shop assistant, nursery nurse, care assistant, paramedic ☐

e. Small business owner
For example, shop owner, hairdresser owner, restaurant owner ☐

f. Foreman or supervisor of other workers
For example, large store supervisor, supervisor of cleaning workers ☐

g. Skilled manual work
For example, plumber, electrician, fitter, train driver, cook, hairdresser ☐

h. Semi-skilled or unskilled manual work
For example, machine operator, assembler, postman, waitress, cleaner, labourer ☐

i. Other. [Please say what.....] ☐

j. Never worked ☐

k. Not applicable ☐

6. Please indicate which best describes the sort of work your **MOTHER** does. (If she is not working outside the home now, please tell me what she did in her last job.) (Please tick one box only)

a. Professional or higher technical work
Work that requires at least degree-level qualifications, for example, doctor, accountant, school teacher, university lecturer, social worker, systems analyst ☐

b. Manager or senior administrator
For example, company director, finance manager, personnel manager, senior sales manager, senior local government officer ☐

c. Clerical
For example, clerk, secretary ☐

d. Sales or services
For example, commercial traveller, shop assistant, nursery nurse, care assistant, paramedic ☐

e. Small business owner
For example, shop owner, small builder, restaurant owner ☐

f. Foreman or supervisor of other workers
For example, building site foreman, supervisor of cleaning workers ☐

g. Skilled manual work
For example, plumber, electrician, fitter, train driver, cook, hairdresser ☐

h. Semi-skilled or unskilled manual work
For example, machine operator, assembler, postman, waitress, cleaner, labourer ☐

i. Other. [Please say what.....] ☐

j. Never worked ☐

k. Not applicable ☐

7. Which of the following best describes the highest level of education your **Father** has completed to date. (Please tick one box only)

1. None ☐
2. Completed Primary ☐
3. Junior/Inter Group or equivalent ☐
4. Leaving Cert. or equivalent ☐
5. Diploma or Certificate ☐
6. University Degree or equivalent ☐
7. Not applicable ☐

8. Which of the following best describes the highest level of education your **Mother** has completed to date. (Please tick one box only)

1. None ☐
2. Completed Primary ☐
3. Junior/Inter Group or equivalent ☐
4. Leaving Cert. or equivalent ☐
5. Diploma or Certificate ☐
6. University Degree or equivalent ☐
7. Not applicable ☐

9. What do you think you will be doing when you leave school? (Please tick one box only)

1. Doing a university degree or equivalent ☐
2. Doing a diploma or certificate ☐
3. On a training scheme/apprenticeship ☐
4. Unemployed ☐
5. Other Please specify..... ☐

10. Who are you currently living with? If more than one category applies, please pick the one you spend the most time with:

1. Both parents ☐
2. Mother only ☐
3. Father only ☐
4. Mother and partner or stepfather ☐
5. Father and partner or stepmother ☐
6. Others ☐

11. What is your current age? .....

12. Have you, or any young person close to you had any direct experience of an unplanned pregnancy?

Yes ☐ No ☐

13. When you were growing up, in which of the ways listed below did you learn about sexual matters? You can tick more than one box if applicable.

1. From mother ☐
2. From father ☐
3. From sibling(s) ☐
4. From lessons at school ☐
5. From peers ☐
6. From sexual partner ☐
7. From doctor/nurse/clinic ☐
8. From media/Internet ☐
9. From other sources ☐
   Please specify.....

14. When you were growing up, in which of the ways listed below did you learn the most about sexual matters? (Please tick one box only)

1. From mother ☐
2. From father ☐
3. From sibling(s) ☐
4. From lessons at school ☐
5. From peers ☐
6. From sexual partner ☐
7. From doctor/nurse/clinic ☐
8. From media/Internet ☐
9. From other sources ☐
   Please specify.....

15. What is your ethnic or cultural background?
Choose ONE section from A to D, then tick the appropriate box within that section.

A White
1. ☐ Irish
2. ☐ Irish Traveller
3. ☐ Any other White background
Please specify.....

B Black or Black Irish
4. ☐ African
5. ☐ Any other Black background
Please specify.....

C Asian or Asian Irish
6. ☐ Chinese
7. ☐ Any other Asian background
Please specify.....

D Other, including mixed background
8. ☐ Other, write description
.....
.....

16. What is your religion? (Please tick one box only)

1. Roman Catholic ☐
2. Church of Ireland ☐
3. Presbyterian ☐
4. Methodist ☐
5. Islam ☐
6. From other sources ☐
Please specify.....

17. How important would you say religion is to you? Is it:
(Please tick one box only)

1. Very important ☐
2. Fairly important ☐
3. Fairly unimportant ☐
4. Very unimportant ☐

18. Apart from special occasions such as weddings, funerals, baptisms and so on, how often nowadays do you attend church services or meetings connected with your religion? (Please tick one box only)

1. Once a week or more ☐
2. 2 or 3 times a month ☐
3. Once a month ☐
4. Several times a year ☐
5. Less frequently ☐
6. Never ☐

THANK YOU FOR COMPLETING THIS QUESTIONNAIRE.
ALL YOUR ANSWERS WILL BE KEPT CONFIDENTIALLY, AND YOUR IDENTITY WILL REMAIN ANONYMOUS IN ANY REPORTING OF THE FINDINGS

Appendix 2.2: Questionnaire 2 (questionnaire embedded in script)

Q no.	Question	Response options
1	If I were Jack, what would be my strongest feeling?	Shocked Happy Guilty Angry Sad Frightened
2	If I were Jack, who would I blame?	Me: not thinking it could happen so easily Me: not bothering to take precautions Me: I drank too much Her: she said it was OK Her: she's done it on purpose to trap me Both: we got carried away Friends: who egged me on Fate: the condom broke Fate: just bad luck
3a	You're going to be a dad? Wow that's pretty cool.	Agree strongly Agree Disagree Disagree strongly
3b	She's a slapper, tell her it's not yours.	Agree strongly Agree Disagree Disagree strongly
3b_2	At least I'm not firing blanks.	Agree strongly Agree Disagree Disagree strongly
3c	You are going to marry her, aren't you?	Agree strongly Agree Disagree Disagree strongly
3d	Just break up with her.	Agree strongly Agree Disagree Disagree strongly
3e	So are you going to tell her to get rid of it?	Agree strongly Agree Disagree Disagree strongly
3f	What about getting the kid adopted?	Agree strongly Agree Disagree Disagree strongly

