

**INFLUENCES ON SAFE SEX DECISION MAKING IN
YOUNG WOMEN**

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OVERVIEW

This thesis is presented in three parts. Part one is a literature review in which the empirical literature that has investigated the determinants of condom use in adolescents is reviewed and discussed in relation to the Extended Parallel Processing Model. Part two presents the qualitative empirical paper, which explores influences on the decision-making process around safe sex in young women. Part three represents a critical appraisal of the study undertaken. It contains reflections on the research process and evaluates the study in the light of good practice guidelines for qualitative research.

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PART 1: LITERATURE REVIEW

What are the determinants of condom use in adolescents and to what extent are these results understandable in terms of the Extended Parallel Processing Model?

Abstract

Young people are disproportionately affected by sexually transmitted diseases (STDs) and the number of diagnoses continues to rise. Condoms are the most effective way of preventing STD transmission but many young people continue to use them inconsistently. This review investigated the determinants of condom use in adolescents and discussed the findings in relation to the Extended Parallel Processing Model (EPPM) which seeks to explain the inconsistency in success rates of health promotion strategies and to provide a theoretical framework for the development of more successful ones. Sixty-five papers published between 1985 and 2006 were reviewed. The literature indicates that subjective norms for condom use, attitudes towards condom use, relationship context and self-efficacy are important determinants of condom use in adolescents. The literature around risk perception and knowledge of STDs as determinants of use are more mixed. It seems that the EPPM has had some success in predicting why some safe sex campaigns are successful, and others are not, and also in developing safe sex campaigns that lead to behavioural change. Its use as a model may be limited by its concept of condom use as an individual process.

Introduction

Recent research has consistently shown high rates of sexually transmitted diseases (STDs) in adolescents. Adolescents typically have elevated STD rates compared to other age groups, with young people in the UK being disproportionately affected by Chlamydia, Gonorrhoea and genital warts. The highest rates of Gonorrhoea in the UK are found in females aged 16 to 19 years old, and young men and women account for 56% and 74% of all Chlamydia diagnoses in men and women respectively (Health Protection Agency, 2005). Of concern is the fact that STD rates in the general population, and specifically young people, are continuing to rise. There was an overall rise of 2% in the number of STDs and other conditions diagnosed in genito-urinary medicine (GUM) clinics between 2003 and 2004 in the UK. Diagnosis of Chlamydia increased by 56% in women aged 16-19 years old between 2000 and 2004 (Health Protection Agency, 2005).

The rising rate of STD transmission and diagnosis is of concern because STDs have a number of long-term health implications, including pelvic inflammatory disease, infertility, ectopic pregnancy, cervical cancer and death (NICE, 2006; Roberts & Kennedy, 2006).

The elevated rates in young people appear to be due to a number of factors. Evidence suggests that adolescents are more likely to engage in high risk sexual behaviours such as unprotected sexual activity, to use condoms incorrectly or inconsistently, to have high-risk partners and to have multiple partners in a pattern of either casual sex or serial

brief monogamous relationships. Adolescent women are also more biologically susceptible to STD infection due to cervical immaturity (Chambers & Rew, 2003; Taylor-Seehafer & Rew, 2000).

Apart from sexual abstinence, the most effective way of preventing transmission of STDs is by using condoms when engaging in sexual behaviour (Sheeran, Abraham & Orbell, 1999). However, studies in many different countries have frequently indicated that only around 30%-50% of heterosexual young adults regularly use condoms (Agius, Dyson, Pitts, Mitchell & Smith, 2006; Burazeri, Roshi & Tavanxhi, 2004; De Visser & Smith, 1999; Roberts & Kennedy, 2006; Trani, Gnisci, Nobile & Angelillo, 2005). A recent study in the UK supports these findings, with 30% of its adolescent participants identifying that they failed to use contraception the first time that they had sex, and that nearly half of them did not use contraception every time they had sex (Widman, Welsh, McNulty & Little, 2006).

Since the widespread concern about the spread of HIV in the 1980s, much effort has gone into developing programs and strategies designed to increase the use of condoms (Sheeran et al., 1999). Research has focused on trying to gain an understanding of the factors which influence condom use to help facilitate the design of effective health promotion strategies. As such, a number of determinants of condom use have been studied in an attempt to identify targets for intervention. However, condom promotion programs have had inconsistent success as evidenced by the continued rising rates of STD infection.

One model that attempts to explain the inconsistency in success rates of health promotion programs and strategies is the Extended Parallel Process Model (EPPM) (Witte, 1992). Please see Figure 1.

According to this model, the evaluation of a health promotion message initiates two appraisals, which result in one of three outcomes. First, people appraise the threat of the hazard. The more individuals feel themselves to be susceptible to a threat, the more motivated they are to begin the second appraisal, which is an evaluation of the efficacy of the message's recommended response. If the threat is perceived as irrelevant or insignificant to them, then there is no motivation to process the message further and the individual will ignore the message. If the threat is perceived as both relevant and serious to them, then the efficacy of the messages recommended response is evaluated resulting in either danger control or fear control responses. The model proposes that when people perceive a serious and relevant threat, they become scared and their fear motivates them to take action to reduce the feeling of fear. The model suggests that perceived efficacy, which encompasses response efficacy (beliefs about the effectiveness of the recommended response) and self-efficacy (beliefs about one's ability to perform the recommended response), determines whether the individual becomes motivated to control the danger of the threat or to control their fear of the threat. High perceived efficacy and high perceived threat promote danger control responses such as adopting the recommended response to avert the hazard in the message. However, the model

Figure 1: The Extended Parallel Process Model (Witte, 1992, p 338)

suggests that people will engage in fear control processes when they do not think they are able to adopt the recommended response because they perceive it as too difficult, too time consuming or that it will not effectively avert the threat. When a person engages in fear control processes, this leads to fear control responses such as denial or avoidance, which results in them rejecting the message's recommended response to the hazard. The model also proposes that if no information is given in the message about the efficacy of the recommended response, then the individual will rely on past experience and prior beliefs to determine their perceived efficacy levels (Witte, 1992; Witte, Berkowitz, Cameron & McKeon, 1998b; Witte 1997).

This review intends to look at the research base concerning the determinants of condom use in adolescents and then to evaluate to what extent the results of this research fit with the EPPM. The EPPM model is focused on because it has not been evaluated in previous reviews of the predictors of condom use, and a few studies have indicated that it may be a useful theoretical framework for developing successful sexual health promotion campaigns (Green & Witte, 2006; Witte & Allen, 2000; Witte et al., 1998a). Firstly, the possible determinants of condom use that have been explored in the research literature will be discussed. Then, the EPPM and its relationship to other models that have been put forward to try to identify where and how health promotion strategies should target the population will be described. This will be followed by a discussion of how the findings of the research concerning the determinants of condom use are understandable in terms of the EPPM. Finally, methodological and conceptual issues, possible areas of future research and implications will be considered.

Search Strategy

The following search strategy was used to identify the literature to be reviewed. First, searches of both the PsycINFO and Web of Science computerized databases were conducted. Combinations of the terms, *condom*, *adolescents*, *Extended Parallel Process Model*, *sexually transmitted infection*, *sexually transmitted disease*, *young women*, *sexual risk taking*, *psychosexual behaviour*, *health behaviour*, *safe sex behaviour*, *sexual activity*, and *risk perception* were entered. The searches were filtered so that only articles in the English language and those published between 1985 and 2006 in peer-reviewed journals were selected. Articles from these searches that had the possibility of being relevant had their abstracts examined to determine the extent of relevancy. Second, further potentially relevant publications were identified through the reference sections of the original sourced articles. Finally, three experts in the field were asked to identify key papers that they thought might be relevant to the review. Articles believed to be potentially relevant following this process were located and read, resulting in a total of 65 articles being reviewed.

Determinants of Condom Use

A number of possible determinants of condom use in adolescents have been explored. These include individual factors such as perception of risk, knowledge about STDs, self-efficacy, attitudes towards condom use, and subjective norms, relational factors such as the relationship context, communication about condom use, and issues of gender and

power, and situational factors such as whether alternative forms of contraception are being used and alcohol use.

Individual Factors

Perceived Risk

Prominent in the literature is the concept of perceived risk. STD prevention programs are often developed from traditional health behaviour models, such as the health belief model (HBM), the theory of reasoned action (TRA), and the theory of planned behaviour (TPB) (Gerrard, Gibbons & Bushman, 1996; Kowalewski, Henson & Longshore, 1997; Wulfert & Wan, 1995). These models describe a series of variables thought to predict behaviour. Whilst these models vary in their predictions as to what the most important influences on behaviour change are, they agree that an individual needs to perceive themselves as being at risk for the negative consequences associated with contracting an STD, prior to behavioural changes to reduce this risk being made (Gerrard et al., 1996; Kowalewski et al., 1997). Therefore, STD prevention efforts aimed at increasing condom use have often focused on increasing people's perceptions of risk for STDs.

However, research findings concerning the role of perceived risk in determining condom use are mixed. A meta-analysis of the psychosocial correlates of heterosexual condom use comprising studies carried out between 1981 and 1996 concluded that perceived threat to HIV infection had only a small correlation with condom use (Sheeran et al., 1999). Similarly, a meta-analysis surveying the literature concerning the relation

between perceived vulnerability and AIDS-preventive sexual behaviour between 1986 and 1994, also concluded that there was little support for the hypothesis that perceptions of vulnerability to HIV motivate subsequent precautionary sexual behaviour (Gerrard et al., 1996). Albarracin and colleagues (2005) also found in their meta-analysis of the effectiveness of HIV-prevention interventions focusing on increasing condom use, that the least effective interventions were those that attempted to induce fear of HIV. In contrast, more recent studies have found perceived risk to be an important factor in determining condom use (De Visser & Smith, 1999; Green, Fulop & Kocsis, 2000; Reisen & Poppen, 1999). This finding has also been replicated in studies looking specifically at the determinants of condom use in adolescents (Bettinger, Adler, Curriero & Ellen, 2004; Ellen et al., 2002a; Ellen, Adler, Gurvey, Millstein & Tschann, 2002b; Kershaw, Ethier, Niccolai, Lewis & Ickovics, 2003).

These apparently conflicting findings might be explained in part by the different focus of the more recent research into perceived risk. These studies have used a different conceptualization of risk perception. They have focused on exploring risks posed by particular partners as opposed to assessing an individual's global perception of STD risk. Participants were asked, "How great a risk for transmission of HIV did you think that this partner posed to you?" rather than "What is the probability that you will be infected with HIV at some time in your life?" (Reisen & Poppen, 1999). Green and colleagues (2000) found that women were using individual assessments of risk rather than generalised assessments of risk when deciding whether to use a condom with a partner.

Interestingly, research suggests that there is a misperception of sexual risk among young women and that they often underestimate their level of STD risk (Bettinger et al., 2004; Ellen, Vittinghoff, Bolan, Boyer & Padian, 1998; Roberts & Kennedy, 2006). Kershaw and colleagues (2003) found in their study of 411 female adolescents in the USA, that of those engaging in high-risk behaviour, for example, having unprotected sex with multiple partners, 65% believed that their behaviour was only slightly or not at all risky. Only 11% of the sample of adolescent girls in Ethier and colleagues' study believed that there was at least some chance of getting an STD, despite the fact that at least a third reported a previous STD diagnosis and a quarter were diagnosed with an STD during the study period (Ethier, Kershaw, Niccolai, Lewis & Ickovics, 2003).

Knowledge about STDs

One of the ways that sexual health promoters have frequently sought to raise peoples' perceptions of risk for STDs is by increasing their knowledge levels of the routes of transmission, symptoms and long-term effects of STDs. It has been assumed that STD knowledge determines condom use via the role it plays in perception of risk. Again, evidence for this is mixed. Some studies have concluded that STD knowledge is related to condom use (Burazeri et al., 2004; Trani et al., 2005), whereas others have found that it is not an important determinant (Hardeman, Pierero & Mannetti, 1997; Sheeran et al., 1999; Williams, Norris & Bedor, 2003). A meta-analysis of the effectiveness of HIV-prevention interventions focusing on increasing condom use found that provision of information had a positive influence on behaviour only when accompanied with active, behavioural strategies (Albarracin et al., 2005). However, even researchers who have concluded that STD knowledge is not a key determinant of condom use, suggest that a

certain level of knowledge and perception of risk is necessary for individuals to take appropriate action. Of concern is the fact that the literature has consistently shown that adolescents have low rates of STD knowledge, particularly about STDs other than HIV. This finding has been replicated in studies in many different countries (Agius et al., 2006; Clark, Jackson & Allen-Taylor, 2002; Downs, Bruine de Bruin, Murray & Fischhoff, 2006; Nockels & Oakeshott, 1999).

Self-efficacy

Another determinant of condom use explored in the research is self-efficacy. Self-efficacy can be conceptualised in terms of people's level of belief in their ability to perform a behaviour (Sheeran et al., 1999). In terms of condom use, this relates to confidence in negotiating use of condoms with a partner and confidence in ability to use a condom successfully so that it prevents STD infection. In Sheeran and colleagues meta-analysis of the psychosocial correlates of heterosexual condom use, they found that self-efficacy had a medium to strong effect size (Sheeran et al., 1999). Another study found that consistent condom users had stronger feelings of self-efficacy for condoms than inconsistent users (Gebhardt, Kuyper & Greunsvan, 2003). Freimuth and colleagues also found that the more respondents believed they could successfully use condoms, the more likely they were to use them (Freimuth, Hammond, Edgar, McDonnald & Fink, 1992).

Recent studies have looked at situation-specific self-efficacy. De Visser and Smith (2001) found that event-specific self-efficacy was a better predictor of condom use than event-independent self-efficacy. Murphy and colleagues (Murphy, Stein, Schlenger & Maibach, 2001) also investigated a multidimensional model of self-efficacy that accounts for both the

situation in which the behaviour occurs and the level of challenge in that situation. They found that this provided the best fit for their sample in terms of predicting condom use as opposed to models which accounted for just a single efficacy variable, considered the situation only or considered the level of challenge only.

