UNIVERSITY OF SOUTHAMPTON

HELPING TO EXPLAIN YOUNG PEOPLE'S USE AND NON-USE OF CONTRACEPTION: INTERACTIONAL AND DYNAMIC INFLUENCES

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ABSTRACT

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HELPING TO EXPLAIN YOUNG PEOPLE'S USE AND NON-USE OF CONTRACEPTION: INTERACTIONAL AND DYNAMIC INFLUENCES

by Lester Michael Coleman

The thesis commences by establishing why research into young people's use and non-use of contraception is so necessary. Nationally collated statistics are used to illustrate the rates for conception and sexually transmitted infection (STI) amongst this population sub-group. Reviewed survey findings, indicating levels of contraceptive and condom non-use, are shown to support these data. Having outlined the nature and extent of the research 'problem', relevant theoretical and empirical studies concerned with contraceptive behaviour are reviewed. Support for the social cognition approaches to health-related behaviour is labelled as well as the more interactionalist based models that have built upon the principles of the former. This review provides the study with a firm theoretical grounding, assurance that the same work has not been replicated elsewhere, identifies areas warranting more investigation and thus helps establish this project's own research question, objectives and conceptual framework. After providing a detailed and reflexive account of how the project was designed and administered, the bulk of the thesis focuses upon presenting the research findings.

The self-administered screening questionnaires (n=424) distributed to young people's clinics generated predominantly descriptive data; they provided a broad socio-demographic profile of the clinic attenders and also measured aspects of their sexual behaviour. From those clinic attenders who volunteered for interview, the analyses of these data allowed a wide variety of young people be recruited into the study. The key findings are that previous behaviour, delaying first intercourse with a current or recent partner and talking to the partner about contraception before this intercourse are both associated with an increased likelihood of contraceptive and condom use.

The round 1 interviews (n=56), undertaken among attenders at young people's clinics, youth clubs and youth advisory centres, identify a number of interactional themes which collectively help to explain the likelihood of 'risk' and 'no risk' situations (these findings are preceded by the main methodological issues associated with this thesis). Indeed, the role of verbal communication, and especially the difficulties reported by some people in initiating such discussion, are especially detailed and appear to be particularly influential. All interviewees recorded their intentions towards using condoms with new partners.

The round 2 interviews (n=22) identify six contrasting patterns of condom use/non-use according to the intentions, expectations and behaviour relationship for those experiencing intercourse with a new partner since the first round of interviews. These patterns are identified as consistent users, converted users, influenced users, over-optimists, the resigned and the consistent non-users. The dynamics of change are also detailed, with respondents reporting an increased awareness towards contraception and STI, a greater consistency in the use of contraception and a greater likelihood of attending a sexual health service since their first ever intercourse. The main triggers for such changes are attributed to respondents' personal experiences and the experiences of their friends and family.

The final part of the thesis outlines the key conclusions (in conjunction with the objectives outlined earlier), discusses some of research limitations and closes by briefly summarising the 'potential' implications (subject to larger scale research) upon health policy and strategies for further research.

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Finally, I am particularly grateful to all the young people who took part in this project.

CHAPTER 1: INTRODUCING THE RESEARCH PROJECT

1. INTRODUCTION AND THESIS STRUCTURE

This project is concerned with promoting the use of contraception among young people in the UK. To achieve this, the thesis starts by defining the research 'problem' and finishes by outlining the project's key conclusions and its contribution to the reviewed literature. The introductory section of this first chapter essentially seeks to guide the reader by providing a brief summary of the forthcoming chapters and this is followed (in the remainder of Chapter 1) by an account why such a project should be undertaken.

1.1 Synopsis of forthcoming chapters

The remainder of Chapter 1 (from Section 2 onwards) seeks to clarify the necessity for carrying out this research project, by outlining the nature of the research 'problem'. Levels of contraceptive use among young people clearly determines the prevalence of conceptions as well as Sexually Transmitted Infection (STI) (when referring specifically to the use of condoms) among this population group. Therefore, in order to illustrate the extent of conceptions and STI among young people, a summary of nationally collated statistics is presented which is then complemented by some key findings derived from a review of recently conducted survey based studies. Chapter 1 then proceeds to argue *why* these statistical and survey findings are indeed a matter of concern and certainly a public health issue of national priority.

Chapters 2 to 3 (Literature Review parts One and Two) review both the theoretical and empirical studies that have contributed to our understanding of why contraception is used so inconsistently by a proportion of young people in the UK. More precisely, Chapter 2 outlines the empirical evidence, in particular through a series of meta analyses, to determine the applicability of the main social cognition models in helping to explain patterns of contraceptive behaviour. Following on from outlining the important contribution that the social cognition models have made in helping to explain such behaviour, this chapter introduces some of the more recent 'alternative' or interaction-based models which essentially build upon the principles outlined through social cognition, as well as some additional innovative constructs of interest.

In the following Chapter 3, these interactionalist models are 'broken down' to facilitate the review of empirical research that has examined the applicability of these models. This process identifies two sets of interactional issues namely, the *communication and negotiation skills* and the *gender power imbalances and pressures within partnerships*, which are shown in the empirical literature to offer a valuable contribution towards predicting contraceptive behaviour. Chapter 3 then introduces three new dimensions upon these interactional issues that have been proposed in the literature to help explain patterns of contraceptive behaviour. Firstly, *dynamic factors* discusses the role of previous interactions, changing use and methods of contraception and changes experienced since first ever intercourse. Secondly, *contextual factors* outlines the influence of both the physical and psychic contexts surrounding the interaction between partners, and how these may affect these behaviours. Thirdly, the empirical review is completed by assessing the impact of the *additional innovative constructs* outlined in Chapter 2, which include planning and preparation, relationship factors and personality influences, etc. It is felt that the inclusion of these additional factors provides the reader with a comprehensive outline of the issues, identified in both the theoretical and empirical literature, that have been argued to influence contraceptive use. Moreover, this Chapter's most significant contribution is that it defines, beyond intention formation, those factors which may help to explain patterns of contraceptive behaviour. Chapter 3 then closes by noting how this review impacts upon the nature of this research project by identifying what *has* and *has not* been researched in this area and thus specify some unanswered research questions to which this thesis shall contribute. Essentially, this section provides assurance that this project's research question is not simply replicating existing research but, in contrast, focuses upon areas which have received very little (if any) investigation. This section also emphasises how the project has a distinct theoretical foundation. Moreover, it also provides an important 'bridge' between the existing research (as depicted in the Literature Review) and the research question and objectives which are introduced at this point.

Chapters 4 to 8 concentrate upon the aims, methodologies, findings and implications of this research project, and subsequently form the bulk of the thesis. In light of the literature reviewed in Chapters 2 and 3, Chapter 4 commences by defining the project's broad research question as follows: *to assess the influence that partner interaction has in explaining contraceptive use*

patterns among young people, and to interpret if and how these use patterns change through time. In order to respond to this research question, five ultimate objectives are identified and for each of these the more immediate objectives are listed, which in turn, detail *how* each of these ultimate objectives will be met. The immediate objectives do not represent hypotheses, but are indicative of the issues that will be investigated in a qualitative and semi-inductive manner, thus allowing any relevant (but perhaps less expected) themes to arise from the data. Chapter 4 presents a conceptual framework for the study, which aims to schematically represent the research question and objectives, and subsequently illustrate what material will be covered in the data generation tools devised. A summary of this framework is presented here to familiarise the reader with the project's aim; this is perceived to be a crucial part of this first chapter, thus allowing the reader to appreciate the relevance of the literature reviewed in the forthcoming chapters.

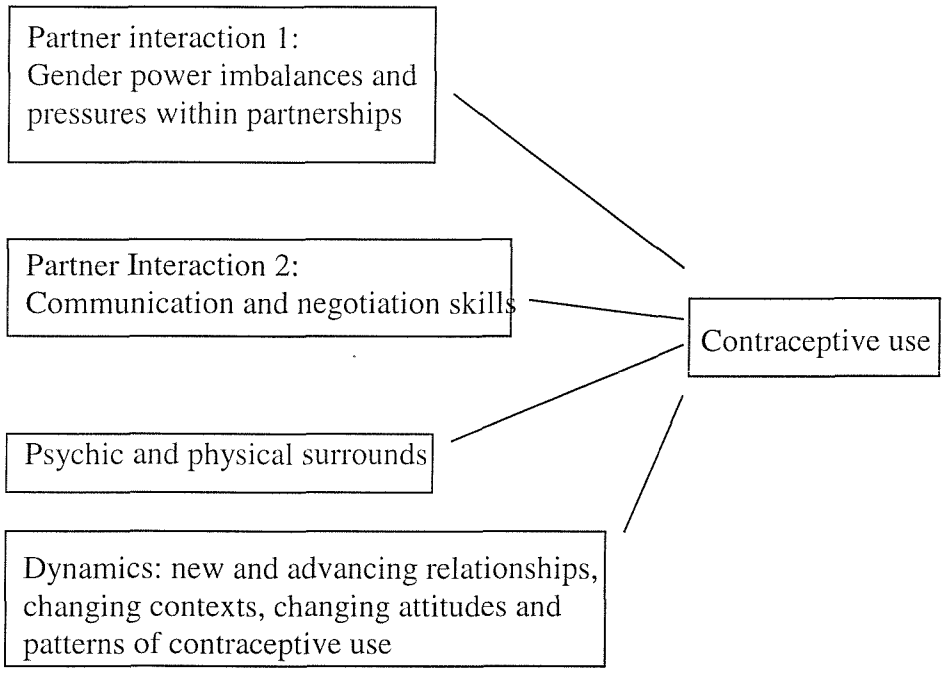


Figure 1: Summary of the project's conceptual framework

The remainder of Chapter 4 outlines the study design, detailing the project's implementation and administration. This includes accounts of both what was proposed before the project was implemented as well as what actually occurred once the project was under way. This reflexive stance allows certain methodological decisions (where divergent from the original proposal) to be explained and justified. The following issues are discussed under the study design: *research*

design, sampling, methods of data collection and *management and administration of the data collection.*

Chapters 5, 6 and 7 detail the research findings. Chapter 5 presents data from the self-administered questionnaires (n=424) distributed to young people's clinics (used primarily to recruit clinic attenders for interview). These data are predominantly descriptive and respond to the information sought by the service staff as well as to some of the specific research objectives noted in Chapter 4. Importantly, the analyses of these data also allowed a wide variety of interviewees to be recruited (in terms of the criteria used in the questionnaire) from the young people's clinics. The key findings are regarding the wide variation in clients seen across the clinics in terms of age, gender, sexual experiences and distance travelled to the clinics. There was a widespread potential for conception and STI; 46% (of non-virgins) experienced intercourse without contraception a few times or *many times* and 18 % used condoms *rarely* or *never*. In terms of first intercourse with current/most recent partner (or FIRP), 17% had not used any contraception and 32% failed to use condoms. Multiple regression analysis showed that past behaviour, delaying first intercourse and talking to the partner about contraception before this intercourse were significantly associated with increased levels of contraceptive use, and also the specific use of condoms, on this occasion (more detail of these quantitative survey findings of clinic attenders can also be seen in Coleman and Ingham, 1998).

Following an outline of the interviewee selection and recruitment process, the analytical procedures adopted and the qualitative methodology employed to generate the key themes or explanations from the data, Chapter 6 presents findings from the first round of interviews (n=56). The main issues derived from the qualitative analysis are presented under *intercourse-specific themes* (predominantly interactional issues relating to a specific instance of intercourse) and *non-intercourse-specific themes* (the more general attributes of the individual or method of contraception, and experiences of attending contraceptive advice services). The interviews identify a number of interactional themes which collectively help to explain the likelihood of 'risk' and 'no risk' situations (see respective chapter for precise definition of 'risk'): *relationship certainty, onset of first intercourse* (with the current or most recent partner), *expectation of intercourse, reasons for intercourse, pressures and persuasions, verbal communication about*

intercourse and contraception, and *taking primary responsibility for contraception and non-verbal communication based strategies*. The role of verbal communication, and especially the associated difficulties reported by some in initiating such discussion, are particularly detailed.

Chapter 7 outlines the design and administration of the second round of interviews (n=22) and introduces the longitudinal component of the project. Whilst the analysis of the round one interviews involves more comparison with other cases, these round two interviews include greater reference to case studies. This chapter highlights the rather unexpected divergence between a person's intention and expectation towards their future use of condoms on the occasion of first intercourse with a new partner and suggests a number of explanations for this, in particular, focusing upon the partner's influence. From the detailed qualitative case study analyses, six contrasting patterns of condom use/non-use are defined according to the intentions, expectations and behaviour relationship for those experiencing intercourse with a new partner since the first round of interviews. These patterns, termed *consistent users*, *converted users*, *influenced users*, *over-optimists*, *the resigned* and the *consistent non-users*, provide a useful framework for discussing the cognitive characteristics likely to lead to both the use and non-use of condoms. Chapter 7 also details the *dynamics of change*, with respondents reporting an increased awareness towards contraception and STI (in particular), a greater consistency in the use of contraception and a greater likelihood of attending a contraceptive advice service since their first ever intercourse. The main triggers for such changes are attributed to respondents' personal experiences, experiences of their friends and close members of their family.

Chapter 8 (final chapter) summarises the project's key conclusions, considers how the research met its objectives and discusses (for each conclusion) the contribution of the research to the literature reviewed in Chapters 2 and 3. Research limitations are noted, including reference to the sampling technique, research design and style of analysis. Chapter 8 closes by briefly summarising the 'potential' implications (subject to larger scale research) upon health policy and strategies for further research.

Finally, the remainder of this first chapter outlines the nature of the research 'problem' (by providing some nationally-collated statistics and survey findings relating to contraceptive use), and

argues why the issue of promoting contraceptive use is thus a matter of concern. Before these are presented, two incidental points of reference must be made. Firstly, when referring to 'young people', the statistics and survey findings selected for this chapter, unless otherwise specified, will broadly follow the age groups chosen for this project's sample; namely 16-19 years inclusive. Secondly, reviewed statistical and survey data deemed relevant for this chapter will include projects undertaken within the boundaries of the British Isles, but not extending into research carried out in mainland Europe and beyond (to ensure cultural relevance).

2. NATIONALLY COLLATED STATISTICS (England and Wales unless stated otherwise) AND SURVEY FINDINGS

2.1 Conception rates

Recent data published by the Office for National Statistics (ONS, 1998) report a significant increase in the conception rate per 1000 women aged 15 -19 inclusive. For the last two years of available data, the rate increased by 7.3% from 58.7 to 63.0 per 1000 women in this age group. This increase has interrupted the steady decline in the rate since its recent peak of 69.1 in 1990 (see Figure 2). The extent to which this recent increase is attributed to the pill 'scare' of 1995 will not be evident until subsequent data for the remainder of the 1990s are available. When examining conception rates for the younger age groups, it is clear that the targets set by the Health of the Nation Government White Paper (Secretary of State for Health, 1992) will not be achieved. The conception rate for girls aged 13 to 15 is reported as 9.4 in 1996 (ONS, 1998), well beyond the target set by the Health of the Nation of 4.8 by the year 2000. With this in mind, this White Paper has been recently termed as a Health of the Nation 'failure' (Adler, 1997).

When examining these conception rates further (among 15-19 year olds), it appears that the proportion of conceptions that have been terminated has remained relatively constant at around one-third (Figure 2). This in itself represents the *minimum* level of unintended conception, since an unknown proportion of conceptions leading to maternities are also likely to have been unintended.

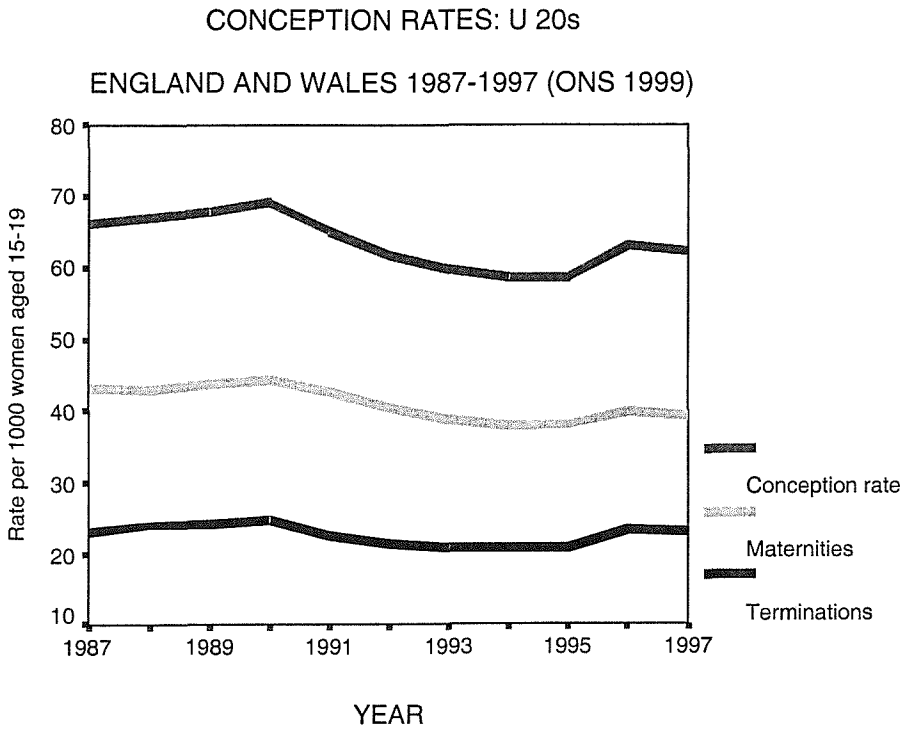


Figure 2: Conception rates for the under 20s

England and Wales (ONS, 1998)

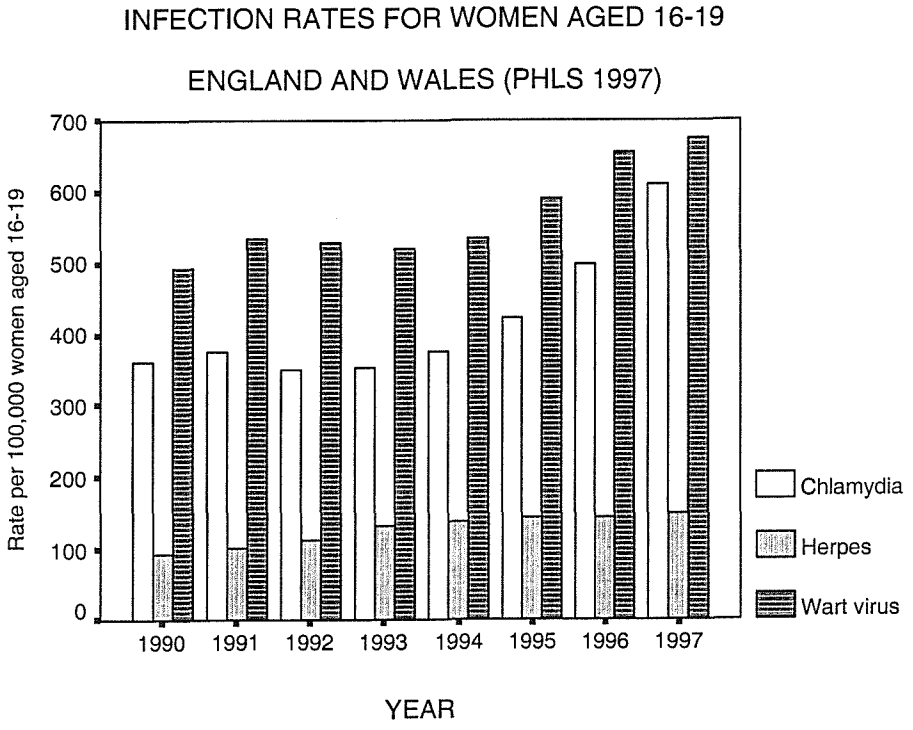


Figure 3: Infection rates for women aged 16-19

England and Wales (PHLS, 1999)

2.2 Sexually Transmitted Infections

In conjunction with the conception rates, there has been a steady rise since the early 1990s in the first time infection rates for Wart Virus, Herpes Simplex Virus and Chlamydia among females aged 16-19 years (Public Health Laboratory Service or PHLS, 1999) (see Figure 3). However, in a literature review concerning the prevalence of Chlamydial infection in UK Family Planning Clinics, Stokes (1997) argues that the rates of infection are not known with any degree of certainty. Moreover, the PHLS statistics are based solely upon Genito-urinary Medicine Clinics (where people are presenting for treatment) and exclude those cases treated at Family Planning Clinics and through General Practice. Nevertheless, Stokes concludes that the estimated prevalence of Chlamydia among women attending UK Family Planning Clinics ranges from 3% to 7% in Family Planning Clinics and 3% to 4% in General Practice. Davis (1998) argues that between 2% to 12% of the population (all age groups) are infected with Chlamydia. In contrast to the rates among women, rates among their male counterparts are not only substantially less for Wart Virus, Herpes Simplex Virus and Chlamydia, but also that there is a reported reduction in their first time infection rates in the 1990s. Whether these rates, and in particular their increase among females is truly due to an increasing prevalence or more representative of the wider reporting and detection techniques (of these frequently asymptomatic infections) remains debatable. Both males and females report recent decreases, from 1996 to 1997, in first time infection rates of Gonorrhoea and Syphilis (more symptomatic and hence likely to be recorded when people are seeking treatment) (PHLS, 1999). In terms of HIV infection, the cases of heterosexual transmission (of most relevance to this project's objective) still remain vastly fewer than those transmitted across other routes (PHLS, 1998). Indeed, the annual infections acquired heterosexually among 15-19 year olds (that is the age group at diagnosis) have broken single figures (with a maximum of 16 new cases in 1996) only four times since 1991 among females and have yet to do so among males. The number of infections acquired heterosexually totalled 6,231 among all age groups by the end of 1997, compared to 18,547 acquired through sexual intercourse between men (PHLS, 1998).

2.3 National and Regional Sexual Behaviour Survey Findings

In order to summarise the array of survey data that has assessed the sexual behaviour (and in particular the contraceptive behaviour) of young people in the UK, the author undertook an extensive review of the relevant literature. This review (see Coleman, 1999 for details) essentially seeks to outline the current climate of sexual behaviour and contraceptive use, in particular, among today's young people within the UK. In light of the review process, some limitations of the existing approaches to surveying contraceptive use are noted (and thus will reflect the approaches used to research contraceptive use in this project). Finally, to provide a more comprehensive account of the contraceptive use of young people in the UK, data illustrating the number and type of sexual intercourse partners and this relationship with condom use are also referenced.

Whilst the review shows that numerous sexual behaviour surveys have taken place in the UK, only rarely have such studies been pooled into such a systematic and easily referenced format (see Coleman, 1999). The exception is a paper published by Fife-Schaw and Breakwell (1992), although no review has since been undertaken in more recent times. This work serves to update the Fife-Schaw and Breakwell (1992) paper and to see whether some of the recommendations proposed by these authors have been incorporated into more recent research. The review includes some of the papers included in this Fife-Schaw and Breakwell (1992) paper, together with more recent surveys.

The review incorporates the findings of eleven surveys that have documented the patterns of contraceptive use among young people. These surveys were selected for review according to the following criteria:

- They were conducted within the last 12 years
- Their findings relate to young people (ages ranging from 15-25)
- They were conducted in the UK
- They were aimed to be broadly representative of the wider population of young people (by using either random or quota sampling to select respondents)
- They had a response rate of at least 50%

- They had a minimum sample size of 400
- They included data which was broken down sufficiently by age to permit reasonable comparison between surveys

Table 1 presents a summary of the key features of each of the eleven surveys that have been reviewed. Each survey is detailed in terms of its author (s) and year of publication, year of survey, survey site, sampling strategy, sampling frame, method (s) of data collection, age group surveyed, number of respondents and the response rate.

2.3.1 Review findings - contraceptive and condom use

There are several different measures documenting contraceptive use that have been used in these surveys, not least those referring to the different methods and consistency of use. Contraceptive use has been assessed using a variety of different time-scales; *use within the last year, current use, use at last intercourse* (or use ALI) and *use at first intercourse,* and each will be presented in turn. In introducing these measures, it is worth noting that surveys examining contraceptive use are conducted among those respondents who have experienced sexual intercourse within the specified time limit (i.e. *no method* or *none* refers to intercourse with no contraception as opposed to not had intercourse). *Contraceptive use within the last year* is a measure used solely by Johnson, Wadsworth, Wellings, Bradshaw and Field (1994), and shows the predominance of pill and condom use (not necessarily together) among 16-24 year olds. The pill is the most frequently cited method for females (64.1%), whereas males are more likely to report condom use (61%). It is important to attach particular weight to this Johnson *et al.* (1994) paper for all indices of sexual behaviour that are cited in this section; this survey is clearly the most extensive undertaken ever in the UK, and its sample area and size (although not confined to young people) is vastly greater than the any of the other surveys reviewed. However, it is important to note that in the Johnson *et al.* survey (1994), respondents were asked to cite *all* contraceptive methods used within the last year and, although this indicates the most commonly used methods, it does not give a truly accurate representation of the consistency of contraception use. As an example, a respondent who used a condom for every act of intercourse could therefore register the same as a respondent who used a condom on only one occasion within the last year.

AUTHOR AND YEAR OF PUBLICATION	SURVEY YEAR	SURVEY SITE	SAMPLING STRATEGY	SAMPLING FRAME	DATA COLLECTION	AGE GROUP	RESPONDENT NOS	RES. RATE %
Abrams *et al.* 1990	1987	Dundee	Randomised	Postal	SAQ	16-18	690 M/F	64
Bowie and Ford 1989	1987	Somerset	Quota	Households	SAQ+Int.	16-21	400 M/F	95
Ford and Morgan 1989	1988	Bristol	Quota	Households	SAQ+Int.	16-21	400 M/F	93
Galt *et al.* 1989	1989	Doncaster	Randomised	Postal	SAQ	18-19	766 M/F	58
MEL 1990	1989	W.mids.	Quota	Street/Halls	SAQ+Int.	16-25	524 M/F	70
Ford 1993	1989/90	S.west UK	Quota	Households	SAQ+Int.	16-24	3777 M/F	70-91
MORI 1990	1990	England	Randomised	Households	Interview	16-19	4436 M/F	63
Galt and Gillies 1990	1990	Derbys.	Randomised	Postal	SAQ	18-49**	1175 M/F	61
West *et al.* 1993	1990	Glasgow	Randomised	Households	Interview	18	908 M/F	90
Johnson *et al.* 1994	1990/91	GB	Randomised	Households	Interview + SAQ	16-59*	18876 M/F	65
Ford et al 1997	1996	Somerset	Quota	Households	SAQ+Int.	16-24	498 M/F	92

SAQ = Self administered questionnaire
Int = Interview
* Data available for 16-24 year olds within the overall sample
** Data available for 18-24 year olds within the overall sample
*** Data available for 16-17 and 18-19 year olds within the overall sample

Table 1: Summary of reviewed papers

West, Wight and Macintyre (1993) termed *current contraceptive use* as that used by non-virgins who had experienced sexual intercourse within the preceding three months. The West *et al.* (1993) survey reveals a fairly high proportion of non-use (11.2% for males and 7.1% for females) and as well as the use of the less effective method of withdrawal (12.5% of males and 5.4% of females). In similar fashion to the Johnson *et al.* survey (1994), the use of the pill and condom predominate, and again the former most frequently cited by females (67.8%) and the latter more by males (57.6%). Although this measure of current use includes some reference to non-use, little can be deduced in terms of the consistency of contraceptive use; contraception may be used on the majority but not necessarily on all occasions, and hence may disguise a degree of non-use or failure to use contraception in the past, perhaps during the early stages of a relationship.