3g	It's her problem, not yours.	Agree strongly Agree Disagree Disagree strongly
3h	You've always got your mates.	Agree strongly Agree Disagree Disagree strongly
4	What do I think about babies now?	I like babies I don't know I dislike babies
5a	What would my Mother say?	Fantastic, I always wanted to be a granny. She's ruined your life. The best thing she can do is to have an abortion. You'll have to have the baby. What are people going to think about us? You're a stupid idiot, you've really messed up. Not applicable.
5b	What would my Father say?	It's alright son, we'll stick by you. She's not living here that's for sure. Well, it's your problem Jack, you're a man now. You're going to have to get married. After all we've done for you; this is how you repay us. Get out of the house, I don't want to see you again. Not applicable.
6a	Would I tell my Mother?	Yes No Not applicable
6b	Would I tell my Father?	Yes No Not applicable
7	How would I feel about pregnant women now?	Yuk or gross or unattractive Nothing in particular Nice or cool or attractive
8a	Do I still fancy her?	Yes No
8b	Do I feel protective towards her?	Yes No
8c	Do I feel angry with her for mucking up my life?	Yes No
8d	Could she have done this on purpose?	Yes No
8e	Do I wish she'd just disappear out of my life?	Yes No
9a	Do I feel like crying too?	Yes No
9b	Am I going to be able to help with this?	Yes No

9c	Do I want to clear out of here?	Yes No
9d	Do I want to get help from someone?	Yes No
10	Would I go with her to see the counsellor?	Yes No
11a	How would I feel about having to leave school?	Cool, can't wait, it's OK. Don't care one way or another. Fed up, sad, lost and angry.
11b	If I were Jack, and had to leave school now – I'd think ...	I'd make a go of it, I'd be OK. Don't care. My life would be messed up and I would never get a decent job.
12a	Would having a baby change my life?	A great deal. Quite a bit. Not much. Not at all.
12b	Would her having an abortion change my life?	A great deal. Quite a bit. Not much. Not at all.
12c	Would her having the baby adopted change my life?	A great deal. Quite a bit. Not much. Not at all.
13a	Could I cope with being a father like them now?	Yes No
13b	Would Emma cope with being a mother now?	Yes No
13c	Do I want to live with Emma now?	Yes No
13d	Do I reckon she'd like to live with me?	Yes No
14a	What do I think of abortion? – I think it's OK, it's the best way out.	Agree Disagree
14b	I think it should be her choice alone.	Agree Disagree
14c	I feel awful, it's a bit like murder.	Agree Disagree
14d	I feel confused, don't want to think about it.	Agree Disagree
15	How would I feel if I left Emma?	Guilty for running away. OK, lots of guys do it. Off the hook, relieved. Afraid. Regretful and down.

16a	How do I feel now? – I feel angry that I've been dragged in to visit the counsellor.	Yes No
16b	I feel embarrassed talking about personal things in front of the counsellor.	Yes No
16c	I feel excluded from what is happening.	Yes No
16d	I feel supported.	Yes No
16e	I feel relieved to talk to someone.	Yes No
17a	I must have a say in what's going to happen.	Agree strongly Agree Disagree Disagree strongly
17b	I feel pressured to stick by her.	Agree strongly Agree Disagree Disagree strongly
17c	I'm too young to commit to a long-term relationship.	Agree strongly Agree Disagree Disagree strongly
18a	What are the good things for me about going ahead with abortion? – I can forget this ever happened.	Important Not important
18b	I can finish school.	Important Not important
18c	It won't upset the family and no one need know.	Important Not important
18d	I can avoid being a really young parent.	Important Not important
18e	I'm free to split with Emma if I want to.	Important Not important
18f	No child of mine will grow up disadvantaged.	Important Not important
19a	What are the bad things for me about going ahead with abortion? – It's physically risky for Emma.	Important Not important
19b	There's a bit of me actually wants a baby.	Important Not important
19c	It's morally wrong.	Important Not important
19d	You can't change your mind afterwards.	Important Not important

19e	I'd regret it for the rest of my life.	Important Not important
19f	I feel it's risky mentally for Emma to go through with.	Important Not important
20a	What are the good things for me about going ahead and having the baby? – It will make my relationship with Emma stronger.	Important Not important
20b	I'll feel better if I take responsibility for my actions.	Important Not important
20c	I won't have to put Emma through the abortion experience.	Important Not important
20d	I'll enjoy being a dad.	Important Not important
20e	It will give me a purpose in life.	Important Not important
20f	The baby could grow up to have a worthwhile life.	Important Not important
21a	What are the bad things for me about going ahead and having the baby? – It's not fair on the baby.	Important Not important
21b	It would ruin my future.	Important Not important
21c	I'll lose friends.	Important Not important
21d	Babies cost a lot of money.	Important Not important
21e	I'll lose sleep and have to deal with nappies.	Important Not important
21f	I'd be a useless father.	Important Not important
21g	It's too much responsibility for me now.	Important Not important
22a	What are the good things for me about having the baby adopted? – The baby will be adopted by a good family.	Important Not important
22b	I can forget this ever happened.	Important Not important
22c	I can finish school.	Important Not important
22d	I can avoid being a young parent.	Important Not important
22e	I'm free to split with Emma if I want to.	Important Not important

22f	The child won't be disadvantaged.	Important Not important
23a	What are the bad things for me about having the baby adopted? – I will always wonder what has happened to the child.	Important Not important
23b	My family will have to get involved with social services.	Important Not important
23c	I will never be able to forget about it.	Important Not important
23d	Someone else will be the child's father.	Important Not important
23e	The child will grow up and not know me.	Important Not important
23f	The child might be unhappy without its natural parents.	Important Not important
24	What do I think of these options?	I want Emma to keep the baby. I want Emma to have an abortion. I want the child adopted. I can't decide, it's totally up to her.
25a	I want Emma to keep the baby, so now what do I want to do?	I'll stick with her and we'll look after the baby together. I'm leaving her now whatever happens. If she chooses to have an abortion, I'll leave her. If she chooses to have an abortion, I'll stick by her anyway.
25a_2	I want Emma to keep the baby so now what do I want to do? Are these possibilities also?	I'll stick by her regardless. I'm leaving her now whatever happens. Decision 1: Keep baby but if not I stay anyway (SMS) Decision 2: Keep baby but if not I leave U (SMS) Decision 3: Keep baby but I leave U now anyway (SMS) Decision 4: Keep baby I will b dad (SMS)
25b	I want Emma to have an abortion.	I'll stick by her through the abortion. I'm leaving her now whatever happens. If she chooses to keep the baby, I'll leave her. If she chooses to keep the baby, I'll stick by her anyway. Decision 1: U do abortion but if not I stay anyway (SMS) Decision 2: U do abortion if not I leave U (SMS) Decision 3: Have abortion but I leave U now anyway (SMS) Decision 4: Have abortion I help U (SMS)