Attitudes towards condoms

Researchers have also looked at whether attitudes towards condoms are a determinant of their use. It has consistently been found that positive attitudes towards condoms, for example, 'condoms demonstrate responsibility', are a reliable predictor of condom use, whilst negative attitudes towards condoms, for example, 'condoms reduce pleasure', are likely to result in their not being used (Albarracin et al., 2005; Albarracin, Johnson, Fishbein & Muellerleile, 2001; Fazekas, Senn & Ledgerwood, 2001; Gebhardt et al., 2003; Hammer, Fisher, Fitzgerald & Fisher, 1996; Pilkington, Kern & Indest, 1994; Sheeran et al., 1999). Interestingly, a study carried out by Cooper and colleagues (Cooper, Agocha & Powers, 1999) found that users of condoms for pregnancy prevention had more positive attitudes towards condoms than those who used condoms for STD prevention and non-users.

Subjective norms for condom use

A perception of subjective norms for condom use, people's perceptions of social pressure to perform a behaviour, has also been indicated as an important determinant in the literature (Albarracin et al., 2005; Albarracin et al., 2001; Crosby et al., 2000; Fazekas et al., 2001; Gebhardt et al., 2003; Lear, 1995; Sheeran et al., 1999; Wulfert & Wan, 1995). It seems that if adolescents believe that their friends are having sex without

condoms, they may be more likely not to use condoms when they have sex. However, if they perceive that their peers are using condoms and that their peers would want them to use a condom, then they will be more likely to do so. Albarracin and colleagues found that HIV-prevention interventions that focused on increasing the expectation that important others think that one should use a condom were most effective when the target audience was aged under twenty-one. They recommended the use of peer-oriented approaches to promote condom use for adolescents (Albarracin et al., 2005).

Relational Factors

The relationship context

Research has also shown the relationship context is an important factor in determining condom use. Many studies demonstrate that condom use is determined by type of relationship, whether the partner is considered to be a casual partner or a long-term partner. Condoms are more likely to be used with casual partners than long-term partners in both adolescents and adults (Gebhardt et al., 2003; Hammer et al., 1996; Lansky, Thomas & Earp, 1998; Lear, 1995; Lescano, Vazquez, Brown, Litvin, & Pugatch, 2006; Misovich, Fisher & Fisher, 1997; Niccolai et al., 2004; Plichta, Weisman, Nathanson, Ensminger & Robinson, 1992). One study found that in condom use terms, a new adolescent relationship required less than a month to be considered an established relationship (Fortenberry, Wanzhu, Harezlak, Katz & Orr, 2002). It has been suggested this may relate to decreasing levels of perceived STD risk due to increased knowledge about the partner, an increasing desire to attain intimacy and trust as the relationship progresses, and the use of incorrect heuristics such as *known-partners-are-*

safe-partners (Bauman & Berman, 2005; Gebhardt et al., 2003; Hammer et al., 1996; Misovich et al., 1997; von Sadvoszky et al., 2003).

Communication about condom use

Communication about condom use between partners has also been found to be an important determinant of use (Davies et al., 2006; De Visser & Smith, 1999; De Visser & Smith, 2001; Hammer et al., 1996; Sheeran et al., 1999; Shoop & Davidson, 1994; von Sadvoszky et al., 2003; Widman et al., 2006). It seems that adolescents who are more open sexual communicators, discuss condom use with their partner and reach an agreement to use condoms, are more likely to report using condoms.

Issues of gender and power

Research has indicated that in terms of determinants of condom use, the relationship context of adolescents, like adults, is heavily influenced by issues related to gender and power. Authors have explored the issue of there being an inequality in status and power between men and women which is also reflected in the area of sexual behaviour (Amaro, 1995; Crawford & Popp, 2003; Crosby et al., 2000; De Visser & Smith, 2004; Holland, Ramazanoglou, Scott, Sharpe & Thomson, 1990; Kirkman, Rosenthal & Smith, 1998; Lear, 1995; Misovich et al., 1997; Van Roosmalen, 2000). Holland and colleagues (1990) have written about condom use not being a practical question about dealing with risk, but rather the outcome of negotiation between potentially unequal partners. A study by Tschann and others (Tschann, Adler, Millstein, Gurvey & Ellen, 2002), found adolescents who had more power than their partners in the domain of emotional intimacy were more likely to get their way about condom use. In their study, men

reported greater emotional and decision-making power than their partners compared with young women. Bryan and colleagues concluded that women with high levels of both acceptance of sexuality and control over the encounter were more likely to have the behavioural and negotiation skills necessary to facilitate condom use (Bryan, Aiken & West, 1997). Other studies have found that women find it difficult to negotiate condom use (De Visser, 2005; Holland et al., 1990; Misovich et al., 1997; Widman et al., 2006). A common discourse is that men are expected to seek sex whereas women are not and as such women have to justify their sexual experiences as aspects of love, intimacy and commitment to avoid being labelled as promiscuous (Kirkman et al., 1998; Van Roosmalen, 2000). Kirkman and colleagues (1998) suggest that the safe sex discourse is incompatible with the romantic narrative as unprotected sex is an indication of trust in a partner and asking for condoms to be used implies that they are not in a committed relationship.

Situational Factors

Alternative forms of contraception

Another determinant of condom use is whether an alternative form of contraception is being used. Studies have found when women are taking the contraceptive pill, they are less likely to use condoms or use them inconsistently (Davies et al., 2006; De Visser & Smith, 1999; De Visser & Smith, 2001; Gebhardt et al., 2003; Hammer et al., 1996; Plichta et al., 1992). Grady and colleagues found women rank pregnancy prevention as the single most important characteristic of contraception, and had more favourable perceptions about the contraceptive pill than other methods. In addition, in their study,

both men and women believed condoms were less effective than the pill at preventing pregnancy (Grady, Klepinger & Nelson-Wally, 1999). Williams and colleagues also found the adolescents in their study were more concerned about pregnancy risk than HIV/STD risk (Williams et al., 2003).

Influence of alcohol or drugs

The influence of drink or drugs increases the likelihood condom use will not take place (Gold & Karmiloff-Smith, 1992; Roberts & Kennedy, 2006; Sheeran et al., 1999; von Sadovszky et al., 2003). Freimuth and others (1992) in their study of college students found the use of alcohol decreased the likelihood that communication about condom use took place. Maisto and colleagues (2004) had a similar finding and also concluded that a moderate intake of alcohol affects women's motivation to have safe sex.

In summary, the research indicates that subjective norms for condom use, self-efficacy, attitudes towards condom use, relationship context and situational factors like alcohol use are important determinants of condom use in adolescents. The literature around risk perception and knowledge of STDs as determinants of use is more mixed. Researchers have concluded that a level of risk perception and STD knowledge is necessary, although not sufficient, as a determinant of condom use in adolescents.

The Extended Parallel Process Model

Research has shown that health promotion strategies based on theoretical guidance are more successful and cost-effective than those that are not (Sheeran et al., 1999; Witte,

1997). A number of health behaviour models have been utilised by those seeking to develop sexual health promotion strategies. These include, the health belief model (HBM), theory of reasoned action (TRA), theory of planned behaviour change (TPB), Social Learning/Cognitive Theory (SCT), and the AIDS Risk Reduction Model (ARRM) (Gerrard et al., 1996; Kowalewski et al., 1997; Sheeran et al., 1999; Wulfert & Wan, 1995). Whilst these models have proved useful in explaining some areas of health behaviour, they have proved less useful in developing successful sexual health strategies around promoting condom use (Green & Witte, 2006). Fear appeals are one way in which sexual health promoters have sought to promote self-protective behaviours to reduce STD transmission (Green & Witte, 2006). Fear appeals are persuasive messages designed to elicit fear in people by describing the negative things that will happen to them if they do not do as the message recommends (Witte, 1992). Although campaigners and researchers, particularly in Western countries, often view fear appeals negatively and believe that they are ineffective, research has shown they can lead to behavioural change (Green & Witte, 2006; Witte & Allen, 2000).

As outlined in the introduction, the Extended Parallel Process Model (See Figure 1) seeks to explain the inconsistency in success rates of health promotion strategies. It also aims to provide a theoretical framework for the development of more successful health promotion strategies by outlining how and why some fear appeals are successful and others are not (Witte, Cameron, Lapinski & Nzyuko, 1998a).

The EPPM suggests health promotion messages work when they *both* lead people to perceive themselves as being susceptible to a serious threat *and* to perceive themselves

as able to perform the effective recommended response (Witte et al., 1998a). The high-perceived severity and susceptibility to the threat motivates people to act, and high-perceived efficacy directs appropriate action (Witte et al., 1998a). This theoretical framework would suggest that perception of risk, positive attitudes towards condoms in terms of their ability to prevent STD infection, and self-efficacy for initiating and carrying out condom use, should emerge from the literature as important determinants of condom use in adolescents.

The research does seem to show that positive attitudes towards condoms and self-efficacy for initiating and carrying out condom use are important determinants of adolescent condom use (Albarracin et al., 2001; De Visser & Smith, 2001; Fazekas et al., 2001; Gebhardt et al., 2003; Freimuth et al., 1992; Hammer et al., 1996; Murphy et al., 2001; Pilkington et al., 1994; Sheeran et al., 1999). As previously discussed, the research concerning risk/susceptibility perception is a bit more mixed, with some studies indicating that it is an important determinant (Bettinger et al., 2004; Bryan et al., 1997; De Visser & Smith, 1999; Ellen et al., 2002a; Ellen et al., 2002b; Green et al., 2000; Kershaw et al., 2003; Reisen & Poppen, 1999; Trani et al., 2005), but not others (Gerrard et al., 1996; Sheeran et al., 1999). More recent studies looking at situation specific and partner specific risk as opposed to global risk perception for STDs have found risk perception to be an important determinant of condom use in adolescents (Bettinger et al., 2004; Bryan et al., 1997; Ellen et al., 2002a; Ellen et al., 2002b; Kershaw et al., 2003; Trani et al., 2005). In a study looking at HIV/AIDS prevention campaigns in Kenya in terms of the EPPM, Witte and colleagues also found that campaigns that emphasized global susceptibility to STDs as opposed to self-susceptibility, were less successful in

promoting stronger levels of perceived susceptibility in individuals (Witte et al., 1998a). This would seem to fit with findings from the risk literature around determinants of condom use.

However, the EPPM does not fully encompass other research findings in this area. The finding that subjective norms for condom use are an important determinant of use does not fit with the EPPM. The EPPM is an individual model, not one of joint behaviour, and as such does not address the relational component of condom use which has been shown to be important. In addition, the EPPM does not appear to consider situational factors which the literature has also indicated to be significant. Both relational and situational factors of a sexual encounter affect an individual's perception that they are susceptible to contracting an STD and on their perception of themselves as able to ensure that correct condom use takes place.

There is some evidence the EPPM framework can be used to predict which safer sex campaigns might be effective and which might not (Green & Witte, 2006; Witte & Allen, 2000; Witte et al., 1998a). Witte and colleagues (1998b) have developed a fear appeal campaign based on the EPPM to decrease the spread of genital warts (or HPV, the Human Papillomavirus). Female college students were presented with either a high-threat message or a generic low-threat message on genital warts followed by an immediate post-test questionnaire and then a two-week follow up questionnaire. The questionnaires were designed to assess perceived severity, perceived susceptibility, fear, efficacy, danger control responses (including condom related behaviours) and fear control responses. The study found the young women exposed to the high-threat

campaign message with high efficacy perceptions had more positive follow-up attitudes towards condoms, stronger intention to use condoms, more condom-related behaviours and greater condom-related behaviour changes than those exposed to the low-threat message or those exposed to the high-threat message with low efficacy perceptions.

Conclusions

Summary of findings

The research appears to indicate that subjective norms for condom use, self-efficacy, attitudes towards condom use, relationship context and situational context are important determinants of condom use in adolescents. The literature around risk perception and knowledge of STDs as determinants of use are more mixed but more recent studies looking at situation and partner-specific perceptions of risk, as opposed to global risk perceptions, have indicated that this is an important determinant. Researchers have concluded that a level of risk perception and STD knowledge is necessary, although not sufficient, as a determinant of condom use in adolescents.

In terms of how these findings are understandable in terms of the EPPM, the EPPM seeks to explain the inconsistency in success rates of health promotion strategies and to provide a theoretical framework for the development of more successful health promotion strategies. The EPPM suggests health promotion messages work when they both lead people to perceive themselves as being susceptible to a serious threat and to perceive themselves as able to perform the effective recommended response. This

theoretical framework would suggest that perception of risk, positive attitudes towards condoms in terms of their ability to prevent STD infection, and self-efficacy for initiating and carrying out condom use, should emerge from the literature as important determinants of condom use in adolescents. The research reviewed in this paper indicates that these are important determinants of condom use in adolescents. However, other findings of the research in this area, the importance of subjective norms for condom use, relational and situational factors, appear not to be incorporated in to the EPPM. As such, the research findings concerning the determinants of condom use in young women are not entirely understandable in terms of the EPPM.

Therefore, whilst it seems that the EPPM framework has had some success in predicting why some safe sex campaigns are successful, and others are not, and in developing safe sex campaigns that lead to behavioural change, its use as a model may be limited by its conception of condom use as an individual process rather than one that is at least partly determined by social and relationship context and situational factors.

Methodological Issues

There are a number of methodological issues to consider in relation to the literature that has been reviewed. Firstly, many of the studies relied on self-reported sexual behaviour. It has been proposed that self-reports of sexual behaviour can be problematic in terms of validity and reliability as a result of participants distorting the information that they give. Participants may wish to present themselves in a positive light and therefore embellish or withhold information, or report what they believe the researchers want to hear. Whilst

this is a potential difficulty with all self-report methods, it has been suggested this may be more of a concern when individuals are disclosing more private information, like sexual behaviour (Gerrard et al., 1996).

Many of the studies that used quantitative methodologies were cross-sectional in design with determinants and condom use behaviour measured concurrently. Such studies are only able to indicate that there is a relationship between the two variables although findings were often interpreted by the authors as indicating a causal relationship. Studies of longitudinal or prospective design provide more certainty in concluding that there is a causal relationship between the two variables.

Many of the quantitative studies had small sample sizes, which limits the statistical power to detect associations between variables. The participants were also commonly homogeneous in terms of ethnicity and socioeconomic background and recruited from either sexual health clinics or further education establishments in the USA which limits the generalizability of the findings to the general population.

There were only eight studies reviewed that used a qualitative methodology. The samples were more varied in terms of participant's ethnicity, cultural and socioeconomic background than the quantitative studies. However, as with the quantitative studies, participants were often recruited from education establishments or sexual health clinics.