Contraceptive use at last intercourse could be thought as being a more accurate representation of consistent levels of use and non-use, since it requires respondents to recount contraceptive use during a specific encounter. Whereas non-use may not be accurately represented in surveys assessing *current* or *usual* method, it is more likely to be revealed when recounting behaviours from a specific and identifiable encounter. This measure has been used by MORI (1990), Ford (1993) and Ford, Halliday and Little (1997). In general, all three surveys show the predominance of use of the condom and/or pill with the former being reported more often by males (39% in Ford 1993 to 60% in MORI 1990) and the latter more commonly cited by females (50% in Ford 1993 to 60% in Ford *et al.* 1997). Although a significant level of contraceptive non-use is reported, the surveys differ markedly in their extent, ranging from 18% in the MORI (1990) survey (if including *safe-period, morning after pill* and *withdrawal* as non-use) to 28% in the survey documented by Ford (1993). It is important to note that non-use of contraception as reported by the MORI (1990) survey is likely to be even higher given that 7% of males and 2% of females did not know whether they used contraception and/or which method was used. The contrasting age groups used in these surveys, illustrated in Table 1, are likely to have influenced these levels of reported contraceptive use (see later in Tables 2 and 3).

The Ford surveys (Ford 1993 and Ford *et al.* 1997) are particularly interesting in that they give an accurate indication of the extent of using both the pill and condom, which has obvious implications upon reducing the risk of STI *and* conception. When comparing these Ford surveys,

the findings show an encouraging increase (between the two surveys undertaken six years apart) in use of the condom *and* pill ALI (from 5% to 12%) as well as a general decrease in the percentage of respondents using no method of contraception on this occasion (from 28% to 18%). However, there must be some caution when interpreting these changes given the different sample sizes, sample area (south-west UK and Somerset) and that the respondents are only similar and not exactly the same as those recruited earlier (even if the geographical region of the UK is comparable).

Some additional measures of contraceptive use have been used so rarely by other studies, that making cross-study comparisons is impossible. One such example is *contraceptive use at first intercourse,* used by West *et al.* 1993. However, their findings are particularly interesting in that they show how use of contraception at first intercourse is notably lower than current use and use ALI (47% of males and 31% of females reported no method used on their first intercourse); this may illustrate not only the problems faced by young people in ensuring contraceptive use on their first intercourse in particular, but also emphasises that researchers using different indices of sexual behaviour (although citing only one example here) may result in quite different findings.

While levels of contraceptive use, and particularly its non-use, help to account for the conception rates previously documented, it is also important to specifically examine the extent of condom use in relation to the prevention of STI among young people. In similar fashion to the measures of contraceptive use, *condom use at last intercourse* is perceived to be a more accurate measure of its use in comparison to *usual method, ever use, use within last year* or *intention to use*. Again, the surveys that have examined condom use ALI quote percentages from non-virgins only. Of the five surveys using this measure (Bowie and Ford, 1989; Ford and Morgan, 1989; Ford, 1993; MORI, 1990; Ford *et al.,* 1997), condom use ALI ranges from 30% (Ford and Morgan, 1989) to 52% (MORI, 1990). While all surveys illustrate an equal or greater use of condoms by males, the differences in total use ALI are likely to reflect the slightly different age groups questioned in these surveys. With condom use shown to decrease with age (Ford, 1993; Ford *et al.,* 1997), this may account for why, for example, MORI (1990) reports condom use ALI at 52% (16-19 year olds) whereas Ford (1990) reports this at 33% (16-24 year olds). These findings are illustrated in Table 2:

SURVEY REFERENCE	SURVEY YEAR	AGE GROUP	CONDOM USE ALI - TOTAL (%)	CONDOM USE ALI - MALES (%)	CONDOM USE ALI - FEMALES (%)
Bowie and Ford 1989	1987	16-21	36	36	36%
Ford and Morgan 1989	1988	16-21	30	-----	-----
Ford 1993	1989/90	16-24	33	39	28%
MORI 1990	1990	16-19	52	60	44%
Ford *et al.* 1997	1996	16-24	41	46	36%

Table 2: Condom use at last intercourse (ALI) (All samples are Non-Virgin or NV)

When reducing this age difference, by including 16-19 year olds only (from the three surveys that allow this), the levels of condom use ALI fall between 49% (Ford, 1993) to 62% (Ford *et al.*, 1997). This is equivalent to non-use of condoms at around 40% to 50% for ALI; see the broad estimates of contraceptive use outlined later on in this section. Moreover, when comparing the Ford surveys (Ford, 1990; Ford *et al.*, 1997), it appears that the overall level of condom use has increased during the time interval between these two surveys. This more standardised measure of condom use can be seen in Table 3:

SURVEY REFERENCE	SURVEY YEAR	AGE GROUP	CONDOM USE ALI - TOTAL (%)
Ford 1993	1989/90	16-19	49
MORI 1990	1990	16-19	52
Ford *et al.* 1997	1996	16-19	62

Table 3: Condom use at last intercourse (ALI) (All samples are NV)

Once the measures used have been standardised as much as is feasibly possible (for example, by presenting the *same* as opposed to *similar* age groups), the findings given previously yield fairly steady assessments of contraceptive use. In an attempt to distil these findings, the main patterns of contraceptive use among young people (age groups as shown) within the UK are summarised as follows:

- Condoms are the most frequently reported contraceptive method used at last intercourse by males, whereas for females the pill is the most frequent
- Non-use of contraception at last intercourse ranges from around 20% to 30% (16-24 year olds)
- Condom use at last intercourse decreases with advancing age whereas pill usage increases
- The use of the condom and pill together has increased since the early 1990s
- Contraceptive use at first intercourse appears to be lower than that reported at last intercourse
- Non-use of condoms at last intercourse ranges from around 40% to 50% (16-19 year olds)

When considering the findings presented above, it is clear that the majority are presented more as *broad estimates* rather than *precise values* of contraceptive use. That is to say, most of the measures can only be illustrated as falling within a specified percentage range; for example, evidence from the reviewed surveys indicates that somewhere between 20% to 30% of young people (defined in this case as between 16-24 years of age) report non-use of contraception at last intercourse. Although these estimates are of value to those concerned with promoting the sexual health of young people within the UK, variations in a number of findings may reflect limitations in some of the surveys, rather than indicating actual differences in the sexual behaviour between each of the surveys *per se*. Given these limitations (to be outlined below), it simply has not been possible in this review to provide more precise findings. Nonetheless, these estimates give us the best indication possible (currently) of the patterns of sexual behaviour derived from a number of surveys undertaken in the UK.

The limitations of existing survey research investigating patterns of contraceptive use among young people is an important outcome that has been derived from this review process. The limitations will be detailed here as they are seen to have a profound impact upon this project's research approach and methodology. One of the most obvious features of this review process is the variety in the indices that have been used to measure the contraceptive use of young people. Where the same measures are used so inconsistently by researchers, making generalisations from such a review has become a complex process. Measures have included *current use of contraception, most usual method of contraception, ever use of contraceptive methods, ever non-use of contraception, use of contraception within the last year, use of contraception within the last three months, use of contraception at last intercourse* and finally, *use of contraception at first intercourse*! Moreover,

of the eleven studies reviewed in this paper, the number of studies that have used the exact same measure of condom use (thus allowing comparisons across these studies to be made) does not exceed five. The case for standardised measures of contraceptive use is clear, and although recognised and recommended in an earlier paper by Fife-Schaw and Breakwell (1992), it appears that this aim has yet to be achieved. Moreover, there is a clear need to standardise the age groups within surveys allowing cross-study comparisons to be made. The review has illustrated the cautions attached to comparing samples aged 16-24 with those sampling 16-19 year olds (as regard to condom use ALI, for example). There is also a need to ensure that the partnership or marital status of the sample is known; for example, condom use ALI holds contrasting connotations (For STI risk potential) according to whether this last partner was a 'one-night stand' or a steady partner (whose sexual history was more likely to be known) – see forthcoming Section 2.3.2.

Aside to the variation in the measures used to assess contraceptive use, certain specific criticisms can be labelled to the measures themselves with regard to their interpretation. There are numerous examples to cite; *use of contraception and/or the condom at last intercourse* (one of the most common measures of contraceptive use) could be perceived by respondents in a number of ways. For the first example, how would a person respond when they experienced sexual intercourse on three occasions during a single night but only used a condom once? Similarly, the non-use of contraception during penetration but without reaching orgasm poses new challenges in the measures used - is this classed by respondents as contraceptive non-use or not even intercourse? Moreover, how are the additional measures of contraceptive use interpreted by the survey respondents? For example, how is *current use* of contraception interpreted? (Does this refer to the last method used or the method most often used?).

When considering such limitations, it is also worth questioning how far this review can generalise from such a collection of survey data. Even given the selection criteria outlined in the introduction, that determined the suitability of the studies to be reviewed, the varying response rates (see Table 1) may indeed be a matter for caution (as well as the varied techniques in calculating this rate). While most surveys utilised random sampling either from within strata or in a multistage manner, the inconsistencies in a number of the survey findings (especially age at first intercourse and contraceptive use ALI) may reflect actually *who* was being surveyed. Although this paper only

reviewed surveys with response rates above 50%, there was considerable variation with four out of the eleven surveys achieving a response rate of over 90%. Assuming that those studies reviewed operated more or less equally in their selection procedures (by attempting to sample the *general* population of young people), it can be argued that the surveys with a higher response rate are more likely to be representative of this broader population. With such a sensitive issue like contraceptive use, surveys that have in excess of 30% to 40% refusal (for example) may represent a greater proportion of those respondents who are able to recall freely and comfortably about their sexuality which is in turn likely to be reflected in the survey findings. While these issues are to be recognised when interpreting such data, it must also be acknowledged that less research has (understandably) assessed the patterns of contraceptive use of those who do not respond to such surveys.

2.3.2 Review findings - Number of sexual intercourse partners and relationship with condom use

Number of sexual intercourse partners is an additional measure commonly examined in survey research and has often been used as an indicator of high risk sexual behaviour in terms of STI potential, particularly if coupled with a measure of condom use. The two most frequently used measures are the number of sexual intercourse partners within a lifetime and the number within the last year. Of the seven surveys recording the number of intercourse partners within a person's lifetime (Abrams, Abraham, Spears and Marks, 1990; Bowie and Ford, 1989; Ford and Morgan, 1989; Ford, 1993; West *et al.,* 1993; Johnson *et al.,* 1994; Ford *et al.,* 1997), between 27% and 47% of men report four or more partners compared to 4% to 40% of women. Sexual intercourse with more lifetime partners is not only shown more by men compared to women, but it is also more evident in those surveys encompassing a greater number of those in their early twenties, hence reflecting an increased sexual experience with advancing age.

The number of sexual partners within the last year gives a more accurate indication of current sexual behaviour, and is also possibly more indicative of the amount of shorter-term encounters. For example, a person reporting four or more partners in their lifetime may be referring to a series of steady relationships whereas the same number within the last year is arguably more likely to

reflect such shorter-term encounters. Where the number of lifetime partners was recorded by virgins (i.e. recorded as no partners) and non-virgins, surveys assessing partners in the last year include four that have questioned non-virgins only (Bowie and Ford, 1989; Ford and Morgan, 1989; MEL, 1990; MORI, 1990) and five that have questioned all members of their sample (Galt, Gillies and Wilson, 1989; Galt and Gillies, 1990; Ford, 1993; West *et al.,* 1993; Johnson *et al.,* 1994). Therefore, making accurate cross-study comparisons is more difficult when the surveys have used such critically different samples; whereas respondents reporting 'no partner' in the four surveys indicates the behaviour of non-virgins, respondents reporting 'no partners' in the remaining five surveys may illustrate, in contrast, the extent of the virgin population within these study samples. With reference to the non-virgin samples only, it appears that between 23% (Ford and Morgan, 1989) and 35% (MEL, 1990) report at least two partners within the last year. The percentage of respondents who report four or more partners in the previous year ranges from 6% (Ford and Morgan, 1989) to 12% (MEL, 1990). Given the time scale used (12 months), it can therefore be inferred that a significant number of these four or more sexual encounters are likely to be shorter-term. The number of sexual partners in the previous year, as for lifetime, is usually greater for men than women. Although partners within the last year (as opposed to lifetime partners) is a comparatively more accurate representation of shorter-term encounters (which also may be more indicative of casual encounters and higher risk sexual behaviour in terms of STI potential), a more exact measure would record levels of condom use within these encounters as well as condom use among contrasting relationships (married as opposed to 'one night stands' or ONS, etc.). The following paragraph attempts to clarify these variations in condom use according to the number and type of relationships.

Given the levels of partner acquisition within a year, this section seeks to highlight whether the necessary levels of condom use are employed for those people adopting what could be argued to be higher risk behaviours (particularly in terms of STI potential). Table 4 illustrates the research findings and shows that condom use actually decreases with increased numbers of intercourse partners within the last year, except for the West *et al.* (1993) survey where use is recorded within the last three months as opposed to ALI. This has obvious implications for STI potential as it could be inferred that there is a minority of young people who practice sexual intercourse with a number

of different partners without using a condom, and possibly within the more casual or shorter-term encounters, given the twelve month time scale.

SURVEY REFERENCE	SURVEY YEAR and AGE GROUP	PARTNERS WITHIN LAST 12 MONTHS	CONDOM USE ALI TOTAL (%)	CONDOM USE ALI MALES (%)	CONDOM USE ALI FEMALES (%)
Bowie and Ford 1989	1987 16-21	0 1 2-3 4+	48 36 30 17		
Ford and Morgan 1989	1988 16-21	0 1 2-3 4+	47 27 32 28		
Ford 1993	1989/90 16-24	0 1 2-3 4+	42 31 38 26		
MORI 1990	1990 16-19	1 2-3 4+		62 63 58	48 37 33
West *et al.* 1993*	1990 18	1 2 3 4+		53.9 60.3 59.3 66.7	33.7 38.5 ----- -----
Ford *et al.* 1997	1996 16-24	0 1 2-3 4+	57 38 45 34		

* For instances of intercourse within the previous three months as opposed to ALI.

Table 4: Variations in condom use by number of partners (all samples except West *et al.*, 1993, are Non-virgin)

Further clarification of these behaviours and risk for STI can only be sought from condom use patterns among different types of relationships. Of the four studies that have examined condom use in various relationships (Table 5), each has a different measure for identifying the more casual encounter and each of these needs to be recognised when interpreting the results. For example, defining relationship status as *single* when other options only include *married*, *cohabiting* or

separated/divorced is somewhat different to no relationship when other options include *married, engaged* and *steady relationship*. In other words the same person could be perhaps defined as *single* in one survey but *steady* in another if he or she is not actually cohabiting.

SURVEY REFERENCE	SURVEY YEAR and AGE GROUP	RELATIONSHIP OF LAST PARTNER	CONDOM USE ALI TOTAL (%)	CONDOM USE ALI MALES (%)	CONDOM USE ALI FEMALES (%)
Ford 1993	1989/90 16-24	MARRIED ENGAGED STEADY NO RELATIONSHIP	13 23 35 35		
MORI 1990	1990 16-19	MARRIED/COHAB. REGULAR PART. OTHER		31 61 64	24 46 48
Johnson *et al.* 1994 *	1990/91 16-24	MARRIED COHAB. SEP./DIV. SINGLE		38.9 37.9 20 67.6	29.1 35.3 31.5 48.8
Ford *et al.* 1997	1996 16-24	MARRIED COHAB. SEP./DIV. SINGLE	13 30 45 56		

* Condom use expressed as one of potentially three most frequently used methods in relationships during the previous year.

Table 5: Variations in condom use by relationship type (all samples are Non-virgin)

There is a clear decrease in condom use in the more 'committed' relationships, and this may help to explain the decline in condom use with increasing age as shown previously (i.e. as people get older they are more likely to become involved in a more committed relationship). Moreover, the findings offer some encouragement with increased levels of condom use in the more casual or less committed encounters. When comparing the Ford surveys (Ford, 1993; Ford *et al.*, 1997), it also appears that condom use outside of the more steady relationships has increased in more recent years. However, the risk-reduction behaviours are by no means sufficient to eliminate risk and, additionally, the switch away from condom use during relationship development (unless partners are both tested for STI) poses obvious challenges to health promoters targeting STI prevention

among young people. In addition to the threat of STI, the potential of conception is still evident - for example, Ford (1993) observed that while 35% used a condom where there was reported *no relationship*, only 25% used the pill and 40% used no method (the highest level of non-use for all respondents). In this situation of more casual encounters, the threat is both from conception and STI, and perhaps represents the greatest challenge to sexual health promotion.

One of the most accurate measures of such high risk sexual behaviour was offered by Johnson *et al.* (1994), who asked respondents to record unsafe sex which they defined as *two or more heterosexual partners and no condom use in the last year.* According to this definition, around 10% of young people in their survey have experienced at least one instance of unsafe sex. It is also worth noting that only one survey (Ford *et al.,* 1997) questions frequency of sexual intercourse (within the last month) together with contraceptive use - this could be argued to be a more accurate measure of potential for conception and/or STI than use ALI (for example). The Ford *et al.* (1997) survey reveals that for those reporting between one and five intercourses within the last month, 42% used a condom and 10% used no method at ALI; for those reporting 11 or more intercourses, 22% used a condom and 29% used no method ALI. This suggests that these people having intercourse more regularly are also more likely to be at greater risk for both conception and STI since they are not using contraception and condoms consistently enough.

The aim of this review of sexual behaviour surveys has been to illustrate current patterns of behaviour among young people in the UK, and also to reflect on the benefits and limitations of the different measures used. This has enabled the author to make a well informed decision as to the indices used in this project to record young people's use and non-use of contraception (see Chapters 5 and 6). In particular, this has illustrated the importance of measuring a *specific* and *memorable* act of intercourse (for example first or last intercourse with a partner), acknowledging that ALI may reflect use within an ongoing steady relationship which may disguise challenges to contraceptive use earlier on in that relationship, taking into account the relationship type and, of course, noting whether condoms as well as other forms of contraception were used. The final section of Chapter 1 will now discuss, in light of the statistical and survey evidence, the nature of the research 'problem'.

3. WHY DOES THIS PRESENT A RESEARCH 'PROBLEM'?

Having given an account of the existent statistical and survey data of relevance to this project, the next section seeks to illustrate more precisely *why* conceptions and STI among young people should be considered as such an important and challenging research area. The key physical and mental health issues will be outlined and will document the impact that STI, cervical cancer, termination of pregnancy and teenage pregnancy/childbirth (as products of the levels and nature of sexual activity previously outlined) can have in determining the physical and mental condition of both the parent(s), unborn foetus and child. These health issues will be seen to demonstrate an adequate rationale for the research presented in this thesis.

3.1 Sexually Transmitted Infection (STI)

A STI is defined as one in which sexual contact is epidemiologically important but is not the only mode of acquisition (Weinstein, 1984). It is important to note that while the clinical manifestations of STI are essentially identified in adolescence and adulthood, the maturing female reproductive system may also be inherently more susceptible to certain STI (Bell and Hein, 1984).

Chlamydia is one of the most commonly reported STI across all age groups in the UK, but the rates shown earlier are likely to be lower than the true figure; although treatment is simple and effective, many cases are unreported with up to 70% of women and 50% of men being asymptomatic. Unlike the US and Canada, there are currently no national guidelines for Chlamydia screening in the UK (Davis, 1998).

The threats from STI include Pelvic Inflammatory Disease (PID) where the micro-organisms spontaneously ascend from the lower reproductive tracts and infect the uterus, fallopian tubes and ovaries. The extent of PID is difficult to estimate due to unreliable clinical diagnosis and a frequent lack of obvious symptoms. However, the most recent available data provided by Buchan and Vessey (1989) showed the following increases: for those women aged discharged from hospital with a diagnosis of PID, the age-specific discharge rates per 100,000 women aged 20-24 increased from 125.6 in 1975 to 189 in 1985 (for acute disease) and from 37.9 to 57.3 for chronic

disease (over the same time period) (Buchan and Vessey, 1989). Davis (1998) notes that 30% of women who receive inadequate treatment for gynaecological complications (more than one half having Chlamydia) develop PID. The long term consequences of PID include chronic pelvic pain, ectopic pregnancy, miscarriage, infertility and recurrent episodes of infection and is thought to be most common among young women in comparison to older women of equal sexual experience (Althaus, 1991). Of people diagnosed with PID, 20% become infertile and 10% will have an ectopic pregnancy (Davis, 1998). Moreover, the risk from infertility increases with each episode of Chlamydial infection; 10% after the first episode and 75% after the third (Davis, 1998). Ectopic pregnancy not only increases the likelihood of infertility, but is also associated with increased levels of maternal mortality (Althaus, 1991). The presence of a STI can also facilitate the spread of HIV.

STI and PID also present serious medical complications for new-borns. Alder (1991) notes the increasing morbidity for the new-born in terms of opthalmia, otitis media, nasopharyngitis, pneumonia and general disadvantage in its health and early development. Moreover, Althaus (1991) cites studies that have linked Syphilis infection with premature delivery and stillbirths and Gonorrhoea to septic abortion, premature delivery and premature or prolonged rupture of the membranes. In addition, Chlamydia (illustrated earlier as one of the most commonly reported STI among young people) has been associated with premature delivery and low birthweight, post-partum fever and neonatal complications, whereby the infections have been transmitted to the developing foetus or the infant at the time of birth, so increasing the likelihood of eye infections, pneumonia and chronic respiratory disease in childhood. Between 30% and 50% of babies born to women with untreated Chlamydia will be infected with eye disease and 10% to 20% will contract pneumonia (Davis, 1998). Similarly, there is a risk of HIV being transmitted from mother to child, with the disease progressing more rapidly among young children as opposed to adults. The health issues are not confined just to women and new-borns; indeed, Chlamydia is the primary cause of epididymitis in young men (Davis, 1998).

3.2 Cervical cancer

Price, Easton, Telljohann and Wallace (1996) identified five risk factors associated with an increased likelihood of contracting cervical cancer as follows: smoking, sexual intercourse with men, multiple sexual partners, sexual intercourse before the age of 16 and having genital warts. Sexual behaviour clearly plays a primary role in determining the likelihood of contracting this potentially fatal illness. More precisely, the Human Papillovirus (HPV) responsible for causing genital warts has been frequently argued to be associated with the development of cervical cancer (Gordon, 1990) and this supports earlier research conducted by Reeves *et al.* (1989) from their Latin American case-control study (n=759 and 1430 respectively). Moreover, those persons infected with HPV who are coinfected with HIV may be at a greater risk of cervical cancer with the cancer progressing much faster in HIV-seropositive women (Althaus, 1991), thus making effective treatment less likely in such a scenario.

Given the sexual behaviours outlined previously and the increased rates for certain STI among females, it is not that surprising that cervical cancer rates are on the increase among this population group. Donovan (1990) notes that for females aged under 25 in England and Wales, the number of positive smear tests increased from 1149 in 1975 to 3908 in 1985 (of course earlier detection and encouragement towards regular smear tests must be acknowledged as, to some extent, contributing to these figures).

3.3 Termination of pregnancy

In conjunction with the percentage of teenage conceptions that result in termination, the consequences of an abortion on the physical and mental health of the teenager must be acknowledged. These include the physical complications and risks from the termination, which are thought to increase the later the pregnancy is in term and the younger the age of the mother. Moreover, mental health issues could include the emotional distress of both taking the decision to terminate and the consequences following the operation, which may possibly involve a range of negative emotions including guilt and regret (Miller, 1992, and a review published by Clare and Tyrell, 1994).

3.4 Youthful pregnancy and childbirth

The impact of pregnancy and childbirth can be viewed as having distinct implications for both the mother and child and each will be discussed in turn. Hudson and Ineichen (1991) note that certain medical conditions are more prevalent among the pregnancies of young women. These include, anaemia, toxaemia, cephopelvic disproportion, hypertension, abruptio placentae, urinary tract infection, prolonged labour and difficult or premature delivery.

It is often argued that other health-related behaviours may compound the impact of teenage pregnancy such as cigarette smoking, alcohol consumption and drug abuse, which could increase the health risks both to the mother (often in the longer term) and to the unborn child (in the shorter term). In this way, the role of young motherhood may be more difficult to isolate, and instead may be a product of what Hudson and Ineichen (1991) termed the 'inappropriate lifestyles' (p.57) of pregnant teenagers. Smoking, and arguably levels of alcohol and drug abuse, are also closely related to socio-economic status (which in itself is negatively correlated to the incidence of teenage pregnancy), so perhaps further increasing the significance of these 'inappropriate lifestyles' in determining the health status of the mother. Similarly, there are possible links between diet during pregnancy and child hyperactivity, unsociable behaviour, low IQ and poor concentration levels. This also highlights the potential for health promoters to tackle the issues of contraception, alcohol and drug abuse, smoking and nutritional values collectively.

Aside to these more physical issues, Fleissig (1994) assessed levels of 'disadvantage' amongst young, single mothers. Although her study sample was not confined to teenagers, the results are interesting in that there was little difference between the mothers who described their pregnancy as intended and those who felt pleased when they found out they were pregnant unintentionally (Fleissig, 1994). In contrast, it was the mothers who were not pleased when they first found out about an unintended pregnancy who reported more antenatal and postnatal depression, as well as a deterioration in the relationship with their partner. This survey suggests that age *per se* may not be the key issue; whether the pregnancy was unintended and how it was 'received' by the mother may be more important. In terms of the mental and emotional impact of teenage pregnancy and childbirth, Birch (1992) notes how many young mothers, who are perhaps more likely to have

missed out on love and attention themselves, are thus less likely to respond sufficiently to their own children's emotional demands. In this way, the teenage mother may be less likely to positively 'receive' the news of pregnancy.

The risks to the child born to a teenage or young mother hinge upon the greater likelihood of low birthweight and the medical complications associated with such a condition. Hudson and Ineichen (1991) note that teenage mothers are twice as likely to give birth to low weight (defined as less than 5lbs) babies. They note that such low birthweight is the strongest correlate of infant illness, death and learning difficulties. Russell (1982), cited in Hudson and Ineichen (1991), also report a greater likelihood of congenital abnormalities and perinatal deaths, especially among those born to the under 16s. Osofsky *et al.* (1988), also in Hudson and Ineichen (1991), add prematurity, neurological and respiratory difficulties as further evidence of medical complications. Peckham (1992) highlights, from research in Great Britain and the USA, that children born to teenage mothers (in contrast to their elder counterparts) are twice as likely to be admitted to hospital as a result of an accident or gastro-enteritis, as well as scoring less well on a range of verbal and non-verbal ability tests.