25c	I want the child adopted.	I'll stick by her through the adoption process. I'm leaving her now whatever happens. If she chooses to keep the baby, I'll leave her. If she chooses to keep the baby, I'll stick by her anyway. Decision 1: Have baby adopted but I stay whatever (SMS) Decision 2: Have baby adopted if not I leave U (SMS) Decision 3: Have baby adopted but I leave U now anyway (SMS) Decision 4: Have baby adopted I help U (SMS)
25d	I can't decide, it's totally up to her.	I'll stick by her regardless. I'm leaving her now whatever happens. Decision 1: Up to you I stay and help (SMS) Decision 2: Up to you I leave U now anyway (SMS)

Evaluation of the IVD

Now, we'd be grateful if you took a few moments to tell us what you thought about the IVD

	If I were Jack ...	Strongly agree	Agree	Not sure	Disagree	Strongly disagree
1.	Helped me understand the effect an unplanned pregnancy would have on a guy like me	☐	☐	☐	☐	☐
2.	Made me think about issues I hadn't thought about before	☐	☐	☐	☐	☐
3.	Got me involved in Jack's situation	☐	☐	☐	☐	☐
4.	Made me think that I should never get myself in that situation	☐	☐	☐	☐	☐
5.	Made me aware that I could talk to a counselling service if I were in Jack's situation	☐	☐	☐	☐	☐

		Very easy	Easy	Difficult	Very difficult
6.	How easy was the screen interface to use?	☐	☐	☐	☐

Appendix 2.3: Qualitative focus group and interview guides

Queen's University Belfast

Teenage men's attitudes and decision-making in relation to an unplanned pregnancy

Outline of focus group themes (young men)

Theme 1: Usability of the IVD
Was the IVD manageable?

Theme 2: Plausibility/authenticity of the IVD
Did you believe in Jack/did you find him believable?
Did you have any difficulties putting yourself in his shoes?

Theme 3: Impact potential as a consequence of engaging with the IVD
Was the end choice easy to make?
What might be the reasons for your choice?/Explore rationale for your choice – what were they?
Do you think the film helped you to think through the issues of unplanned pregnancy, especially as an issue for boys?
Is a possible unplanned pregnancy something you have ever given much thought to?
Do you think, having viewed the film, it will have any impact on your social relationships?

Interview guide: teachers

Did you have difficulty accepting this IVD into schools?
How did you find the content of the IVD?
Did you find the interface easy to use or were there any difficulties?
How easy did you think the questions in the IVD were to answer?
Did you think the film would have any real impact on participants' lives?
Did you think the film was believable?
Did you think the issue was addressed sensitively?
Did you think the film would help teens to think through the issues of unplanned pregnancy?
Do you think it could be integrated as part of the standard SPHE curriculum?

Interview guide: health and education sector professionals

Theme 1: Background to expert panel
Can you tell me a bit about your work and especially your work with young men?

Theme 2: Evaluation of the content of the interactive DVD
How did you find the content of the interactive DVD?
Did you find the film to be believable?
Did you think the issue was addressed sensitively?
Did you think the film would help teens to think through the issues of unplanned pregnancy?

Broader questions
How do you think this compares to other approaches that are available?
Did you think the film would have any real impact on their lives?

Theme 3: Future implementation
At the moment this is essentially a research tool. However, we are imagining developing and evaluating this as an educational tool in the context of SPHE in the classroom.
What do you think we would need to do in order to develop it as an educational tool that teachers might be able to autonomously use within the classroom setting?
Do you think there would be any difficulty in implementing this programme in schools across Ireland?

Theme 4: For youth service workers only
Do you think this might be a useful resource in your own work places?
How might we develop it further as a resource which could be used in your work settings?

Appendix 3: Information sheets and consent forms

Appendix 3.1: Letter of invitation to take part in the study (schools)

Queen's University Belfast

Date: June 2008

Dear Principal and RSE Teacher,

Re: Research project: Teenage men's attitudes and decision-making in relation to an unplanned pregnancy

We write to you in connection with the above research project, which is due to commence in September 2008 in schools across Ireland.

Teenage pregnancies present a major difficulty for schools and pupils. Relationship and sexual education classes are a space in which schools can proactively address this issue, but to-date there has been little quality material on how best to approach this issue with young men in particular. The purpose of this study is to find out about the attitudes of teenage men to unplanned pregnancy so that we can help young men to think through the possible consequences of having sex. We also want to test an IVD that is designed to help young men in second level education to think about these issues.

The research is funded by the Crisis Pregnancy Agency whose mandate is to prepare and oversee a strategy for a reduction in the number of crisis pregnancies through educational and other services. The research will be conducted by a team of researchers from Queen's University Belfast and University College Dublin.

Key personnel from the Social and Personal Health Education (SPHE) Support Service (Sharon McGrath, SPHE National Co-ordinator; Frances Shearer, RSE National Co-ordinator) are members of our Advisory Group, and they have approved the research project, and the content of the IVD used in the project. Additionally, this study has been reviewed and given a favourable opinion by the Research Ethics Committee of the School of Nursing and Midwifery, Queen's University Belfast.

Principally, we would like to invite the participation of the RSE teacher and those students in your pre-Leaving Certificate classes who are young men aged between 14 and 16 years of age. We will require two SPHE/RSE class periods, and an additional period for just 10 participants.

We sincerely hope that you will consider facilitating us in this important and innovative research project. We would like to follow up this letter with a phone call to see if we could demonstrate the IVD and consult with you further about the research.

Yours sincerely,

Dr Sharon Cruise
(Research Fellow)
And on behalf of the research team:
Dr Maria Lohan, Dr Peter O'Halloran, Dr Fiona Alderdice and Dr Abbey Hyde.

Appendix 3.2: Information about the research (young men aged 14 to 18 years)

Teenage men's attitudes and decision-making in relation to an unplanned pregnancy

We would like to invite you to take part in a research study. Before you decide whether you wish to take part, you need to understand why the research is being done, and what it would involve for you. Please take time to read the following information carefully. Talk to others about the study if you wish.

Who is organising and funding the research?