Only two of the studies were explicit in the method of qualitative analysis that they used. It was not clear with some of the studies whether credibility checks had been carried out

and a lack of raw data in some of the papers meant that the findings were not grounded in examples, making difficult to evaluate the findings.

Implications for future research

This review highlights a number of possible areas of future research. As the research has shown that partner-specific risk, relationship context, self-efficacy and attitudes towards condoms are important factors in determining condom use, research is needed in to these areas to understand them further so that more appropriately targeted campaigns can be developed.

Studies that use prospective designs so that causal relationships can be examined and studies utilising qualitative methodologies that allow meanings in this complex area of human behaviour to be explored would be particularly useful in helping to consider why some people always use condoms, why some people never use condoms and why some people use condoms inconsistently.

Two studies have suggested that safe sex campaigns guided by the EPPM could be successful in helping to promote condom use (Witte et al., 1998a; Witte et al., 1998b). Further studies that evaluate the efficacy of condom promotion strategies guided by the EPPM and exploration of why these campaigns are, or are not, successful will be useful in evaluating whether this model is one that should be utilised for condom promotion campaigns.

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PART 2: EMPIRICAL PAPER

Influences on Safe Sex Decision Making in Young Women

Abstract

This qualitative study explored influences on the decision-making process around safe sex in young women focusing on risk perceptions and the context of the sexual encounter. Semi-structured interviews were conducted with twelve young women aged seventeen to eighteen years old. The interview transcripts were analysed using Interpretative Phenomenological Analysis (IPA). Participants considered sexually transmitted diseases as being of secondary concern to them and were inconsistent in their use of condoms. This was due to a number of inter-related factors: perceived risk, compensatory behaviours, individual beliefs, situational factors, relationship context, influence of others outside the sexual relationship and issues related to gender. The implications for future research and developing intervention programmes are discussed.

Introduction

Sexually transmitted diseases (STDs) are a major public health concern because of their long term health implications which include pelvic inflammatory disease, infertility, cervical cancer, ectopic pregnancy and death (NICE, 2006; Roberts & Kennedy, 2006).

Concern about the levels of STDs in young people is increasing as figures demonstrate rising rates in this age group. Young women in particular are being disproportionately affected. In the UK, 61% of new HIV cases in young people were women, the highest rates of gonorrhoea and genital warts were found in females aged 16 to 19 years old, and diagnoses of Chlamydia increased by 56% in women in the same age group between 2000 and 2004 (Health Protection Agency, 2005).

Studies indicate only around 30-50% of heterosexual young adults regularly use condoms (Agius, Dyson, Pitts, Mitchell & Smith, 2006; Burazeri, Roshi & Tavanxhi, 2004; De Visser & Smith, 1999; Roberts & Kennedy, 2006; Trani, Gnisci, Nobile & Angelillo, 2005) even though, apart from sexual abstinence, this is the most effective way of preventing transmission (Sheeran, Abraham & Orbell, 1999). A study in the UK (Widman, Welsh, McNulty & Little, 2006) found that nearly half of the adolescent participants did not use contraception every time they had sex.

Research has therefore focused on trying to gain an understanding of the factors which influence condom use. The variables predicted by health behaviour models, such as the health belief model (HBM), theory of reasoned action (TRA), theory of planned

behaviour change (TPB), Social Learning/Cognitive Theory (SCT), and the AIDS Risk Reduction Model (ARRM), as being important influences have been the focus of study. Findings indicate that subjective norms for condom use (Albarracin, Johnson, Fishbein, & Muellereleile, 2001; Fazekas, Senn, & Ledgerwood, 2001; Gebhardt, Kuyper, & Greunsvan, 2003; Sheeran et al., 1999; Wulfert & Wan, 1995), attitudes towards condoms (Albarracin et al., 2001; Fazekas et al., 2001; Gebhardt et al., 2003; Hammer, Fisher, Fitzgerald & Fisher, 1996; Pilkington, Kern & Indest, 1994; Sheeran et al., 1999), self-efficacy (De Visser & Smith, 2001; Freimuth, Hammond, Edgar, McDonald & Fink, 1992; Gebhardt et al., 2003; Murphy, Stein, Schlenger & Maibach, 2001; Sheeran et al., 1999) and situational factors such as use of alternative forms of contraception, condom availability and substance use (Davies et al., 2006; De Visser & Smith, 1999; De Visser & Smith, 2001; Freimuth et al., 1992; Gebhardt et al., 2003; Gold & Karmiloff-Smith, 1992; Hammer et al., 1996; Maisto, Carey, Carey, Gordon & Schum, 2004; Plichta, Weisman, Nathanson, Ensminger & Robinson, 1992; Roberts & Kennedy, 2006; Sheeran et al., 1999; Von Sadvoszky et al., 2003) are important determinants of condom use in adolescents.

The literature around risk perception and knowledge of STDs as determinants of use is more mixed. Two meta-analyses concluded perceived threat to HIV infection had only a small correlation with condom use (Gerrard, Gibbons & Bushman, 1996; Sheeran et al., 1999). However, studies looking at situation and partner-specific perceptions of risk, as opposed to global risk perceptions which are currently identified as a central variable in existing health behaviour models, have indicated this is an important determinant

(Bettinger, Adler, Curriero & Ellen, 2004; Ellen et al, 2002a; Ellen, Adler, Gurvey, Millstein & Tschann, 2002b; Green, Fulop & Kocsis, 2000; Reisen & Poppen, 1999).

Studies of the determinants of condom use aim to help facilitate the design of effective health promotion strategies as to date these have had inconsistent success. Many health promotion programs have been based upon theories of health behaviour. Research has shown whilst social cognition theories of health behaviour predict some risk behaviours well, they seem less able to predict condom use with much of the variance in behaviour remaining unaccounted for (Chambers & Rew, 2003; De Visser & Smith, 2001; Green et al., 2000). Some researchers have identified that one of the major drawbacks of these models are they fail to explain inconsistent condom use over time and fail to capture the complex nature of sexual encounters in that they focus on an individual rather than the interplay between two partners (Bauman & Berman, 2005; Bearinger & Resnick, 2003; Green et al., 2000). Several authors have written about the importance of the relationship context and different cultural expectations of men and women's sexual behaviour in determining condom use (Amaro, 1995; Crawford & Popp, 2003; De Visser, 2005; Gebhardt et al., 2003; Holland, Ramazanoglou, Scott, Sharpe & Thomson, 1990; Kirkman, Rosenthal & Smith, 1998; Lear, 1995; Plichta et al., 1992; Van Roosmalen, 2000; Widman et al., 2006).

Research Aims

In view of these findings, the main aim of the present study was to explore the influences on the decision making processes in young women in the UK around safe sex

focusing on risk perceptions and the context of the sexual encounter. Given the relative lack of success of safe sex health promotion strategies, the study also wanted to document participants' views as to what could be done to help keep young women safe from STDs.

The study aimed to investigate the following questions:

1. What is their current behaviour in terms of condom use?
2. What are their perceptions of STD risk?
3. What influences risk perceptions?
4. What are the influences on condom use behaviour?
5. What are their recommendations for keeping young women safe from STDs?

Gaining a greater understanding of these areas will help inform the design of health promotion strategies to increase the use of condoms and reduce the transmission of STDs in the UK population. Much of the research to date has taken place in clinic or college settings in the USA, and so a study of a community-based population in the UK will add to knowledge in this area.

Rationale for Approach

Given the complexity of this area of behaviour and the exploratory nature of the study, a qualitative approach is most appropriate. Interpretative Phenomenological Analysis (IPA) was chosen as the method of analysis and framework for a number of reasons.

Firstly, it provides a structured method for the systematic analysis of data. Secondly, it is

a suitable approach for when a researcher is trying to find out how individuals perceive the particular situations they are facing and when the area is one that is complex and/or concerned with process. IPA is an appropriate method of analysis when the research questions are broad and the aim is to explore an area flexibly and in detail (Smith & Osborn, 2003). It has been widely utilised as a method of qualitative analysis in the health psychology field (Smith, 2004).

Method

Ethics

Ethical approval was granted by University College London (UCL) ethics committee (See Appendix A).

Participants

Inclusion Criteria

The criteria for inclusion in the study were: female, aged sixteen to eighteen years old, heterosexual, sexually active, and able to speak and understand sufficient English to be able to take part in the interview without an interpreter.

Recruitment Procedure

Initial contacts were made via an advertisement placed on a teen website, approaching schools and further education colleges in London, informing first year psychology

students about the study in a lecture and registering the study on the UCL Subject Pool website. Participants were recruited through a method called 'snowballing' which operates by asking each respondent to name one or two other people who fit the research criteria (Barker, Pistrang & Elliott, 2002).

Participants recruited through the snowballing method were approached by the respondent who suggested them. These participant recruiters asked their contacts if they might be interested in taking part, and if their contact details could be passed on to the researcher. Participants recruited through the first year psychology lectures at UCL and the UCL Subject Pool website contacted the researcher by email. The researcher then contacted the potential participant to explain the nature of the study and what taking part would involve. If the participant felt they still wanted to take part then a time to meet was arranged. At this meeting the participants were given a participant information sheet (see Appendix B) and a consent form (see Appendix C).

Characteristics of the Sample

Twelve participants took part in the study (see Table 1).

Table 1: Participant Characteristics

Participant Number	Age	Ethnicity	Employment status	Relationship Status	Number of sexual partners	Past condom use	Current condom use
1	18	White British	Unemployed	Single	4	Sometimes	N/A
2	18	White European	Employed	Engaged	4	Sometimes	No
3	17	White British	Employed	Relationship	1	No	No
4	18	White European	Student	Relationship	1	Sometimes	No
5	18	White European	Student	Relationship	1	Sometimes	No
6	18	White British	Student	Relationship	1	Yes	Yes
7	18	White British	Student	Single	7	Sometimes	N/A
8	18	Black British	Student	Relationship	1	Sometimes	Yes
9	18	White British	Employed	Single	2	Sometimes	N/A
10	18	White British	Student	Relationship	1	Sometimes	No
11	17	White British	Unemployed	Relationship	1	Sometimes	Yes
12	17	Black British	Unemployed	Relationship	3	Sometimes	No

Procedure

Participants were offered the choice of meeting either in their home or at UCL. The aim was for interviews to be held in a private setting in which they would feel comfortable talking about their sexual experiences.

Upon meeting each participant, the information sheet and consent form were read and participants were given the opportunity to ask questions. Participants were reassured of the confidentiality of the interviews and their anonymity. It was emphasized that taking part was voluntary and they could withdraw from the study at any time and any information held about them would be destroyed.

Interviews lasted between fifty minutes and one and a half hours and were tape-recorded. At the end, participants were given further opportunity to ask questions and informed they would be contacted in a few months to arrange feedback of the results. Participants were offered details of sexual health clinics across London.

Interview tapes were transcribed verbatim and analysed using IPA. Any identifying information about the participant was removed during the transcription process to ensure confidentiality.

Following the analysis, participants were contacted to arrange feedback of the results. Results of the analysis were fed back via individual interview or email and participants

were invited to comment on the findings. Once feedback had taken place, participants were paid £10 to reimburse them for their time and travel costs.

Interview schedule

Interviews were semi-structured with an interview schedule to guide the interview and use as a prompt. The interview guide was designed specifically for the study and informed by relevant research (see Appendix D).

The following questions were covered:

- ‘Warm-up’ questions to enable participants to feel comfortable in talking about sexual matters and their sexual experiences. These involved asking about the sex education they had received and describing their first sexual encounter.
- about specific sexual encounters when the participant had, and had not, used a condom with the aim of establishing why condom use had, or had not, taken place.
- about the types of people likely to present a risk to the participant and those they do not feel present a risk.
- about their level of risk of contracting an STD and how this compares to others.
- about participants’ level of knowledge about STDs and where this knowledge had come from with the aim of establishing whether this contributed to their risk perception.
- to establish how participants feel about discussing condom use with partners and their attitudes towards condoms.

- to establish whether participants have had an STD test, how they made the decision to do this and how they felt about testing.
- to establish what participants felt would be the best way that young women could be helped to keep themselves safe from STDs.

These areas were covered in each interview in varying degrees of detail. The interview schedule was used to ensure that key areas in relation to the research questions were examined but used flexibly so that additional areas of interest could be explored if these were raised.

Two pilot interviews were carried out as a way of assessing the structure and coverage of the schedule. As a result, some changes were made. These included altering some questions so they were more open-ended and having an additional warm-up question to provide the participants with a language for talking about sexual activities. In addition, further questions on the areas of partner's attitudes, discussion about sexual history, discussion about condom use and STD testing were included. As the pilot interviews did not differ substantially from later interviews they were included in the final analysis.

Method of Analysis

Interpretative Phenomenological Analysis

The transcripts were analysed using IPA to identify key themes within the data. IPA is a qualitative approach to data analysis that aims to explore in detail the participant's experience and how participants perceive and conceptualize that experience (Smith,

2004). The term interpretative phenomenological analysis is used to emphasize two facets of the process of analysis. It is phenomenological in the sense that it is concerned with an individual's personal perception of an event rather than an objective record of the event, and interpretative in that it accepts that the process of making sense of the participant's perspective will be affected by the researcher's own perceptions and experiences (Smith, Jarman & Osborn, 1999).

Stages of Analysis

The analysis involved the following steps in accordance with the literature (Smith et al., 1999; Smith & Osborn, 2003). Examples of the stages of analysis can be found in Appendix E - G:

1. The first stage involved a detailed reading and re-reading of one of the pilot interview transcripts using the left-hand margin to note down things of interest or significance. This consisted of key words, summaries, connections, preliminary interpretations and emerging themes. The aim was to become thoroughly familiar with the text.
2. The transcript was re-read with the right hand margin used to note tentative theme titles with the aim of capturing the essential meaning of what was found in the transcript.
3. On a separate sheet these emergent themes were listed and connections between them were sought. Themes that seemed to be linked were clustered together.
4. A table of 2nd level major themes and 1st level sub-themes was then produced that seemed to capture the richest and most salient of the participant's concerns.

Alongside each theme, key words from the text plus the page and line number were added to allow them to be easily identified.

5. This process was continued with the other eleven interviews. As new themes emerged in the subsequent interviews, these were checked against the earlier transcripts.
6. Finally, a master list of 3rd level super-ordinate themes was produced by considering the 2nd level themes as a whole. A selection of transcripts was re-read in the light of these to ensure the themes were grounded in the transcripts.