For all the health issues noted above (relating to both mother and child), three additional points must be made as a conclusion to this section. Firstly, the physical/mental health issues associated with teenage pregnancy and childbirth can not be generalised or assumed for all teenagers. Indeed, they are extremely tied to the physiological maturity of the individual as well as to her precise age within the teenage year band. For example, the experiences of a 14 or 15 year old are likely to be substantially different to someone in their late teens. Secondly, some of the issues are more closely than others related to the societal norms and social service provision provided by the Government. For example, some of the medical issues associated with children born to young mothers may to some extent reflect the availability of and accessibility to the appropriate health services as well as the unwillingness of teenagers to regularly attend antenatal classes, which is particularly the case in this country (Hudson and Ineichen, 1991). Finally, it is also worth noting that, beyond these health issues, teenage conception rates have significantly impacted upon Government expenditure. Indeed, an increase in social security payments, child and support health care (including terminations) and extra housing demands will all have a direct impact upon Government

expenditure. McGuire and Hughes (1995) report that the existing use of NHS family planning services results in the avoidance of over three million unintended pregnancies, representing a saving of over £2.5 billion per year to the NHS. Moreover, they represent the 'Benefits: Costs' ratio of family planning services as 11:1, double that of the last estimate by Liang (1982) at 5.3:1.

4. CONCLUSION

The health issues presented in this chapter clearly support the necessity for this research project. Indeed, this is particularly so when considering the additional consequences (besides pregnancy) of not using contraception during intercourse; that is the serious health complications associated with cervical cancer and STI. With teenage pregnancies in the UK being the highest in Western Europe (Independent, February 12th, 1998), and the recognition of 'sexual health' gaining support from the highest of Political levels (The Health of the Nation Government White Paper, Secretary of State for Health, 1992), the inconsistent use of contraception among young people is now firmly established as a public health issue of great concern. With the most recent reported increase in the teenage conception and STI rates, it is clearly a problem that has not been tackled effectively enough and one that has not dissipated since the Health of the Nation initiative.

Having outlined the nature and extent of this research 'problem', the next two chapters will review both theoretical and empirical studies that have contributed to our understanding of precisely why contraception may be used so inconsistently by a proportion of young people in the UK.

CHAPTER 2: LITERATURE REVIEW PART ONE

1. INTRODUCTION, AIMS AND STRUCTURE OF REVIEW

By reviewing empirical and theoretical research studies, the following two chapters seek to explain and account for the patterns of sexual behaviour that have been defined previously, and to illustrate how this review shape the specific objectives and design of the project. Literature on contraceptive use will be reviewed, including the specific use of condoms to prevent HIV infection, since both are clearly relevant to this study.

It is important to stress at the outset that models and theories identifying the most pertinent factors *instigating* and *maintaining* health-related behavioural *change* are of greater relevance to this review than those exclusively examining the *determinants* of such health-related behaviour. This is simply because the review cannot possibly incorporate the exhaustive sociological and psychological literature of behavioural determination, but instead recognises the potential applications of identifying those factors which, through sexual health promotion, may improve the sexual health status of the population concerned.

The aims of the first part of the literature review, presented as Chapter 2, are to summarise the theoretical literature of relevance to this project. This chapter will seek to document the contribution of the social-cognition models in relation to contraceptive behaviour as well as some of the more recent interaction-based[1] theories, that have essentially extended the social cognition framework, to help further our understanding of this behaviour. The review will focus upon those factors proposed as determining an intention to use contraception and, in particular, those which may mediate or influence the nature of the intention-behaviour relationship. Moreover, extensions of the social cognition framework will illustrate more detail on the post-intention-formation processes and include, beyond intention and self-efficacy, a series of other proposed influences

[1] A note on definition: The term 'interaction-based' reflects how many of the constructs that are proposed to extend the principles of social cognition tend to emphasise the *interactive* or dyadic nature of condom use through skills, negotiations, power-relations, etc.

upon behaviour. Empirical support and/or criticism towards these theoretical propositions will be issued (social cognition theories in this chapter and extensions of these models in Chapter 3).

Importantly, the purpose of constructing such a review is that it will be able to identify what *has* and *has not* been researched and thus help define unanswered research questions. This process will serve three critical functions:

- It will provide a theoretical base to this project i.e. that the project's aims have a sense of theoretical credibility.
- It will provide assurance that the project is not replicating research published elsewhere.
- It will help focus, through its theoretical base and identification of unanswered research questions, a series of key project objectives.

It is also appropriate to describe the search strategy that was adopted by the author in constructing the review. In the first stages of search, literature was gathered from three main sources; on-line literature searches (chiefly BIDS, POPline, MEDline and PsycLIT), reviewing recent editions of key journals (such as Psychology and Health, Journal of Community and Applied Social Psychology, Health Education Research Theory and Practice, the British Medical Journal and the British Journal of Family Planning) and also by seeking general advice from academics experienced in the field of research (such as the Supervisor, Advisor and colleagues from previously attended universities). Key words in the searches naturally evolved as the search became more refined. However, to give an indication of the approach in the early stages of review, the following word searches were performed: contraception, condom, young people, teenager, HIV/AIDS, England, UK, behaviour, intention, expectation, attitude, self-efficacy, control and social cognition. These search words are not placed in any order of prioritisation and, as is conventional with on-line searches, the use of 'and', 'or' and truncating words with * were used to focus upon the most relevant literature.

During the second phase of review, further literature was identified through refined on-line searches, by regularly reading newly published articles in the key journals and also by identifying additional literature in the bibliographies of all relevant articles and papers. Recent conferences

attended were a particularly fruitful source of relevant literature. Although the literature review was an ongoing process, right up to the year of thesis publication, it is important to note that the search strategy employed has tended to exclude literature (in particular empirical research studies) that has been published outside the last fifteen years, except if the literature is perceived as notably influential and largely unsurpassed in more recent times. As expected, most of the literature reviewed has been published within the last five years. Empirical research from the UK and US (given the depth of research undertaken here) will receive most attention in the review, as well as research utilising a socio-psychological stance. By noting the limitations of existing research as well as areas that require more investigation, it is hoped that such a thorough review of the related research will support the necessity for this research project, and also help to justify the main research question and design of the study.

There is a vast amount of relevant literature, both theoretical and empirical, that is of relevance to this project. One of the most critical and difficult processes in presenting such a review has been to condense this information succinctly. This is particularly so for the models of social cognition that are of relevance to this project; rather than outlining each of these models (which have been widely used in health-related behaviour studies), it is assumed that the reader is familiar with their main constructs and arguments. Conversely, this review will commence by outlining the specific contribution (through empirical research) that these models of social cognition have had in predicting contraceptive behaviour.

As a final note to this Introduction, Hirst (1994), in her qualitative study into the social and sexual lives of 15-16 year olds, noted a series of responses when it came to young people explaining why they had failed to use a method of contraception during sexual intercourse, for example,

> '...getting carried away....just not bothering....just forgot.'
>
> Hirst (1994) p.20

This chapter and Chapter 3, by reviewing empirical and theoretical research studies, will seek to investigate, in light of the research undertaken, *why* such a 15 year old may just 'forget' to use a method of contraception during intercourse.

2. SOCIAL COGNITION MODELS: EMPIRICAL EVIDENCE FOR THEIR CONTRIBUTION TOWARDS OUR UNDERSTANDING OF CONTRACEPTIVE BEHAVIOUR.

As stated above, it is assumed that the reader is familiar with the models of social cognition, such as the Health Belief Model (HBM, Becker, 1974), Protection Motivation Theory (PMT, Rogers, 1975), the Theory of Reasoned Action (TRA, Ajzen and Fishbein, 1980), Social Cognitive Theory (SCT, Bandura, 1986) and the Theory of Planned Behaviour (TPB, Ajzen, 1988). To illustrate their key constructs, Kasprzyk, Montano and Fishbein (1998) have recently developed an 'integrated' model to include the main elements of these models (see later in Figure 4[2]) . Abraham, Sheeran and Johnston (1998) have also acknowledged that there are a number of potentially overlapping social cognitive models (p.571), and provide a thorough review of these constructs in the development of their 'core-model' of intention formation. Similarly, Bandura (1998) produced a simplified table illustrating the areas of overlap between the five models mentioned here. To detail this conceptual overlapping, Conner and Norman (1996) have noted the following similarities in these models:

1. The models emphasise the notion of threat through perceived severity and susceptibility (HBM, PMT), expectancies about environmental cues (SCT) and evaluation of behavioural beliefs (TRA, TPB).
2. The models illustrate the perceived consequences of performing a health behaviour; for example, the perceived costs and benefits (HBM), beliefs about outcomes (TRA, TPB), outcome expectancies (SCT) and response efficacy (PMT).
3. The perceived capability of performing a specific behaviour is highlighted in certain models; for example, perceived behavioural control (TPB) and self-efficacy (SCT, PMT).
4. Aside to the subjective norms (TRA, TPB), the models do not explicitly refer to normative social influences upon behaviour. In SCT, normative influences may be indicated by perceived social consequences of behaviour (Conner and Norman, 1996) and regulate actions through social sanctions and self-sanctions (Bandura, 1998).

[2] Kasprzyk's *et al.* (1998) integrated framework includes two extra constructs, namely *critical events* and *alternative strategies*, which are less indicative of the social cognition models, and will be detailed later on in this chapter

5. The TPB and PMT indicate that the social cognitive constructs of these models may have an indirect impact upon behaviour. In the TPB, the variable intervening between the social cognitive constructs and behaviour is termed behavioural intention, and in the PMT it is defined as protection motivation. However, Prentice-Dunn and Rogers (1986), cited in Conner and Norman (1996), noted that protection motivation is synonymous with the behavioural intention construct. In SCT, provisional and distal goals are the antecedents of behaviour.

Whilst presenting the similarities of these theories may ease the simplification of the review process, it must also be acknowledged that there are notable differences between their construction. For example, the HBM identifies six independent predictors of behaviour with minimal specification towards how they impact upon this behaviour. By contrast, the TRA and TPB identify how the influences upon an individual determine that individual's decision to follow a particular behaviour (Conner and Norman, 1996). Bandura (1998) reports how some of these models show minimal guidance on behaviour change, whereas the SCT 'embeds its determinants in a large body of knowledge that specifies the mechanisms through which they operate....' (p.630). In this way, it can be argued that the TRA, TPB and SCT, with the formation of behavioural intentions and goals, show more about decision-making than the HBM. Also, although perceived threat and behavioural beliefs have been grouped together in the above, it is important to acknowledge that 'perceptions' as shown in the HBM and PMT (perhaps influenced by changing emotional and arousal cues), may be quite different to the more rationally based 'beliefs' (TRA and TPB). Moreover, whereas the TPB, SCT and PMT acknowledge the importance of 'control' in shaping behaviour, this element is less evident in the TRA and HBM (although perceived barriers may be paralleled, to some extent, to perceived capabilities and control). In other words, the TPB, SCT and PMT are more applicable to behaviours over which people do not have complete control, whereas the TRA and the HBM (to some extent) assume that control will have no impact upon the behavioural outcome (and thus are perhaps more relevant for those behaviours over which people *do* have control). The issue of 'control' is particularly pertinent to the arena of sexual behaviour and will be discussed later on in this chapter.

Nonetheless, and despite these differences, the author has decided to review these models of social cognition collectively (given their element of overlap) rather than review empirical support for

each one in turn. This will conserve more space for this review to focus upon the important contribution that these models of social cognition have offered towards contraceptive behaviour, and detail those models that have built upon their arguments.

In order to evaluate the contribution of these social cognition models in a concise and detailed manner, attention will be drawn to a number of meta-analyses. These analyses incorporate a number of different studies and are a more efficient way of evaluating the models, rather than reviewing each and every study that has tested a model or one or more of their key constructs. Moreover, the meta-analyses are particularly useful in evaluating the intention-behaviour relationship professed by the social cognition models, which has contributed to most of the debate surrounding their applicability, and which in turn, has had a great influence upon the aims and design of this project.

While the focus of this review is upon contraceptive behaviour, it is important to highlight that the social cognition models have been applied to the study of many different forms of behaviour. Indeed, whilst these models were not originally devised to help explain contraceptive behaviour (unlike the more interactionalist models reviewed later on in this chapter), they have, nonetheless, since been applied to this area. With this in mind, it is unfeasible to exclude all other behaviours when conducting a review of these meta-analyses. The approach, therefore, is to review meta-analyses which have included at least a proportion of contraceptive-behaviour studies and to determine, in light of this range of reviewed behaviours, if these models of social cognition can be applied to the study and prediction of contraceptive use alongside other behaviours.

The following studies will be reviewed:

- Hodgkins, Sheeran and Orbell (in press)
- Godin and Kok (1996)
- Sutton (1998)
- Sheeran, Abraham and Orbell (1999)
- Sheeran and Orbell (1998)
- Kasprzyk *et al.* (1998)

Hodgkins, Sheeran and Orbell (in press) report findings from the meta-analysis of the PMT. Twenty-seven studies with 29 samples and a total of 7,694 participants were reviewed. Studies related to a range of health behaviours were used, with seven assessing contraceptive use. This study found that the social cognitive variables identified in the PMT were significantly predictive of intentions ($p<0.001$). This study is interesting in that associations between the PMT variables and behaviour were assessed in two ways; both to concurrent and subsequent behaviours, although the latter type of research design was less frequently reported. As for intentions, the constructs of the PMT were significantly predictive of concurrent behaviour but less so of subsequent behaviours. More specifically, intention and subsequent behaviour showed a medium to strong association (.40), which is comparable to the equivalent measure recorded in earlier meta analyses by Sheppard, Hartwich and Warshaw (1988) and Randall and Wolf (1988 - cited in Hodgkins *et al.,* in press) which included a wide range in behaviours other then contraceptive use.

Fifty-eight health related behavioural applications from 56 studies were reviewed by Godin and Kok in 1996 to assess the predictive performance of the TPB. Twelve applications were detailing condom use in the context of HIV/AIDS prevention. The average correlations between intention and attitude, subjective norms and perceived behavioural control was reported at .41. Attitudes and perceived behavioural control were found to be most responsible for explaining the variations in behaviour. For those studies assessing condom use in the context of HIV/AIDS risk reduction, the average correlation between behaviour and intentions was found to be .52. Of the remaining health behaviours reviewed in their study, only 'addictive' behaviours such as smoking and alcohol produced a higher average correlation.

To accurately assess the predictive performance of the TRA and TPB, Sutton (1998) reviewed nine *separate* meta-analyses. A range of behaviours was assessed including smoking and condom use as well as a selection of non-health-related measures. Sutton (1998) summarises the findings for predicting behavioural intention as being reasonably consistent, with multiple correlations ranging between .63 and .71 (Sutton, 1998). The relationship between intention and behaviour was, although weaker, found to be reasonably predictive with correlations ranging from .44 to .62. Sutton cites Cohen's (1988, 1992) definition of prediction strength and notes that these would be

described as either 'medium' or 'large' effects (Cohen's definitions should be considered when presenting further meta-analytic findings in this chapter). Even though Sutton notes, for intentions, that these findings typically explain less than 50% of the variance, he also notes how critical it is in placing these findings in the appropriate context. Sutton points out that these are impressive results when viewed in the context of the typical effect sizes for the behavioural sciences and that, in reality, explanation of 100% of the variance is highly unlikely (Sutton 1998). Indeed, Sutton details nine reasons for poor prediction in behavioural measures which are more attributed to the measures themselves rather than a reflection upon the credibility of the models in question. These reasons include that intentions may change (if their measurement is not close to the observation of behaviour), they may be provisional (in that they are unlikely to be measured immediately after they are formed), different scales may be used to measure intention and behaviour (in terms of magnitude, possible response formats, etc.) and that the reliability of these measures may be questionable if 'multiple indicators of intention and behaviour' (Sutton 1998, p.1330) were not used (which would enable the reliability to be estimated). In consideration of Sutton's paper, it appears that owing to the frequent (and often inevitable) methodological constraints in researching the behavioural sciences, the social cognition models reviewed in these meta-analyses are more impressive than perhaps they first appear.

The following two studies by Sheeran, Abraham and Orbell (1999) and Sheeran and Orbell (1998) reviewed social cognition models exclusively in the context of condom use. Given that condom use has been argued to contrast from many of the additional behaviours reviewed in the above studies, particular importance should be given to these papers. Sheeran *et al.* (1999) reviewed psychosocial correlates of heterosexual condom use and categorised the variables under investigation in the context of the AIDS Risk Reduction Model or ARRM (outlined in full later on in this chapter). In addition to the 'enactment' or post-intentional stage of the ARRM (to be outlined later in Section 4.1), this study is also a clear test of the principles of social cognition. One hundred and twenty one studies reviewed yielded 660 correlations with self-reported condom use. Sample size weighted average correlations were provided. The majority of studies recorded condom use retrospectively (rather than matching intentions to subsequent behaviours). Knowledge and threat appraisal (including perceived susceptibility, perceived severity, etc.) were found to have small associations with condom use, whereas attitudes and social norm showed

stronger medium positive associations (.32 and .26 respectively). Although numerous additional correlations are presented in this most comprehensive of reviews (some of which will be presented in Chapter 3 since they empirically test some of the theoretical arguments posted by the interaction-based models), this paper documents an intention-behaviour correlation of .43. Sheeran *et al.* (1999) note that,

> 'Consistent with the TRA, a medium-to-strong average correlation between intentions and behaviour was observed here.....Reported intentions to use a condom were strongly correlated with condom use measures.'
>
> Sheeran *et al.* (1999) p.118

Comparing their findings with other meta-analyses, the authors conclude that 'our meta-analysis demonstrates that condom use is predictable from attitudes and intentions to the same extent as other behaviour' (p.121).

The 18 studies reviewed by Sheeran and Orbell (1998) all incorporated a longitudinal design, to match up people's intentions with their subsequent behaviours. There was no reference to the ability of the models in predicting intentions (from attitudes, social norms, etc.) and all findings focused upon the intention-behaviour relationship. They reviewed 28 tests of association involving over 2500 participants from studies that recorded the intention to use condoms as well as actual behaviours at follow-up (anytime from four to 52 weeks later). The sample size weighted average correlation between intention and condom use was 0.44, and they conclude that condom use was not less predictable from intentions than were other behaviours (i.e. that their findings, as were Sheeran *et al.*, 1999, were comparable to those behaviours other than condom use that have been previously outlined). They define this association to be 'medium to strong' (p.231).

However, one possible limitation of this Sheeran and Orbell (1998) paper is that only a few studies specifically targeted condom use with a *new* partner. Clearly in an established relationship, it could be argued that the correlation between intention and behaviour will be stronger, and that new, unexpected encounters (for example) are more likely to challenge this relationship. Indeed, from the few studies reviewed in this paper that had specified the relationship type, Sheeran and Orbell (1998) note a stronger intention-behaviour correlation regarding condom use between *steady*

partners compared to *new* and *casual* partners. Alongside relationship type, Sheeran and Orbell (1998) also report an increased intention-behaviour correlation (in the context of condom use) for shorter time intervals (between measuring the intention and behaviour) and older samples (positively correlated to increased sexual experience). These methodological issues support Sutton's (1998) reasons for poorer predictive performance in the behavioural sciences reported earlier.

Additional considerations when interpreting meta-analytic data are noted by Sheeran *et al.* (1999). They report that these data do not detail the direction of the correlation reported, nor can they discount (without conducting experimental studies) the possibility of third variable effects. Sheeran *et al.* (1999) also note, earlier on in their paper, that conducting longitudinal research into intention and prospective or subsequent behaviours (as noted by only 15% of their reviewed studies) should be distinguished from cross-sectional studies which record behaviour retrospectively because such designs permit stronger inferences about the relationship between condom use and predictor variables (Sheeran *et al.,* 1999). With this in mind, it is worth mentioning that Sheeran *et al.* (1999) found the average correlations for the intention-behaviour relationship to be greater (.46) in the longitudinal designs compared to the cross-sectional studies (.39). Sheeran *et al.* (1999) also highlight the important consideration of whether the combination of a variety of condom use measures used in these studies produces more reliable results. Even though the authors document evidence to suggest that condom use measures are indeed intercorrelated, this consideration supports the case for more standardised measures of contraceptive used as reported in Chapter 1.

Moreover, some methodological concerns have been raised over the divergence in the manner that intentions as well as behaviours are actually measured in these reviews. By reviewing numerous studies, particularly in the context of the TRA, Warshaw and Davis (1985) noted the distinction between *behavioural intention* (or 'the degree to which a person has formulated conscious plans to perform or not to perform some specified behaviour', p.214) and *behavioural expectation* (or 'the individual's estimation of the likelihood that he or she actually will perform some specified future behaviour', p.215). It is assumed that the concept of behavioural expectation is synonymous with an *estimation* (see Sheppard *et al.*, 1988) and a *self-prediction* (Warshaw and Davis, 1985; Conner

and Norman, 1996; Sheeran and Orbell, 1998). Warshaw and Davis (1985) argued for the greater predictive performance of a behavioural expectation since it includes a number of factors that can impact upon behaviour beyond the scope of a behavioural intention, 'such as anticipated changes in intentions, noncognitive habits, ability limitations, and possible environmental facilitators and/or constructs' (p.215). Their own empirical research and the meta-analysis of Sheppard *et al.* (1988) lend support to this claim. Indeed, Warshaw and Davis (1985) noted the need for a refined intention measure within the social cognition framework, and this view was still being echoed by Conner and Norman (1996), some ten years later.

In similar fashion to the above, Agnew (1998) makes the point that most of the criticism labelled to the TRA has resolved around the measurement of the theory's various elements (Agnew, 1998). He specifically investigated the differences between individually generated versus modal beliefs regarding condom use. Whilst his paper provides a useful account on the different ways of operationalising these beliefs, his own empirical work of just under 100 North American students found that individually derived beliefs were only marginally better predictors of attitudes and intentions and that a 'lack of wide divergence between own and modal beliefs helps account for the relative modest findings' (p.284).

Finally, to complete this section, reference will be made to a particularly influential study by Kasprzyk *et al.* (1998) which has prospectively or longitudinally investigated patterns of condom use, using the models of social cognition as a framework for their study. Although not a meta-analysis, this paper is included here since it specifically set out to test several models of social cognition by developing an integrated framework (see earlier and Figure 4) representing their main constructs.

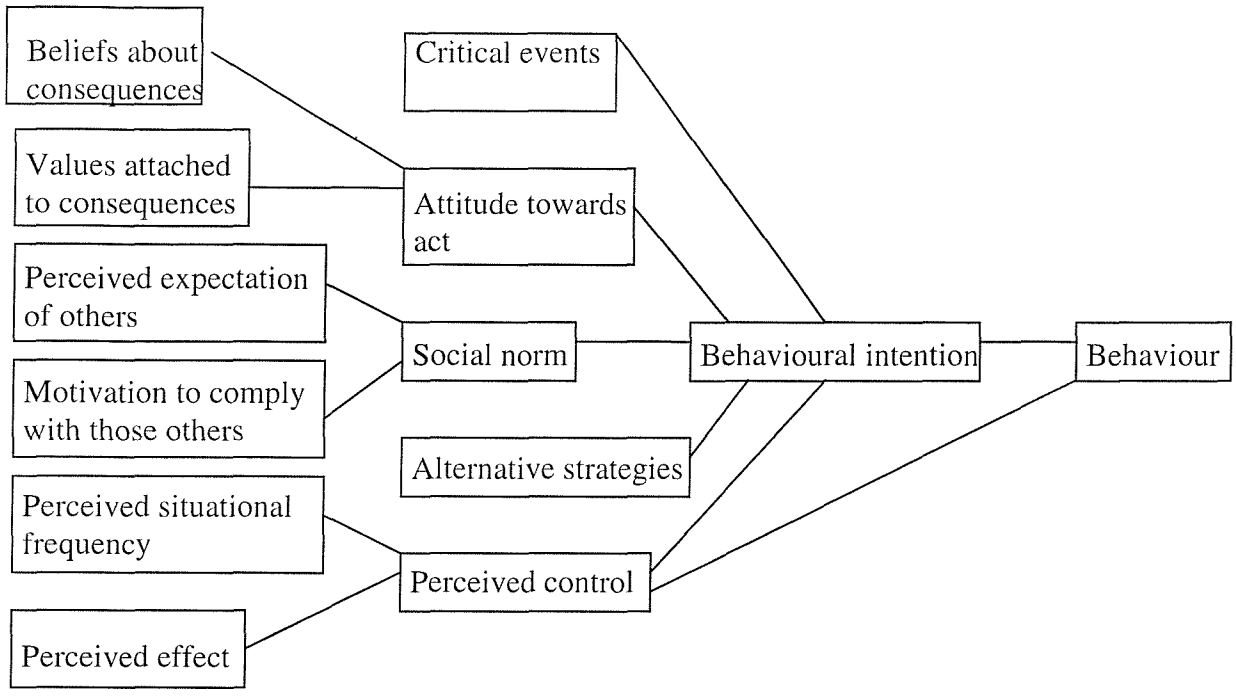


Figure 4: Kasprzyk *et al.* (1998) integrated framework of the social-cognition constructs

Their framework includes the key determinants of behavioural intention (attitudes, social norms and perceived control or self-efficacy). Additionally, the model includes constructs that were derived from a qualitative phase preceding questionnaire development. These were *alternative strategies* (where individuals may not use condoms because they use alternative ways to protect themselves from HIV, thus may not intend to use condoms in the future) and *critical events* (for example, experiencing a split condom or having a STI) which may influence behaviour independent of the attitudes, social norms and perceived control. The samples were chosen from four high risk groups for HIV: injecting drug users, gay men, female commercial sex workers and multi-partnered heterosexuals. Questionnaires at Time 1 (n=935) measured the main theoretical constructs of the models, including intentions, which were then matched with the behaviours (or condom use) at Time 2 (n=686), three months later. Regression analyses were used to predict six measures of condom use intentions and behaviours from the constructs depicted in their framework: condom use during vaginal, anal and oral sex for both regular and casual partners (but again, not necessarily *new* partners). The results presented in this review refer solely to condom

use during vaginal intercourse, as these behaviours are seen to be most relevant for this study. Attitudes were found to be the strongest predictor of intentions, with beta weights recorded as .26 for casual partners and .40 for regular partners. The remaining constructs, social norms and perceived control, were found to be weaker predictors of this intention (although still statistically significant). In contrast to the findings of Sutton (1998), the predictive influence of intentions upon this behaviour were the strongest of all relationships, reporting beta weights for .30 for casual partners and .49 for regular partners (fairly similar to the findings relating specifically to condom use from Godin and Kok, 1996; Sheeran and Orbell, 1998; Sheeran *et al.,* 1999). Note also how the correlations were stronger in the context of a regular partner, implying that casual encounters are perhaps the more difficult scenarios for following through intentions (supporting Sheeran and Orbell's work, 1998).

3. ASSESSING THE CONTRIBUTION OF THE MODELS OF SOCIAL COGNITION TO EXPLAINING PATTERNS OF CONTRACEPTIVE USE

Even given the methodological issues reported previously, one of the real positive attributes of the meta-analyses is that greater support can be observed for particular variables relative to others, within the social cognition framework, as a means of explaining contraceptive behaviour. For example, attitudes were noted as being especially important in predicting intentions in the Godin and Kok (1996), Sheeran *et al.* (1999) and the Kasprzyk *et al.* (1998) studies, and also self-efficacy predicting intentions in the Hodgkins *et al.* (in press) study. As a further example, subjective norms were found to be a less important (compared to attitudes) influence upon intention by Godin and Kok (1996) and Sheeran *et al.* (1999). In addition, all of the studies presented above provide overall support for the predictive qualities of the social cognition models and the intention-behaviour relationship that they propose. Sheeran and Orbell (1998) and Sheeran *et al.* (1999) specifically make the point that the intention-behaviour relationship in the context of condom use is not substantially different to the other correlations observed by a whole array of behaviours reported in the other studies. With this in mind, it can be reasonably concluded, particularly given the issues of researching behavioural sciences as outlined earlier, that the models of social cognition have been found to be impressive predictors of contraceptive and condom use, and that,

in general, 'self-report measures based on these models do reliably distinguish between those who will and will not undertake a range of health behaviours' (Abraham *et al.,* 1998, p.569).