The research is funded by the Crisis Pregnancy Agency, which was established in 2001 under the Health (Corporate Bodies) Act 1961. The Crisis Pregnancy Agency is committed to reducing the number of crisis pregnancies through educational and other services. The research will be conducted by a team of researchers from Queen's University Belfast and University College Dublin. The research project is due to be completed in January 2010.

What is the purpose of the study?

Teenage women who have an unplanned pregnancy face serious emotional and practical problems as well risks to their health. The attitudes of male partners have a strong effect on how women think about the choices they must make about their pregnancy. The purpose of this study is to find out about the attitudes of teenage men to unplanned pregnancy so that we can help young men to think through the possible consequences of having sex. We also want to test an IVD that is designed to help young men think about these issues.

Why have I been invited?

We are asking 600 young men aged between 14 and 16 years from twelve schools to take part in the research. You have been invited because you are part of this age group.

Do I have to take part?

It is up to you to decide. We will describe the study and go through this Information Sheet, which we will then give to you. We will then ask you to sign a consent form to show you have agreed to take part. We will give you a copy of the consent form to keep. You can decide not to take part and you do not have to give a reason for saying no.

What if I decide to withdraw from the study?

You are free to withdraw at any time, without giving a reason. If you do withdraw, we will not use the data we have collected from you.

What about my parents/guardian?

We will send this Information Sheet to your parents or guardian so that if you wish you can discuss the study with them and decide together whether you would like to take part. Your parents have also been given the right to withdraw you from the study by signing an opt-out form and returning it to the researcher.

What will I be asked to do if I take part?

There are two parts in the research. We would like everyone to participate in Part one and a smaller number of people at Part two.

Part one: If you decide to take part in part one we will ask you to fill in a questionnaire about your attitudes to pregnancy, being a father, and relationships between men and women. Then we will ask you to watch a short film (on an IVD) about a teenage man who has made his girlfriend pregnant. During the film you will be asked to fill in an onscreen questionnaire about the choices faced by the young man. We will make sure that nobody can see what you are answering – both the researcher and your class teacher will be present and they will make sure that participants are seated sufficiently far apart so as not to be able to see each other's responses. When you have completed the paper questionnaire you will seal it in your own individual envelope – sealed envelopes will then be collected by the researcher. When you have completed the onscreen questionnaire and closed down the programme this will automatically save your responses into a separate text file that will be stored on the memory stick that has been used to run the onscreen questionnaire so no-one but the researchers will be able to see your responses.

This should take no more than 45 minutes and will happen on school premises.

Part two: A random selection of students will be chosen to participate in part two, which is a focus group discussion. You will be again asked to give your consent to participate and offered the chance to withdraw without giving a reason.

This part of the research will mean a group of up to 10 young men meeting with a researcher for 40 minutes. The researcher will ask the participants to discuss the issues raised in the IVD and to give their views on the value of the IVD. The conversation will be tape recorded so that we can write out the discussion and see where the groups from the 12 schools agree and disagree. All identifying features of you and your school will be removed from the written version.

You may offer to take part at stage one only or at both stage one and stage two.

What if there is a problem?

If you are unhappy with anything that happens during the study, you can talk to your parents/guardian, or to the researchers, or to your teachers. We will deal with the issue immediately. In addition, if you feel distressed by any of the issues raised, we will inform your school counsellor. Of course you can withdraw from the study at any time, without

giving a reason. You can also make a formal complaint if you wish (details of how to do this are set out at the end of this document).

Will my taking part in the study be kept confidential?

Because the research is taking place in school time your classmates and teachers will probably realise you are taking part. However, only the researchers will have access to the data. We will follow ethical and legal guidelines and keep all information privately and securely. You will not be asked to put your name on the questionnaire. We will store the questionnaires and all other paper data in a locked filing cabinet in a secure building at Queen's University Belfast. Names of individuals or schools stored on a computer will be password protected and deleted at the end of the study. Paper data will be destroyed securely five years after the study ends.

We will listen to the tapes of the focus group interviews and write down what is said. We will not write down names or anything else that would identify any individual.

At the end of the study, all data resulting from the research will be stored for a minimum of five years and a maximum of 10 years in Queen's University Belfast. All data will be archived by year 10 in The UK Data Archive (UKDA) located in the University of Essex. This is a centre that specialises in keeping data securely so that other researchers can apply for ethical permission to use it in their own research.

What will happen to the results of the research study?

The results of the study will be published in research reports and in scientific journals. We will not publish anything that could be used to identify you or your school. We will send copies of reports and journal articles to your school so that you can read them if you want to.

Who has reviewed the study?

All research is looked at by an independent group of people, called a Research Ethics Committee, to protect your safety, rights, wellbeing and dignity. This study has been reviewed and given a favourable opinion by the Research Ethics Committee of the School of Nursing and Midwifery, Queen's University Belfast.

Further information and contact details

If you would like further information about the research, please contact Dr Sharon Cruise or Dr Maria Lohan:

Dr Sharon Cruise
Research Fellow
School of Nursing and Midwifery
Queen's University Belfast
10 Malone Road
Belfast BT9 5BN

Tel: 048 9097 6916
Email: s.cruise@qub.ac.uk

Dr Maria Lohan
Lecturer
School of Nursing and Midwifery
Queen's University Belfast
10 Malone Road
Belfast BT9 5BN

Tel: 048 9097 6555
Email: m.lohan@qub.ac.uk

What if I want to make a complaint?

If you are unhappy with any part of the study and do not wish to approach the research team or the school, please contact Professor Jean Orr, Head of School, School of Nursing and Midwifery, Queen's University Belfast.

Professor Jean Orr
Head of School
School of Nursing and Midwifery
Queen's University Belfast
Medical Biology Centre
97 Lisburn Road
Belfast BT9 7BL

Tel: 048 9097 2233
Email: j.orr@qub.ac.uk

Signed:
Dr Sharon Cruise, Researcher

Appendix 3.3: Information about the research (focus groups – young men aged 14 to 18 years)

Teenage men's attitudes and decision-making in relation to an unplanned pregnancy

You have already been a participant in the first part of this research by watching the IVD 'If I were Jack' and completing the online questionnaire associated with that CD. Thank you for your time and cooperation in this stage of the research.

You have now been randomly selected to take part in the next stage of the research, which involves participating in a focus group discussion. You will be again asked to give your consent to participate and offered the chance to withdraw without giving a reason.