Credibility Checks

Credibility checks are emphasized as important in the literature to ensure that qualitative analysis is carried out to a good standard (Barker et al, 2002; Elliott, Fischer & Rennie, 1999). In this study, credibility checks were carried out in accordance with guidelines (Elliott et al, 1999). Firstly, two researchers independently of the main researcher read a sample of one of the transcripts and their preliminary tentative theme labels were compared with the main researcher and discussed. Secondly, during the development of the master theme list, discussions were held with other researchers familiar with IPA to enable the data to be thought about from different perspectives. Thirdly, the master list of super-ordinate themes was fed back to some of the participants to check they made sense to them and they were given the opportunity to comment on the findings.

Researcher's Perspective

'Owning one's perspective' has been identified as good practice for qualitative research. This involves the researcher describing their theoretical orientations, expectations and

relevant experiences so that readers can evaluate the researchers' understanding of the data and assess for themselves to what extent the researcher's position may bias the data analysis (Elliott et al, 1999; Yardley, 2000). IPA recognises the role of the researcher in making sense of the participant's personal world and emphasizes the importance of a reflexive attitude (Smith et al, 1999). As such I am, as the researcher, going to outline my perspective in undertaking this research study.

I have had an interest in the application of psychology in health research and health settings for some years. I have previously undertaken two research projects related to Chronic Fatigue Syndrome and am currently on a training placement working with clients experiencing various health related difficulties. I have not had experience of working in the sexual health field and so this is an area that I had few prior assumptions about. I was curious about participant's experiences of sex education at school as I felt mine had been limited.

As a woman in my mid-twenties, I think that my age and gender were advantageous in terms of enabling the participants to feel comfortable in talking to me about their sexual experiences. Several mentioned of times when they had had to approach male chemist staff or doctors in relation to sexual health issues and found this embarrassing. Several also spoke of the difficulties in talking about sex to 'old' people who they felt would not understand and would judge them. Feedback from participants was they had enjoyed doing the interview and found it interesting. However, I also had to be alert to the fact that whilst I was similar to the participants in some respects, being female and heterosexual, I had to be careful not to assume that I understood their social world, their

experiences and how they felt about them. Therefore, I was careful to ask questions to clarify terms, to establish how incidents had made them feel and about understandings in their peer group to minimise this.

Results

Participants' condom use behaviour

Only two participants were consistent in their use of condoms. There is a tendency for those in a relationship to use condoms less frequently than those not in a relationship (See Table 1)

Themes emerging from IPA

The interpretative phenomenological analysis yielded three master themes (see Table 2). Each theme is illustrated by quotations from the participants. The source of each quotation is indicated by the participant's number. Where quotes have been edited for brevity, missing words are denoted by "...".

Table 2: Master Themes and Sub-themes

Master Themes	Sub-themes
1. Perception of vulnerability to STDs	STDs as a secondary concern Personal invulnerability Distancing
2. Condoms as only a part of reducing risk	Importance of testing Risk assessment of partners Staying monogamous Avoiding non-sexual situations
3. Constraints on/facilitators of condom use	Individual beliefs Situational factors Relationship context Influence of others Gender issues

1. Perception of vulnerability to STDs

STDs as a secondary concern

Participants' considered STDs as being of secondary concern to them after preventing pregnancy, maintaining status in the peer group, and maintaining the relationship with their partner.

Nearly all of the participants' primary concern was preventing pregnancy. Pregnancy has both higher visibility and availability than STDs and hence is a more salient concern. Many knew girls their age who had been pregnant whilst were not aware of people who had contracted STDs.

“One of my close friends got pregnant like last year and so that’s always kind of marked me quite a lot, so it’s not something I want to go through.” (P1)

“Like you see women pregnant all the time and you know it’s very possible. While STDs, its something people don’t really talk about as much... So I don’t see it as a reality, it’s not something I think will happen as soon as like, pregnancy.” (P4)

Pregnancy is seen as having worse repercussions than STDs. Participants had concerns about disappointing parents, having to change career plans, their current relationship being affected, the moral and practical difficulties of an abortion, and being too young to have a baby. The consequences of having an STD were perceived as not being serious due to participants knowing people who had STDs easily treated and a patchy knowledge about the health consequences of infection. Knowledge was commonly obtained from school, family, friends, magazines and television.

“...at least five or six of my friends have had an STI at one point and its usually just been like, not big things, like Chlamydia or something, and you can get it treated and then its all OK” (P7).

Consequently, many participants focus on pregnancy rather than STD prevention and if condoms are being used it is for this reason. If participants felt condoms were not a good form of protection against pregnancy then they switched to using the contraceptive pill and ceased to use condoms.

“I’m pretty paranoid about these things so I think I just trusted the pill more...I think the times that I used condoms was mostly when I like, when I forgot to take my pill or something.” (P4).

STDs are of secondary concern to maintaining social position in the peer group.

Participants said girls their age are concerned about what peers think about them, and

whether their sexual behaviour will lead to them fitting in with the group. If participants felt using condoms would lead to them fitting in with the group, then they were likely to use them.

“...among my friends it was just the socially acceptable thing to do and using condoms was just what everybody did.” (P10).

However, if participants felt using condoms would result in exclusion from the group, then they were less likely to want to use them.

“Keeping up the appearances and um, I don’t know, staying with the crew ... ‘You gotta do it or you can’t be in our crew,’ ‘If you use a condom you’re an idiot’ ... What’s the word again? The craze or what, um, just what everyone does. Cos everyone else does it, you gotta do it as well.” (P11)

Some prioritise the way they wish to present themselves to peers over concerns about STDs. Those wishing to be viewed as ‘responsible’ chose to use condoms. However, those who wished to be seen as ‘risk takers’ chose not to use condoms.

“...generally I’m quite like, um, well behaved and I just think its, I think sex in a way for me is kind of, a way of kind of being a bit reckless and a bit wild” (P1).

Some also felt not using condoms would lead to peers perceiving them as ‘slutty’ and so wished to use them for this reason.

“He’ll think you got respect for yourself but when you just let him enter without a condom, he’s thinking ‘this girl she’s a slut, she’s easy.’” (P12).

STDs are also of secondary concern to maintaining a relationship with their sexual

partner. Participants spoke of the difficulties around negotiating condom use fearing that it would jeopardise the relationship. They anticipated broaching this subject could result in their partner taking offence at an insinuation they might have an STD and not feeling trusted.

“It probably makes you look a bit pushy and a bit um, like you doubt them? You know...he could have turned around and said ‘what, don’t you trust me?’.” (P7).

They believed this could result in the loss of an opportunity for sex, conflict or the partner leaving them.

“None of them have said ‘no’ to me about a condom but its just that I haven’t asked...cos as soon as they say ‘no’, I’d be like ‘we’re not doing it’, and then it could like escalate in to a massive fight or something and I don’t want to be in that situation.” (P9).

“Like if I don’t really know the person and they say ‘no’, then I’d be like ‘OK, never mind. But if I would really like the person, like it’s difficult...maybe the fact that they wouldn’t want to have sex with me.” (P4).

However, participants did not report any of the feared outcomes occurring. Some partners had asked, ‘don’t you trust me?’ but this had been resolved.

There is a concern about when it is appropriate to have these discussions as asking too early could be perceived as presumptuous or intrusive by the partner.

“I didn’t want to bring it up too early in the relationship because that’s a bit...I don’t know, maybe pushing that we’re going to be a long-term thing maybe. You know, I don’t want to jump the gun...” (p7).

Therefore, they sometimes happened once participants’ had already placed themselves in a potentially risky situation.

“...and then after you’ve had sex once, then you’ve got a reason to ask them, you know, about their sexual history. So then you could ask, then I could ask.” (P3)

Personal invulnerability

Many participants describe having a personal invulnerability to contracting an STD, ‘it won’t happen to me’. Some described this as being similar to that of other health risks.

“I think people just think that they are not going to get them and they just don’t really care... I think you always think that you are not going to get a disease.” (P6).

“Like you never think its going to happen. I smoke, I never think I’m going to get lung cancer...But you never think its going to happen to you.” (P9).

When considering their risk of contracting an STD, a minority of participants’ felt it was the same as others but many reported it was less. They felt this because they considered their sexual behaviour to be ‘safe’ or because they were in a situation, a long term relationship, where they were unlikely to be exposed to risk. Whilst this appeared to be an accurate assessment of their risk level in some cases, some participants’ spoke of encounters which they felt had presented minimal risk for them but later described as risky behaviour for others.

“Obviously I’m more likely than people who aren’t having sex at all but I’d say less likely cos there are a lot of people having a lot more sex with a lot more people...people are a lot less safe about it than I am.” (P3).

“Um, probably less likely just because like I said, kind of belonging to the kind of um, you know, upper, well middle class, quite liberal kind of people who always talked about it quite a lot” (P1).

Distancing

When considering who is at risk, participants often described people dissimilar to them in terms of socioeconomic background, ethnicity, behaviour, and employment. When considering who would be unlikely to have an STD, participants often described people similar to themselves.

“You kind of expect them to be, to be kind of all safe cos, just because they’re well educated and they, cos they tend to talk about these things amongst themselves like, like I’ve done with my family” (P1).

“Maybe prostitutes...and slags (laughs). I know that ain’t the right word yeah, but some girls that get around with loads of guys.” (P11).

Participant’s lack of knowledge meant they often resort to stereotyping when considering who is at risk, leading them to consider themselves as being of low risk.

“I just think ‘a tramp.’ Like instantly. I don’t mean to do it but...The first to your head is just like ‘crack head’, like ‘woman, dirty, man, dirty’, just tramps.” (P9).

2. Condoms as only a part of reducing risk

Participants consider condom use as only one way of reducing STD risk. Other behaviours are used to reduce risk and so they do not always consider condoms to be necessary.

Importance of testing

STD testing is seen as an important way of reducing risk. Testing often took place with new partners, if they suspected their partner had cheated, or following encounters where a condom had not been used or used ineffectively with a ‘risky’ person. Participants felt

if they intended to get tested, if testing had occurred at the beginning of a relationship, or in a few cases, was taking place regularly, they did not need to use condoms.

“I would still, no matter how much I trust them, want them to get checked really while they were with, like at least once, while they were with me.” (P3).

Risk assessment of partners

Participants also carry out a risk assessment of potential partners and use condoms with those they feel might present a risk. Level of risk was based on appearance, things they heard about them, meeting their friends and family, considering how and where they met them, and things the person told them about their background and history.

“Their presentation, their speech and their actions...their sexual history...but if you don’t know the person, the three topics I just gave you. I would say look for that...Add it all up man.” (P12)

“Or if he’s drinking and then maybe going and drive drunk. That would tell me he’s an irresponsible person so I would start thinking other things apart from that” (P2)

“I think its better to, you know, at least talk a bit to the person...Try to find out something, not just look and then just go to the bedroom. It’s not a good idea.” (P5)

Staying monogamous

Having one partner and having sex within a trusting relationship is seen as safe and so condom use unnecessary. Participants felt being in a relationship reduced the statistical likelihood of exposure to someone with an STD, and they could also trust their partner not to have sex with other people.

“If you’ve been with someone for a certain amount of time, or your husband, I think its alright...but I think if you’ve just met someone like that, at a club...and you’ve gone home with them, yeah, I think you should use a condom.” (P11).

One night stands are seen as inherently risky as it is difficult to carry out a risk assessment of a person you do not know well. Participants said they would always want to use a condom in this situation.

“...if you just know the person in the party or something, its a bit, you don't know the person so you don't know what that person might have.” (P5).

Avoiding non-sexual situations

A few participants have concerns about contracting an STD via non-sexual transmission. They reduce risk by being careful about contact in public toilets, changing rooms, gyms and swimming pools.

“You just never know. Like, you could just catch off the smallest thing, you know what I mean? Toilet seats. I never sit on a toilet seat.” (P11)

3. Constraints on/facilitators of condom use

Participants' spoke of a number of factors that influence condom use.

Individual Beliefs

Participants' attitudes towards condoms affect whether they are used. Positive attitudes (e.g. condoms are effective at preventing pregnancy and STDs, are easily obtainable and easy to use), meant use was more likely. Negative attitudes (e.g. condoms are expensive, inconvenient, ineffective) meant use was less likely.

“I don't know, the whole idea of condoms just seemed a bit weird to me...I just thought I would enjoy it much more without them.” (P3).

Self-efficacy around negotiating use and successfully using a condom to prevent infection or pregnancy was important. Negotiating use was perceived to be difficult but participants who felt they could say 'no condom, no sex' were more likely to use them.

"I just said to him... 'you should be strapped up cos I'm not gonna do it if you ain't gonna put it on.'...when he was halfway through he said 'can I take it off?' and I said 'No, sorry. Its either that or you don't get nothing at all .'" (P11).

Situational factors

The availability of condoms, alcohol consumption, level of sexual arousal, use of other forms of contraception, and perception of partners STD risk influenced condom use.

"I was relatively drunk. Drunk enough to kind of not seem, like, not to feel so worried about it all...we were at his friends house and like, we had no way of getting condoms anyway...and then I kind of just really wanted to so we did." (P1)

"When I first started on the pill, for the first few months we carried on using condoms and then got a bit lazy and naughty and...we were having sex without a condom. But I was on the pill and I know he's not been anywhere." (P8)

The first response given by most participants when asked who would be likely to present an STD risk to them was 'anyone can get one' and hence that they would always want to use a condom with a new partner.

"No, because obviously everybody, anyone whose ever had sex like is just as likely to have one" (P7).

However, when this was explored, decisions about condom use were not made based on this belief. When participants' were asked about specific situations where condoms had, or had not, been used, they made decisions based on the risk they felt the particular

partner posed to them at the time. Judgement about risk was based on appearance, behaviour, things they had heard about them, information the person gave them about their past, where they met them and their feelings for that person.

“Only because I thought I loved him. Nothing else. You don’t think someone you like, you really, really love does.” (P9).

“But he did have a bit of a reputation for sleeping around so there was no way I was going to do anything without a condom that time.” (P7)

The context of the relationship

The partner’s attitude towards condoms is an important factor in participants perceiving it to be difficult to ask for condoms to be used and the request respected. If partners supported condom use then it was more likely to take place.