Nonetheless, and despite these impressive results, Fazio (1990), Ingham, Woodcock and Stenner (1992), Wight (1992), Abraham and Sheeran (1993), Ingham (1993), Abraham and Sheeran (1994), Ingham and van Zessen (1995), Ingham *et al.* (1996), Rosenthal and Fernbach (1997) and Hillier, Harrison and Warr (1998) have all critically questioned the overall credibility of these social cognition models of health and preventive behaviour. Indeed, Sheeran *et al.* (1999), alongside concluding positive support for the social cognition models, also recognise certain limitations from their substantial review of condom use. By focusing upon the intention-behaviour relationship, Sheeran *et al.* (1999) report that more research and theoretical advancement is required within this most pertinent of relationships. They note that,

> 'Although the average correlation between intention and condom use is similar to the effect sizes obtained in previous reviews of intention-behaviour correlations, it is apparent, nonetheless, that the consistency between intentions and behaviour is far from perfect in this area. A potential difficulty for the TRA, therefore, is that it cannot explain why some young people with positive intentions to use a condom are successful in using one whereas other people with positive intentions do not succeed.'
>
> Sheeran *et al.* (1999) p.125

Sheeran *et al.* (1999) argue for an expansion of the TRA to include a range of additional variables (which will be detailed in the next section). Indeed, Ajzen himself (cited in Godin and Kok, 1996) acknowledges the potential of including other variables with the TPB as follows:

> 'The theory of planned behaviour is, in principle, open to the inclusion of additional predictors if it can be shown that they capture a significant proportion of the variance in intention or behaviour after the theory's current variables have been taken into account.'
>
> Ajzen, cited in Godin and Kok (1996) p.94

Potential avenues for such an expansion of the social cognition framework can be introduced by observing some of the limitations of these models that have been depicted in the literature. For

example, Conner and Norman (1996) argue that the models may help to distinguish between individuals who do or do not perform a behaviour, but reveal less detail about what processes help turn these intentions into actual behaviour. They observe that,

> 'However, the social cognition models considered in this book generally do not directly address the issue of translating intentions into action. They can be conceptualized as relatively static models that stop at the formation of an intention; they do not go on to distinguish between intenders who become performers and those who do not.'
>
> Conner and Norman (1996) p.213

Abraham *et al.* (1998) also note this limitation, in that the models have mapped out cognitive antecedents of intention formation, but have failed to adequately theorise the cognitive processes involved in action initiation and goal achievement (p.570). Indeed, providing more detail on the translation of intentions to behaviour, or these post-intention-formation processes, may well help to explain why people with positive intentions do not always result in successful behaviours. In addition, even when considering subjective norms, it could be argued that more detail could be given to the interactive processes that occur between the sexual partners (such as verbal communication) and how these may influence contraceptive behaviours. Finally, the impact of the specific situational context is not detailed to any great extent in these models as having any potential influence upon behaviour and, as such, is also a potential route for their extension.

Some of these potentially influential additional considerations will be reviewed in the next section of this chapter. Indeed, by outlining the possible avenues for expansion of the social-cognition models, attention will be drawn towards some of the interaction-based influences which are the especial focus of this project. This following section will propose that there are separate and distinct socio-psychological processes that operate 'between' an intention and a behaviour, and thus account for the fact that the adopted behaviour is not *always* or *perfectly* comparable with the prior intention.

Returning to the work by Hirst (1994), cited at the start of this chapter, the social cognition models appear to offer a valuable but perhaps incomplete explanation as to why her respondents 'forgot'

about contraception. Whilst it could be assumed that the majority of her respondents were aware of the need for contraception and intended to use it appropriately, there must be something unique about the interaction or during the lead up to the interaction that prevented contraceptive use. To further the investigation, a selection of interaction-based theories that serve to elaborate upon these issues will be presented in the following section. To what extent these interactionalist models will improve our understanding of contraceptive use patterns will be a key focus.

4. OUTLINE OF THE INTERACTION-BASED MODELS AND POSSIBLE EXPANSION OF THE SOCIAL COGNITION MODELS

This section outlines a series of theoretical propositions that have built upon the principles of social cognition. They essentially provide more detail on the post-intention-formation processes as well as include, beyond intentions and self-efficacy, a series of other proposed influences upon behaviour. Although the following two categories may be not always be obviously distinct, this section will first present a series of innovative models (often illustrated diagrammatically) and this will be followed by an account of some new constructs or influences upon intentions and behaviour which have been documented in the theoretical literature.

4.1 Models that have built upon the principles of social cognition

The following models will be discussed:

- Intervention model of HIV risk-behaviour change - Fisher and Fisher (1993)
- AIDS Risk Reduction Model - Catania, Kegeles and Coates (1990)
- Goal-Driven Model of Interpersonal Influence - Dillard (1990)
- Compliance-based approach to condom use - Edgar (1992)
- Dynamic Multifactorial Model of Sexual Conduct - Ingham, Jaramazovic, Stevens, Vanwesenbeeck and Van Zessen (1996)

Fisher and Fisher (1993) proposed one such interaction-based model relating to the determinants of HIV risk-behaviour change. Again, it is assumed that the processes facilitating HIV risk-

reduction such as condom use (regardless of whether other forms of contraception are being used) are of relevance to this project. Their 'Intervention Model' outlines four fundamental determinants of HIV risk-reduction as depicted in Figure 5 and is considered by the author, at this stage in the research, to represent one of the most influential models of behaviour change proposed in recent years. Indeed, Fisher and Fisher (1993) noted how its constructs are consistent with literature relating to adolescent pregnancy, preventing HIV and general sex-related preventive behaviour (in Byrne, Kelley and Fisher, 1993). The numerous studies influencing this model are outlined in the Byrne *et al.* (1993) paper. The model is clearly based upon the social cognition models and is a fine example of the extension of these principles that were outlined in the previous section.

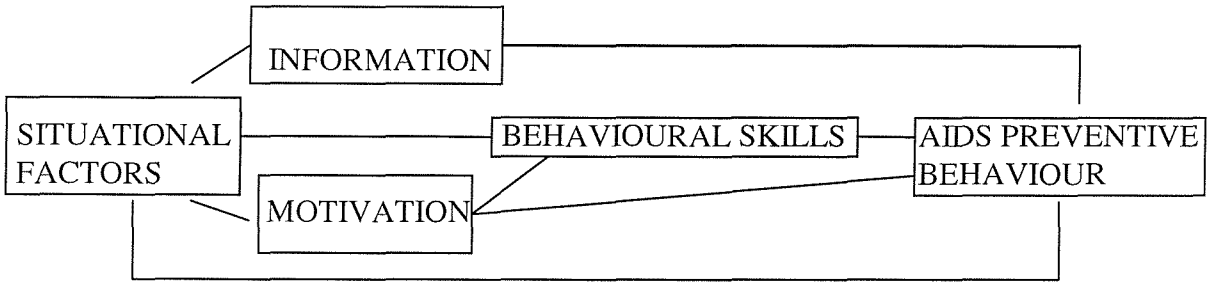
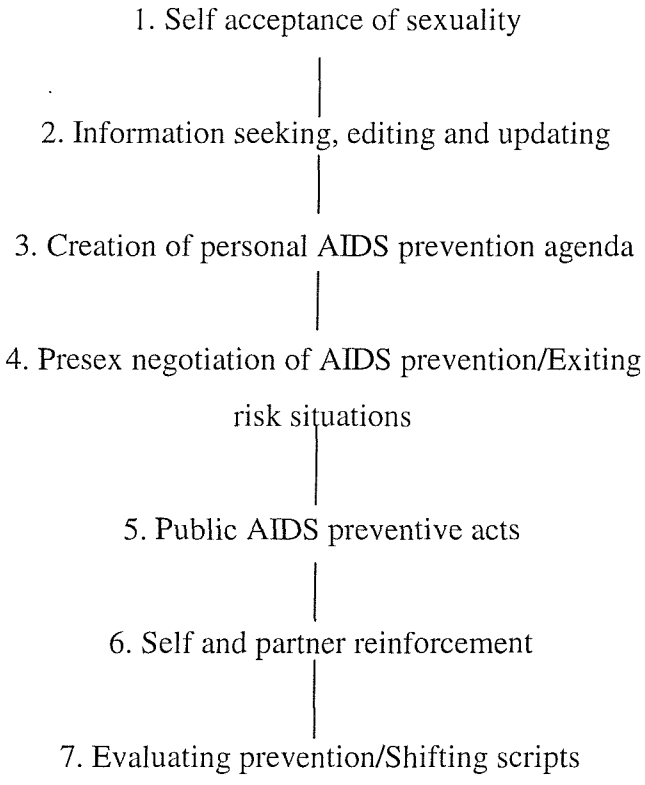


Figure 5: Fisher and Fisher's (1993) intervention model of HIV risk-behaviour change

Two of the model's determinants, *information* and *motivation*, incorporate the elements of the social cognition theories such as knowledge, perceived susceptibility, perceived severity, health motivation, etc. A third determinant or *situational factors* acknowledges the important role for sex education and service provision in influencing whether a person becomes adequately informed, motivated and skilled (Byrne *et al.,* 1993). However, it is the fourth determinant, or *behavioural skills* that clearly marks the extension of this theory from its social cognitive foundation. Essentially, risk-reduction information, motivation and situational factors can influence behaviour change directly, or via a set of these important behavioural skills. The behavioural skills represent a distinct construct linking a person's intention with their behaviour. In other words, even if a person intends to use a condom (for example), this models argues that behavioural skills may be necessary to translate this intention into actual condom use. Fisher and Fisher (1993) state that behavioural skills involve a series of seven steps or an 'AIDS Risk-Reduction Behaviour Sequence' shown as follows:



Steps 4 and 6 are of particular interest in that they represent the interaction between partners; an aspect that has been overlooked by models previously presented. Step 4 essentially represents the communicative or negotiational ability whereby,

> '...the individual must be skilled at bringing up his or her AIDS prevention agenda in pre-sex discussion with a partner who may be unmotivated to comply with the individual's wishes. As a corollary, the individual must be able to exit situations in which it is impossible to negotiate prevention.'
>
> Fisher and Fisher (1993) p.134

Step 6 represents the assertion and reinforcement involved in achieving preventive behaviour whereby,

> '...the individual must be able to reinforce both the self and the partner for the consistent practice of AIDS preventive behaviours in order to maintain such preventions over the long run.'
>
> Fisher and Fisher (1993) p.134

Not only does this model offer a distinct interactive component to risk-reduction behaviour, but Step 7 illustrates the importance of evaluating behavioural skills used in the past, and hence highlights the important influence of previous sexual encounters in determining current behaviours.

Essentially, the model offers alternative conceptualisations, through interactive processes and continual evaluations, to why provision of information often fails to have a substantial effect upon preventive behaviour, be it related to HIV transmission or teenage pregnancy. These principles are reflected in the calls for innovative and theoretically grounded sex education programmes from, for example, Abraham and Sheeran (1993) who conclude that such a redefinition in the approach to sexual behaviour change must alter the patterns of sexual health promotion currently employed. They suggest that,

> '...social psychological models focusing upon the difficulties individuals experience in regulating interactive sequences may provide a more comprehensive psychological understanding of the determinants of condom use. This implies a shift in health education methods from persuasion to practice, targeting the acquisition of interactive competence rather than related cognitions.'
>
> Abraham and Sheeran (1993) p.252

Moreover, the Fisher and Fisher model (1993) also has clear links to the idea of conflict and power relations that may be evident in an interaction between partners and which will be discussed at greater length later on in this section.

Given its sequential approach, parallels can be made between the model proposed by Fisher and Fisher (1993) and the AIDS Risk Reduction Model (ARRM) devised by Catania, Kegeles and

Coates (1990). This model was referred to earlier on in this chapter when reporting the meta-analytic findings from Sheeran *et al.* (1999). There are three stages in the ARRM representing people's efforts to change sexual behaviours related to HIV transmission. Like the previously example, this model also builds upon the principles of social cognition (which are evident in its first two stages). In Stage One (or 'Labelling'), three factors are hypothesised to influence the recognition of certain behaviours as problematic: a *knowledge* of sexual practices associated with HIV transmission (or how to prevent an unintended pregnancy) is required. An individual must also perceive himself or herself to be *susceptible* to HIV infection and must also perceive HIV infection to be *undesirable*. In Stage Two (or 'Commitment'), two sets of factors are hypothesised to influence an undertaking to change behaviour if it poses a risk to HIV infection. The first, or the *costs and benefits* of changing behaviour includes *response efficacy* (for example, the perceived effectiveness of a condom in preventing HIV transmission) and *enjoyment* (the enjoyment associated with a particular high risk sexual act may serve to inhibit commitment to reduce that behaviour). The second, or *self-efficacy* (for example, the perceived capability of using condoms) has been discussed earlier under the social cognition models. In Stage Three (or 'Enactment'), the behaviours are actually put into practice. There are three separate phases during this final stage, namely *information seeking* (i.e. how to change behaviour), *obtaining remedies* and *enacting solutions*. It is the inclusion of this 'enactment' stage, professing in particular the role of communication skills, that marks the way in which this model has extended the ideas outlined in the social cognition models. The authors highlight the role of communication as follows,

> 'The ability to engage one's partner in a policy of mutually safe behaviours most likely depends on one's ability to communicate verbally about sexual issues. The inability to discuss sexual matters in a constructive problem-solving manner may reduce the sexual partner's participation in the task of reducing high risk behaviour, thereby undermining the change process.'
>
> Catania *et al.* (1990) p.64

All three stages of the ARRM are influenced by the social norms and networks; that is the influence of friends, family, partners and society as a whole in determining which behaviours are more or less acceptable.

Dillard (1990) (cited in Edgar, 1992) proposed a 'Goal-Driven Model of Interpersonal Influence' whereby preventive behaviour is achieved through a three stage sequence of events. The first stage or 'Goals' refers to the future states of affairs which an individual is committed to achieving or maintaining. Two types of goals are simultaneously present in any given situation, namely primary and secondary goals, and the interplay between them determines subsequent behaviours. For example, the desire to convince one's sexual partner to use a condom may function as the primary goal, whereas the desire to not interfere with the pleasure of lovemaking or raise the subject during conversation can serve as secondary goals. These secondary goals, as the examples illustrate, are fundamental in accounting for why a person may not always act on his or her prior intentions. These arguments relate to the issue of goal conflict and prioritisation to be detailed in Section 4.2. In brief, these secondary goals are theorised to account for individuals failing to discuss the issue of contraception with a partner (Edgar, 1992). Dillard identified five secondary goals (in Edgar, 1992):

1. Identity Goals: These stem from moral standards, life principles and one's orientation toward personal conduct. For example, an individual who has concerns about the morality of premarital sex may want to use a condom. However, he or she may forego an attempt at persuasion because overt discussion about the event makes it too real (Edgar, 1992).

2. Relational Resource Goals: These are aimed to protect the nature of the relationship. For example, a woman may not want to ask her male partner to use a condom if she thinks he will find it an offensive question and so may damage her relationship. She may prefer to risk pregnancy rather than the actual relationship, particularly if it is its early stages.

3. Personal Resource Goals: These refer to physical, material, mental and temporal assets. For example, one's own sexual enjoyment may overshadow the intention to use condoms if they are believed to diminish the physical pleasure of sex.

4. Arousal Management Goals: These refer to an individual's attempt to maintain a comfortable psychological state by, for example, opting not to discuss any sexual matters such as contraception.

5. Interaction Goals: These refer to an individual's desire to avoid behaviour that may create a negative impression of himself or herself. For example, a partner may perceive an individual as weak-willed if he or she expresses concerns about pregnancy.

It is the second or 'Planning' Stage of the Dillard model (1990) where attempts are made to explain why an individual, even if he or she intends to initiate a discussion about contraception (judged by the secondary goals outlined previously), fails to actually use contraception in the forthcoming sexual encounter. In other words, this stage refers directly to the communication skills (proposed here to be both verbal and non-verbal) of an individual in persuading his or her partner to use contraception. The incorporation of a Planning Stage also relates to the work of Gollwitzer (1993) which will be outlined in the following section detailing innovative constructs and influences upon intentions and behaviour. Finally, the 'Action' stage of Dillard's (1990) (in Edgar, 1992) 'Goal-Driven Model of Interpersonal Influence' represents the behavioural outcome and is hypothesised to be the product of the previously outlined Goal and Planning stages.

Conner and Norman (1996) highlight the possible links between these, and other stage-based models of health-related behaviours (such as Prochaska and DiClemente's Transtheoretical Model of Behaviour Change, 1984, and Schwarzer's Health Action Process Approach, 1992). Conner and Norman (1996) note that in order to explain health behaviour it is necessary to formulate stages of behaviour change relating (in sequence) to *pre-contemplation*, *motivation*, *planning*, *action* and *maintenance*. Their summary illustrates, once again, a distinct foundation of these arguments in the principles of social cognition.

> 'First, there is the pre-contemplation stage during which the individual is not thinking about the performance of a new health behaviour. This stage may be brought to an end by various cues to action which cause the individual to start thinking about adopting a new behaviour. The second stage is a decision-making or motivation stage in which the individual thinks about the pros and cons of performing a new behaviour. This stage is brought to an end by the formation of an intention. In the third stage, the planning stage, the individual is concerned with the making of plans to initiate behaviour. This stage is brought to an

> end by the successful initiation of behaviour. The fourth stage is an action stage in which the individual is concerned with monitoring and controlling behaviour. This stage ends with the successful completion of behaviour. Finally, for ongoing behaviours there is a maintenance stage in which the individual is concerned with ensuring that the behaviour is successfully repeated, as in the fourth stage.'
>
> Conner and Norman (1996) p.217

The use of models advocating explicit stages in predicting health related behaviour illustrates an extension of the social cognition models outlined previously. Firstly, such models are dynamic (people move from stage to stage over time) indicating that previous sexual experiences, duration of sexual relationship, sexual maturity, etc. may all have a bearing upon the adoption of particular behaviours (see later). Also, the use of stages implies that different cognitions may have different degrees of salience at different points in the behavioural change sequence; for example, the cost/benefits analogy (cited in the social cognition models) may be relevant more during the early stages of such a sequence. In relation to this, Bandura (1998) notes how the term stage-based is too often innapropriately adopted in models, and he separates these (in particular Prochaska and DiClemnte's Trantheoretical model) from what he terms the more 'genuine stage theory' (p.631).

Aside to the use of stages and sequences, a consistent theme of all these interaction-based models has been the importance labelled to communication or negotiation skills, often during a planning phase, that are required to convince or persuade a partner to use contraception (or move between stages). Edgar (1992) and also Freimuth *et al.* (1992) proposed a three stage model or 'compliance-based approach' to condom use that details these themes further. The first stage is an intention to use a condom (or 'Desire'), the second stage represents the initiation of a discussion with a partner about using a condom (or 'Initiate') and, the third stage refers to the actual use of a condom (or 'Use'). It is the second or Initiate stage which is of interest when helping to explain the inconsistent relationship may occur between intentions and behaviour. Based on a survey of college students (n=204) that examined the communications that occurred during the respondents' most recent sexual encounters, Edgar (1992) identified five types of individuals to help further the understanding towards the interactive processes at work in determining condom use,

CONDOM USERS

- Assertives: They exhibit the 'correct' attitude toward condoms, bring up the subject with their partner, and successfully enact the preventive behaviour.

- Compliers: These individuals do not want to use a condom, but use one under pressure from the assertive partner.

CONDOM NON-USERS

- Disinteresteds: They do not want to use a condom and do not use one.

- Passives: They want to use a condom, but do not initiate a discussion about use, and end up not using one.

- Unsuccessfuls: They want to use a condom, initiate a discussion, but still end up not using one.

In line with the objectives of this research project, the most relevant groups, in terms of non-use of condoms, are the 'passives' and 'unsuccessfuls' since they illustrate the interactive processes at work, such as communication between partners. Note also, how the social cognition models of health preventive behaviour would predict that these persons would use condoms (in that intentions are assumed to relate directly to behaviour), but due to the influence of their partners they end up failing to use them.

These representations by Edgar (1992) are similar to the 'styles of protection' devised by Rademakers *et al.* (1992) from the analyses of interview data. These styles of protection ranged from the 'determined protectors' (use condoms irrespective of the partner's views) to the 'unwillings' (no intention to use condoms and have the competence to ensure this). In between, styles included 'negotiators' (intend to use condoms and instigate negotiations with partner to gain

their agreement); the 'inexperienced' (non-use of condoms based on a preceding monogamous relationship in which condoms were not used); the 'steady relationship thinkers' (the desire for their relationship to be viewed as steady and committed involves rapid abandonment of condoms); and finally the 'passives' (have no intention to use condoms and do not recognise the need for STI/HIV protection).

These different 'individuals' (or scenarios) not only illustrate the importance of initiating a discussion and conducting the discussion in an assertive manner, but also illustrate the link between trust, commitment and lack of condom use as seen as applicable for advancing relationships (see Chapter 3). In respect to Rademakers' *et al.* (1992) 'steady relationship thinkers', a transgression from condom use is desirable for those who want intercourse to symbolise an act of trust and commitment, in the developing relationship, as soon as possible.

The final model under review is not only perhaps one of the most comprehensive, but also offers an approach that mirrors some of the ideas central to the aims of this project. The 'Dynamic Multifactorial Model of Sexual Conduct' (Ingham *et al.,* 1996) illustrates many of the themes previously outlined, and also proposes some fresh perspectives. According to this model,

> '...sexual behaviour occurs in interaction, in a social and situational context, by actors who are not only guided by health-related cognitions and intentions, but also by sexual and relational emotions, cognitions, hopes and aspirations. These dimensions of the interactional, the contextual and the broader meaning of sexuality are central to our dynamic model of sexual conduct,....'
>
> Ingham *et al.* (1996) p.19

Interactional competence, which refers to the ability that a person has in achieving their desired outcomes in a sexual interaction (and extend beyond contraceptive use to include sexual pleasure, course of sexual conduct, etc.) is the 'keystone' to the model. The notion of interactional competence itself highlights the role of '...pre-planning, timely and clear discussion of contraceptives' (Ingham *et al.,* 1996, p.21). A series of elements (or stages) is argued to shape interactional competence, and these include 'antecedent factors' (childhood, adolescent and

intermediate contextual factors influencing each individual), the 'sexual arena' (immediate context and actual sexual interaction) and 'consequent factors' (evaluation of the sexual interaction and intentions for the future). Aside to the key role that interactional competence has in explaining levels of contraceptive use, the model is useful in supporting the need for longitudinal research to assess many of the dynamic issues surrounding sexual behaviour.

Not only are these communications about contraception in need of more research, but also the timing of this discussion and the plans devised in preparation for intercourse may be crucial in determining the consistency of contraceptive use. Longitudinal research can address these dynamic issues by asking respondents to recount such experiences and/or to conduct reinterviews. In addition, researching those persons who have recently commenced their sexual 'career', or who have just entered a new relationship with a partner, may generate the most florid data. These areas in need of further research have clearly helped shape the objectives and aims of this project (see Chapter 3).

4.2 Innovative constructs or influences upon intentions and behaviour

The models highlighted above propose a series of common themes that may help us to explain patterns of contraceptive use more thoroughly. Most of the models have a distinct stage or sequential process in defining patterns of contraceptive behaviour; such a dynamic focus may illustrate the importance of previous behaviours in explaining current patterns of contraceptive use (to be covered in the following chapter) and also pose theoretical challenges as to how the impact of previous behaviour may be reduced to facilitate behaviour *change* through intervention programmes. An additional key difference between these models and those of social cognition is the direct reference to planning and preparation for contraceptive use, and the communication or negotiation skills that are also likely to be required during a particular stage.

A comprehensive review of the literature by Abraham *et al.* (1998) has focused upon the role of planning and preparation in their account of the cognitive mechanisms beyond intention formation (and self-efficacy) which can lead to behaviour. These will be the first set of innovative constructs to be presented in this section that are argued to mediate the intentions-behaviour relationship.

This paper essentially covers a great deal of material that has sought to respond to the limitations of the social cognition models that have been detailed earlier in this chapter. They talk of 'action control' which covers the 'processes involved in initiating action, managing action sequences and maintaining behaviour change over time' (p.570). They argue that prior planning and rehearsal is central to this 'action control' and draw on material that is both theoretical and empirical (so for this particular review paper, empirical support is illustrated simultaneously and not in Chapter 3).

Abraham *et al.* (1998) cite the work of Bagozzi (1992) to detail the specific preparatory behaviours that are required to ensure a particular behaviour. They apply these preparatory principles to the specific scenario of condom use and note that,

> 'For example, prior to condom use a person may have to acquire condoms, carry or store them, suggest their use to a sexual partner, negotiate their use if their partner is reluctant and resist invitations to have unprotected sex. The cognitive antecedents of each of these preparatory behaviours may be considered separately.'
>
> Abraham *et al.*, 1998, p.579.

This quotation illustrates two interesting points. Firstly, that communication skills are included in these preparatory behaviours (see summary tables at the end of Chapter 3) and, secondly, that the last sentence indicates the important foundation of the social cognition models in that the intention to acquire condoms, for example, is determined by the attitudes, normative beliefs, self representations and self-efficacy towards this particular preparatory behaviour.

The idea of a 'planning' stage and the preparatory steps required to initiate behaviour relates to the work of Gollwitzer (1993). Gollwitzer (1993) essentially proposed that enacting intentions is a two stage process. The first stage is essentially motivational, and is comparable to the intentions formulated in the social cognition models. However, the second or post-decisional stage includes formulation of plans or 'implementation intentions'. These implementation intentions commit the individual to a specific course of action when certain environmental cues are received (i.e. 'I intend to initiate goal directed behaviour X when situation Y is encountered') (Conner and Armitage, 1998). Gollwitzer (1993) argues that such a planning of behaviour, perhaps by

specifying a time and place or in response to a certain environmental cue, creates a memory trace that is highly accessible and retrievable. This concept clearly may have implications for the use of 'rehearsal' strategies that could be implemented in school sex education.