This part of the research will mean a group of up to 10 young men meeting with a researcher for 40 minutes. The researcher will ask the participants to discuss the issues raised in the IVD, and to give their views on the value of the IVD. The conversation will be tape recorded so that at a later stage we can write out the discussion and see where the groups from the 12 schools agree and disagree. All identifying features of you and your school will be removed from the written version.

You were provided with an Information Sheet before watching the video and completing the online questionnaire that provided information about the study, and that Information Sheet was yours to take away with you. We will also remind you here what the study is about, and emphasise that this Information Sheet is also yours to take away. We will also remind you about other important issues that were raised in the first Information Sheet that we provided.

A reminder of what the study is about

Teenage women who have an unplanned pregnancy face serious emotional and practical problems as well risks to their health. The attitudes of male partners have a strong effect on how women think about the choices they must make about their pregnancy. The purpose of this study is to find out about the attitudes of teenage men to unplanned pregnancy so that we can help young men to think through the possible consequences of having sex. We also want to test a video presentation that is designed to help young men think about these issues.

Do I have to take part?

It is up to you to decide. We will describe the study and go through this Information Sheet, which we will then give to you. We will then ask you to sign a consent form to show you have agreed to take part. We will give you a copy of the consent form to keep. You can decide not to take part and you do not have to give a reason for saying no.

What if I decide to withdraw from the study?

You are free to withdraw at any time, without giving a reason. If you do withdraw, we will not use the data we have collected from you.

What if there is a problem?

If you are unhappy with anything that happens during the focus group session you can talk to your parents/guardian, or to the researchers, or to your teachers. We will deal with the issue immediately. If you show any signs of distress, we will inform your school counsellor. Of course you can withdraw from the study at any time, without giving a reason. You can also make a formal complaint if you wish (details of how to do this are set out at the end of this document).

Will my taking part in the study be kept confidential?

Because the research is taking place in school time, your classmates and teachers will probably realise you are taking part. Also, there will be other young men from your class who are taking part in the focus group, so they will know of your involvement in this part of the research, and during the focus group discussion they will be aware of some of your points of view (just as you will be aware of theirs). However, it will be agreed at the start of the focus group among all those taking part that we will be respecting the privacy and confidentiality of views shared during the focus group, and after completion of the focus group, the researchers will follow ethical and legal guidelines and keep all information privately and securely. **Only** the researchers will have access to the data.

We will listen to the tapes of the focus group interviews and write down what is said. We will not write down names or anything else that would identify any individual.

At the end of the study, all data resulting from the research (including the tapes and transcripts) will be stored for a minimum of five years and a maximum of 10 years in Queen's University Belfast. All data will be archived by year 10 in The UK Data Archive (UKDA) located in the University of Essex. This is a centre that specialises in keeping data securely so that other researchers can apply for ethical permission to use it in their own research.

What will happen to the results of the research study?

The results of the study will be published in research reports and in scientific journals. We will not publish anything that could be used to identify you or your school. We will send copies of reports and journal articles to your school so that you can read them if you want to.

Who has reviewed the study?

All research is looked at by an independent group of people, called a Research Ethics Committee, to protect your safety, rights, wellbeing and dignity. This study has been reviewed and given a favourable opinion by the Research Ethics Committee of the School of Nursing and Midwifery, Queen's University Belfast.

Further information and contact details

If you would like further information about the research, please contact Dr Sharon Cruise or Dr Maria Lohan.

Dr Sharon Cruise
Research Fellow
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Tel: 048 9097 6916
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Dr Maria Lohan
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10 Malone Road
Belfast BT9 5BN

Tel: 048 9097 6555
Email: m.lohan@qub.ac.uk

What if I want to make a complaint?

If you are unhappy with any part of the study and do not wish to approach the research team or the school, please contact Professor Jean Orr, Head of School, School of Nursing and Midwifery, Queen's University Belfast.

Professor Jean Orr
Head of School
School of Nursing and Midwifery
Queen's University Belfast
Medical Biology Centre
97 Lisburn Road
Belfast BT9 7BL

Tel: 048 9097 2233
Email: j.orr@qub.ac.uk

Signed:
Dr Sharon Cruise, Researcher

Appendix 3.4: Information about the research (parent/guardian)

Teenage men's attitudes and decision-making in relation to an unplanned pregnancy

We would like to invite your son to take part in a research study. In addition, we would like to invite you to take part. Before you decide whether you wish you and/or your son to take part, you need to understand why the research is being done, and what it would involve for both you and your son. Please take time to read the following information carefully.

Who is organising and funding the research?
The research is funded by the Crisis Pregnancy Agency, which was established in 2001 under the Health (Corporate Bodies) Act 1961. The Crisis Pregnancy Agency is mandated to prepare and oversee a strategy to provide for a reduction in the number of crisis pregnancies through educational and other services. The research will be conducted by a team of researchers from Queen's University Belfast and University College Dublin. The research project started in January 2008, and is due to be completed in January 2010.

What is the purpose of the study?
Teenage women who have an unplanned pregnancy face serious emotional and practical problems as well risks to their health. The attitudes of male partners have a strong effect on how women think about the choices they must make about their pregnancy. The purpose of this study is to find out about the attitudes of teenage men to unplanned pregnancy so that we can help young men to think through the possible consequences of having sex. We also want to test an IVD that is designed to help young men think about these issues. **However, we wish to emphasise and reassure you that the content of the IVD that is being used in the research does not contain any material that is sexually explicit.** It is more concerned about the social relationships, and decision-making processes, related to an unplanned pregnancy.

Why has my son been invited?
We are asking 600 young men aged between 14 and 16 years from approximately 12 schools to take part in the research. Your son has been invited because he is part of this age group, and his school is one that has agreed to facilitate the research.

Does my son have to take part?
It is up to you and him to decide. In the first instance, if you decide after having read this Information Sheet that you would prefer your son not to take part in this research, then you can indicate this by signing the attached 'opt-out' form and returning it to us in the stamped addressed envelope provided. We will then ensure that your son **is not** included in the research by informing his RSE teacher to withdraw him from participation in the

study. If, however, you are happy for your son to take part in the research, then we will also describe the study and go through a similar Information Sheet (which we will then give to your son) with him. We will then ask your son to sign a consent form to show that he has agreed to take part. We will give your son a copy of the consent form to keep. He can decide not to take part and he does not have to give a reason for saying no.

What if my son decides to withdraw from the study?
Your son is free to withdraw at any time, without giving a reason. If your son does withdraw, we will not use the data we have collected from him.