“...he backed me up and showed me that it was right to use a condom.” (P12).

However, if they believed partners would not want to use condoms, then participants were less likely to ask.

“...I think if I did ask he probably wouldn’t have wanted to that much.” (P3).

If the relationship is established then condom use was less likely, related to the belief that ‘relationships are safe’ leading to pregnancy being the only concern. Participants tended to use the contraceptive pill so condoms were seen as unnecessary.

“If I’m with him for like another year...I might get like the pills or you can get a coil fitted inside...but for now I’ll carry on using the condoms.” (P11).

Not using condoms was also thought to demonstrate trust and emotional intimacy, seen as desirable as a relationship progresses.

“Its all better cos you think to yourself, ‘OK this is right obviously’ ...to know that a boy wants to have sex with you without a condom, plus if you’re making love as well, I always think that’s the best feeling you can ever get” (P12).

Gender influences

One of the most vivid themes was of different acceptable standards of sexual behaviour for men and women. For men it is thought to be acceptable, and in some peer groups endorsed, to have multiple partners, cheat on their partners, and not use condoms. These behaviours are not felt to be acceptable for women and result in judgements being made about them. Some participants said non-use of condoms would lead to them being perceived as ‘slutty’ whilst men resisted using condoms to be seen as ‘cool’ and masculine.

“I think with a girl, if you have sex without condoms with just random people then, you know, you’re looked upon as slutty and disgusting whereas for a boy its like, ‘Oh yeah, that’s so cool.’” (P8).

Some thought men should carry condoms and that it is embarrassing for women to do so. This meant they were unlikely to have condoms available if they wanted to use them.

“I don’t carry condoms...But I think if I did it would probably get me out of lots of difficult situations...I just think boys should do that.” (P9).

Many participants believe men are less concerned about safe sex and that women have

to instigate safe sex behaviour as the consequences of not being safe are worse for them.

“I think they’re not so kind of bothered about it so I think it is generally the girl’s responsibility. I don’t think it should be, but I think that’s just the way that things kind of shape up. The girl has to kind of say, ‘come on.’” (P1).

However, they felt it indicated respect if a boy wanted to use a condom and wished this would happen more often.

“...if they ain’t gonna use one for me, they don’t really respect me anyway do they?...if I went to him yeah, and I said, ‘let’s not use a condom,’ and he said to me, ‘no we are going to use a condom,’ I’d like to hear that.” (P11).

Influence of others outside the sexual relationship

Participants are influenced by others in deciding which form of contraception to use.

Advice commonly came from family, friends or doctors. Consideration was also given as to whether they wished their parents to know that they were having sex. Those who did not wish their parents to know often used condoms as these were felt to be easier to obtain without parental knowledge. Peer group norms about how they would be evaluated for using condoms is also important.

“...lots of my friends and just used the condoms instead because it was easier...you can kind of hide it. Well, when you’re on the pill it’s a bit more like, my mum would have noticed it if I wouldn’t have told her.” (P4).

“She (mother) made me go to the gynaecologist...and then the gynaecologist suggested that I go on the pill cos it was I think just more convenient as well.” (P6).

Participants' recommendations for reducing STD transmission in young women

Participants' had a number of ideas. Many felt mandatory sex education should be given in schools, and education about STDs should be given more priority within this.

“And for the future, then high schools. Cos then everybody's going to go through the same mandatory education about it... If they could have more of it and sort of standardised throughout UK education. That'd be a lot better” (P7).

They felt sex education should start at a young age, however, several reported they had received it at too young an age when it was perceived as irrelevant. They recommended sex education continue up to and beyond the age of consent.

“I think it would be more helpful though in later years, like when people are in high school instead of like at, when I got sexual education, like I was too young for it. I didn't really get what they were talking about. I wasn't interested.” (P4)

Having people from outside the school (e.g. sexual health workers), educating them about sex was preferable to teachers. They felt these people knew more about the topic, were more realistic about adolescents' sexual behaviour and it was easier to ask questions.

“...and like, not your like PE teacher telling you about it or like your drama teacher...to have like someone who actually teaches you and any questions you have, you know they'll find out.” (P9).

They also felt it would be helpful to hear from people who have had STDs as this might make young people think it could happen to them.

“Like, maybe watching a video of like a woman speaking, you know, a woman who’s had an STD, speaking about it, or even if there was a woman who would go into classrooms and speak about it” (P3).

Utilising the media to inform people about safe sex was recommended. A variety of ways were suggested including television and radio advertisements, magazine and newspaper articles, and storylines in soaps.

“...like adverts on the TV or something?...and if they did them like in newspapers... Then through the media slowly everybody would get more of an idea...local radio... you’re just going about your daily business and its not something that’s really interrogative or you know like pushed upon...it does kind of seep in...like you always remember really tacky adverts don’t you?” (P7).

Some participants recommended improving the availability of condoms by making them cheaper and having condoms free in chemists to under sixteens.

“Condoms are quite expensive as well and they have VAT on them so that should be taken off cos they are quite expensive and the pill is free” (P5).

Focusing effort on men, as they are seen to be less concerned about STDs, was thought by some to be useful. They recommended separating boys and girls at school for sex education, and having information about sexual health in men’s magazines, on the radio and TV.

“...boys need to be spoken to differently as they don’t take it seriously...instead of just putting naked women in men’s magazines, they should have some sexual health ...Focus on the guys, I think the guys are the main problem.” (P11).

Feedback from participants

Feedback was obtained from three participants. All agreed with the themes 'STDs as a secondary concern' and 'Personal invulnerability.' They emphasized again how difficult it is to bring up discussions about safe sex with a partner. They agreed a lack of knowledge about STDs contributed to condoms not being used. One participant did not feel 'Distancing' fitted with her experience. They agreed with the theme 'Condoms as only a part of staying safe', however, were surprised by others believing non-sexual situations to be risky as this was something they had not considered. This feedback was not unexpected given they were not the participants who engaged in this behaviour. In terms of factors affecting condom use, they felt 'individual beliefs', 'situational factors' and 'relationship context' captured their experiences. The theme of 'gender issues' resonated strongly with them. Two commented they did not find it embarrassing to carry condoms but agreed this was something many young women found difficult.

Discussion

This qualitative study aimed to explore the influences on safe sex decision making processes in young women focusing on risk and the context of the sexual encounter, and to document views as to what could be done to help keep young women safe from STDs.

Summary of findings and discussion in relation to the literature

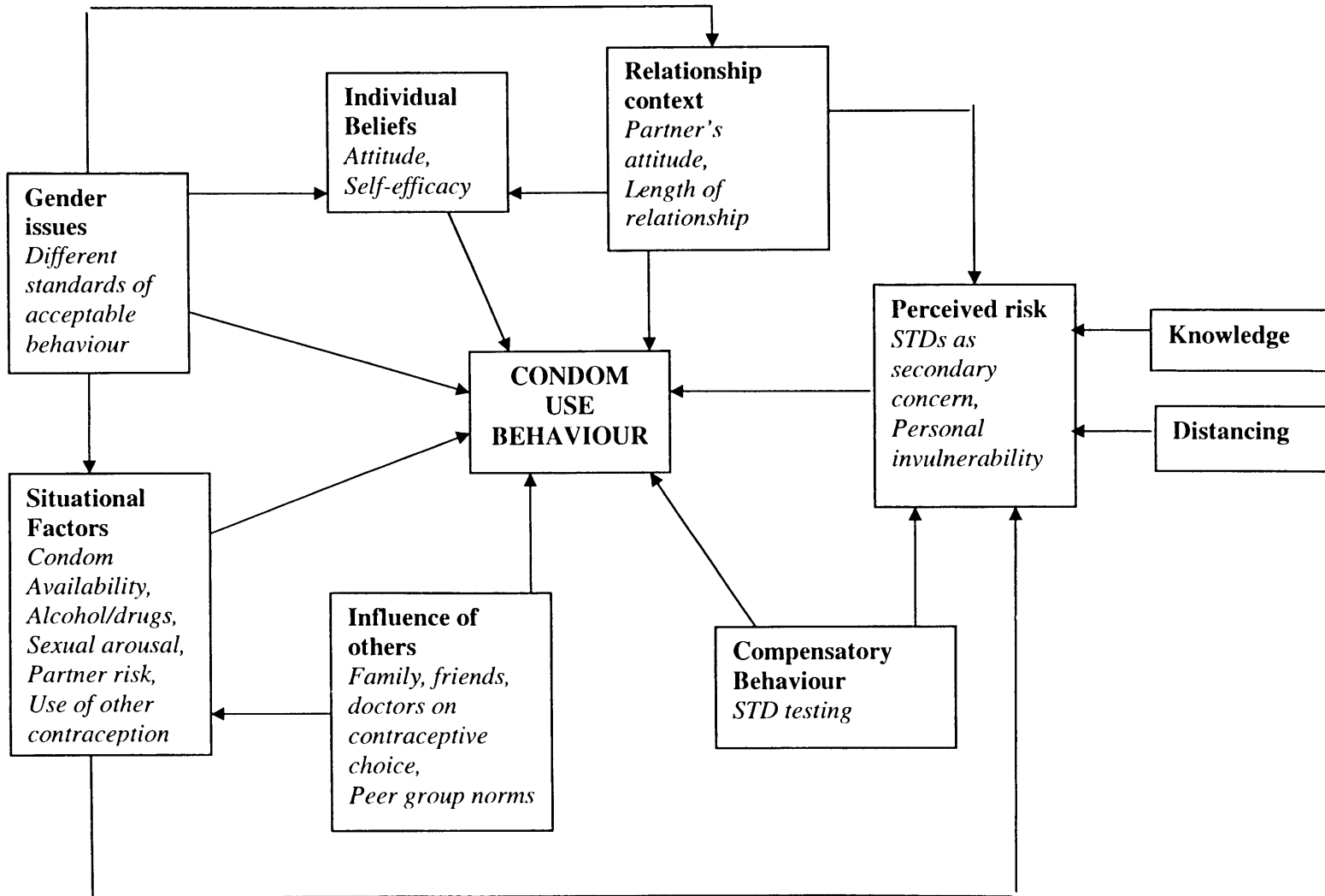
The first question the study aimed to investigate was the participants' current behaviour

in terms of condom use. Consistent with other research, participants were inconsistent in their use of condoms and were less likely to use them in an established relationship (Bauman & Berman, 2005; Gebhardt et al., 2003; Hammer et al., 1996; Lansky, Thomas & Earp, 1998; Lescano, Vazquez, Brown, Litvin & Pugatch, 2006; Plichta et al., 1992; Widman et al., 2006). This was due to a number of inter-related factors: perceived risk, compensatory behaviour, individual beliefs, situational factors, relationship context, influence of others and gender issues. Figure 2 diagrammatically represents the proposed associations between these factors as suggested from the study findings.

The second question the study aimed to investigate was the participants' perceptions of STD risk. Concern about STDs was secondary to preventing pregnancy, maintaining status in the peer group, and maintaining the relationship with their partner. Participants prioritised these goals over condom use for the prevention of STDs. Greater concern about pregnancy than STDs has been reported in previous studies (Cooper, Agocha & Powers, 1999; De Visser, 2005; Grady, Klepinger & Nelson-Wally, 1999; Kirkman et al., 1998). Similar to the findings of this study, Van Roosmalen (2000) highlighted the importance for young women of being accepted by their peer group and potential boyfriends.

In terms of risk, participants also perceived a personal invulnerability to STD infection believing it was something that could happen to others but not to them. Personal invulnerability or unrealistic optimism (UO) has been found in some previous studies of adolescents and STD risk (De Visser, 2005; Misovich, Fisher & Fisher, 1997) but not in

Figure 2. Proposed associations between factors influencing condom use in young women



others (Ellen, Boyer, Tschann & Shafer, 1996). Studies of gay men and HIV risk have also indicated that UO processes are operating in this population, showing this is not unique to adolescents (Gold, 2004). Gold's study sought to differentiate between two explanatory models of UO: a cognitive account, which proposes UOs arise as a result of the use of cognitive heuristics, and a motivational account, that proposes UOs serve the function of reducing an individual's anxiety about an event. They felt their research supported the former explanation (Gold, 2004). This is consistent with the current findings that participants are using the 'availability heuristic' and focusing on their own risk-decreasing behaviours and others' risk-increasing behaviours. In line with previous research (Ellen, Vittinghoff, Bolan, Boyer & Padian, 1998; Ethier, Kershaw, Niccolai, Lewis & Ickovics, 2003; Kershaw, Ethier, Niccolai, Lewis & Ickovics, 2003; Roberts & Kennedy, 2006), participants appeared to underestimate their level of STD risk based on their reported behaviour.

The third research question the study aimed to investigate was what was influencing participants' risk perceptions. It seems that risk perception was influenced by knowledge, distancing, and compensatory behaviours. Knowledge was generally low and led to participants resorting to stereotyping when considering who is at risk. The finding that knowledge influences condom use is consistent with some studies (Burazeri et al., 2004; Kershaw et al., 2003; Trani et al., 2005) but not others (Hardeman, Pierro & Mannetti, 1997; Sheeran et al., 1999; Williams, Norris & Bedor, 2003). Previous research also found young people across many countries had little knowledge about STDs other than HIV (Agius et al., 2006; Clark, Jackson & Allen-Taylor, 2002; Downs, Bruine de Bruin, Murray & Fischhoff, 2006; Nockels & Oakeshott, 1999). The process

of distancing meant participants considered that STDs affected people who were dissimilar to them. Participants also practised a compensatory behaviour of STD testing which meant they perceived their risk to be low and condom use unnecessary. Rabiau and colleagues (Rabiau, Knauper & Miquelon, 2006) put forward a useful framework for making sense of the findings of this study, the Compensatory Health Beliefs (CHBs) Model. This proposes that conflict between a wish for a desired activity or object and health goals may create a negative state of cognitive dissonance which an individual seeks to alleviate. This can be achieved by the following three strategies, deciding to resist the desire, adapting the perception of the degree of risk caused by the object or behaviour, and activating compensatory health beliefs. Participants appeared to be adopting all three strategies in this study. CHBs are beliefs that the negative effects of a volitional pleasurable unhealthy behaviour can be neutralized by engaging in another volitional healthy behaviour. Compensatory behaviours have been found in other areas of health behaviour, for example, dieting and exercise (Anderson & Bulik, 2004; Knauper, Rabiau, Cohen & Patriciu, 2004). In this study, participants believed because they engaged in the compensatory behaviour of STD testing they did not need to use condoms. Compensatory behaviours range in their effectiveness at reducing the negative effects of the unhealthy behaviour (Knauper et al., 2004) and STD testing following a sexual encounter without a condom is not necessarily effective. Firstly, individuals may fail to follow through with the compensatory behaviour and a number of participants spoke of occasions when testing had not ended up taking place. Secondly, STD testing will only effectively compensate for negative effects if the STD is detected, if treatment is available, and if it is properly carried out.