Orbell, Hodgkins and Sheeran (1997) elaborate on this idea by noting that an implementation intention seems to ensure that when an opportunity for a particular behaviour presents itself that this will be rapidly detected and that the decision to respond in an appropriate way will be easily retrieved from memory (Orbell *et al.,* 1997, p.947). Orbell *et al.* (1997) also note how this concept again builds upon the social cognition models whereby although such models include elements of how intentions translate into behaviour, the concept of implementation intentions (detailing where and when this action will take place and the speed of behavioural response) provides more depth to this process. Orbell *et al.* (1997) also note how implementation intentions relate to the importance of past predicting current and future behaviour as well as the specific context of the interaction (the empirical validation of this work as well as the importance of the context of the interaction will be detailed in greater depth in the following chapter),

> 'What Gollwitzer's work suggests, however, is that context and behaviour can become paired as a result of cognitive, as opposed to behavioural, rehearsal of time and place of behavioural performance. That is, planning to perform a behaviour at a particular time and in a particular location has similar effects to having previously performed the behaviour in that context many times: In both instances, there is an association in memory between the behaviour and certain contextual cues.'
>
> Orbell *et al.* (1997) p.948

Abraham *et al.* (1998) reviewed the work of Bargh (1990) and Bargh and Barndollar (1996) and drew comparisons between their work on automatic control in a particular context and the environmental cues (or passing the control of a behaviour to the environment) highlighted by Gollwitzer (1993). Abraham *et al.* (1998) conclude, in light of their review of auotmaticity or unconscious control, that 'context-specific practice will result in increasingly effortless enactment' (p.581). In relation to this, Abraham *et al.* (1998) argue that this practice and rehearsal of what to do when a particular situation is encountered can override the impact of past behaviour (assuming

that behaviour *change* is the desired outcome through this particular intervention). The influence of past behaviour will be detailed further in Chapter 3.

In addition, Abraham *et al.* (1998) highlight that preparation and rehearsal techniques can increase the optimistic beliefs in, for example, ensuring condom use in particularly difficult circumstances; this enhanced 'coping self-efficacy' (p.582) serves to 'prompt conscious self-regulation during action and, thereby, maintain a goal priority in the face of intergoal conflict' (p.583). This 'intergoal conflict' ties in with the reviews by Karoly (1993 and 1998) which provide detail on the importance of conflicting goals within individuals and the importance of goal prioritisation, as well as the overall complexities in the goal-setting variables (Karoly, 1993, p.32). Essentially goal prioritisation is also argued to be fostered through planning and rehearsal, and the more a goal is prioritised, the less likely it is that contextual variations or restrictions will impact upon the self-regulation or maintenance of behaviours. Similarly, Abraham *et al.* (1998) reviewed the work of Vallacher and Wegner (1987) who, through an 'action identification theory', have argued that goals identified at a higher level or priority are more likely to stand up to the challenge of contextual variation or restriction. Moreover, goal priority is also subject to the manner in which they are embedded in the self, in that if a goal becomes a 'central identity' (Abraham *et al.*, 1998, p.584) then competing goals are likely to be less disruptive, thus ensuring the relevant behaviour is maintained. Individual differences in goal prioritisation also bear some relation to the action versus state oriented individuals that will be discussed later in this section and Dillard's (1990) primary and secondary goals outlined earlier. Finally, whilst this goal prioritisation relates to the individual, goal conflict *between* partners is likely to be reflected in the gender power relations that may be evident (also see later).

Several of these additional constructs highlighted in this section are reflected in the work of Bagozzi and Edwards (1998), who built upon Gollwitzer's work by proposing a framework for predicting the self-regulation of body weight. Their work also investigated the formation of goal intentions (through a 'desire' construct) but the main relevance here is its detail shown to the intention-behaviour relationship (or goal intention-goal attainment/failure relationship to use their terms). Their interpretation of this relationship is summed as follows:

Goal intention ⟶ Trying ⟶ Instrumental acts ⟶ goal attainment or failure

The key addition to Gollwitzer's work is reflected in the 'trying' construct which includes implementation-intentions as well as the development of specific plans (to transform goal intention into action), monitoring, guidance, control, possible change of plans and influences upon commitment to the goal and/or implementation intentions (such as situational or interpersonal factors) (Bagozzi and Edwards, 1998, p.598). Willpower and self-discipline to carry out instrumental actions or goal directed behaviours are clearly reflected in their concept of 'trying'.

Sheeran *et al.* (1999) in their meta-analysis of condom use mentioned earlier, detail a series of innovative constructs (in the context of the 'enactment' stage of the ARRM, Catania *et al.*, 1990) that may influence the relationship between intentions and behaviour. They identify both preparatory behaviours and interpersonal variables. Sheeran *et al.* (1999) identify empirical support for these influences upon condom use from previous research; empirical validation from their own meta-analysis will be outlined in the following Chapter 3. They define preparatory behaviours as carrying a condom and the issue of condom availability, and clearly tie in with the work presented earlier in the start of this section.

Interpersonal variables include relationship status or whether the interaction was with a casual, steady or potentially steady partner (for example), and how this may influence condom use. Perception of the partner's risk for HIV (or other STI) may be influential, and this is likely to include an assessment of how many previous sexual partners a person may have had in the past (as well as whether they have other 'current' partners), or whether they inject drugs or have done so previously. The importance of communication is highlighted by Sheeran *et al.* (1999) in terms of whether partners have discussed the issues of HIV (or other STI) risk potential or the appropriate prevention measures such as using condoms. The final measure categorised as an interpersonal variable is that of sexual arousal which is argued to potentially undermine the processes of 'labelling' and 'commitment' (in the context of the ARRM) and lead to the non-use of condoms (Sheeran *et al.*, 1999).

Sheeran *et al.* (1999) also identify a series of demographic influences (such as the association between condom use and age, gender, educational level, etc.) and personality factors. The author's note, although not both explicitly included in the ARRM (Catania *et al.*, 1990), that personality factors have rarely been investigated in the empirical research literature (unlike the demographic variables which have received relatively more attention). Sheeran *et al.* (1999) specify three contrasting personality-based potential influences upon condom use, namely *impulsivity* (how people may act impulsively or in an unplanned way), *venturesomeness* (a reported tendency to take risks and seek adventure) and *erotophilia-erotophobia* (or how people may evaluate sexual stimuli in generally a positive or negative manner) (Sheeran *et al.*, 1999). To reiterate, empirical validation of these additional constructs from the Sheeran *et al.* (1999) meta-analysis will be detailed in Chapter 3 (alongside all other empirical research relating to the models/constructs that have built upon the foundation of social-cognition).

Some of the theoretical propositions outlined in Sheeran et al's (1999) work are grounded in an earlier paper by Abraham and Sheeran (1993). Abraham and Sheeran (1993) outline an interactive model of safer-sex promotion that incorporated personality, interpersonal or relationship characteristics and situational constraints on sexual behaviour. Indeed, they make specific reference to 'psychological predictors of condom use which are not included in social-cognitive models' (Abraham and Sheeran, 1993, p.249). Personality based measures include erotophilia and erotophobia (outlined previously) as well as sex guilt and sexual anxiety which, by citing research by Gerrard (1982) and Leary and Dobbins (1983), they argue as having significant associations with condom use. For relationship characteristics, they identify several important perceptions which are argued as important influences upon condom use such as relationship duration, intimacy, interpersonal communication, perceived status (or equivalent to relationship type in Sheeran *et al*, 1999) and exclusivity (perhaps linked to relationship commitment as well as HIV risk potential). They also identify situational constraints in relation to substance abuse (see situational/contextual issues outlined in Chapter 3).

Abraham and Sheeran (1993) then focus their review upon a series of 'sophisticated interactive skills' (p.253) which, in the context of this project's literature review, are required to successfully translate positive intentions into behaviour. They highlight the importance of negotiation skills in

enabling the necessary preparatory steps in condom use to be made, such as obtaining condoms in advance (linking in with planning and preparation and Gollwitzer's implementation intentions, 1993). They also note how this skills training could be perfected by practice and rehearsal and, accordingly, how the most sexually inexperienced young people (as well as those in new interactions and with different partners) are most in need of such intervention. They argue that these negotiations are more than the ability to communicate verbally to a partner, given that negotiation is often more implicit or scripted (Chapter 3) and that skills are required, for example, to breakdown any scripts which represent gender power imbalances (see later in this section). Abraham and Sheeran (1993) also widen the skills construct to 'personal management skills' (p.251) which they believe are necessary to prevent these situational constraints of alcohol and drug abuse from impacting upon condom use behaviours. Abraham and Sheeran's (1993) paper is geared towards safer-sex promotion, covers a substantial amount of theoretical literature and introduces the concept of interactive *skills* into the debate of health education provision.

The importance of a skills-based construct is also recognised by Conner and Armitage (1998) who provide a number of ways in which the TPB could be extended. They link the concept of 'specialized skills' (p.1431) to resources and opportunities in what they term the continuum of perceived behavioural control and note, in accordance with the principles of the TPB, that as control increases then the intention-behaviour relationship becomes more solid. They provide more detail, in terms of these resources, opportunities and skills, how control over a situation or scenario can be increased; they use the concept of increased control in describing how the TPB could be extended. For example, they note in relation to past behaviour, how perceptions of control are increased which, in turn, could impact upon future behaviour,

> 'Clearly, past behaviour does not cause subsequent behaviour. However, frequent performance of a behaviour may bring subsequent behaviour under the control of habitual processes.....repetition of behaviour should lead to enhanced perceptions of control.'
>
> Conner and Armitage (1998) p.1436-1437

Similarly, Bandura (1998) notes the link between skills enhancement and increased control. He argues that self-regulatory capabilities among people are derived from the 'motivational and self-management skills and resilient beliefs in their efficacy to exercise control over their health habits' (p.633). Bandura's work details a system of self-regulation and motivation which, by informing computer-based intervention programmes, has successfully led to behaviour change in the context of chronic illnesses such as heart disease and arthritis. Although these conditions differ from the more 'immediate' issue of condom use (for example), the components of his system are worth noting in the general context of behaviour change (through intervention design) and lend support to the importance of perceived control in this process. Bandura's system for achieving self-regulation focuses upon the three key components of *self-observation* (leading to goal setting and evaluation of progress towards these goals), *judgmental process* (in terms of personal standards, referential comparisons, valuation of activities and performance determinants) and finally *self-reaction* (by which positive reaction, for example, is likely to lead to the reinforcement of these behavioural changes).

Conner and Armitage (1998) proposed additional extensions to the TPB and include measures of belief salience (through belief importance ratings) which may increase the predictability of attitudes upon behaviour. Moreover, greater attention to normative influences upon behaviour are suggested, such as the inclusion of moral norms which may be particularly pertinent in this project's context given the potential link between condom use and trust and responsibility (for example). Conner and Armitage (1998) cite Ajzen's (1991) definition of moral norms as an 'individual's perception of the moral correctness or incorrectness of performing a behaviour' (p.1441). Moreover, the concept of self-identity is also proposed for inclusion, and reflects a wider normative societal influence than is currently present in the TPB. Anticipated affective reaction to behaviour (or the potential for regret) is also included and, once more, maybe particularly relevant for condom use where the consequences for not using condoms could result in conception and HIV (or other STI) transmission between partners. Godin and Kok (1996) also make reference to moral norms and self-identity (or 'role-identity') as possible influences upon reported variance in intentions and behaviour.

Having outlined these variables as potential additions to the TPB, Conner and Armitage (1998) provide two key ways in which this expansion may occur: The spontaneous impact of attitudes on behaviour and the impact of intentions upon behaviour. Both are of great interest to this project.

Conner and Armitage (1998) cite Fazio's (1986) model of spontaneous processing by which attitudes, in the presence of an attitude object (or environmental cue, for example) automatically guide behaviour in a more spontaneous manner (thus almost bypassing the formation of intentions as argued in the TPB). The impact upon this attitude-behaviour relationship is increased according to how accessible or easily recalled these attitudes are by the individual. They note that factors serving to increase the accessibility of attitudes (such as direct experience) are likely to increase the strength of this relationship. Conner and Armitage (1998) make the important observation that this attitude-behaviour relationship, through spontaneous processing, complements (rather than replaces) the exiting attitude-intention-behaviour relationship as indicated by the TPB, and may become more influential when either motivation or opportunity to process information are particularly lacking (p.1449). This work also ties in with the environmental cues referred to earlier in the context of Gollwitzer's work (1993) and the review findings presented by Abraham *et al.* (1998); both of which were detailed earlier on in this section.

The second route for expansion cited by Conner and Armitage (1998) refers to the intention-behaviour relationship. They make the point outlined towards the end Section 3 of this chapter, whereby 'it remains a concern of social psychologists to understand why not everyone behaves in accordance with their intentions' (p.1450). They note how some individuals may be more committed to act in accordance to their intentions than others. More specifically, Conner and Armitage (1998) refer to action-oriented individuals, who are more persistent in acting out their intention and, the opposing or state-oriented individuals who are more likely to attend to internal or external states that are related to the target behaviour, and thus less likely to persist in following an intention (Conner and Armitage, 1998). These individual differences in commitment also relate the the certainty-oriented and uncertainty-oreiented individuals defined by Sorrentino (1996) (cited in Abraham *et al.*, 1998), whereby the latter group are more motivated to resolve uncertainty and change their behaviour accordingly.

Conner and Armitage (1998) also refer to the (previously outlined) work of Gollwitzer (1993) and the concept of implementation intentions, and how these influence the intention-behaviour relationship. With their paper showing a distinct focus upon 'control', Conner and Armitage (1998) make an interesting point regarding Gollwitzer's (1993) work in that implementation intentions pass *control* to the environment, and thus when a particular situation is encountered, then the individual responds accordingly.

Finally, as has been mentioned previously in this section, innovative influences upon the intention-behaviour relationship must also draw reference to the gender power relations (or imbalances) that may occur between partners. For example, this may be of particular relevance to Edgar's (see the 'compliance-based approach' to condom use in 1992 detailed earlier) 'unsuccessfuls' in accounting for their *non-use* of condoms, and conversely for his 'compliers' in accounting for their *use* of condoms; in both instances, the partners differ in their intentions to use/not use condoms, and it may be the power relations existent in this partnership that determine the final outcome. The influence of the partner is also advocated in a similar manner in Herold and McNamee's earlier (1982) model of contraceptive use. More recently, Holland *et al.* (1992) documented in great detail the role of gender power imbalances and pressures within partnerships in determining the practice of safer sex, in that,

> '...variations in levels of power and autonomy in the negotiation of sexual encounters can contribute to unsafe sexual behaviour.'
> Holland *et al.* (1992) p.142

Holland *et al.* (1992) outlined the pressures imposed by the male partner, ranging from mild insistence to have intercourse or having intercourse on his terms, to threats and even assault if his requests are rejected. Consequently, they argued that female empowerment, or the redefinition of the power relations in a male/female relationship, is crucial in determining consistent condom use. Empowerment must be apparent at the individual or intrapersonal level in the development of a positive conception of feminine sexuality, in addition to the interpersonal level where this positive conception is then put into practice,

> '...how far their [WOMEN] needs for sexual safety are compromised by pressure to service men's needs in sexual relationships, and how far they subordinate their own sexual safety to their expectations of men's needs and desires. We argue that for a young woman to negotiate safe sex in a heterosexual relationship she has to be empowered both to develop a positive conception of feminine sexuality and able to put this positive conception into practice.'
>
> Holland *et al.* (1992) p.143

In relation to the communication and negotiation skills that have been noted throughout this section of the review, Bandura (1992) noted how these and the gender power imbalances and pressures within partnerships are not totally independent of each other; the more extreme the power differences (in terms of detriment to the female to facilitate the forthcoming example), the more likely that any negotiational intentions will be shelved. Indeed, Bandura (1992) emphasised the difficulties of raising such discussions whereby,

> 'Women who are enmeshed in relationships of imbalanced power need to be taught how to negotiate protected sex nonconfrontationally.'
>
> Bandura (1992) p.109

Of related interest, Kippax, Crawford, Waldby and Benton (1990) reviewed the potential to negotiate safer sex in terms of three discourses documented earlier by Hollway (1984). The three discourses represent a means to summarise the state of sexual interaction between males and females that are all too often ignored or assumed in sexual behaviour research, and are defined as the 'male sex drive discourse' (female role to satisfy the male), the 'have/hold discourse' (female role to acquire and hold on to her male) and the 'permissive discourse' (sexual interaction for mutual pleasure with no commitments) and are referred to here in the order of *decreasing* gender power imbalance. Hollway (1984) argued that the ease of negotiation is increased as the gender power imbalance decreases, therefore most likely in the 'permissive discourse'. Kippax *et al.* (1990) highlighted how ironical it is that women following a permissive discourse (for example, in a 'one night stand' or ONS) may actually, therefore, have a greater chance of negotiating safer sex than those women in a committed and established relationship,

> 'In encounters with the permissive discourse, the underlying understandings include the knowledge that given the man finds the woman attractive he will be flattered by the woman's actions. The woman thus has a space to negotiate conditions, the space brought into being through the negotiation of mutual desire.....It may appear paradoxical, but our analysis suggests that the promiscuous woman may be in a better position to protect herself from HIV infection than the faithful wife and mother.'
>
> Kippax *et al.* (1990) p.541

The *nature* of the relationship (and how it may compare to one of the above discourses proposed by Hollway, 1984) and its association with negotiational practices (see also Sheeran *et al.,* 1999, and their interpersonal or relationship variables detailed earlier in this section), is clearly an aspect in need of further research, and certainly of relevance to this project's aims (see Chapters 3 and 4). The paper by Kippax *et al.* (1990) concludes by extending Hollway's discourses to include a fourth measure which places women's sexuality at its *centre*, so maximising the potential for sexual negotiations. This positive view of women's sexuality is similar to the frequently termed 'missing discourse of desire' (Fine, 1988). There must, therefore, be parallels drawn between the establishment of this fourth discourse and the potential offered to empower women as a means of promoting contraceptive negotiation between partners. When women can acknowledge their desire for sex (instead of saying 'No' when they mean 'Yes'), then the potential for successful communication and negotiation about contraception is vastly increased (Lear, 1995).

These different discourses of sexual interaction are somewhat determined by the nature of the sexual culture within society and, in particular, the differences between male and female sexuality. Of interest here is establishing the link between societal differences and the gender power imbalances and pressures within relationships. It is accepted that in American culture (and therefore of some relevance to the UK), that men are expected to initiate the first sexual encounter, with women deciding 'how far things will go' and being responsible for contraception or refusal (Lear, 1995). DeBro, Campbell and Peplau (1994) talked of men as adopting the role of seducer with women setting the limits and willing to withhold sex until certain conditions are met. This process or sequence of negotiation has often been viewed as a process of 'attrition' until the

woman agrees to the man's desires. The gender power imbalances and pressures within partnerships present in a relationship will naturally determine the strength and ultimate success of such attrition. While these broader issues of differing discourses of sexual interaction and the nature of the sexual culture will not receive as much attention in this project, in comparison to the more immediate contexts of the interaction (see Chapter 3), they are worth acknowledging as perhaps playing a key role in shaping the sexual behaviour of young people.

5. CONCLUSION

The first part of this chapter, through citing a series of meta-analyses, has noted how the social cognition models of health-related behaviour have made a significant contribution to the explanation of contraceptive use patterns. They have been shown to be an important advancement on the more traditional knowledge-based theories that preceded them. However, they have also been shown to offer an incomplete explanation of these behaviours and, hence, have been extended in a number of ways in the reviewed theoretical literature. This chapter has detailed this expansion both in terms of new, explicitly defined models (termed interaction-based given their greater acknowledgement to the interactive nature of sexual relationships) as well as through a number of innovative additional constructs.

A central and emerging theme that has arisen from the theoretical literature has been the potential impact of communication skills (taken, at this stage, to include explicit and the more implicit negotiations within an interaction) and the gendered power imbalances and pressures that may be evident, and which together may enable us to provide a greater understanding of the intentions-behaviour relationship in particular. In addition, a number of more individualistic propositions such as implementation intentions, preparatory behaviours and personality influences have also been argued to be of importance. Chapter 3 will present the empirical validation of these innovative models and constructs and focus upon the overall conclusions from the complete literature review, including how the review helped to identify this project's research objectives.

CHAPTER 3: LITERATURE REVIEW PART TWO

1. INTRODUCTION

This chapter evaluates research concerned with the role of interaction-based models in explaining contraceptive behaviour. As indicated in the previous chapter, theoretical research advocating the role of partner interaction as a determinant of contraceptive behaviour has illustrated the twin importance of communication and negotiation skills and the relative gender power imbalances and pressures within partnerships. Although communication and negotiation skills and the gender power imbalances and pressures within partnerships are not entirely distinct concepts, it does seem appropriate to review empirical research support for them both in turn. In addition, empirical research determining the predictive ability of the innovative constructs outlined in Chapter 2 (such as Gollwitzer's, 1993, implementation intentions, general planning and preparatory influences, etc.) a number of more *dynamic* considerations and the *contexts* surrounding the interaction will complete the assessment of these theoretical arguments that have built upon the principles of social cognition. This review will close by summarising the contribution of the theoretical and empirical research, identify areas warranting more research and specify how this project will contribute to closing these research gaps.

The procedures for reviewing the literature were similar to those identified at the start of the last chapter. Whilst the literature sources were the same (in terms of journals and literature data bases) the word searches reflect the aims of this particular chapter. Keywords for word searches were as follows: communication, negotiation, power, pressure, skills, verbal, non-verbal, scripted, implicit, explicit, dynamic, previous or past behaviour, habit, routine, situation, context, alcohol, drugs, substance, moods, meanings, planning, preparation, implementation intentions, translating intentions, condoms, contraception and young people. The same techniques to those specified at the start of Chapter 2 were used to refine the literature search.

2. COMMUNICATION AND NEGOTIATION SKILLS

Several different aspects of the communication and negotiation skills influence upon contraceptive behaviour will be presented in turn. This will help focus the summary of the review findings presented towards the end of this chapter. The first section documents the empirical research that supports a positive relationship between these variables in question.

2.1 Supporting a positive association between communication and condom use

The majority of empirical research assessing the role of communication and negotiation skills between partners upon contraceptive use has been conducted in terms of condom use as a means to prevent HIV and other STIs. Support for a positive association (although not necessarily professing a causal relationship) has certainly been gathering strength in the more recently published literature.

As an introductory example, in their survey of 404 sexually active women attending a family planning clinic, Weisman *et al.* (1989) reported that a woman's use of condoms was not associated with either knowledge or perceived vulnerability about HIV/AIDS, but related instead to prior discussion about condoms with their partner. More recently, Shoop and Davidson (1994) surveyed 80 male and female adolescents aged 15-18 years and found that the ability to communicate with their sexual partners about AIDS was the strongest predictor of self-reported condom use. Similar positive associations between levels of communication (whether related to HIV, contraception in general or sexual history of partner) and use of condoms have been observed by Ross (1988), Catania *et al.* (1989), Boldero, Moore and Rosenthal (1992), Bruce, Shrum, Trefethen and Slovik (1990), DiClemente (1991), Gold, Skinner, Grant and Plummer (1991), Kelly, St. Lawrence and Brasfield (1991), Schilling, El-Bassel, Gilbert and Schinke (1991), Edgar *et al.* (1992), Wight (1992), Malow, Corrigan, Cunningham and West (1993), Thornton (1993), Svenson and Hansson (1993), Wingood, Hunter-Gamble and DiClemente (1993), Catania, Coates, Golden and Dolcini (1994), Donald *et al.* (1994), Malow, West, Corrigan and Pena (1994), Rickman, Lodico, DiClemente and Morris (1994), Wilson, Kastrinakis, D'Angelo and Getson (1994), Barthlow, Horan, DiClemente and Lanier (1995), Detzer, Wendt, Solomon and Dorsch (1995), LoConte *et*

al. (1997) and Sheeran *et al.* (1999) in their meta analysis of 11 studies that researched such a relationship (reporting an association of .46 for communication about condoms and condom use). In addition, Hillier *et al.* (1998) reported that 68% of their sample (n=512 students) had not talked about condoms the last time they had intercourse; for those people who had held a discussion were significantly ($p<0.0001$) more likely to have used a condom on this occasion. Lear (1995) documented one of the few qualitative studies that has examined the relationship between partner communication and condom use. From interviews with 30 college students, she noted that difficulty in communicating with one's sexual partner was indeed associated with having intercourse without using a condom. However, Bengel *et al.* (1996) noted how the assessment and importance of 'communicative self-efficacy' (equivalent to the perceived ability to initiate or hold a discussion about condom use) was often governed by the particular behavioural measures employed; they found that this variable was indeed positively associated with behaviour change, but was also often associated with an *increase* in HIV risk behaviour. To use their own words in offering such an explanation seems most appropriate,

> 'On the one hand, it makes it easier to raise the subject about safer sex and hence encourage behavioural change (positive coefficient for behaviour change). On the other hand, it also makes it easier to make contact, which for certain persons can lead to having more sexual partners (negative coefficient for number of sexual partners and sexual behaviour).'
>
> Bengel *et al.* (1996) p.515

The Bengel *et al.* study (1996), with their 'communicative self-efficacy', also illustrates the wide application of self-efficacy to include the perceived ability in talking about contraception. However, it must be acknowledged that a perceived personal ability in communicating with a partner (i.e. a high communicative self-efficacy) may not necessarily *always* translate into a perceived capability of using condoms; a range of situations, contexts and different partners is likely to challenge this. Indeed, Abraham *et al.* (1998) note this variation in perceived control in that, for example, 'an individual's self-efficacy may be high in relation to using a condom but low in relation to suggesting condom use to a partner' (p.579). Moreover, the ability to communicate with a partner is also likely to involve more than just a sense of self-efficacy; other skills are required (for example, see Fisher and Fisher's 'behavioural skills' construct in their 'Intervention

Model', 1993, outlined in Chapter 2) such as recognising when this communication should occur, how to negotiate against a partner who is less keen to use condoms, how to reinforce the issue of condom use to ensure consistent future use and generally how to raise important issues in an effective and sensitive manner.