What will my son be asked to do if he takes part?
There are two parts in the research. We would like everyone to participate in Part one, and a smaller number of people at Part two.

Part one: If you agree to your son taking part at stage one he will be asked to fill in a questionnaire about his attitudes to pregnancy, being a father, and relationships between men and women. Then he will be asked to watch a short film (on an IVD) about a teenage man who has made his girlfriend pregnant (**to reiterate, there are no sexually explicit scenes in this film**). During the film, your son will be asked to complete an onscreen questionnaire about the choices faced by the young man. We will make sure that nobody can see what he is answering.

This should take no more than 45 minutes and will happen on school premises Part one will take place in his regular RSE class. Part two will take place directly afterwards.

Part two: A random selection of students will be chosen to participate in Part two, which is a focus group discussion. If your son is among the participants randomly selected to take part in the focus group, he will be again asked to give his consent to participate and offered the chance to withdraw without giving a reason. This part of the research will mean a group of up to 10 young men from each participating school meeting with a researcher for 40 minutes. The researcher will ask the participants to discuss the issues raised in the IVD and to give their views on the value of the IVD. The conversation will be tape recorded so that we can write out the discussion and see where the groups from the 12 schools agree and disagree. All identifying features of your son and his school will be removed from the written version.

Your son may offer to take part at stage one only or at both stage one and stage two.

What if there is a problem?
If your son is unhappy with anything that happens during the study he can talk to you, or to the researchers, or to his teachers. We will deal with the issue immediately. If he shows any signs of visible distress, we will inform the school counsellor. Of course he can withdraw from the study at any time, without giving a reason. He can also make a formal complaint if he wishes (details of how to do this are set out at the end of this document).

Will my son's taking part in the study be kept confidential?

Because the research is taking place in school time your son's classmates and teachers will probably realise he is taking part. However, only the researchers will have access to the data. We will follow ethical and legal guidelines and keep all information privately and securely. Your son will not be asked to put his name on the questionnaire. We will store the questionnaires and all other paper data in a locked filing cabinet in a secure building at Queen's University Belfast. Names of individuals or schools stored on a computer will be password protected and deleted at the end of the study. Paper data will be destroyed securely five years after the study ends.

We will listen to the tapes of the focus group interviews and write down what is said. We will not write down names or anything else that would identify any individual.

At the end of the study, all data resulting from the research (including the tapes and transcripts) will be stored for a minimum of five years and a maximum of 10 years in Queen's University Belfast. All data will be archived by year 10 in The UK Data Archive (UKDA) located in the University of Essex. This is a centre that specialises in keeping data securely so that other researchers can apply for ethical permission to use it in their own research.

Will I be asked to participate in any part of the study?

The final stage of the study involves obtaining feedback about the IVD that will be used in the present research to examine the attitudes of teenage men to unplanned pregnancy. This involves demonstrating the CD to groups of parents, and immediately afterwards holding focus group discussions with parents to elicit their views on its value and appropriateness as part of sexual and relationship education in secondary schools. If you would like to participate in this stage of the research study please provide your name, address and contact phone number on the final page at the end of this Information Sheet, and return it to the address provided. We will then contact you in due course to provide the date, time and venue of a focus group that you can attend.

What will happen to the results of the research study?

The results of the study will be published in research reports and in scientific journals. We will not publish anything that could be used to identify you, your son or his school. We will send copies of reports and journal articles to your son's school so that you and he can read them if you want to.

Who has reviewed the study?

All research is looked at by an independent group of people, called a Research Ethics Committee, to protect all participants' safety, rights, wellbeing and dignity. This study has been reviewed and given a favourable opinion by the Research Ethics Committee of the School of Nursing and Midwifery, Queen's University Belfast.

Further information and contact details

If you would like further information about the research, please contact Dr Sharon Cruise or Dr Maria Lohan.

Dr Sharon Cruise
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Dr Maria Lohan
Lecturer
School of Nursing and Midwifery
Queen's University Belfast
10 Malone Road
Belfast BT9 5BN

Tel: 048 9097 6555
Email:m.lohan@qub.ac.uk

What if I want to make a complaint?
If you and/or your son are unhappy with any part of the study and do not wish to approach the research team or the school, please contact Professor Jean Orr, Head of School, School of Nursing and Midwifery, Queen's University Belfast.

Professor Jean Orr
Head of School
School of Nursing and Midwifery
Queen's University Belfast
Medical Biology Centre
97 Lisburn Road
Belfast BT9 7BL

Tel: 048 9097 2233
Email: j.orr@qub.ac.uk

Signed:
Dr Sharon Cruise, Researcher

Appendix 3.5: Information about the research (interviews with health and education sector professionals)

Teenage men's attitudes and decision-making in relation to an unplanned pregnancy

We would like to invite you to take part in a research study. Before you decide whether you wish to take part, you need to understand why the research is being done, and what it would involve for you. Please take time to read the following information carefully. Talk to others about the study if you wish.

Who is organising and funding the research?
The research is funded by the Crisis Pregnancy Agency. The Crisis Pregnancy Agency is mandated to prepare and oversee a strategy to provide for a reduction in the number of crisis pregnancies through educational and other services. The research will be conducted by a team of researchers from Queen's University Belfast and University College Dublin. The research project started in January 2008, and is due to be completed in January 2010.

What is the purpose of the study?
Teenage women who have an unplanned pregnancy face serious emotional and practical problems as well risks to their health. The attitudes of male partners have a strong effect on how women think about the choices they must make about their pregnancy. The purpose of this study is to find out about the attitudes of teenage men to unplanned pregnancy so that we can help young men to think through the possible consequences of having sex. We also want to test a video presentation that is designed to help young men think about these issues.

Why have I been invited?
The research team received your contact details from the Advisory Group for the project (which includes key personnel from the Department of Education).

The first stage of the research involved development of the research tools used in the present study. The second stage involved data collection among 14 to 16-year-old Irish males using an online questionnaire, and an IVD with questions embedded within the programme which assessed the attitudes and decision-making processes of young men faced with a hypothetical situation in which the key character ('Jack') has made his girlfriend pregnant. Focus group discussions with a random selection of participants also allowed for further exploration of key issues raised through using the IVD. The final stage of the research involves an evaluation of the IVD that has been used in this study, and it is for this stage of the research that we are seeking your participation. In particular, we are interested in hearing your views about: 1) the suitability, 2) usability,

and 3) effectiveness/impact of the IVD used in the present research in facilitating RSE classes with young people. In order to ascertain your views, we will send you a copy of the IVD for you to examine, and we will then follow this up with a face-to-face interview during which time we will ask you a number of questions on the three issues mentioned above (i.e., suitability; usability; effectiveness/impact).