The fourth research question the study aimed to investigate was what the influences are on condom use behaviour in young women. This study suggests these can be grouped into individual beliefs, situational factors, relationship context, influence of others and gender issues. Individual beliefs that affected condom use were attitudes towards condoms and self-efficacy which is consistent with other findings (Albarracín et al., 2001; De Visser & Smith, 2001; Gebhardt et al., 2003; Pilkington et al., 1994; Sheeran et al., 1999). Positive attitudes meant condom use was more likely whereas beliefs that condoms were inconvenient, expensive, ineffective at preventing pregnancy and/or awkward to use, meant use was less likely. Pilkington and colleagues point out that the causal link between attitudes and condom use is unknown. It is not clear whether positive attitudes facilitate condom use or experience with condoms improves attitudes towards them (Pilkington et al., 1994). With regard to self-efficacy, negotiating condom use was perceived to be difficult because of concerns that it would negatively affect the relationship. Participants who felt they could say 'no condom, no sex' were more likely to use them. Roberts and Kennedy (2006) also found sexual assertiveness in college women was correlated with condom use.

Situational factors that decreased condom use were having no condoms, alcohol/drug use, high level of sexual arousal, use of alternative forms of contraception and not perceiving partner to present an STD risk. The first four of these factors replicate the findings of many previous studies (e.g. Plichta et al., 1992; Roberts & Kennedy, 2006; Sheeran et al., 1999). Maisto and colleagues (2004) found alcohol intoxication affected intentions to use condoms via effects on risk perceptions and condom behavioural skills. The participants in this study also felt intoxication affected their perception of risk and

desire to use condoms. In terms of risk, this study supports research focusing on partner and situation specific risk in determining condom use (Bettinger et al., 2004; Ellen et al., 2002; Ellen et al., 2002; Green et al., 2000; Reisen & Poppen, 1999). The participants in this study assessed the STD risk particular partners posed to them to decide whether to use condoms or not in a particular situation, rather than accessing a more generalized perception of STD risk. They assessed STD risk of potential partners by considering how and where they met them, their appearance, things they had heard about them, meeting their friends and family, and information the person gave them about their background and history. When asked why they had not used a condom in a particular situation, the response commonly given was 'I didn't think he presented a risk to me' which was a judgement made based on the criteria given above. Such judgements are likely to be inaccurate. For example, a study of adolescents found one third of the participants thought their partner had not engaged in a risk behaviour when in fact they had (Ellen, Vittinghoff, Bolan, Boyer & Padian, 1998). This highlights the issue that young women may form inaccurate judgements about the potential STD risk of partners thus exposing themselves to STD infection.

The aspects of the relationship context that affected condom use were the partner's attitude, length of relationship, and desire to attain trust and intimacy which is consistent with findings of other studies. As in other studies, if partner's supported condom use then it was more likely (De Visser, 2005; De Visser & Smith, 2004; Holland et al., 1990; Kirkman et al., 1998; Lescano et al., 2006; Plichta et al., 1992), however, the perception was that young men did not want to use condoms. The length of a relationship influenced condom use in terms of it being less likely if the relationship was established.

This was related to the belief that 'relationships are safe' leading to pregnancy being the only concern, and the wish to demonstrate trust and attain emotional intimacy as the relationship progresses. This is similar to Bauman and Berman's (2005) study which found that adolescent condom use was related to the degree of long-term commitment, love and trust. They found as relationships became more intimate, condoms tended to be discontinued once girls obtained another form of contraception.

The role of gender issues, in terms of there being different standards of acceptable sexual behaviour for men and women, was related to condom use in a number of ways. Firstly, the perception men do not want to use condoms and that women should initiate use, makes negotiating difficult for young women due to their tendency to prioritise preserving their relationship over STD concern. Secondly, it impacts on condom availability, an important situational influence on condom use, as participants felt male partners should be providing condoms. Crawford and Popp's (2003) review of research looking at sexual double standards also found social norms discourage women's contraceptive preparedness in sexual encounters. Other studies have found women find it difficult to negotiate condom use and related this to differing cultural expectations of men and women's sexual behaviour (Amaro, 1995; De Visser, 2005; Holland et al., 1990; Kirkman et al., 1998; Lear, 1995; Van Roosmalen, 2000).

People outside the sexual relationship also influenced condom use, namely family, friends, and medical staff. This happened via their influence on choice of contraceptive and peer group norms. If participants were advised to use the contraceptive pill then they ceased to use condoms. Condom use was also affected by whether they wished their

parents to know that they were having sex. If they did not wish them to know then they tended to use condoms as these could be obtained without parental knowledge. This is a finding which does not seem to have been reported in previous studies. The importance of peer group norms in terms of whether participants would be evaluated negatively or positively by their friends for using condoms is a consistent finding in the literature (e.g. Albarracin et al., 2001; Crosby et al, 2000; Fazekas et al., 2001; Sheeran et al., 1999).

Methodological Issues

In terms of strengths, this study adhered to Elliott and colleagues (1999) guidelines of best practice in qualitative research: owning one's perspective, situating the sample, grounding in examples, providing credibility checks, coherence, accomplishing general vs. specific tasks, and resonating with readers. The latter was checked via feedback of the findings to participants, to two other researchers familiar with IPA and to staff at a child and adolescent service. Another strength is that the sample included variation in socioeconomic and ethnic background. This suggests that the findings are relevant to young women from different backgrounds.

However, a number of limitations should be noted. Firstly, the sample was entirely English speaking and of young women aged seventeen to eighteen, and so the relevancy of the findings to non-English speaking and younger adolescents should be considered. Secondly, the intention was to feed back the results via focus groups to elicit different perspectives on the analysis. However, the process of carrying out the individual interviews led me to believe that participants would not feel comfortable discussing the

topic in a group, therefore, feed back was given individually. There was a low response rate despite contacting participants several times and reimbursement for time and expenses only being made if feedback was given. This meant only a limited range of responses about the analysis were obtained. Lastly, when data is self-reported, there is always a question over the accuracy and validity of the information obtained.

Participants may distort or withhold information to present themselves in a positive light, report what they believe the researcher wants to hear, or their recollections of past behaviour may be inaccurate. It has been suggested that self-presentation concerns may be a particular issue when obtaining information about private experiences like sexual behaviour (Gerrard et al., 1996). Although I do not believe this was too much of an issue as participants expressed views they felt uncomfortable about holding and reported behaviours they felt were not socially desirable for young women, there were contradictions in the data and so this does need to be held in mind.

Implications

Future research should investigate the use of compensatory behaviours and how they influence condom use in young women to see if this finding is replicated, and what factors influence the behaviours and subsequent risk perception. Given condom use is a behaviour influenced by both partners, it would be useful to explore whether young men are also using compensatory behaviours. In addition, the condom use of young women in this study was influenced by beliefs they understood men to hold (e.g. men do not want to use condoms, men will be offended if I initiate use). It would be interesting to replicate this study with young men to see if this is the case and then to feed back the

results of both studies to focus groups of each sex to elicit their responses. Findings from such research would inform interventions to increase condom use.

The study suggests several avenues for interventions to reduce the likelihood of young women contracting STDs. Given the number of factors involved in condom use and the inter-relationships between them, it seems likely that a multi-faceted approach will be most effective. Although risk and knowledge about STDs are not sufficient to ensure that condom use takes place, a perception of personal risk is necessary for people to be motivated to engage in safe sex behaviour. The young women in this study had a limited knowledge about the health consequences of STD infection, and perceived STDs as not being relevant to them. Consideration therefore needs to be given as to how messages about STDs can be imparted to increase knowledge and perceived personal risk of STDs.

The finding that young women practised a compensatory behaviour instead of using condoms suggests that a potential way of preventing STD transmission would be to raise awareness about this process. It could be useful to highlight which behaviours are effective at reducing their risk of contracting an STD (e.g. testing of self and partner prior to having sex without a condom), and which are not (e.g. testing of self and partner after having sex without a condom). Given the participants reliance on assessing a potential partner's risk when deciding whether to use condoms, it could also be useful to incorporate in to safe sex programmes discussions with young women about 'safe' or 'risky' indicators to get them to consider how reliable these are.

In summary, this study found that despite the efforts of health campaigners, young women used condoms inconsistently and considered STDs as being of secondary concern to them. The finding that participants used a compensatory behaviour and carried out a risk assessment of partners instead of condoms to prevent themselves from acquiring an STD has implications for developing intervention programmes.

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PART 3: CRITICAL APPRAISAL

Abstract

This paper presents a critical appraisal of the empirical study undertaken in Part Two. It contains a number of reflections on the process of undertaking the qualitative research study focusing on issues involved with the design of the study, recruitment and the interviewing process. It describes how decisions were made and the steps that were taken to overcome issues that arose. The study is also evaluated in the light of guidelines for good practice in qualitative research.

Introduction

This appraisal will comprise of a number of reflections on the process of undertaking this research study. It will focus on issues involved with the design of the study, recruitment and the interviewing process. Finally, I will evaluate the study in the light of guidelines for good practice in qualitative research.

Reflections on the research process

Design of the Study

When considering the best way to collect the data for the study, one of the questions was whether a focus group or individual interview format would be preferable.

A focus group is a group of individuals selected and assembled by researchers to discuss and comment on, from personal experience, the topic that is the subject of the research (Powell & Single, 1996). The advantages of focus groups are that they can be helpful in stimulating discussion, getting information about shared understandings amongst a cohort, identifying the full range of perspectives held by the participants, and take less time to conduct than individual interviews. Disadvantages of using a focus group are that the discussion may remain superficial, participants may be influenced by the responses of others in the group and they may limit the disclosure of private and sensitive information. Individual interviews have the advantage of enabling the

participants to feel more comfortable in disclosing personal information and of being able to explore individual experiences in more depth (Powell & Single, 1996).

With these considerations in mind, it was decided that data collection would take place via conducting individual interviews with the participants. It was felt that given the intimate and personal nature of the topic under discussion, their sexual experiences, participants might feel constrained in responding truthfully and in sufficient detail in a group environment. It was also felt that it could be useful to use a focus group format when feeding back the results of the analysis to the participants. Feeding back results is considered to be good practice when conducting qualitative research as it allows the participants to consider whether the themes identified by the researcher fit with their understanding and to comment on the findings (Elliott, Fischer & Rennie, 1999). A focus group format would take less time to conduct than individual interviews and different perspectives could be elicited on the results of the analysis. However, the process of carrying out the individual interviews led me to believe that participants would not feel comfortable discussing the topic in a group and that not much useful additional information would be generated as a result. This belief came from the concerns expressed by the participants about confidentiality and anonymity. Therefore, it was decided that it would be preferable to feed back the results and get comments from the participants in individual meetings.

Recruitment

When planning the research project I had anticipated that there would not be too many difficulties in recruiting participants. This was because the sample size was not large, the inclusion criteria were fairly broad and I believed that once one or two participants had been recruited, the snowballing method would mean that further potential participants would be quickly identified. I had some concerns that the young women may feel embarrassed about discussing their sexual experiences but felt that if they knew their friends had done so and found the experience to be interesting, this should not prove too much of a barrier.

However, it did take longer than expected to recruit sufficient numbers and I was surprised by the recruitment difficulties that emerged. Firstly, the participants who took part did not put forward many others as potential participants. This appeared to be due to a number of reasons. Firstly, some appeared reluctant to approach friends as they did not want to make the assumption that their friends were sexually active and they also felt it might insinuate that they believed their friends had had a lot of sexual experiences. There were also difficulties in motivating the participants to contact people they thought might be suitable. After a few experiences of participants failing to contact people about the study and getting back to me about the outcome, I attempted to overcome this by asking them to contact potential participants at the end of the interview whilst the study was still at the forefront of their minds. This approach worked successfully. The use of the snowballing method was also beneficial. Some participants whose friends had taken part said they had been unsure about participating when the study had first been

mentioned to them but their friend had said it was like 'having a girly chat' and so they decided to.

I was particularly surprised by the response from the schools and further education colleges in the London area that I approached. A number were contacted, some through 'cold-calling' and some through people that I or my research supervisors knew who worked at the schools. To increase the chances of the schools agreeing to allow recruitment to take place, I offered to feed back the results of the study to pupils and staff and to facilitate some discussion groups around safe sex if they wished. All those schools and further education colleges approached declined to take part in the study once it was explained that it focused on sexual health. They said it was because they felt parents would be unhappy about their children taking part. I was surprised by the universal reluctance of the schools and colleges to take part given that the participant's were over the legal age of consent for sexual activity. On reflection, I had assumed that discussions about sex would already be taking place in schools for this age group and that teachers and parents would be pleased for the issue of safe sex to be focused on.

I think the reluctance of schools and parents to focus on the topic of safe sex is interesting and does reflect some of the difficulties of promoting sexual health in the UK. Many of the participants spoke of there being a 'taboo' around talking about sex with people of their age group. They felt this hindered acquisition of knowledge about safe sex and discussion about relevant issues, which was increasing the risk that young people faced from STDs. Participants recommended that sex should be more freely

talked about at school, at home and in the media to enable messages about safe sex to be communicated.

Given these recruitment difficulties, further avenues of recruitment had to be explored. Resubmissions were made to the UCL ethics committee for advertising on a teen website, and approaching students at UCL. I was keen to ensure the sample consisted of young women from a variety of different socioeconomic backgrounds as the samples of many previous studies in this area have consisted entirely of college students thus limiting the applicability of the findings to this population. Whilst UCL students did come forward to take part in the study once it was advertised, I continued to try and think of ways in which participants from other backgrounds could be recruited. I therefore also re-contacted participants who were not students to remind them to approach friends about the study.