These positive associations between communication and negotiation skills and the likelihood of condom use also extend to contraceptive use as a whole. Polit-O'Hara and Kahn (1985) interviewed 83 unmarried couples aged between 15 and 18 years, and concluded that those individuals who were effective communicators were more likely to use contraception during sexual intercourse. Conversely, those termed ineffective communicators were less likely to use contraception. Similar associations were reported by Rademakers (1991) in her Dutch survey of adolescent contraceptive behaviour; the main part of the study was a qualitative comparison between the sexual lifestyles and the interaction skills of 'good' contraceptors (39 girls who visited a family planning clinic in order to obtain contraception), and those of 'ineffective' contraceptors (34 girls who visited an abortion clinic to have a pregnancy terminated). For the 'good' contraceptors it was found that,

> 'More or less explicit negotiations take place with respect to what is going to happen during the contact. 'Are we going to make love or not, where do we stop and what are the rules of the game?''
>
> Rademakers (1991) p.8

In contrast, those respondents requesting a termination (or the 'ineffective' contraceptors) were,

> '...much less active in this sort of 'negotiation' process than the girls in the other group. Both sexual behaviour and the use of contraception were matters in which they more often than not left the initiative and responsibility to their boyfriend. He was the one who should start the talking, who should take the decisions and who should buy the contraceptives.'
>
> Rademakers (1991) p.9

Finally, the work of Freimuth *et al.* (1992) is particularly pertinent since it specifically tested the previously outlined (in Chapter 2) three stage 'compliance-based approach' to condom use (Edgar, 1992; Freimuth *et al.,* 1992). From the results of over 200 college students, they not only found empirical validation but also related this to the development of innovative intervention policies whereby,

> 'According to these results, increasing communication self-efficacy [referred to as the second or 'Initiate' stage in the compliance-based approach] should lead to increased attempts to initiate discussions about condom use, eventually leading to actual use.'
>
> Freimuth *et al.* (1992) p.214

2.2 Communication-enhancement interventions

Having identified a positive link between communicative ability and condom use, several studies (like the one mentioned immediately before in the previous section) have begun to take this idea further and talk about possible intervention strategies. In conjunction with this, several studies report results from the evaluation of such intervention programmes which, by improving the communication and negotiation skills of adolescents, have attempted to enhance the use of condoms. These intervention programmes, by nature of their research design, imply more of a causal relationship between communication skills and condom use. Kelly, Murphy, Washington and Wilson (1994) evaluated an HIV and AIDS intervention programme among 197 high-risk inner city women aged 18-40 years. The subjects were randomly allocated to either a risk-reduction intervention group that received education sessions aimed at increasing sexual communication and negotiation skills, or a control group that received information about health issues aside to HIV and AIDS. At three month follow-up, the members of the intervention group did indeed show an increase in sexual communication and negotiation skills, but, more significantly in this instance, they had increased condom usage from 26% of intercourse occasions prior to the intervention, to 56% at the time of follow-up. It is worth mentioning that the educational strategy that had resulted in the increase in sexual communication and negotiation consisted of sessions devoted to condom use, sexual assertiveness, problem solving, risk trigger

self-management and peer support. Similarly, DiClemente and Wingood (1995) evaluated a social skills HIV intervention programme which aimed to increase condom use, this time among 100 sexually active, heterosexual black women aged 18-19 years. Those respondents who were randomly allocated to the social skills intervention (as opposed to the control group where HIV risk-reduction education was provided after follow-up interview) reported increased condom use in conjunction with greater levels of sexual communication. In relation to these intervention studies, Rosenthal, Cohen and Biro (1996) noted that when formulating intervention programmes aimed at increasing condom use, it is not sufficient to solely aim at improving communication and negotiation strategies, but instead it is necessary to foster a greater sense of mutuality and collaboration within relationships. This is because, these authors argue, mutuality and collaboration have a positive effect on the communication and negotiation levels within such relationships which, in turn, will be likely to encourage condom use.

2.3 Types of communication styles

A number of studies have researched the interpersonal communication process in greater depth by examining the relative influence of different *types* of communication upon contraceptive behaviour. Edgar (1992) asked over 200 students to hypothesise over their verbal responses from a series of contrasting scenarios. He reports that the most successful communication techniques to persuade partners to use condoms were using the 'Power (punishment)' and 'You' strategies. The former tacitly emphasises protection of one's own health ('no condom, no sex'); the latter communicates consideration for the health of the target of compliance ('I care about you very much and don't want anything to happen to you') (Edgar, 1992). It becomes immediately apparent that not only is it important for young people to communicate with their partners in the first instance, but also to adopt the most effective strategies. Moreover, this shows the important ability to draw on the strategies most suited to the particular context of the interaction, for example, whether they are casual or more steady encounters.

In addition, Campbell and Barnlund (1977) compared responses of 56 sexually active females in the San Francisco area. It was found that effective contraceptors would often adopt a sarcastic and humorous approach in order to achieve consistent use of contraception. In relation to this

humorous approach, Adelman (1992) from her review of relevant social and psychological research, proposed the benefits of using playfulness as a means of facilitating the discussion of condom use between sexual partners. She defines 'play' in this context to include,

> '...a variety of communicative verbal and nonverbal exchanges that interactants find amusing (e.g. verbal play such as jokes, punning, storytelling, rhyming, metaphors, baby talk, personal idioms, role-playing; nonverbal play such as mock fighting, object play and hand games).'
>
> Adelman (1993) p.72

Additional research looking at different communication strategies has been conducted by Reel and Thompson (1994). They asked a sample of heterosexual undergraduate students (n=261, predominantly under 25s) in the US to evaluate the effectiveness (in terms of promoting condom use) of a series of statements. Whilst results showed that almost any prior discussion about condoms or HIV would have a positive effect, some strategies were perceived as being more effective than others. They documented that,

> 'While foci such as "safe than sorry" or "responsibility" were responded to positively, messages such as "I'm afraid I might get AIDS from you" led to very hostile responses. Overall, non accusatory, nonblaming messages were more likely to be used and were more likely to result in condom use and a positive verbal response.'
>
> Reel and Thompson (1994) pp.137-138

Moving on from these hypothetical scenarios, the same study by Reel and Thompson (1994) observed differences in the communication techniques actually used by regular and irregular condom users. Again the notion of 'better safe than sorry' was associated with condom users, as well as the focus on pregnancy prevention (even though STI prevention was of importance but perhaps a more difficult subject to raise) and the idea of protecting both individuals. In addition, condom users were more likely to be 'firm' in their communication, delivering statements that were not open to debate such as 'I practice safe sex'.

Some research has investigated *gender* differences in the level and type of verbal sexual communication between partners. For example, a study conducted by Cline and McKenzie (1994), who found that women were more likely to engage in such a discussion relating to HIV and AIDS than men, and that, as a consequence, they argue that intervention strategies should be targeted separately according to gender. In addition, Edgar's (1992) research documented at the start of this section reported that women were more likely to use the 'Power' strategy ('no condom, no sex') or directly request the use of a condom; men, in contrast, were more likely to report non-verbal styles of communication. More recently, and perhaps in support of these findings, a meta-analysis reported by Sheeran *et al.* (1999 - detailed extensively in the previous chapter) noted a stronger relationship between communication and condom use among women in comparison to men. In terms of the 'barriers' to communication, Hillier *et al.* (1998) noted some interesting gender differences. They reported that boys found it particularly difficult to talk about condoms, prior to intercourse, since it spelt out their intention to have intercourse (and were concerned about their partner's reaction).

Still in the context of communication, but perhaps not as explicit or verbal, DeBro *et al.* (1994) illustrated how different strategies were used by college students to encourage or discourage condom use. From open-ended responses to hypothetical scenarios of how the student would persuade a partner to use and not use a condom, they identified six key strategies: *reward* promised positive consequences to partner agreement; *emotional coercion* promised negative consequences; *risk information* involved detailing the health threats of STIs; *deception* related to the withholding of information to gain agreement; *seduction* used sexual arousal and; *withhold sex* threatened a lack of intercourse. Although some of these strategies relate to the gender power imbalances and more subtle pressures exerted within partnerships (frequently perceived as negative influences), they are also seen here as a valuable set of less verbally explicit negotiational techniques used to gain compliance with condom use. In terms of the actual strategies used by students, men were more likely than women to have ever used 'seduction', 'information' and 'reward' (in order of decreasing statistical significance) to discourage condom use. Conversely, when encouraging condom use, men most often used 'seduction' whereas women threatened to 'withhold sex'. Aside to these gender differences, DeBro *et al.* (1994) found that 'seduction' was the most commonly used strategy to both encourage and discourage condom use. Such non-verbal

strategies were argued by DeBro *et al.* (1994) to be 'context-specific'(p.178) which is a theme elaborated upon under Section 4 in this chapter.

2.4 Sexual scripts and implicit negotiations

These 'non-verbal' strategies reported immediately above also tie in with the notion of sexual scripts (Gagnon, 1990). Essentially, sexual scripts are scenarios identified by non-verbal or coded communications or contextual cues associated with or legitimising sexual behaviour or expectations of sexual interaction (Gagnon, 1990). They draw on many aspects of this project including communication skills, gender power imbalances and pressures within partnerships, contextual variables and changing courses of relationships and sexual experience. In terms of script constitution, they can be manifested as implicit language (for example, 'coming upstairs?' or 'fancy some coffee?'), sudden changes in location (for example, from bar to night-club, night-club to house or lounge to bedroom) or changes in body posture (for example, by fixing regular eye-contact or by moving from sitting to lying down). Moreover, Rademakers *et al.* (1991) cites examples of scripted communication between partners as the signals given to each other about what they like and want to do, by varying levels of 'moaning' or adjusting their partner's hand to a different area of the body, etc.

Whilst neither of the above scripted communications involve explicit negotiation, it can be seen that there are a series of steps that need to be accomplished (or often perceived as barriers to overcome) in order to culminate in some form of sexual interaction. Indeed, contraceptive use may well depend not only on acknowledging the meaning of such scripts by interpreting them successfully, but also by not hesitating in challenging the script (often through explicit communication) in order to act on prior contraceptive intentions. Difficulties may arise when scripts are misinterpreted, where one partner may subsequently assume intercourse is to follow with the other partner oblivious to their viewpoint. For example, Abbey (1982) tested the hypothesis that friendliness from a member of the opposite sex might be misperceived as a sign of sexual interest. Both men and women were invited to watch a conversation between a male and a female in a research laboratory. Support for the hypothesis was found, with men, as opposed to women (both actors and observers), frequently misinterpreting women's friendliness as a sign of

sexual advancement. This indicates that misinterpretation of actions and/or conversation (or scripts) may lead to sexual advancement by the men who incorrectly perceive that the women are showing mutual interest. This misinterpretation may coincide with excessive pressure from the males which, in turn, may make contraceptive use (if not offered by the male) and even intercourse itself difficult to avoid. The difficulties also arise, therefore, not only in misinterpreting scripts but also if one script clearly dominates over an other. This may have some bearing upon the gender power imbalances present within the interaction as well as some of the more intrapersonal qualities, such as self-efficacy and self-esteem, and also the ability to communicate and negotiate effectively, tactically and sensitively according to the particular context of the interaction. These skills will also be required in determining at what point such communications must be initiated in order not to have any detrimental affect upon the outcome. For example, if a person wishes to have sexual intercourse with a condom but certainly does not wish to have the intercourse postponed, at what point should the issues of condom use be raised? Also, at what point will such a communication have the least bearing upon whether intercourse occurs?

Other implications for this project include how scripts are learned and changed. It is likely that these scripts develop with age and sexual experience, and hence there are distinct implications for those less sexually experienced individuals who, with less formed and tried scripts, may result in a lower chance of acting in accordance with prior contraceptive intentions. For example, Lear (1995) argued that sexual encounters in the early stages of a relationship often involve very little verbal communication,

> 'Ambiguity is deliberately maintained in case one of the partners decides not to proceed. This muteness clarifies the explanation that sex 'just happened', for talking about sex can be interpreted as a sexual act itself.'
>
> Lear (1995) p.1313

Scripts may also change in accordance with a new partner, by partner type (for example casual versus more steady encounters) and by differing power relations of the interaction (in terms of age and gender which may make disruption of dominant scripts difficult for fear of rejection, mental or

physical abuse, damaging social reputation, etc.). Indeed, the longitudinal dimension of this project (see Chapter 4 for clarification) may help to assess to what extent changing or developing scripts may influence contraceptive behaviours. Nonetheless, the use and acknowledgement of scripts will clearly assist in the study of partner interaction and in particular those variables that are hypothesised to be of association.

The use of scripted communication between partners must not be ignored in this project and, indeed, these implicitly verbal or non-verbal signs may be equally as significant as the explicit verbal discussions between partners. Additionally, the communication may not always be conducted by *both* partners (either implicit or explicit) but may follow what Rademakers *et al.* (1991) termed 'uni-lateral steering', where something is said or gesture made by *one* partner and this is greeted by silence from the other partner which is assumed to signify their consent, but may also indicate a lack of ability as to how to respond. This latter point also presents a possible link between such uni-lateral steering and any gender power imbalances and pressures within partnerships that may be evident.

Such indirect forms of communication have also been more recently reported by Wellings and Mitchell (under review), who sought to identify communication styles from four focus group discussions and 29 semi-structured interviews among 16 to 29 year olds in the UK. They noted that early sexual communication is predominantly 'indirect and ambiguous' (Wellings and Mitchell, paper submitted, p.2), and that such style protects against the potential for rejection and also avoids the risk and problematic consequences of incorrectly *assuming* that intercourse will occur.

2.5 Concluding the link between communication and contraception: general consensus for more research

Finally, aside to those studies outlined in this chapter that advocate the importance of interpersonal communication, the case is strengthened by the number of academics and professionals who have acknowledged the need to conduct further research to enable a deeper understanding of the communications and negotiations that occur between partners, with a view to developing

appropriate interventions aimed at increasing levels of contraception (including condom) use (Wight, 1990; Ehrhardt, Yingling, Zawadzki and Martinez-Ramirez, 1992; Hingson and Strunin, 1992; Joffe and Radius, 1993; Schaalma, Kok and Peters, 1993; Harper, 1994; Harbin, 1995; Phillips, 1995; Sheer, 1995; Sheer and Cline, 1995; Spingarn, 1995). The extent to which communication between sexual partners is viewed as important in determining safer sex patterns has been highlighted by a review published by Kelly and Kalichman (1995), and is of clear relevance to the issue of young people's use of contraception. Their own words are used to conclude this discussion about communication and negotiation skills,

> '...communication between sexual partners about sex in general - and safer sex in particular - has emerged as one of the strongest predictors of consistent condom use...'
>
> Kelly and Kalichman (1995) p.910

3. GENDER POWER IMBALANCES AND PRESSURES WITHIN PARTNERSHIPS

3.1 Relationship between power, pressures and contraceptive use

Holland *et al.* (1992 and 1993) reported findings from the Women Risk and AIDS Project (WRAP) examining the sexual beliefs and practices of two samples each of 75 young women between 16 and 21 in the cities of London and Manchester. To date, this is one of only a few studies that have sought to specifically research the role of gender power relations in order to explain levels of less safer sex among young people. Assessing levels of HIV-related sexual behaviours, the study was focused primarily towards levels of condom use (to date, there are no published research studies that have specifically examined the role of gender power relations in determining levels of contraceptive *as well as condom use* exclusively among a sample of young people). From a series of in-depth interviews, the authors noted an overwhelming documentation of,

'A) Inequalities of power in sexual relationships and encounters.
B) Possibilities of negotiation in sexual relations, but which take place within a framework of social constraints:
(i) from male pressure to male violence
(ii) a passive femininity
(iii) women's responsibility for male sexuality
(iv) the missing discourse of desire.'

Holland *et al.* (1992) p.276

The 'inequalities of power' are reflected in their findings that 24% of the young women in the sample had experienced unwanted sexual intercourse in response to pressure from men. The pressures cited ranged from mild insistence on giving way to intercourse, to threats, physical assault, child abuse and rape (Holland *et al.,* 1992). In terms of 'possibilities of negotiation', the WRAP supports the link between gender power imbalances and levels of interpersonal communication (as a means of promoting condom use). One of the few additional studies that has assessed coercive intercourse was conducted more recently in New Zealand among a cohort of 21 year olds (Dickson, Paul, Herbison and Silva, 1998). This study found that 0.2% of men and 7% of women reported that their first ever intercourse was 'forced'. Moreover (for women only), this was more apparent for those having their first intercourse at a relatively early age.

Using 'method memory work' with two groups of four sexually experienced women (aged between 30 and 50), Kippax *et al.* (1990) similarly noted that the power imbalances, as identified as a set of discourses, were also highly related to the levels of negotiation. They observed, on the one extreme, that,

'The male sex drive discourse represents women's sexuality as always receptive. What follows is the assumption that women always want it, even if they do not act accordingly. This attribution of a passive, receptive sexuality simultaneously licenses the man's unilateral action and interprets silence as the equivalent of consent. The power relations which describe the terms of the male sex drive discourse render negotiation unintelligible.'

Kippax *et al.* (1990) p.538

At the other extreme, Kippax *et al.* (1990) highlighted that sexual negotiation can only occur in encounters where the women have some sense of control and hence the gender power imbalances are at least nullified or even reversed through female empowerment. Moreover, this is likely to be related to the female's self-efficacy, whereby increased confidence and assertiveness is essential if such pressures are to be resisted.

It is clear that in these situations of extreme power imbalance that it would be harder for the individual who has less power to behave in the way that he or she intended to. In this way, GPIP acts as a moderator effect upon the intention-behaviour relationship and, given the direction of pressure, could be most evident for young women in particular. Moreover, this pattern of power imbalance is clearly not applicable to all interactions/people. For example, these influences upon the intention-behaviour relationship are more likely to evident among Hollway's (1984 - see previous chapter) 'male sex drive discourse' and the 'have/hold discourse' compared to the 'permissive discourse'. In addition, it could be argued that gender differences in the intentions-behaviour relationship may help to explain the gender variation in reported condom use, as was found in the Sheeran *et al.* (1999) meta-analysis, whereby men were more likely to report condom use than women (-.08). However, it is also worth noting that Sheeran and Orbell (1998), from their meta analysis of condom use, found that gender had no significant impact on the intention-behaviour relationship.

While the aforementioned studies tend to document the predominance of male pressure, the WRAP study (Holland *et al.*, 1992) also reported that many of the women surveyed perceived men as being the more competent actors in the sexual encounter, so fostering even greater gender power imbalances (more male pressure in this case) within a partnership. This is also reflected in the findings reported by Kashima, Gallois and McCamish (1992), who studied predictors of condom use in two parallel studies in Brisbane, Australia. For participants in both studies, the sexual partner was by far the most important person influencing decisions about sex. More specifically, women were much more likely to cite men as important influences upon their contraceptive behaviour, in contrast to the men who were less likely to rate the influence of their female partners.

Kent *et al.* (1990), cited in Wight (1992), noted that in addition to the pressures of male sexual satisfaction, economic factors may also frequently disadvantage women in their requests regarding sexual behaviour. For example, the convention of men taking women out, premised on their higher earning capacity, coupled with their greater access to cars and restrictions on women's mobility at night, means that men have greater power to determine the location of their meeting which can then be contrived to make sexual activity more possible (Wight, 1992).

Finally, it is worth noting that the power imbalances and pressures between partners can also be more subtle than those examples given previously. For example, pressures to withhold sex or threatening to end a relationship are effective power strategies often used (DeBro *et al.,* 1994) alongside pressure for intercourse. Moreover, these pressures are not always manifested through 'force' or 'power strategies', but may also be recognised more simply through willingness for intercourse. One of the few studies that has assessed this issue in some depth found that 77% of men and 53% of women reported that both partners were 'equally willing' for intercourse (Dickson *et al.,* 1998). These gender differences were still evident when age differences were controlled for. The extent of pressure, power, control and willingness for intercourse may also be indicated by apparent later regret for intercourse; Dickson *et al.* (1998) found that 16% of men and 54% of women reported that they 'should have waited longer before having sex with anyone'. However, the *extent* to which coercion played a role in these particular intercourses is not certain.

3.2 Reversing the trend - a case for female empowerment?

Given these gender power imbalances and pressures within partnerships, Holland *et al.* (1992) subsequently assessed whether a subset of 26 young women, whom they identified as relatively empowered to negotiate sexual intercourse, were actually more likely to practice safer sex. They defined empowerment to include resistance to femininity as well as resistance to masculinity. However, support for this hypothesis was mixed with only a selection of these empowered women being successful in actually achieving safer sex.

Holland *et al.* (1992) and Holland, Ramazanoglu, Sharpe and Thomson (1998) also detail two aspects of empowerment, from this particular subset, that are of additional interest. They argue that experiential empowerment (gained through the positive experiences of achieving condom use) is required alongside intellectual empowerment (essentially knowledge based) to foster an increase in condom use.

Moreover, Levine *et al.* (1993) argued the case for female empowerment from three years of instituting and evaluating an HIV prevention programme in the USA that was designed to assist women in making healthy choices about their bodies (Levine *et al.*, 1993). They concluded that their programme shows,

> '...real and sustained behavioural changes in women. Women are reporting ongoing post-intervention changes in their sexual behaviour that reduce their risk of HIV infection.'
>
> Levine *et al.* (1993) p.321

These instances of empowerment not only help illustrate further the influence of power imbalances upon contraceptive use, but also indicate potential intervention strategies that could reduce these discrepancies. Moreover, Bandura (1998) notes the relationship between empowerment and increased control, and cites work by McKusick, Coates, Morin, Pollark and Hoff (1990) who reported self-empowerment among a gay community led to a stronger sense of self-efficacy and reduction in high risk behaviours.

As a final note, it must not be forgotten by researchers and policy makers that such gender power imbalances and pressures within partnerships can also have a *positive* effect upon contraceptive use, and could be used positively in the design of intervention programmes. Indeed, Rosenthal *et al.* (1994) in their survey of 248 adolescent girls, found that male partner insistence on using condoms was highly predictive of their use during intercourse. Equally as overlooked, Kelly and Kalichman (1995) reported (amidst numerous examples or research documenting male pressure) evidence that men are also often on the receiving end of coercive advances from women; it should not always be assumed that this pressure is being exerted unidirectionally.

In addition to the communication and negotiation skills and the gender power imbalances and pressures within partnerships, there exist a number of other issues that have been empirically associated with sexual behaviour and contraceptive use, and that are worthy of further discussion. New theoretical advances, whilst emphasising the aforementioned issues, have also noted how models of sexual behaviour must be viewed *dynamically* and must also reflect the particular *context* in which the interaction occurs. Moreover, the empirical validation of the remaining innovative constructs outlined in the previous chapter must also be considered. These issues will now be discussed in turn, and illustrate the avenues of investigation that must be considered in order to comprehensively study the interactional influences upon contraceptive use. It is worth acknowledging that these additional sub-sections are not totally of mutual exclusion - for example, although elements of the relationship type have a contextual relevance, they are introduced under the dynamic issues to reflect *changes* in the type of interaction.

4. 'COMPLETING THE PICTURE' - A CONSIDERATION OF THE DYNAMIC (PREVIOUS INTERACTIONS AND/OR CHANGING NATURE OF SEXUAL RELATIONSHIPS), CONTEXTUAL AND THE ADDITIONAL INNOVATIVE CONSTRUCTS OUTLINED IN CHAPTER 2

4.1 Dynamic factors

Since sexual behaviour is continually evolving and changing over the course of an individual's life, a 'snapshot' of risk associated behaviours, typical of cross-sectional surveys, is not a sufficient investigation into contraceptive use (National Research Council, 1992), and hence research incorporating more of a longitudinal dimension should be encouraged. These designs can vary from tight cohort studies through to those which ask respondents to more simply recall past experiences (as in the study by Gold *et al.,* 1991, which asked gay men to recall both safe and unsafe sexual experiences in the past six months). By many of the interaction-based models advocating the notion of 'stages' to behaviour change, it is clear that the influence of past sexual experiences, length of sexual relationship, etc. can all have a bearing upon actual reported behaviours by determining the speed of movement between certain stages. Also, the interaction of individuals at contrasting stages may have a bearing on their contraceptive use patterns. This point

is more obvious when reviewing developmental models of contraceptive use, such as the Lindemann three stage theory (1977). Of the three stages ('Natural', 'Peer Prescription' and 'Expert'), contraceptive use becomes more planned, regular and effective in the final stage. In terms of partner influence, it is more likely that for interactions involving people at different stages of the model, the more experienced partner (or the partner at the highest stage) will have the greatest influence upon use of contraception.

4.1.1 Previous sexual experiences

In respect of these dynamic considerations, the role of previous sexual experiences is one that is gathering support in the literature for explaining current sexual behaviours. For example, Abraham *et al.* (1995) assessed the relevance of the HBM (a social cognition model not incorporating a temporal dimension) as a predictor of young people's condom use. The study assessed 258 sexually active young people over the course of a year and clearly found that previous patterns of condom use were significantly predictive of subsequent behaviours, whereas 'intentions and HBM measures did not predict reported sexual activity over the study year' (Abraham *et al.,* 1995, p.1). Similarly, Thompson *et al.* (1996) surveyed over 200 students from California and found that previous use of condoms was highly predictive of their current use. Further support has been offered by Gallois *et al.* (1994) in their survey of 225 heterosexual students in the University of Queensland. Furthermore, Sutton (1994) linked repeated behaviour, such as contraceptive use, to the notion of 'routines', illustrating how thoughts and decisions taken regarding a particular behaviour are governed by what has occurred in the past. In addition, Sheeran *et al.* (1999), in their extensive meta-analysis of 17 independent correlations of this measure (with a sample size of 1,833), found a 'medium-sized positive relationship between previous condom use and current or subsequent use' (.36) (p.118). Conner and Armitage (1998) reviewed 11 and 7 studies relating to the prediction of intentions and behaviour respectively, and concluded that,

> '.....on the basis of published research, there appears to be an empirical case to support past behaviour as a predictor of unique variance in intentions and behaviour in the TPB.'
>
> Conner and Armitage (1998) p.1438

Although in a different cultural setting (Hispanic women) and in relation to a distinctively different age group (18-40), Moore *et al.* (1995) extended the validity of previous sexual experiences with specific reference to the interactional processes that are the centrepiece of this project. They hypothesised from their findings that women who used condoms with their primary partners perceived that future partners will react more favourably to requests for condom use (during pre-intercourse negotiations), than for those who were currently not using condoms. This study, like the others mentioned previously in this section, stresses the need for research to extend beyond the 'one-time' conducted surveys to those incorporating a longitudinal dimension in order to examine the array of dynamic processes that may influence contraceptive use and non-use. This could include both prediction and measurement of behaviours at follow-up as well as asking respondents to recall several instances of sexual intercourse in the past.

4.1.2 Changes in contraceptive use: method and consistency

The use of a longitudinal research design may also clarify the precise criteria used by which a 'steady' relationship is judged stable enough to instigate a *change* in contraceptive method (usually the abandonment of condoms). Ford (1993) reported from his survey of 153 non-virgins in Plymouth that the use of condoms at last intercourse declined from 45% in relationships up to six months in duration to 25% for those lasting longer than six months. Conversely, the use of the Pill increased from 21% to 43% for those relationships of extended duration. Similarly, Edwards (1993), Edwards (1994), Fergusson, Lynskey and Horwood (1994), Ku, Sonenstein and Pleck (1994), Ku Sonenstein and Pleck (1995) and Lear (1995) have all documented the link between a decrease in condom use with the advancing stages of a relationship. It appears that the idea of using a condom in a steady, affectionate relationship may be incompatible for reasons illustrated, for example, by Kippax *et al.* (1990) who noted that 'condomless love may become the symbol of true love' (p.539). Moreover, it has been argued that assumed trust between partners implies monogamy, and hence sexual intercourse outside the relationship would not be revealed, and would therefore not warrant a return to condom use (Wight, 1990). Even if a partner intends to use a condom during intercourse with a 'steady' and 'trustworthy' partner, instigating a conversation about why they view condoms as a necessity could question the credibility of their partner's background and may even jeopardise the relationship (a forfeit so high that they may decide not to

raise the subject). Rosenthal and Fernbach (1997) noted from their adult sample (n=112) that several people (especially women) would be prepared to stop using condoms almost immediately if they thought that they were in a serious, trusting and monogamous relationship. Not only does this scenario assume fidelity, but it also ignores the previous sexual behaviour of the current partner. Kelly and Kalichman (1995), from an extensive review of related literature, have also highlighted this issue of condom use and trust in the context of HIV prevention as follows,

> 'Safer sex therefore implies that the person with whom one plans to have sex is viewed as a potential source of disease. Although people may consider sex with highly casual partners to create risk and adopt protective steps in the context of casual or transient relationships, it seems much less likely that a partner toward whom one has a close, affectionate, or loving feelings will be viewed as a health threat.'
>
> Kelly and Kalichman (1995) p.909

The previous example also highlights how contraceptive behaviours may change between casual and more steady relationships. Whilst it is argued by Kelly and Kalichman (1995), and also with reference to the permissive discourse presented earlier (in Section 3), that condom use should be more straightforward to enact in the more casual encounters, data presented in sexual behaviour surveys could be argued to show a different pattern. Data presented in Chapter 1 show that people who report having more sexual partners within the year (assumed to include more 'casual' encounters) tend to use condoms less consistently. Note also that studies outlined in Chapter 2 by Kaspryzk *et al.* (1998) and Sheeran and Orbell (1998) found stronger correlations between intentions and behaviour among regular rather than casual partners. There is an obvious need to conduct qualitative research in this area to clarify exactly how, and in particular why, condom use patterns alter between the more casual and steady relationships. The issue of relationship 'type' will be further detailed in Section 4.3.3 of this chapter.