Do I have to take part?
It is up to you to decide. We will describe what will be required, and will go through this Information Sheet with you, allowing you time to ask any questions you may have. We will then ask you to sign a consent form to show you have agreed to take part. We will give you a copy of the consent form to keep. You can decide not to take part and you do not have to give a reason for saying no.

If you are willing to take part in the second stage of this research project, please complete the last page of this Information Sheet and return it to us in the attached stamped addressed envelope. On receipt of this, a member of the research team will be in contact to arrange for the IVD to be forwarded to you, and to confirm a suitable date, time and venue in order to conduct the interview. The interview should take no more than 30 minutes of your time.

What if I decide to withdraw from the study?
You are free to withdraw at any time, without giving a reason. If you do withdraw, we will not use the data we have collected from you.

What will I be asked to do if I take part?
In the first instance the research team will forward to you a copy of the audio-visual tool in order that you may view it. We will follow up this with a semi-structured interview that will be scheduled for a time that is convenient to you.

On the day of the interview the researcher will again explain the purpose and procedure of the interview, allowing the possibility to ask questions and emphasising the right to withdraw. You will then be asked to sign a consent form before the interview commences.

What if there is a problem?
If you are unhappy with anything that happens during the study you can discuss this with the researchers and we will deal with the issue immediately. Of course you can withdraw from the study at any time, without giving a reason. You can also make a formal complaint if you wish (details of how to do this are set out at the end of this document).

Will my taking part in the study be kept confidential?
As your name and contact details were provided to the research team by the Advisory Group, members of that group will be aware of your possible participation in the project. We will follow ethical and legal guidelines and keep all information privately and securely. **Only** the researchers will have access to the data. We will not write your name on the interview record sheet, but will provide you with a participant number. We will store all paper data in a locked filing cabinet in a secure building at Queen's University Belfast. Names of individuals or schools stored on a computer will be password protected and

deleted at the end of the study. Paper data will be destroyed securely five years after the study ends.

We will listen to the tapes of the interviews and write down what is said. We will not write down names or anything else that would identify any individual.

At the end of the study, all data resulting from the research (including the tapes and transcripts) will be stored for a minimum of five years and a maximum of 10 years in Queen's University Belfast. All data will be archived by year 10 in The UK Data Archive (UKDA) located in the University of Essex. This is a centre that specialises in keeping data securely so that other researchers can apply for ethical permission to use it in their own research.

What will happen to the results of the research study?
The results of the study will be published in research reports and in scientific journals. We will not publish anything that could be used to identify you. We will send copies of reports and journal articles to you so that you can read them if you want to.

Who has reviewed the study?
All research is looked at by an independent group of people, called a Research Ethics Committee, to protect your safety, rights, wellbeing and dignity. This study has been reviewed and given a favourable opinion by the Research Ethics Committee of the School of Nursing and Midwifery, Queen's University Belfast.

Further information and contact details
If you would like further information about the research, please contact Dr Sharon Cruise or Dr Maria Lohan.

Dr Sharon Cruise
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Queen's University Belfast
10 Malone Road
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Tel: 048 9097 6916
Email: s.cruise@qub.ac.uk

Dr Maria Lohan
Lecturer
School of Nursing and Midwifery
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10 Malone Road
Belfast BT9 5BN

Tel: 048 9097 6555
Email: m.lohan@qub.ac.uk

What if I want to make a complaint?
If you are unhappy with any part of the study and do not wish to approach the research team or the school, please contact Professor Jean Orr.

Professor Jean Orr
Head of School
School of Nursing and Midwifery
Queen's University Belfast
Medical Biology Centre
97 Lisburn Road
Belfast BT9 7BL

Tel: 048 9097 2233
Email: j.orr@qub.ac.uk

Signed:
Dr Sharon Cruise, Researcher

Queen's University Belfast

Teenage men's attitudes and decision-making in relation to an unplanned pregnancy

Educationalist evaluations of IVD (Interviews)

If you would like to take part in an evaluation of the IVD used in the above project, please provide your name, address and contact phone number below in order that we can forward the CD to you, and make contact with you to arrange an interview for a date/time that is convenient to you.

We thank you for your interest in this project.

Name: _____

Work Address: _____

_____

_____

_____

_____

Phone: _____

Please return the above sheet in the attached stamped addressed envelope.

Appendix 3.6: Participant consent form part 1 (Questionnaire 1 and IVD)

Queen's University Belfast

Title of Project: Teenage men's attitudes and decision-making in relation to an unplanned pregnancy

Names of Researchers: Dr Sharon Cruise, Dr Maria Lohan, Dr Peter O'Halloran, Dr Abbey Hyde and Dr Fiona Alderdice

Please initial box

1. I confirm that I have read and understand the information sheet dated ..... for the above study. I have had the opportunity to consider the information, to ask questions and have had my questions answered satisfactorily. ☐

2. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason, without my rights being affected. ☐

3. I understand that all data will be stored anonymously and that I or my school will not be able to be identified in any of the reports. ☐

4. I agree to take part in the study. ☐

Name of participant (PLEASE USE CAPITALS)	Date	Signature
Researcher	Date	Signature

OFFICE USE

Centre No.	
Participant No.	

Appendix 3.7: Participant consent form part 2 (focus group)

Queen's University Belfast

Title of Project: Teenage men's attitudes and decision-making in relation to an unplanned pregnancy

Names of Researchers: Dr Sharon Cruise, Dr Maria Lohan, Dr Peter O'Halloran, Dr Abbey Hyde and Dr Fiona Alderdice

Please initial box

1. I confirm that I have read and understand the information sheet dated ..... for the above study. I have had the opportunity to consider the information, to ask questions and have had my questions answered satisfactorily. ☐

2. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason, without my rights being affected. ☐

3. I understand that all data will be stored anonymously and that I or my school will not be able to be identified in any of the reports. ☐

4. I agree to take part in the study. ☐

Name of participant (PLEASE USE CAPITALS)	Date	Signature
Researcher	Date	Signature

OFFICE USE

Centre No.	
Participant No.	

Appendix 3.8: Parental/guardian opt-out form

Queen's University Belfast

Teenage men's attitudes and decision-making in relation to an unplanned pregnancy

Confidential

I have read the Information Sheet dated ..... about the above-named study, and I do not wish my son to be involved in this study.