On reflection, I should have been more prepared for there to be difficulties in recruiting a sufficient sample size and at the outset opened up all these potential avenues simultaneously. Although the sample did end up being reasonably diverse in terms of cultural and socioeconomic background, it was difficult to achieve this. However, the issue of sample diversity in qualitative research is different to that of quantitative research. Researchers are not seeking to employ a representative sample as would be the case in quantitative methodologies, but to produce in-depth analyses of a small group's accounts of a phenomenon which may subsequently lead on to generalizations as the research is replicated (Yardley, 2000).

Interviews

Establishing Rapport

I believe that a number of factors contributed to the participants feeling able to discuss this personal part of their life in such an in depth and open way. Firstly, as a woman in my mid-twenties, I think my age and gender were advantageous in enabling the participants to feel comfortable in talking to me. Several participants spoke of feeling embarrassed and judged when talking to men or older people about sex and so a male or older female interviewer may have made them feel constrained in their responses.

To establish rapport during the recruitment phase and initial stages of the interviews, confidentiality and anonymity were emphasized, an explanation about what would happen to the information following the interviews was given, and participants were told they could withdraw from the study at any time and any information held about them would be destroyed. Only one person who contacted me via email about taking part in the study chose not to once the information sheet had been sent to her. A few participants expressed concerns about confidentiality at the beginning of the interview but most became talkative and relaxed during the interview and none chose to withdraw from the study once an interview had been arranged.

The use of warm-up questions at the start of the interview appeared to be beneficial in enabling the participants to feel comfortable in talking about sexual matters and their sexual experiences. Following on from the two pilot interviews, an additional warm-up question to provide the participants with a language for talking about sexual activities

was introduced. This was due to the two piloted participants appearing to find it difficult to know what to call different activities which resulted in them feeling embarrassed and hesitant.

Interviewer Stance

I also considered the issue of what stance to take whilst conducting the interviews. I was conscious of the importance of making the participants feel at ease when discussing such an intimate part of their life. As such, whilst retaining a professional and neutral approach, I also aimed to be interested and friendly. Feedback from participants was that they had enjoyed taking part in the interviews and they felt that it was an important thing for them to do. Interestingly, some reported they had felt comfortable because it was like 'having a girly chat' and others because it was the same as talking to 'a doctor.' I think this reflects the issue of flexibility when conducting research interviews and the importance of slightly changing style depending on what appears to make the participant feel comfortable and hence elicits the most useful information.

In considering interview stance, an issue that arose was of whether I should provide information to the participants. It was decided when designing the study and considering ethical issues, that I would bring information about sexual health clinics in London to the interviews to offer to participants at the end. This was felt to be important in case the interview process brought up any concerns for the participants about past sexual behaviour and their level of STD risk. However, when conducting the interviews I was surprised by the lack of sexual health knowledge of many of the participants and a number asked me questions during the interview. I was unsure as to whether I should be

providing them with this information but did so in some cases, for example, when asked questions as to whether Chlamydia has any symptoms and the difference between HIV and AIDS. I answered these questions as I felt it would damage rapport if I did not and also because I was concerned for the participants' health in some cases if they did not know the answer to the question. In retrospect, it would have been useful for me to have prepared a list of websites where participants could have looked up sexual health information as well.

Accuracy of Self-Report Data

When obtaining self-report data, there is always a question over the accuracy and validity of the information obtained from participants as participants may distort the information they give. Participants may wish to present themselves in a positive light and therefore may withhold information or report what they believe the researcher wants to hear. Researchers have proposed that this may be a particular issue when obtaining information about more private experiences like sexual behaviour (Gerrard et al., 1996). However, in terms of this study, I do not feel that this was too much of an issue. The participants spoke of engaging in behaviours they felt were not considered to be socially desirable for young women, for example, having one night stands, and expressed beliefs they felt uncomfortable about and understood not to be 'politically correct'. This led me to believe participants were not engaging in too much self-censorship and were being open about their sexual behaviours and beliefs. I attempted to minimize impression management by responding in an interested manner when participants appeared to be unsure as to whether they should say something to let them know that I was keen to hear about all their experiences and views.

Evaluation in light of guidelines for good practice

Elliott and colleagues have published guidelines outlining good practice in qualitative research (Elliott et al., 1999). These were developed with the aim of providing methodological guidelines to support a rigorous approach to qualitative research, to foster more valid scientific reviews of qualitative research using appropriate criteria, and to assist qualitative researchers in producing research of good quality. Some of the guidelines are relevant to both quantitative and qualitative research, for example, use of appropriate methods and contribution to knowledge, but others are specific to qualitative research reflecting the different philosophies and aims of the two approaches. It is the guidelines specific to qualitative research that I am going to consider, which are: owning one's perspective, situating the sample, grounding in examples, providing credibility checks, coherence, accomplishing general vs. specific tasks and resonating with readers.

Owning one's perspective involves the researcher describing their theoretical orientations, expectations and relevant experiences so that readers are helped to interpret the researchers understanding of the data and how it may have been affected by their values and interests. In the method section, information about myself that I felt to be pertinent to the research was given and the ways in which this might have impacted on the research process considered. To minimize the impact of my personal beliefs on interpreting the findings, the themes that arose were discussed with independent researchers familiar with IPA and the project supervisors to enable me to think about the connections I had made between the themes from alternative perspectives.

Situating the sample involves the author describing the research participants and their life circumstances so that the reader can judge the range of persons and situations to which the findings might be relevant. In the method section, descriptive information about the sample, age, ethnicity, employment status, relationship status, number of sexual partners, and past and present condom use, was included to allow the reader to do this.

Grounding in examples involves the authors providing examples of the data to illustrate both the analytic procedures used in the study and how their understanding of the phenomena developed in the light of these. This allows the readers to assess the 'fit' between the data and the author's understandings and to develop their own alternatives. In this study, examples of different stages of the analytic process were provided in the appendix section to allow the reader to follow the emergence of the different themes. Quotes from the interviews were also given in the results section to illustrate the themes.

Credibility checks are used so that researchers can check the credibility of their themes or accounts. There are several methods for doing this, some of which were utilised in this study. Firstly, two independent researchers read a sample of one of the transcripts and their preliminary tentative theme labels were compared with mine and discussed. Secondly, during the development of the master theme list, discussions were held with other researchers familiar with IPA to enable me to think about the data from different perspectives. Thirdly, the master list of super-ordinate themes was fed back to some of the participants, known as testimonial validity or respondent validation, to check their

understanding of the results. Unfortunately, there was a low response rate for the respondent validation, three participants, which meant that only a limited range of responses about the analysis were obtained. However, the feedback about the results was that participants felt it mostly fitted with their experiences which is encouraging. It would have been useful to have obtained feedback from more of the participants. It is difficult to think of further strategies that could have been employed to encourage more of the participants to provide feedback other than the ones that were used. These were contacting the participants several times about arranging a time to give feedback, only reimbursing them for time and expenses if feedback on the analysis was obtained, and being flexible about the way that feedback could be given, individual interviews or via email.

Coherence refers to the results being presented in a way that achieves integration whilst preserving nuances in the data. The understanding should fit together to form a narrative, map or framework for the phenomenon under study. I found this aspect particularly challenging due to the large amount of data involved. To achieve coherence for the reader, the results of the analysis were presented according to the research questions outlined in the methods section. A summary of the analysis was also presented figuratively to depict the relationships between the categories.

Accomplishing general vs. specific research tasks refers to the author considering the aim of the research, a general understanding of a phenomenon or of a specific case, and undertaking an appropriate depth of analysis on an appropriate sample size for this aim to be met. It is also important for the limitations of extending the findings to be

addressed. In this study, the aim was to gain a general understanding of safe sex decision making in young women in the UK. As such, a sample size appropriate to gaining a more general understanding of a phenomenon was chosen. Although the sample was reasonably diverse in some aspects, the limitations of extending the findings to other populations was considered in the discussion.

Finally, the findings of the study should resonate with readers in that they judge it to have accurately represented the subject or to have clarified or expanded their understanding of it. This was checked via feedback of the findings to participants, to two other researchers familiar with IPA and to staff at a child and adolescent service where I was on placement. The feedback given by the participants seems to indicate that the findings captured their experiences and conceptualized them in ways they had not previously considered. In addition, when the results were presented at the child and adolescent service, some used the concepts to discuss safe sex with their clients and found them very useful in helping them to relate to the clients experiences and increase rapport.

Conclusions

In summary, this appraisal has considered a number of my reflections on the process of carrying out this qualitative study, described how decisions were made and the steps that were taken to overcome issues that arose. I believe this study has met the guidelines for good practice and as someone with little previous experience of carrying out qualitative

research, they were very valuable in both the planning and carrying out of the study and analysis.

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APPENDIX A
Letter of Ethical Approval

APPENDIX B
Participant Information Sheet

PARTICIPANT INFORMATION SHEET

Project Title: Safe-sex decision making in young women

Introduction

My name is Laura Baird. I am a researcher working at University College London. You are being invited to take part in a research study. Before you decide, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish. Ask if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part.

Principal Investigator

Name: Laura Baird
Address: University College London
1-19 Torrington Place
London, WC1E 6BT

What is the study looking at?

We are interested in finding out more about the decisions that young women make around safe sex. We want to talk to about fifteen women aged between 16 and 18 years old about some of their sexual experiences and their views on sexual issues.

Do I have to take part?

No, taking part is voluntary. If you do not want to take part, you do not have to give a reason and no pressure will be put on you to try and change your mind. You may discontinue participation in the study at any time without penalty or loss of benefits to which you are otherwise entitled. If you decide to withdraw from the study then please contact me at the earliest opportunity. If you do withdraw from the study then all data held about you will be destroyed.

What will I have to do if I take part?

If you decide to take part, you will be invited to meet with me for an individual discussion lasting around one hour. This can either take place at the Sub-Department of Clinical Health Psychology or at your home if you would prefer. This will involve talking about some of your sexual experiences and your views on some sexual matters.

Following completion of the individual discussions, participants will be invited to attend one of a series of focus groups. These again should last for about one hour. During the groups, the findings of the study will be fed back to participants so they can comment further on them and this will also be an opportunity for participants to ask any questions they may have about the results of the study.

What are the possible disadvantages of taking part?

Taking part in this study will involve attending an hour long individual discussion and an hour long group discussion. You will be reimbursed £10 for your time and expenses.

You will have the opportunity to discuss with the researcher any concerns that arise during the course of the individual discussions. The researcher will have information on sexual health clinics should these be required.

What are the possible benefits of taking part?

We hope that the results of this study will tell us more about how young women make decisions around safe sex and help in the development of safe sex programmes for young adults.

Will my taking part in this study be kept confidential?

Yes, all the information you give us will be confidential and used for the purposes of this study only. Access to data will be restricted to researchers working on the study. The data will be collected and stored in accordance with the Data Protection Act 1998 and will be disposed of in a secure manner. The information will not be used in any way that will allow you to be identified individually.

What will happen to the results of the research study?

Data from the study may be published in an academic journal or may be used for additional or subsequent research. However, all identifying information about participants will be removed and they will not be able to be identified from information provided.

Contact for further information

If you have any further questions about this study or your rights as a participant, please contact me or either of the Project Supervisors.

What do I do now?

Think about the information on this sheet and ask me if you are not sure about anything. If you agree to take part in the study, sign the consent form. The consent form will not be used to identify you. It will be filed separately from all other information. Please keep this information sheet and the copy of your signed consent form safe so you can refer back to them in the future if you need to.

Thank you for considering taking part in this study

APPROVED BY UNIVERSITY COLLEGE LONDON'S RESEARCH ETHICS COMMITTEE

APPENDIX C
Consent Form

CONFIDENTIAL

INFORMED CONSENT FORM

Project Title: Safe-sex decision making in young women

	YES	NO
Have you read the Participant Information Sheet?		
Has the project been explained to you orally?		
Have you had the opportunity to ask questions and discuss the study?		
Have you received enough information about the study?		
Do you give consent to be involved in this research project?		
Do you understand that you are free to withdraw from the study without penalty at any stage?		
Do you agree with the publication of the results of this study in a research journal?		
I am aware of and consent to the tape recording of my discussion with the researcher and to the researcher taking notes during the course of the discussion.		

Signature of Participant.....

Date.....

Full Name in Capitals.....

Signature of Researcher.....

Date.....

APPROVED BY UNIVERSITY COLLEGE LONDON'S RESEARCH ETHICS COMMITTEE

APPENDIX D
Interview Schedule

Interview Schedule

Warm-up questions:

- *Could you tell me a bit about the sex education you have had?*
- *There are lots of things that we do with people in bed like oral sex, penetrative sex, fondling, can you tell me how many people have you done these sorts of things with?*
- *Could you give me a rough estimate of how many people you have had sex with?*
- *Could you tell me about the first time you had sex?*
- *Have you ever used condoms?*
- *Have you ever not used one?*

1. Tell me about a time you had sex with someone and you used a condom even though you thought the person was safe (in terms of not likely to give you an STD)?

- Tell me about this person
- What was the situation?
- Why did you think they were safe/ What does safe mean to you?
- Why did you use a condom if you thought they were safe?
- When did you decide that you would use a condom?
- Tell me about how using a condom come about
- Did you talk about STDs? Condoms? What were his attitudes towards these?
- What did he usually say? What did you usually say?
- What went through your mind?
- Tell me about whether you talked to anyone else about having sex and your safe sex decisions?

2. Tell me about a time you had sex with someone and you used a condom because you thought a person might be unsafe?

- Tell me about this person
- What was the situation?
- Why did you think they were unsafe?
- Why did you want to use a condom? What were you concerned about?
- When did you decide to use a condom?
- Tell me about how using a condom come about?
- Did you talk about STDs? Condoms? What were his attitudes towards these?
- What did he usually say? What did you usually say?
- What went through your mind?
- How did he respond to your concerns?
- Tell me about whether you talked to anyone else about having sex and your safe sex decisions?

3. Tell me about a time you had sex with someone and did not use a condom but you thought that may be you should have?

- Tell me about this person
- What was the situation?
- Why did you think they were unsafe?

- When did you decide not to use a condom?
- Did you talk about STDs? Condoms? What were his attitudes towards these?
- What did he usually say? What did you usually say?
- What are your ideas about using a condom? What are your thoughts and feelings about using condoms?
- What factors stopped you using a condom?
Possible things to ask about: Alcohol, drugs, mood you were in, partner did not want to (what was their reason for not wanting to?), it wasn't mentioned/subject wasn't brought up, we didn't have one, I didn't want to ask (why not?), we got carried away, I didn't want to (why?)
- When did you start to think that you should have used one?
- Did you discuss these concerns with anyone? What did they say?
- How did he respond to your concerns?
- How would you feel about asking him to use one?
- Did you take any action afterwards? Why did you or did you not take this action?