The issue of trust and perceived need for using condoms relates to the important processes by which partners assess the 'risk' of each other (in terms of infection with HIV and other STIs). It is assumed that the idea of conducting tests for HIV or other STIs prior to sexual intercourse with a new partner is often inconceivable, leaving a whole host of inaccurate criteria by which a partner's

sexual history is assessed. Kelly and Kalichman (1995) reviewed the work of Williams *et al.* (1992) who found that college students based their decision to use condoms on personality attributes such as likeability, warmth and kindness. Similar findings were observed by Lear (1995) in her qualitative study of sexual communication among college students. Although the previous example refers to HIV infection, the relevance to pregnancy prevention is clear, particularly where intercourse is sufficiently unexpected in terms of making alternative arrangements for contraception beyond condom use. The decision to use condoms may also be governed by young people's prime reasons for choosing this method of contraception; in other words, to what extent they are perceived as a means to prevent pregnancy or the transmission of STIs (or both). These issues of relationship 'type' and risk perception will be further detailed in Section 4.3.3 of this chapter.

4.1.3 Changes associated with 'sexual career' - first ever and more recent episodes of intercourse

Only a single study (to date) has included a longitudinal dimension to assess changing communication levels between partners. Poppen (1994) compared sexual experiences of 186 college students in 1979 to those of 215 in 1989 (not the same students) by completing the Sexual History Questionnaire, collecting data on contraceptive use and partner communication. Decade changes were examined by comparing the 1989 results to those of ten years earlier, and changes in sexual career were examined by comparing contraceptive use with the first *ever* sexual partner with first intercourse with the most *recent* partner. In terms of contraception use, the most interesting finding was that use over the decade was relatively similar, but changes during the sexual career advancement for both years were more noticeable; reported contraceptive use (at first intercourse) increased from 70% for first to 85% for current partner in 1979, and from 71% to 85% ten years later. In terms of discussing contraceptive use, changes during the sexual career were also more noticeable, with discussions more common with the current, as opposed to the first sexual partner in both 1979 and 1989. The results show, therefore, that the changes in the amount of partner communication throughout career advancement (despite the fact that the overall levels of communication were low) were also associated with changes in reported contraceptive use between partners. Other than this study, longitudinal research (to date) has largely failed to

examine the development of plans and strategies conducted either as individuals, or as communicated between partners, as regards contraceptive use.

Of additional interest, Dickson *et al.* (1998) assessed accounts of first intercourse from a cross-sectional sample of 477 men and 458 women, obtained from within a birth cohort followed longitudinally as part of the Dunedin Multidisciplinary Health and Development Study (New Zealand - see earlier in this chapter). Important findings concern reasons and expectancy for intercourse and the nature of the relationship at that time (measures rarely researched elsewhere). Although the study did not relate these issues to contraceptive use (something that this project hopes to achieve), it did report that being 'curious about what it would be like' was the most common reason for intercourse (for both males and females). Both sexes reported 'being drunk' as an additional reason, but females were more likely than males to cite being 'in love'. Moreover, first intercourse was usually unexpected with 50% of men and 30% of women stating that intercourse has occurred 'on the spur of the moment'. In terms of the relationship type at this first intercourse, 34% of the females and 50% of the females were in a steady relationship, whereas 11% of the males and 6% of the females had 'just met for the first time'. Onset of first intercourse was also reported by Ingham *et al.* (1991), in their interviews (n=95) among young men and women aged 16-25: time to first intercourse together was less than or equal to two weeks for half the sample, and within 24 hours for a quarter.

The British national survey of sexual attitudes and lifestyles (Johnson *et al.*, 1994, referred to in Chapter 1) also examined experiences of first ever intercourse. However, by researching a greater range of age groups (16-59), this allows for greater interpretation as to how such responses may have changed according to when this first intercourse occurred. Comparing the 16-24 age group to that aged 45-59, it appears that a greater percentage of first intercourses nowadays are likely to be with someone 'met for the first time' or 'met recently'. In addition, the 16-24 year olds are more likely (than the older age groups) to have cited 'curiosity' as a reason for first intercourse. Moreover, the youngest cohort (aged 16-24), and in particular the women, are more likely to report that first intercourse occurred 'too soon'; 37% of women aged 16-24 reported their first intercourse as occurring 'too soon' compared to 15% of women aged 45-59 at the time of survey. Although the age groups used in the national survey (Johnson *et al.*, 1994) do not permit direct

comparisons with other studies, these trends clearly show some support for the findings reported by Dickson *et al.* (1998) and Ingham *et al.* (1991) reported in the previous paragraph.

It is hoped that this project will also be able to examine some 'career' or historical changes in partner communication and contraceptive use in even greater depth by reinterviewing the same (as opposed to similar) respondents. Moreover, the project will aim to see whether the 'factors and circumstances' reported by Dickson *et al.* (1998, p.32), have any bearing upon contraceptive use in previous episodes of intercourse. This project's cohort study represents an advanced longitudinal design (focusing upon the *same* set of individuals interviewed on more than one occasion), and will also have the additional advantage of *qualitatively* comparing intentions with reported behaviour (largely unresearched as yet), so casting light on many of the theoretical models that have been outlined previously (see Chapter 4 for more detail).

4.2 Contextual factors

The most recent theoretical accounts of sexual behaviour and contraceptive use have tended to include a distinct contextual component. The first interaction-based model outlined in the previous chapter, by Fisher and Fisher (1993), explicitly highlighted the importance of 'Situational Factors'. In addition, Sheeran, White and Phillips (1991) proposed not only that patterns of contraceptive use can be explained by background socio-demographic factors and intrapersonal qualities (as in the social cognition models), but also pointed out that these factors would be modified by the context of the interaction. Sheeran *et al.* (1991) define the context both in terms of interpersonal influences (of partners, friends, etc.) and by a series of situational factors unique to the time and location of the interaction. Since the interpersonal influence of the partner has been outlined previously (in respect of the communication and negotiation skills and gender power imbalances and pressures within a relationship), this section will discuss contextual issues more in terms of the immediate time and location of the interaction. That is not to say that the wider social context is less influential towards behaviour change (Bandura, 1998, presents an informative account of the importance of the wider social community); rather that it is beyond the scope of this particular project (see Chapter 4).

4.2.1 Psychic context

Davies and Weatherburn (1991), in their study of high risk male homosexual behaviour, noted the importance of the negotiational practices between partners and how they operate (and vary) in differing 'psychic' and 'physical' contexts. They defined the psychic context as strongly related to self-esteem and self-efficacy, and that it refers to the combination of moods (such as loneliness, elation, anxiety, hatred, etc.) and meanings present at the point of interaction, as well as the expectations that a person has about the ensuing sexual encounters. For example, different meanings can include 'I desire you', 'I love you', 'I forgive you' and 'I hate you' and these may perhaps also be indicative of the type, state or length of the relationship at that moment in time. Similarly, the importance of intercourse in terms of an act indicative of love, curiosity or physical pleasure may determine subsequent behaviours. Meanings associated with intercourse could also be examined by asking respondents to cite their main reasons for having intercourse on previous occasions. In respect of expectations, these may include perceived responsibilities for contraceptive choice/decisions, who should 'lead' the interaction and whether self or partner satisfaction is the priority.

4.2.2 Physical context

The physical context is more straightforward and refers to the specific place or location where the interaction between partners occurs. For example, it could be hypothesised that a casual sexual encounter in the home or car of the male partner will render any communication or negotiation practices initiated by the female partner as less effective than were the encounter to occur on her 'territory'. DeBro *et al.* (1994) have already argued (see Section 3 of this chapter) how the strategies and pressures used to persuade partners into using and not using condoms are likely to vary in different situations. Moreover, certain 'unstable' contexts such as cars, beaches, etc. could make obtaining contraception more difficult, particularly if intercourse is unexpected.

Different situations can also be seen to potentiate or 'trigger' episodes of high risk sexual behaviour (Kelly and Kalichman, 1995). Eiser and Ford (1995) presented a useful synopsis of the theoretical literature relating to 'situational disinhibition' and its influence upon changes in sexual

behaviour. While their study relates specifically to the holiday environment, reviewed theoretical research acknowledges the importance of differing situational cues that may determine levels of risk-related sexual behaviours. From their own study of over 1000 tourists in the south-west of England, Eiser and Ford (1995) note that levels of high risk sexual behaviour could be attributed to the situational influence of the holiday environment,

> 'Sexual activity was also related, especially among females, to higher scores on a factor representing situational disinhibition, e.g. feeling like a 'different person' on holiday.'
>
> Eiser and Ford (1995) p.323

It was found that people on holiday were less constrained by their normal role demands and interpersonal obligations and that this had profound implications regarding their contraceptive use and sexual activity whilst on holiday (Eiser and Ford, 1995). In similar fashion, Hennink, Diamond and Cooper (1997) reported that seasonal workers from five holiday centres in the south of England had more sexual partners during the work season, in comparison to the equivalent time period when at home. They highlighted that these behaviour differences are attributed to the workers having fewer social constraints, their own accommodation, a more sociable environment and a general increase in alcohol consumption. Their findings also suggest that, although the workers report more sexual partners, contraceptive behaviour is similar to that practised at home. Indeed, cases of unsafe sexual encounters were frequently reported at all times of the year.

Lear (1995) extends the influence of situational inhibition to the university environment. In her qualitative study of safer sex among college students, she noted how the university environment provided,

> '...a fairly unstable, free environment in which many people at this stage were still subject to denial and wishful thinking regarding the potential consequences of their behaviour.'
>
> Lear (1995) p.1317

The situational influence of an environment also relates closely to the work of Fazio (1990) who argued that the perception and interpretation of a particular situation may shape behaviour in a

form of 'spontaneous processing', operating in direct contrast to the more usual rational decision making process. The question remains as to what situational cues (or physical contexts) can trigger such 'spontaneous processing'; specifically in relation to this project, for example, the occurrence of sexual intercourse without the use of contraception.

These findings relate to an influential study by Gold *et al.* (1991) referred to at the start of Section 4.1 of this chapter. In this study, gay men were asked to recall two sexual encounters in the past (where they had experienced 'unsafe sex' and 'safe sex'). Whilst the authors identified several factors that distinguish between these encounters (that have been cited elsewhere in this chapter), they also point out how respondents self-justification for unsafe sex may differ in the immediate context (at the time of interaction) compared to other times (outside the interaction). In other words, in the context of sexual interaction, or at the time of 'hot' cognition, these self-justifications may include self-delusion, 'in that they reflect reasoning which, while recognized as invalid in the cold light of day, is nevertheless employed in the heat of the moment' (Gold *et al.*, 1991, p.275).

With this discussion in mind, it is worth reiterating the case for more longitudinal research, since this type of design could help assess whether the situational effects of holidays, festivals, special parties or even Saturday nights encourage greater sexual activity with different partners and with less precaution than at other times (Wight, 1990).

4.2.3 Alcohol and drug use

When considering these psychic and physical contexts, one cannot ignore the contextual role that alcohol and drug use may have upon the interactional processes (particularly given the frequent recreational use of alcohol and drugs among young people in the UK). The general consensus of the experimental evidence on alcohol's impact on sexual behaviour is that it acts as a depressant, even at low concentrations (Price and Price, 1983). However, research correlating unsafe sexual encounters with alcohol consumption illustrates that alcohol can have a distinctly contrasting effect from a sexual depressant in that it acts as a sexual disinhibitor. In other words, the effects of alcohol consumption can lead people to engage in sexual acts in which they might not otherwise

engage. The disinhibition hypothesis argues, therefore, that the link between drinking and disinhibition is not so much pharmacological and physiological in character but is a socially constructed feature of culture and cognition (Reinarman and Leigh, 1987). Indeed, Stroebe and Stroebe (1995) reviewed a number of studies that have used a balanced placebo design to argue the central role that the *expected* effects of alcohol have upon disinhibited behaviours,

> 'In particular, the knowledge that one has consumed alcohol appears to disinhibit enjoyable but illicit behaviour (such as sexual behaviour or further alcohol consumption) by providing an excuse for what would otherwise be considered inappropriate acts.'
>
> Stroebe and Stroebe (1995) p.103

Whilst it is not the purpose of this review to argue in detail what physiological, pharmacological and psychological processes may or may not be involved in alcohol's effects upon sexual behaviour, it must be stressed that there is a great depth of research literature reporting a positive association between alcohol consumption and lack of condom use. That is a relationship between alcohol use *immediately prior to or during sexual encounters* (of more relevance to this review) as opposed to levels of alcohol consumption at other times. Bagnall, Plant and Warwick (1990) interviewed over 1000 15 and 16 year olds and concluded that respondents who combined alcohol consumption with sex were seven times less likely than others to report using condoms for vaginal intercourse. Similar associations were reported by Molgaard, Nakamura, Hovell and Elder (1988), McKusker *et al.* (1990), Ostrow *et al.* (1990), Plant (1990), Stall *et al.* (1990), Erickson and Trocki (1992), Gold, Karmiloff-Smith, Skinner and Morton (1992), McEwan, McCallum, Bhopal and Madhock (1992) and Luster and Small (1994). Lear (1995) noted how many of her interviewees cited instances of sexual intercourse which, unless they had been drinking, would not have normally occurred.

Numerous research studies have reported the relationship between illicit drug use, in addition to alcohol consumption, and reported unsafe sexual encounters. For example, Stall *et al.* (1986), Robertson and Plant (1988), Sonenstein, Pleck and Ku (1989), Anonymous (1990), Biglan (1990),

CDC (1990), Hingson, Strunin, Heeran and Berlin (1990), Breakwell, Fife-Schaw and Clayden (1991), Gillmore, Butler, Lohr and Gilchrist (1992), Strunin and Hingson (1992), Barthlow *et al.* (1995) and Graves and Leigh (1995) reported that those persons who consumed large quantities of alcohol and who used drugs prior to intercourse were less likely to use condoms consistently.

In contrast to the findings reported above, a number of research studies have failed to support the association between alcohol and/or drug use with unsafe sexual behaviour. Harvey and Beckman (1986) collected data from sexually active women (aged 18-34) over three consecutive menstrual cycles (safe sexual behaviour in this study refers primarily to potential for conception rather than HIV given the date of this study). They concluded that,

> '...female-initiated sexual activity appeared to be inversely related to alcohol use with women initiating significantly fewer sexual activities following the consumption of alcohol...The findings further indicated that alcohol consumption immediately prior to sexual intercourse did not significantly alter the use of coitus-dependent contraceptives.'
>
> Harvey and Beckman (1986) p.327

Thomas, Plant and Plant (1990) and Gold *et al.* (1991) also failed to find a relationship between alcohol or drug use and patterns of contraceptive use.

Given these inconsistencies, it seems that the effects of alcohol and drug use upon sexual behaviour cannot be solely attributed to the disinhibition theory. Instead, it appears that the relationship is far more complex, and that the circumstances under which alcohol is consumed, as well as the psychological state of the consumer, may moderate the relationship further (Price and Price, 1983). When considering the role of alcohol and drug use, it is therefore equally important to acknowledge the influence that the additional psychic and physical contexts have in mediating the effect of the alcohol and drug use upon subsequent sexual behaviours. Moreover, in respect of those studies documenting a positive association between alcohol and drug use and non-use of contraception, further research is required to see whether this relationship is the product of sexual disinhibition or if other processes are at work. For example, are individuals who are likely to use

alcohol and drugs also those more likely to have sex without contraception (without a causal linkage), or are there underlying social or dispositional characteristics is related to risk-taking in several walks of life including alcohol, drugs and non-use of contraception (Kelly and Kalichman, 1995)? More detailed research, using a variety of methods, is clearly required in this area.

The acknowledgement of contextual factors as potential influences upon sexual behaviours has certainly gained more theoretical and empirical support in recent years. Section 4.2 has shown how, of all the different 'levels' of context, it is most likely that the immediate physical and psychic contexts have the greatest influence upon the communications between partners and subsequent sexual behaviour. However, as a final note, it is worth mentioning that a number of models outlining the importance of the immediate contexts have also labelled the wider social contexts as playing a role in shaping the interaction between partners. For example, the two-person model of interaction for heterosexual behaviour devised by Frank and Zimmermann (1991) ranges from global and subcultural norms to the network of significant others to the situational context and right down to the interaction itself between two people. In their paper, the authors note that the wider contexts (global and subcultural social norms and the network of significant others) tend to shape a person's behavioural intention, whereas it is the immediate contexts (situational contexts and the interaction itself) that determine whether such intentions are translated into respective behaviours.

4.3 Empirical validation of the additional innovative constructs identified in Chapter 2

It is important to note at the start of this section that a number of the innovative constructs presented in Chapter 2 have been empirically reviewed under the previous sections in this chapter. For example, the interactive skills constructs have been covered under 'communication and negotiation skills' and gender power imbalances and pressures within partnerships have been outlined in their own section. This section will present empirical evidence for the following innovative constructs:

- Planning and preparatory behaviours
- Gollwitzer's (1993) implementation intentions / Bagozzi and Edwards' (1998) 'trying'

- Interpersonal factors
- Personality factors
- Normative influences

4.3.1 Planning and preparatory behaviours

It is important to note at the outset that empirical support for the importance of preparatory behaviours has been documented in the influential review by Abraham *et al.* (1998); this has already been detailed in Section 4.2 of Chapter 2. In addition, Abraham *et al.* (1998) included communication and negotiation skills as part of these preparatory behaviours, so there is some overlap with the empirical validation shown in Section 2 of this chapter.

These types of behaviours were also reviewed in the meta-analysis of Sheeran *et al.* (1999), in terms of carrying a condom and having a condom available at the time of intercourse. Twelve independent correlations were reviewed with a sample size of over 3000. Both measures were positively associated with condom use (.31 and .41 respectively). The authors note that these two measures are interrelated since carrying a condom (in advance of intercourse) is likely to lead to the availability of a condom at the time of that intercourse. Sheeran *et al.* (1999) conclude this contribution as follows, and argue that these behaviours should be included in a modified TRA,

> 'Thus, these two preparatory behaviours, which have received scant attention in psychosocial studies of heterosexual condom use, emerge as medium-to-strong predictors of condom use.'
>
> Sheeran *et al.* (1999) p.118

4.3.2 Gollwitzer's (1993) implementation intentions / Bagozzi and Edwards' (1998) 'trying'

At the outset, it is worth noting that in an extensive review of the theoretical and empirical literature concerning the TPB, Conner and Armitage (1998 - details of the review outlined earlier)

suggest that Gollwitzer's implementation intentions should be included in a new and updated version of this model.

More specific support for this construct has been supplied by Orbell, Hodgkins and Sheeran (1997) who assessed breast self-examination (or BSE). They found that implementation intentions were indeed more predictive of behaviour than goal intentions. Orbell *et al.* (1997) noted that for those women who formed implementation intentions (specifying a time and date for their intended behaviour) were almost twice as likely to perform BSE as those who did not form such implementation intentions. They recognise that these intentions are more effective since they provide a mechanism that facilitates the retrieval of an intention in memory, and that can mimic the effect of habitual behaviour (thus reducing the impact of past behaviour, of no BSE, in predicting future behaviour) (Orbell *et al.,* 1997). Although BSE may be a different behaviour to contraceptive use, their research, by detailing *how* these implementations impact upon behaviour, indicate that this would also be applicable to other behaviours such as contraceptive use.

It was already noted in Chapter 2 how Bagozzi and Edwards' (1998) construct of 'trying', presented in their model of self-regulation of body weight, built upon Gollwitzer's work and idea of implementation-intentions. They tested the intentions-behaviour relationship aspect of their model through a longitudinal study of 117 undergraduate students completing two questionnaires administered one month apart. Although this study refers to body weight, the theoretical innovation is of relevance to this research. In short, using multiple regression analysis, they found 'considerable support for the processes of goal setting and goal pursuit' (Bagozzi and Edwards, 1998, p.618) and found that 'trying', through will-power, self-discipline, time devoted to planning and physical energy expended, initiated the behaviour of exercising and dieting (Bagozzi and Edwards, 1998, p.618).

4.3.3 Interpersonal factors

Sheeran *et al.* (1999) reviewed findings from 11 studies that had reported the percentage use of condoms with both steady and casual partners. They present findings in two ways, by comparing the mean percentage of respondents who *always* used a condom with their partners (17% with a

steady partner and 30% for a casual partner) and the average percentage who *never* used a condom in such circumstances (52% with steady partners never used a condom compared to 40% with casual partners). The authors conclude, as for preparatory behaviours, that 'these findings provide convincing evidence that relationship status is strongly associated with rates of condom use' (p.119). Section 2 in Chapter 2 has already reported that Sheeran and Orbell (1998), from their meta analysis, and the study by Kasprzyk *et al.* (1998) all found stronger correlations between intention and behaviour within 'steady' (rather than 'casual') partnerships.

In addition, the Sheeran *et al.* (1999) study also reviewed partner's attitude towards condoms and found that the average correlations between this and condom use were .30. These findings were derived from eight independent associations with a sample size of around 2,500.

Fewer studies reviewed by Sheeran *et al.* (1999) investigated risk perception of the sexual partner (6 independent associations with sample size of around 1,700). In terms of perceptions of sexual intercourse outside the relationship, there was a small (-.21) association with condom use. However, perception of the partner injecting drugs showed a stronger association (-.30) with condom use, although the results were derived from particularly few (two) studies in this instance. In terms of sexual arousal, Sheeran *et al.* (1999) reported small correlations between this and condom use. Therefore, the empirical data, on this evidence, do not support the inclusion of this latter measure into an extension of the social cognition models (it must be acknowledged, however, that this correlation was derived from four associations totalling a sample size of 258).

4.3.4 Personality factors

Personality variables have been defined earlier as *impulsivity*, *venturesomeness* and *erotophilia-erotophobia*. Sheeran *et al.* (1999) reviewed six independent associations between these measures and condom use, but all three of these variables had 'small nonsignificant average correlations with condom use' (p.120).

In conjunction with these personality influences, individual differences in commitment to carrying out intentions will also be detailed here. Conner and Armitage (1998) cite previous empirical work

by Beckman and Kuhl, 1984 and Kuhl, 1985, in support of the action versus state-oriented individuals (outlined earlier). To reiterate, the action-state individuals, are more likely to have developed a plan of action and are more likely to persist in translating their intentions into behaviour (compared to the state-oriented people). With this in mind, these individual differences are argued as being likely to impact on the strength of the intentions-behaviour relationship.

4.3.5 Normative influences

Godin and Kok (1996) cite empirical evidence to support their extension of the TPB to include moral norms and self-identity (or personal norms). The authors cite Boissonneault and Godin (1990), Collette, Godin, Bradet and Gionet (1994) and Parker, Manstead and Stradling (1995) who have all documented empirical research in support of moral norms in influencing a wide range of behaviours. Significantly, they also cite Boyd and Wandersman (1991) who support the inclusion of moral norms in the context of predicting condom use. Godin and Kok (1996) also cite Sparks and Shepherd (1992) and Theodorakis (1994) who have shown similar support for self-identity or personal norms (or a wider normative societal influence).

In supporting the importance of these normative influences, Godin and Kok (1996) draw parallels with the Triandis' (1980) theory of interpersonal behaviour whereby,

> 'In the Triandis theory, role beliefs (i.e., role identity), a subdimension of the social construct, and perceived normative belief (moral norm) are two of the variables defining one's intention, along the affective and cognitive dimensions of attitudes.'
>
> Godin and Kok (1996) p.94

Conner and Armitage (1998) also cite previous studies that have documented empirical support for these normative influences. In addition to those cited above, they draw reference from the following who have all shown support for moral norms: Beck and Ajzen (1991), Godin, Savard, Kok, Fortin and Bowyer (1996), Godin, Valois, Jobin and Ross (1991), Kurland (1996), Nucifora,

Gallois and Kashima (1993), Raats, Shepherd and Sparks (1995), Randall and Gibson (1991), Sparks, Shepherd and Frewer (1995) and Vermette and Godin (1996). The authors conclude that,

> '.....the correlations between moral norm and the TPB components are reasonably large, and suggest that this construct may have an important role to play in the TPB.....moral norm added (on average) 4% to the prediction of intention, a change which is significant.'
>
> Conner and Armitage (1998) p.1443

Conner and Armitage (1998), in support of self-identity, cite the following studies: Dennison and Shepherd (1995), Godin, Vezina and Leclerc (1989), Sparks and Shepherd (1992), Sparks, Shepherd and Frewer (1995), Thesdorakis (1994), Thesdorakis, Bagiatis and Goudas (1995) and Armitage and Conner (1998). Conner and Armitage (1998) note that this construct certainly serves as a useful addition to the TPB and, drawing on the above studies, it accounts for 1% of the variance in intention.

5. IMPACT OF THE LITERATURE REVIEW UPON THIS PROJECT

Chapters 2 and 3 have sought to review literature (both theoretical and empirical) that has helped us to understand patterns of contraceptive use and non-use. This concluding section intends to present a summary of the research in terms of its key findings (and level of support for helping to explain these patterns of contraceptive behaviour), and also to note whether these lines of research have been investigated in sufficient depth. Unanswered research questions, requiring more investigation, will be highlighted.

5.1 Research summary and the identification of research gaps/unanswered research questions

The following summary will be presented mainly in the form of tables (6-11). These will present areas of research that have been reviewed, cite the relevant sections and page numbers from

Chapters 2 and 3, the type and design of research (for example, predominantly quantitative and cross-sectional), the conclusions drawn from this research and which areas, if any, are in need of more investigation (the latter which are italicised). A critical part of this section is to illustrate the link between the 'research gaps' and project objectives; each table title will identify the ultimate objective to which it relates (all ultimate objectives will be listed in the conclusion to this chapter).