Name: _____

Name of pupil(s): _____

Date: _____

Please return this form to us in the enclosed stamped addressed envelope as soon as possible. No further contact will be made.

Appendix 3.9: Participant consent form part 3 (teachers', parents', and health and education sector professionals' evaluation)

Queen's University Belfast

Title of Project: Teenage men's attitudes and decision-making in relation to an unplanned pregnancy

Names of Researchers: Dr Sharon Cruise, Dr Maria Lohan, Dr Peter O'Halloran, Dr Abbey Hyde and Dr Fiona Alderdice

Please initial box

1. I confirm that I have read and understand the information sheet dated ..... for the above study. I have had the opportunity to consider the information, to ask questions and have had my questions answered satisfactorily. ☐

2. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason, without my rights being affected. ☐

3. I understand that all data will be stored anonymously and that I or my school will not be able to be identified in any of the reports. ☐

4. I agree to take part in the study. ☐

Name of participant (PLEASE USE CAPITALS)	Date	Signature
Researcher	Date	Signature

OFFICE USE

Centre No.	
Participant No.	

Appendix 4: Advisory board

Martin Grogan
Health Service Executive (South), Cork

Rosie Toner
Former Counselling Director, Irish Family Planning Association, Dublin

Maire Morrissey
Project Manager, The Squashy Couch, Waterford

Sharon McGrath
Former National Coordinator, SPHE Support Service, Marino Institute of Technology, Dublin

Frances Shearer
RSE National Coordinator, Drumcondra Education Centre, Dublin

Appendix 5: Multinomial logistic regression tables

Appendix 5.1: Model 2 – Abortion versus other options

Table 36: Multinomial logistic regression: abortion (Model 2)

Beta coefficients, standard error, odds ratios and confidence intervals for multinomial logistic regression examining distal predictor variables with 'abortion' as reference category (N=312)

'Adoption' as reference category	'Keep the baby'			'Abortion'			'Leave it up to her'		
	β (SE)	Sig	OR (95% CI)	β (SE)	Sig	OR (95% CI)	β (SE)	Sig	OR (95% CI)
IPPS Pregnancy	0.74 (1.83)	0.687	2.09 (0.06–75.94)	0.22 (2.18)	0.919	1.25 (0.02–88.57)	2.60 (2.17)	0.230	13.48 (0.19–941.94)
IPPS Parenthood	4.32* (1.77)	0.015	75.42 (2.36–2415.07)	2.76 (2.07)	0.183	15.84 (0.27–921.53)	4.26* (2.09)	0.041	70.98 (1.19–4222.03)
Self-esteem	0.08 (1.17)	0.945	1.08 (0.11–10.71)	0.45 (1.36)	0.741	1.57 (0.11–22.59)	−1.47 (1.40)	0.294	0.23 (0.02–3.58)
Masculinity	0.40 (1.22)	0.743	1.49 (0.14–16.13)	1.95 (1.39)	0.161	7.04 (0.46–107.84)	0.94 (1.49)	0.528	2.55 (0.14–46.98)
Religiosity	−0.16 (0.57)	0.776	1.17 (0.39–3.55)	−1.99*** (0.67)	0.003	7.31 (1.98–27.06)	−0.57 (0.68)	0.403	1.77 (0.46–6.77)
Social class (ref=prof)									
Other	0.01 (0.66)	0.983	1.01 (0.28–3.68)	−0.60 (0.93)	0.517	0.55 (0.09–3.38)	0.04 (0.76)	0.955	1.04 (0.24–4.60)
Manual	0.84 (0.49)	0.086	2.31 (0.89–6.01)	0.90 (0.56)	0.109	2.47 (0.82–7.46)	0.50 (0.58)	0.391	1.64 (0.53–5.09)
Lower middle	0.96* (0.44)	0.029	2.60 (1.11–6.13)	0.77 (0.51)	0.130	2.16 (0.80–5.87)	0.60 (0.52)	0.249	1.82 (0.66–5.04)

Nagelkerke = 0.15

* p<0.05; ** p<0.01; *** p≤0.001

Appendix 5.2: Model 3 – Adoption versus other options

Table 37: Multinomial logistic regression: adoption (Model 3)

Beta coefficients, standard error, odds ratios and confidence intervals for multinomial logistic regression examining distal predictor variables with 'adoption' as reference category (N=312)

'Adoption' as reference category	'Keep the baby'			'Abortion'			'Leave it up to her'		
	β (SE)	Sig	OR (95% CI)	β (SE)	Sig	OR (95% CI)	β (SE)	Sig	OR (95% CI)
IPPS Pregnancy	0.52 (1.78)	0.770	1.68 (0.05–54.43)	−0.22 (2.18)	0.919	0.80 (0.01–57.05)	2.38 (2.12)	0.261	10.82 (0.17–690.41)
IPPS Parenthood	1.56 (1.63)	0.339	4.76 (0.19–116.70)	−2.76 (2.07)	0.183	0.06 (0.00–3.67)	1.50 (1.97)	0.447	4.48 (0.09–213.16)
Self-esteem	−0.37 (1.15)	0.747	0.69 (0.07–6.52)	−0.45 (1.36)	0.741	0.14 (0.01–2.17)	−1.92 (1.39)	0.166	0.15 (0.01–2.22)
Masculinity	−1.55 (1.13)	0.167	0.21 (0.02–1.92)	1.95 (1.39)	0.161	0.14 (0.01–2.17)	−1.02 (1.42)	0.473	0.36 (0.02–5.81)
Religiosity	1.83*** (0.56)	0.001	0.16 (0.05–0.48)	−1.99** (0.67)	0.003	0.14 (0.04–0.51)	1.42* (0.67)	0.035	0.24 (0.07–0.91)
Social class (ref=prof)									
Other	0.61 (0.83)	0.459	1.85 (0.36–9.39)	−0.60 (0.93)	0.517	1.82 (0.30–11.24)	0.64 (0.91)	0.478	1.90 (0.32–11.25)
Manual	-0.07 (0.43)	0.878	0.94 (0.40–2.17)	0.90 (0.56)	0.109	0.41 (0.13–1.22)	−0.41 (0.53)	0.438	0.66 (0.24–1.87)
Lower middle	0.19 (0.39)	0.635	1.20 (0.56–2.58)	0.77 (0.51)	0.130	0.46 (0.17–1.25)	−0.17 (0.48)	0.717	0.84 (0.33–2.14)

Nagelkerke = 0.15

* p<0.05; ** p<0.01

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