4. Adolescents perceptions of partner risk:

- Tell me about the kinds of people or activities that mean people are more likely to get an STD?
- Tell me about the kinds of things about a person that would make you feel that you might want to use a condom with them?
- If you were getting to know someone and thinking about maybe having sex with them in the future, what sort of things would you look for to help you decide about whether you wanted to use condoms or not?
Possible factors to suggest: Age, occupation, attractiveness, social circle/ friends, knowledge about their history e.g. sexual experience, drug taking, relationship status, ethnicity, where you met them, sexual identity e.g. bisexual, straight, behaviour, how long you had known them, who initiated sex, where you had sex, type of sex, vaginal or anal, other factors about appearance, something they said
- Tell me about who would you feel it was OK not to use a condom with? Who does not present a risk to you?
- Tell me about the things about X that made you think it was OK not to use a condom? What reassured you?
- If you want to know about someone's history, when is it OK to ask them?
- What would it be like to ask them before that time?
- What would make you think a person had an STD? What would you look for?

5. Adolescent's perception of their risk of contracting an STD:

- What risks are you worried about when you have sex?
- Do you think *you* are at risk of getting an STD? If yes, why? If no, why not?
- Can you tell me which STDs you are concerned about getting?
- Why are you concerned about these STDs?
- Why are you not concerned about the others?

- How likely is it that you will get an STD?
- Do you think you are more or less likely than others in the general population to get an STD? If more or less likely, why?
- What percentage of your friends are using condoms? Do you think you are more or less careful than your friends?
- In what situation can you imagine that you might get an STD?
- What are the ways that that you can stop yourself from catching an STD?
- What activities do you think are risky?

6. Knowledge about STDs:

- Could you tell me a little bit about what you know about these STDs:
 - Chlamydia
 - gonorrhoea
 - HIV
 - Syphilis
 - Hepatitis B
 - Genital warts

7. Adolescent's views about asking partners to use condoms:

- How do you feel about asking people to use condoms?
- What did you think it would say about you?
- What did you think it would say about them?
- What did you think it would say about your relationship?
- What have your past experiences been when you have asked someone to use a condom?
- What would make it easier for you to ask someone to use a condom?

8. Sexual Health clinics:

- Have you ever been to a sexual health clinic?
- Do you know anyone else who has been to one?
- How did you know about the clinic?
- Why did you want to go?
- Have you ever asked anyone else to be tested?
- Tell me about that
- How did you feel while you were waiting for your results?

9. If you were in charge of sexual health in the UK, what sorts of things would you do to help keep young women safe?

APPENDIX E

Stage one of analysis: Annotations on the text

IPA Analysis – First Stage

Extract from interview with P10 – Annotations on the text

Condoms socially acceptable in peer group	P: And, I don't know, among my friends it was just the socially acceptable thing to do and using condoms was just what everybody did and, yeah. I think we would have thought it quite odd if someone had said that um, 'my boyfriend doesn't want to use a condom' or something. We would have thought he was a bad person and probably advised them to get rid of him but.
Odd not to use	I: So, did you talk to anyone about your decisions?
Boys not want to? Advise friends if behaviour not fit in	P: Not really. Um, my mum did keep offering to take me to the doctor and get me put on the pill but not necessarily cos we'd had a discussion about what I was doing kind of thing. Um, but, and then when I did go on the pill she knows that I am and, it was just like OK. I think she's just glad that I'm taking responsibility of it and as long as she knows that I am being responsible, she's fine.
Mum wanted go to doctor for pill	I: It sounds like she wanted you to go on the pill?
Pill after a while	P: Yeah I think she was just worried that if I wasn't on the pill she had no way of knowing what I was doing, um, but I don't know. She said 'as long as you're being safe then that's fine' so.
Responsible to use contraception	I: And why do you think that you are more worried about pregnancy rather than STIs?
Mum worried if not on pill	P: Um, I don't know its probably because its more of an immediate thing like, a problem to deal with that would be quite big. And um, its more, like, disrupting of your life. Like, if you got Chlamydia you could get it sorted out with a course of antibiotics or whatever but pregnancy is something a lot bigger to deal with. And especially like at uni now it would be a scary thing to have to cope with so. Um...I don't know, just for me, it's a bigger worry.
More worried pregnancy as more disrupting	I: Because of the consequences?
Chlamydia easily sorted out	P: Yeah and um it would require a much bigger like decision making, thinking and a lot more stress really. Yeah and just, it would be a lot more just, like, have a bigger impact on my life than yeah.
Pregnancy scary to cope with	I: You were saying that Chlamydia can be treated quite easily, what about the others, do you feel that they can as well?
Pregnancy more stressful	P: Um, I'm not sure about like the treatment for gonorrhoea or syphilis or genital warts but I thought they could all be treated quite easily with a course of medicine. Um, yeah so its easily solved.
Not sure about STD treatment but thought easy	

APPENDIX F

Stage four of analysis: Example of tables of second level themes with first level themes clustered underneath from extract shown in Appendix E

IPA Analysis – Fourth Stage

Example of tables of second level themes with first level themes clustered underneath from extract shown in Appendix E

The numbers at the end of each quote indicate where it can be found in the interview transcript: page number, paragraph number.

CONCERN ABOUT STDs

“Um, all of them probably. I mean AIDS but I don’t know how likely that would be” 4, 3

“Well it’s a particularly scary one but I mean, I don’t know how prevalent it is among people of our age but probably not that, so I don’t know.” 4, 4

“Um, not really cos it was both of our, the first time we’d both had sex so it wasn’t something that I was too worried about.” 2, 1

“Yeah but we’d been going out since we were both sixteen and it was, it didn’t seem to pose a threat at all.” 3, 5

“Yeah if I’d just met someone...I’d be scared of getting STIs” 4, 2

“Like, if you got Chlamydia you could get it sorted out with a course of antibiotics or whatever” 9, 4

“Um, I’m not sure about like the treatment for gonorrhoea or syphilis or genital warts but I thought they could all be treated quite easily with a course of medicine. Um, yeah so its easily solved..” 9, 6

DO WHAT FRIENDS DO

“I suppose it just felt like it was something that everybody did” 1, 14

“And, I don’t know, among my friends it was just the socially acceptable thing to do and using condoms was just what everybody did and, yeah” 9, 1

“I think we would have thought it quite odd if someone had said that um, ‘my boyfriend doesn’t want to use a condom’ or something. We would have thought he was a bad person and probably advised them to get rid of him but.” 9, 1

OTHERS SUGGEST PILL

“My mum did keep offering to take me to the doctor and get me put on the pill but not necessarily cos we’d had a discussion about what I was doing kind of thing.” 9, 2

“Yeah, I think she was just worried that if I wasn’t on the pill she had no way of knowing what I was doing” 9, 3

PILL BECAUSE IN RELATIONSHIP/CONDOMS BECAUSE NOT

“...because the pill is, um, I don’t know. It is not something that I wanted to go on unless I was in a relationship but, it was fine. I didn’t just want to be on it for no reason because of like side effects that it has and, um, so I think condoms was probably what most people my age would use. At least in the beginning of a relationship.” 7, 1

“Yeah, although most of them that have been in a relationship for like longer than three months have gone on the pill” 7, 2

PREGNANCY MAIN CONCERN

“pregnancy definitely” 1, 15

“I suppose its just that I know that I’m fine and protected against pregnancy” 3, 1

“I mean we both agreed that condoms are fine but they are a bit of a hassle and it was probably because, um, we’d had one splitting twice and it was just a bit stressful.” 3, 7

“I went and got the morning after pill both times. Um, yeah, that was fine but its not something you wanna do all the time.” 3, 9

“Well pregnancy would probably be the foremost at the moment” 5, 9

“but pregnancy is something a lot bigger to deal with. And especially like at uni now it would be a scary thing to have to cope with so. Um...I don’t know, just for me, it’s a bigger worry. Um, I don’t know its probably because its more of an immediate thing like, a problem to deal with that would be quite big. And um, its more like, disrupting of your life.” 9, 4

“Yeah and um it would require a much bigger like decision making, thinking and a lot more stress really. Yeah and just, it would be a lot more just, like, have a bigger impact on my life than yeah.” 9, 5

“Um, I’m not sure about like the treatment for gonorrhoea or syphilis or genital warts but I thought they could all be treated quite easily with a course of medicine. Um, yeah so its easily solved.” 9, 6

RESPECTFUL BOYS USE CONDOMS

“I don’t know, it would be quite backwards of a boy not to want to use a condom in the society that we live in so” 7, 7

“Yeah, um, because its like an obvious thing that you need to do. If he didn’t want to do it I’d be quite worried about what kind of person he was” 7, 8

“Um, maybe someone that’s not particularly respectful of girls” 7, 9

“I think we would have thought it quite odd if someone had said that um, ‘my boyfriend doesn’t want to use a condom’ or something. We would have thought he was a bad person and probably advised them to get rid of him but.” 9, 1

RESPONSIBILITY

“We’re both pretty responsible so there wasn’t any debate about whether we’d use it or not.” 2, 2

“people that are maybe less responsible about sex” 3, 12

“I don’t think so if I stay like, as concerned about it and responsible as I feel I am at the moment. Um...like I shouldn’t have thought so.” 6, 8

“I think she’s just glad that I’m taking responsibility of it and as long as she knows that I am being responsible, she’s fine.” 9, 2

“Yeah. Someone that’s comfortable about talking about something like that makes you feel that he’s more responsible in that area and has thought about things like that.” 10, 5

APPENDIX G

Stage six of analysis: One of several third level organisations of themes

IPA Analysis – Sixth Stage

One of several third level organisations of themes

1. Perception of vulnerability to STDs:

i. STDs as a secondary concern

- STDs as secondary concern after concern about pregnancy, their peer group and maintaining their relationship with the partner.
- Nearly all the participants' primary concern was a fear of getting pregnant. Related to pregnancy having higher visibility and availability. Pregnancy was seen as having worse repercussions than STDs. Consequences of having an STD were not perceived as serious as knew people who had had them treated or because did not know much about the health consequences of infection. They used the contraceptive pill to prevent pregnancy so condoms not necessary.
- Also important to maintain social position in peer group. Participants concerned about what peers thought about them and whether condom use would lead to them fitting in. Also how wanted to be seen by peer group, e.g. risk-taker or responsible.
- STDs also a secondary concern to maintaining the relationship with their sexual partner. Difficult to negotiate condom use because feared discussions would lead to partner taking offence or not feeling trusted. Worried could lead to breakdown of relationship or conflict. Meant conversations sometimes happened after a potentially risky situation.

ii. Personal invulnerability

Many participants felt they had a personal invulnerability to contracting an STD. Their belief is that 'it won't happen to me.' Some described this as being similar to that of other health risks and risky behaviours, for example, smoking and lung cancer. Many felt their risk was less than others because they considered their behaviour or situation to be 'safe.' This assessment was not always accurate.

iii. Distancing

When considering who is at risk of contracting an STD, participants often described people who were dissimilar to them in terms of socioeconomic background, ethnicity, employment, and behaviour.

iv. General vulnerability vs. partner risk

The first response given when asked who would be likely to present an STD risk was that 'anyone can get one' and hence that they would always want to use a condom with a new partner. However, responses showed condom use not being based on this belief. Made decision based on risk presented by particular partner in particular situation. This judgement based on appearance, their behaviour, things they had heard about them, information the person gave them about their past, where they met them and their feelings for that person.

2. Condoms as only a part of staying safe:

i. Importance of STD testing

This was mentioned by nearly all of the participants and was seen as an important way of reducing STD risk. Often took place if a partner was new, if they suspected their partner had cheated, or following encounters where a condom had not been used with a 'risky' person or had split.

ii. Risk assessment of partner

Participants tried to protect themselves from contracting an STD by carrying out a 'risk assessment' of potential partners. They attempted to judge the level of STD risk that a potential partner posed to them based on the person's appearance, things they had heard about them, meeting their friends and family, considering how and where they met them, and things the person told them about their background and history.

iii. Staying monogamous

Having one partner and having sex within a relationship was seen as being safe. Most participants felt that once you were in a relationship, condom use was not necessary due to the decreased risk. One night stands were seen as being risky because it is difficult to carry out a risk assessment if you do not know the person well.

iv. Avoiding risky non-sexual situations

Some participants also had concerns about contracting an STD via non-sexual transmission. These participants also sought to stay safe by being careful about contact in public toilets, changing rooms, swimming pools and gyms.

3. Constraints/facilitators in condom use occurring:

i. Influence of others outside relationship

Participants were influenced by others in terms of which form of contraception to use. Consideration was also given as to whether they wished their parents to know that they were having sex. If they did not wish their parents to know then they used condoms as these were seen as easier to obtain without parental knowledge. Peer group norms in terms of whether they would be evaluated negatively or positively by their friends for using condoms was also important.

ii. Situational factors

Important aspects of the situational context were whether a condom was available to use or not, whether alcohol had been consumed, participant's level of sexual arousal, whether another form of contraception was being used and whether the participant considered the partner to present an STD risk to them or not.

iii. The context of the relationship

The partner's attitude towards condoms was an important factor as was whether the participant perceived it would be difficult to ask for condoms to be used. The length of the relationship influenced condom use in terms of condom use being less likely if the relationship was established. This was related to increased use of the contraceptive pill which took care of the issue of pregnancy so condoms were not seen as being necessary. It was also believed that not using condoms demonstrated trust and emotional intimacy in a relationship.

iv. Individual factors

Participants' own attitudes towards condoms affected whether they were used. A positive attitude towards condoms in terms of them being effective at preventing pregnancy and STD transmission, easily obtainable and easy to use were more likely to lead to condom use. Attitudes around condoms being inconvenient, expensive, not a good way of preventing pregnancy and awkward meant they were less likely to be used.

v. Socio-cultural factors

Many participants spoke of there being different standards of acceptable sexual behaviour for men and women. It was accepted, and in some peer groups endorsed, that men can have multiple partners, could cheat on their partners, and not use condoms.

history, STD testing and condom use as the consequences of not being safe are v
women than men.