Depth of research	**Type**	**Design**	**Research conclusions/Research gaps**
Adequate - numerous studies have sought to assess the predictive performance of the social cognition models in terms of intentions as well as the intentions-behaviour relationship. Four meta-analyses by Hodgkins *et al.* (in press), Godin and Kok (1996), Sheeran *et al.* (1999) and Sheeran and Orbell (1998) were reviewed, and they reported results from over 200 studies (although some were reviewed in more than one meta-analysis). Sutton (1998) reviewed 9 separate meta-analyses. Many of the reviewed studies specifically investigated the applicability of the social cognition models in the context of contraceptive use.	Predominantly quantitative. Less in-depth, qualitative investigation	Cross-sectional and longitudinal (investigating subsequent behaviours).	Social cognition models are impressive predictors of intentions as well as behaviour. However, for the latter, the research is slightly less conclusive and expansion of the social cognition models is required to help explain why people who intend to use contraception may not always achieve this. *More research could be undertaken to qualitatively investigate the intentions-behaviour relationship - a longitudinal design, following the same respondents, would enable this critical relationship to be researched in-depth to uncover the processes by which intentions do, and occasionally do not, match subsequent behaviour. These processes could include many of the issues mentioned in the remaining summary tables, which have been identified as possible extensions of the social cognition models.*

Table 6: Social-cognition models - Chapter 2, Sections 2 to 3, p.67-77 - see ultimate objectives 4 & 5

Depth of research	Type	Design	Research conclusions/Research gaps
Adequate quantitative investigation that demonstrates a positive relationship between communication (about contraception, HIV and STI or previous sexual experiences) and reported condom use. The review cites 27 studies supporting such an association and one meta analysis by Sheeran *et al.* 1999. Also, two communication skills enhancement intervention programmes that lead to increased condom use at follow-up (Kelly *et al.*, 1994 and DiClemente and Wingood, 1995) are identified. Abraham *et al.* (1998) note the role of communication and negotiation skills as part of the important planning and rehearsal for ensuring condom use (also see Table 11).	Predominantly quantitative. Less in-depth, qualitative investigation	Predominantly cross-sectional, but also two randomised studies of a communicatio n skills enhancement intervention (Kelly *et al.*, 1994 and DiClemente and Wingood, 1995).	Communication is acknowledged as an important predictor, but *more research could be undertaken to invetigate 'why' or 'how' communication skills are important, and the potential barriers that prevent such communication from occurring. Also, what types (explicit/implicit) and styles are most effective, what is actually communicated between partners and when this should be best delivered in the build up to intercourse (especially the between new partners). A longitudinal design could assess whether these communication issues influence the formation of an intention, or whether they show more impact upon the intentions-behaviour relationship.* Sheeran *et al.* (1999) make specific reference to how few studies in their meta-analysis of condom use had investigated its relationship with communication (11 out of 121 studies).

Table 7: Communication skills - Chapter 3, Section 2, p.77-82 - see ultimate objectives 1, 4 & 5

Depth of research	Type	Design	Research conclusions/Research gaps
Inadequate - less than 10 studies are reviewed that investigated GPIP. Most are descriptive, detailing the nature (explicit and implicit) of this power imbalance and pressure. Evidence of a link between GPIP and condom use and communication between partners is noted. The extent of GPIP in recalled instances of intercourse is also detailed.	Predominantly qualitative research into the nature of GPIP. Quantitative research documents the extent of GPIP in recalled intercourses.	Predominantly cross-sectional collating retrospective accounts.	GPIP is highlighted as a potentially important influence on contraceptive use. However, *more research could assess precisely how this GPIP may moderate the intentions-behaviour relationship. More of research in to how people can overcome or negotiate in situations of extreme GPIP, at what stage GPIP is most salient in the interaction and what type of people find it most or least difficult to negotiate their intentions in such scenarios (in relation to age, gender, sexual experience, etc.).*

Table 8: Gender power imbalances and pressures within partnerships - Chapter 3, Section 3, p.82-88 - see ultimate objectives 1, 4 & 5

Depth of research	Type	Design	Research conclusions/Research gaps
Several different dynamic issues have been reviewed. Adequate research (over 40 independent correlations) document a link between previous sexual behaviour and condom use intentions and behaviour. Adequate research with 11 studies detailing evidence for, and some of the reasons behind, a change in contraceptive method with relationship duration (usually a reduction in condom use). Inadequate research into sexual career changes between first and more recent intercourses: exceptions include Poppen (1994) who reports increased communication between more recent partners and Dickson *et al.* (1998) who detailed reasons and expectancy of first intercourse between partners.	Predominantly quantitative.	Predominantly cross-sectional collating retrospective accounts.	Although the importance of previous sexual experience is noted, the details of how this impacts upon behaviour is less evident. The link between condom use and increased relationship duration is well established. *More research is required in to note changes experienced during a sexual career, using longitudinal designs to follow people through this increased experience. Qualitative investigation to explore how this increased experience may be associated with changes in contraceptive use, communication levels, negotiational techniques, intention-behaviour relationship, etc. is required. More research required to investigate the time and events leading up to first intercourse between partners, including the timing of communication between partners in relation to this intercourse. Also, how the reasons and expectancy (and preparation) of intercourse may affect contraceptive use.*

Table 9: Dynamic influences upon contraceptive use - Chapter 3, Section 4.1, p.88-94 - see ultimate objectives 2, 4 & 5

Depth of research	Type	Design	Research conclusions/Research gaps
Several different contextual issues have been reviewed. Inadequate research in to the moods/meanings associated with intercourse and contraceptive use (Davis and Weatherburn, 1991, is one of few studies that has researched this 'psychic context'). Adequate research demonstrating the physical context and contraceptive use relationship - 7 key studies were reviewed (Wight, 1990, Gold *et al.*, 1991, DeBro *et al.*, 1994, Kelly and Kalichman, 1995, Eiser and Ford, 1995, Lear 1995 and Hennink *et al.*, 1997). Adequate research in to Alcohol, drugs and contraceptive use (around 30 studies reviewed). However, existing research detailing the physical context and alcohol and drugs influence indicates that more research is required to explore these complex relationships with contraceptive use.	Quantitative and qualitative.	Predominantly cross-sectional collating retrospective accounts.	Contextual issues surrounding the interaction between partners need to be considered when predicting patterns of contraceptive use. *More qualitative investigation is required to explore how moods and meanings and the physical context (or location) affect contraceptive use. Also, how the context may influence other variables such as GPIP, condom availability, etc. General need for more investigation in to the contexts which facilitate or hinder the use of contraception. A longitudinal design could assess whether these contextual issues influence the formation of an intention, or whether they show more impact upon the intentions-behaviour relationship.* Alcohol and drug use relationship with contraceptive use is complex, often producing inconsistent results. *More research is required to see if their is a causal linkage between substance abuse and use of contraception.*

Table 10: Contextual influences - Chapter 3, Section 4.2, p.94-99 - see ultimate objectives 3, 4 & 5

Depth of research	Type	Design	Research conclusions/Research gaps
Five sets of constructs were presented in sections 4.3.1 to 4.3.5 of this chapter as possible influences upon contraceptive use: Planning and preparatory behaviours, Gollwitzer's implementation intentions and Bagozzi and Edwards' construct of 'trying', interpersonal factors (relationship type and risk assessment), personality factors and normative influences. Adequate quantitative research, including meta-analyses and reviews by Godin and Kok (1996), Conner and Armitage (1998) and Sheeran *et al.* (1999), have established the importance of carrying condoms and having them available, implementation intentions, relationship type (casual versus steady), risk perception of partners (such as intercourse outside the relationship and drug use), individual differences in commitment (action versus state orientation) and moral norms and self-identity (or personal norms). A particularly influential and detailed review by Abraham *et al.* (1998) has illustrated the importance of planning and rehearsal in successfully translating intentions into behaviour and the significance of goal prioritisation.	Predominantly quantitative.	Predominantly cross-sectional collating retrospective accounts.	There is a clear demonstration of the importance of a number of additional innovative constructs, beyond communication skills, GPIP, dynamic factors and contexts, which need to be considered in predicting patterns of contraceptive behaviour. However, *this could be complemented by some in-depth, qualitative investigation in to how some of the issues may explain whether contraception is used or not. This investigation could include reasons for carrying and not carrying condoms, how different relationship types pose different challenges to condom use, what criteria people use when assessing their partner's risk (for HIV or STI). A longitudinal design could assess whether these issues influence the formation of an intention, or whether they show more impact upon the intentions-behaviour relationship. In general terms, a longitudinal design could help investigate which of these innovative principles are reflected in people whose intentions did and did not match their behaviours.*

Table 11: Additional innovative constructs - Chapter 3, Section 4.3, p.12-18 - see ultimate objectives 4 & 5

In general, it appears that the additional depth of the interaction-based models tend to offer a fuller explanation of contraceptive use patterns. These models, built upon the principles of social cognition, have identified gender power imbalances and pressures within partnerships and communication and negotiation skills as two highly interrelated variables associated with contraceptive use. In short, it has been argued that the more extreme the power imbalance that exists in the partnership, the less likely a partner will be able to communicate his or, more commonly, her personal desires regarding contraception. Moreover, empirical research addressing the role of communication and negotiation skills has inferred that the ability to negotiate effectively to a sexual partner may affect not only the level of HIV risk-reduction behaviour (cited most frequently in the literature), but also that of contraceptive use in general and pregnancy prevention. The importance of a number of dynamic and contextual issues which have been shown to impact upon contraceptive use has also been documented. These include the consideration of previous sexual behaviour, changes in contraceptive method, sexual career changes (with increased sexual experience from first ever intercourse to more recent instances) and the psychic and physical contexts surrounding the interaction. The review of the empirical literature has also identified a series of additional innovative constructs which are associated with contraceptive use, namely, planning and preparatory behaviours, Gollwitzer's implementation intentions and Bagozzi and Edwards' construct of 'trying', interpersonal factors (relationship type and risk assessment), personality factors and normative influences.

5.2 Bridging the gaps - moving towards this project's aims

When focusing upon areas of research requiring more investigation that have been identified in the previous summary tables, there appears to be a collective requirement for more in-depth, qualitative exploration in to many of the additional variables (beyond social cognition) that have been argued to influence contraceptive use. The justification for this is two fold. Firstly, is the necessity for more research, in general, that can relate to a number of these influences such as GPIP, sexual career changes, etc. Secondly, is the predominance of quantitative methodologies which have demonstrated clear associations but have perhaps have failed to fully illustrate and/or elaborate on 'how' these variables influence contraceptive use, such as the barriers to

communication, communication strategies, timing of communication in relation to intercourse, negotiating in situations of extreme GPIP, etc.

In addition to the contribution that qualitative methodologies can offer, there is also a requirement to conduct this research using a longitudinal design. The significance of the intentions-behaviour relationship has been identified early on in this review as a critical element in the prediction of contraceptive use. There is a clear need to record people's intentions towards subsequent behaviours and then follow-up these same respondents to not only record the nature of this intentions-behaviour relationship, but to explore some of the reasons why this relationship may have been consistent or inconsistent. Moreover, a longitudinal design could assess whether the issues mentioned above (communication skills, GPIP, etc.) influence the formation of an intention, or whether they show more impact upon this intentions-behaviour relationship. Although some meta-analyses, in particular those conducted by Sheeran and Orbell (1998) and Sheeran *et al.* (1999) reviewed research that included the prospective prediction of behaviours, it is still important to incorporate this design within new research, even if that research is more qualitative in its nature.

The next section will conclude this review presented in Chapters 2 and 3 by linking the research gaps to the objectives of this research project. It is important to highlight, in consideration of feasibility, that not all of the unanswered research questions will be reflected in this project's objectives (for example, the relationships between abilty to carry condoms, moral norms and alcohol with condom use will not be intentionally investigated, although they may well fair in the exploratory approach).

6. CONCLUSION - SPECIFYING THE RESEARCH QUESTION AND FIVE ULTIMATE OBJECTIVES

The aims of the project are presented in a progressively more focused and detailed manner; the broad research question is presented first, followed by an outline of the project's objectives. There are five ultimate objectives which will be outlined in conjunction to the summary tables presented above. For each of these ultimate objectives to be achieved, there are a series of more immediate

objectives which will be detailed in the following Chapter 4. The objectives listed are not necessarily mutually exclusive and are by no means 'final'; it is expected that they will become refined slightly as the data collection proceeds. At this point, however, the objectives serve to identify the thoughts of the author at this stage of the research process (in light of the research rationale and literature review), and will be shown in Chapter 4 to influence the nature of the loosely structured interview schedule.

6.1 Research question

To assess the influence that partner interaction has in explaining contraceptive use patterns among young people and to interpret if and how these use patterns change through time.

Hence:

- To ultimately assist programme administrators and policy makers to design new or improved intervention strategies aimed at increasing the consistent use of contraception among young people.

- To ultimately assist programme administrators and policy makers to design new or improved intervention strategies aimed at encouraging the utilisation of family planning and sexual health services among young people.

6.2 Five ultimate objectives

6.2.1 Ultimate objective 1

To assess the role of Partner Interaction (PI) or more precisely the Communication and Negotiation Skills (CNS) and Gender Power Imbalances and Pressures (GPIP) present within partnerships that may help explain patterns of use and non-use of contraception (especially condoms). To undertake this research among young men and women aged 16-19 inclusive,

recruited from young people's clinics, youth clubs and youth advisory centres within the Southampton Community Health NHS Trust.

Justification/rationale: Summaries presented above in Tables 7 (Communication skills) and 8 (GPIP).

6.2.2 Ultimate objective 2

To examine a range of dynamic factors that may be related to levels of CNS and GPIP and/or use and non-use of contraception (especially condoms).

Justification/rationale: Summary presented above in Table 9 (Dynamic influences).

6.2.3 Ultimate objective 3

To examine a range of contextual factors that may be related to levels of CNS and GPIP and/or use and non-use of contraception (especially condoms).

Justification/rationale: Summary presented above in Table 10 (Contextual influences).

6.2.4 Ultimate objective 4

To conduct this research into PI using a longitudinal design (by examining previous behaviour and also by interviewing respondents on two occasions to record behaviour between interviews) to explore the relationship between intentions and behaviour regarding the use and non-use of contraception (especially condoms).

Justification/rationale: All of the tables (6-11) presented above, which illustrate that a longitudinal design will allow the intentions-behaviour relationship to be explored in greater detail. Such a design will facilitate the investigation into whether the communication skills, GPIP,

dynamic and contextual influences and the additional innovative constructs help to explain the formation of an intention or show more of an impact upon the intentions-behaviour relationship. By comparing people whose intentions did and did not match behaviours will allow the author to see how these interactional issues (including the innovative constructs) may have distinguished between the effective and less effective contraceptive users.

6.2.5 Ultimate objective 5

To conduct this research into PI and use of contraception in predominantly a qualitative manner, using appropriate methods of data collection and analysis.

Justification/rationale: All of the tables (6-11) presented above, which illustrate that a more exploratory approach can complement exiting research by investigating 'how' the intention-behaviour relationship, communication skills, GPIP, dynamic and contextual influences and the additional innovative constructs may help to explain patterns of contraceptive use and non-use.

The following chapter will now elaborate on these ultimate objectives and start to detail precisely how this research project will be conducted as well as what it hopes to achieve.

CHAPTER 4: RESEARCH AIMS, CONCEPTUAL FRAMEWORK AND STUDY DESIGN

This chapter introduces the purpose of this research project and outlines precisely how the research will be conducted. The previous chapter specified the important relationship between the review findings and the objectives of this project. This chapter, after reiterating the five ultimate objectives, will provide more detail on how each of these will be met. These will provide a foundation for the conceptual framework and selection of the appropriate research design and methodologies which will follow. A detailed account of the original research proposal submitted to the NHS Research and Development Directorate, which includes many of these details, can be seen in Appendix 1.

1. RESEARCH OBJECTIVES

For each of the ultimate objectives, a series of more immediate objectives are listed which will detail how each of these ultimate objectives will be met. It must be noted that the immediate objectives (especially) do not represent hypotheses but are more akin to issues or paths of investigation that are to be researched in a qualitative and semi-inductive manner, thus allowing any relevant (but less obvious) themes to arise from the data. The objectives listed are not necessarily mutually exclusive and are by no means 'final'; it is expected that they will become refined slightly as more interviews are completed. At this point, the objectives serve to identify the thoughts of the author at this stage of the research process, and to help shape the nature of the loosely structured interview schedule.

1.1 Ultimate objective 1

To assess the role of Partner Interaction (PI) or more precisely the Communication and Negotiation Skills (CNS) and Gender Power Imbalances and Pressures (GPIP) present within partnerships that may help explain patterns of use and non-use of contraception (including condom use). To undertake this research among young men and women aged 16-19 inclusive,

recruited from young people's clinics, youth clubs and youth advisory centres within the Southampton Community Health NHS Trust.

Immediate objectives relating to ultimate objective 1

To assess CNS in terms of the following:

- Levels of communication (about contraception and family planning and sexual health services) between friends (same and opposite sex, different age groups, etc.), family members and sexual partners.
- Nature of communication between partners (what is discussed? Agreement for intercourse? Contraceptive methods? Service choice and/or use? Perceived responsibilities for contraception?)
- Types of communication between partners (formal/less formal? Explicit/implicit? Verbal/non-verbal? Bi-lateral or uni-lateral? Scripted or non-scripted? Language style and terminology? Assumptions, understanding and misunderstanding of terminologies?)
- Interactional factors (who raised issues? Anticipations? Responses? Feelings after communication? Reasons for difficulties in communication? Timing of communication in relation to intercourse?)
- Effective communication strategies/techniques to achieve intention to use contraception.

To assess GPIP in terms of the following:

- Pressures regarding intercourse and contraception use or non-use.
- Persuasive techniques and skills to achieve intentions or overcome GPIP.
- Expectancies/assumptions about gender roles and perceived responsibilities for contraceptive use and service uptake.
- How GPIP is expressed (implicitly or explicitly, verbal or non-verbal, etc.?)

To assess contraceptive (including condom) use in terms of the following:

- Method choice
- Consistency of use (use at first intercourse with current or most recent partner? Use at first intercourse with most recent 'steady' partner and more 'casual' partner? Ever use/non-use? How often not used?)
- Types of use (distinguish between condom use once or use for all subsequent intercourses during a session? Use between 'casual' and more 'steady' partners?)
- Reasons for use (pregnancy and/or STI prevention? Perceived necessities for condom use and risk assessment of partner?)
- Who provides condoms within the partnership? Perceptions of males and females to their partners if they provide condoms?
- Instances of 'incorrect' contraceptive use? Attitudes to and problems with condom use - splitting, slippage, etc.
- Reasons for sexual intercourse ('love', 'curiosity', 'physical drive', etc.).
- Attributions for contraceptive behaviour (important influences such as own experiences, partner influence, parental views, etc.)

1.2 Ultimate objective 2

To examine a range of dynamic factors that may be related to levels of CNS and GPIP and/or use and non-use of contraception (especially condoms).

Immediate objectives relating to ultimate objective 2

To consider a range of dynamic factors in terms of the following:

- The impact of previous sexual experiences upon intentions and behaviour.
- Onset of first intercourse with current or most recent partner (how long after first 'going-out' with each other?)

- Expectancy of recalled instances of intercourse (preparation? Planning? Expected or less expected?)
- Timing of first communication between partners about contraception and services (when, in terms of own sexual career, relationship length, onset of first ever intercourse and intercourse with a new partner?)
- The impact and explanation for possible changes in the level of GPIP and CNS.
- The impact of changing psychic and physical contexts of interaction.
- Changing levels of awareness about contraception and sexual health issues (during sexual career, relationship duration, etc.).
- Changing levels of contraceptive use (during sexual career, relationship duration and between different steady or casual partners).
- Changing levels of service use (during sexual career, relationship duration and between different steady or casual partners).
- Changing methods of contraception (during sexual career, relationship duration and between different steady or casual partners).
- Reasons for these reported changes.

1.3 Ultimate objective 3

To examine a range of contextual factors that may be related to levels of CNS and GPIP and/or use and non-use of contraception (especially condoms).

Immediate objectives relating to ultimate objective 3

To consider a range of contextual factors in terms of the following:

- Immediate psychic contexts (moods, meanings and expectations of intercourse including alcohol and drug use).
- Immediate physical contexts (location of interaction).

- Additional scenarios or situations which may affect levels of CNS and GPIP and/or contraceptive use.

1.4 Ultimate objective 4

To conduct this research into PI using a longitudinal design (by examining previous behaviour and also by interviewing respondents on two occasions to record behaviour between interviews) to explore the relationship between intentions and behaviour regarding the use and non-use of contraception (especially condoms).

Immediate objectives relating to ultimate objective 4

To asses the relationship between intentions and behaviour (use of contraception including condoms) in terms of the following:

- To record intentions (i.e. Would you want to use .....?) regarding contraceptive use to match with responses at re-interview.
- To record 'expectations' regarding hypothetical scenarios of future interactions (for example, if a partner was not willing to use a condom, would you still have intercourse? Do you think you would always manage to use a condom the next time you have intercourse?) to match with responses at re-interview, and to also reveal negotiational strategies.
- To investigate the processes involved in translating intentions to behaviour, such as planning and rehearsal, and what skills are required to achieve this, and to essentially help to distinguish between effective and less effective contraceptive users.
- To record how people may prepare for intercourse (e.g. by obtaining condoms) and what strategies they may have for insisting upon contraceptive or condom use.
- Where possible, to record contraceptive use behaviours with new partners acquired since the first interview (where the intentions and expectations were noted).
- To uncover how the interactional (CNS and GPIP), dynamic and contextual issues may influence the intentions-behaviour relationship.

1.5 Ultimate objective 5

To conduct this research into PI and use of contraception in predominantly a qualitative manner, using appropriate methods of data collection and analysis.

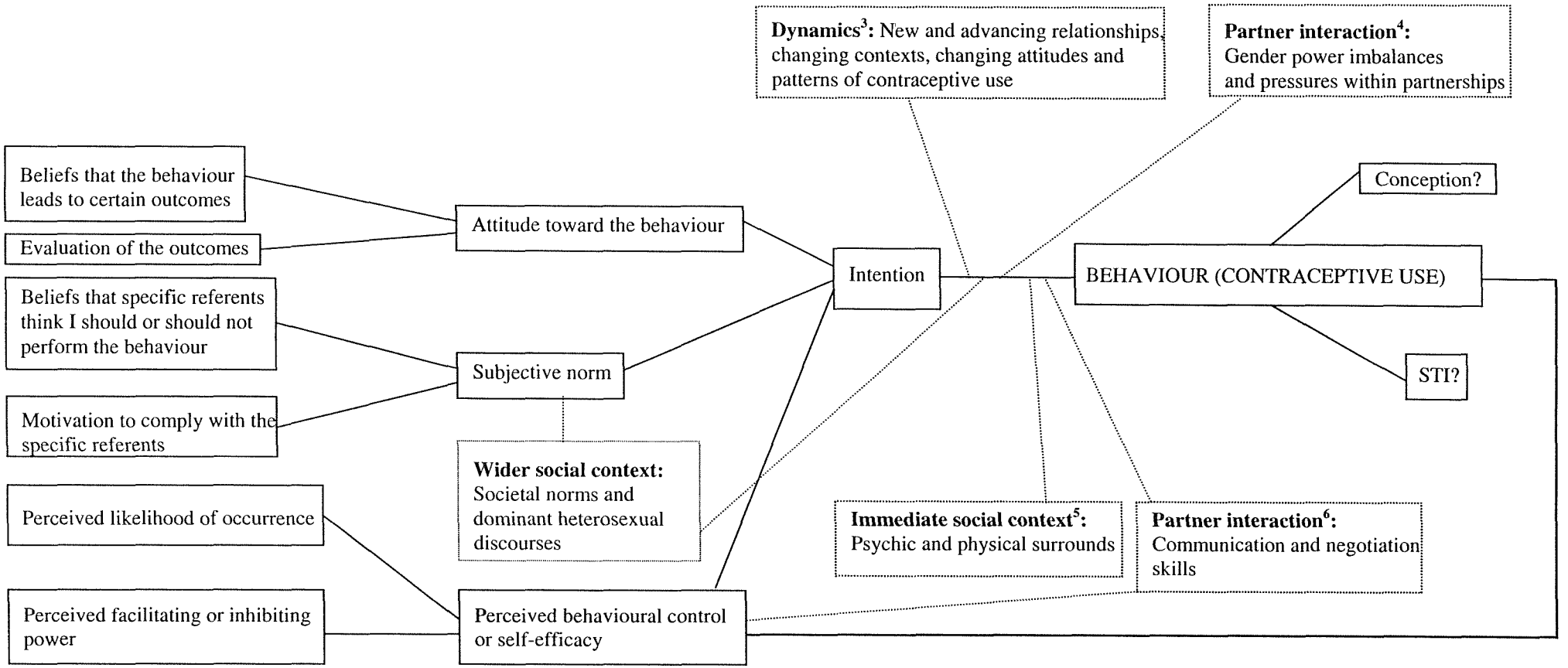
Immediate objectives relating to ultimate objective 5

To use the appropriate methods to meet the ultimate objectives presented previously in terms of the following:

- To use semi-structured, face to face, in-depth interviews to explore and generate data on how CNS, GPIP, dynamic and contextual issues may help to explain patterns of contraceptive use.
- To use the appropriate analyses which reflect this exploratory and semi-inductive approach.
- Whilst adhering loosely to the interview schedule, invite discussion about any topics perceived as relevant by interviewee.
- Concentrate on asking more about "How?" and "Why?" as opposed to "If" and "Whether".
- Invite interviewees to talk freely about "why" they used contraception on some occasions but not on others (if applicable).
- The analytical approach, that meets these criteria, will be fully detailed in Chapter 6.

2. CONCEPTUAL FRAMEWORK

Given the aims of this research project, this section seeks to identify (conceptually) how they relate to the existing theory that attempts to explain variations in contraceptive behaviour. The Literature Review (Chapters 2 and 3) has frequently focused upon the relationship between intentions and behaviour. The reviewed social cognition models propose that this relationship is direct and hence, one of the most widely documented models, the Theory of Planned Behaviour (TPB), will form the basis of the diagrammatically presented conceptual framework (Figure 6). The constructs added in the framework are marked out in hatched lines to separate them from the



STI = Sexually transmitted infection

Figure 6: Conceptual foundations to contraceptive use: challenging the intention-behaviour relationship and potential extensions to the theory of planned behaviour

[3] For summary of reviewed research, see Table 9 in Chapter 3
[4] For summary of reviewed research, see Table 8 in Chapter 3
[5] For summary of reviewed research, see Table 10 in Chapter 3
[6] For summary of reviewed research, see Table 7 in Chapter 3

TPB. Essentially, the conceptual framework highlights a set of themes which, at this stage (and in light of the reviewed extensions of the social cognition models), are proposed as potential influences upon the intention-behaviour relationship. These themes are not assumed to be a finite account of all those issues that could possibly mediate this relationship, but are more indicative of those which are of interest and relevance to this project (in its formative stage). One of the project's major purpose will be to explore, by adhering to this conceptual approach, how accurate this representation is and hence what influence this has, if any, upon the current theoretical literature relating to contraceptive behaviour. If this project supports the 'adequate' (see Tables 6-11 in Chapter 3) research that has demonstrated, for example, a relationship between communication skills and contraceptive use, this qualitative approach will be able to explore such relationships in greater detail, by illustrating *how* and *what type* of communication skills, GPIP, etc. influence behaviours.

Previously reviewed interaction-based models of health-related behaviour and the additional innovative constructs which have built upon the principles of social cognition, have suggested a number of factors which may help to explain why intentions may not conclusively lead to expectant behaviours (in this case, the use of contraception). The review argued that partner interaction may prove to be a powerful influence upon this intention-behaviour relationship. As a consequence, constructs depicting partner interaction, in terms of communication and negotiation skills (Section 2 and Table 7 of Chapter 3) and gender power imbalances and pressures within partnerships (Section 3 and Table 8 of Chapter 3), are central to the conceptual framework. In addition, the conceptual framework is not a static representation and the relative strengths of the components are likely to change through time. The dynamic influence (Section 4.1 and Table 9 of Chapter 3) of changing relationships, experiences and contexts, etc. are all argued as having a possible impact upon the intention-behaviour relationship. The longitudinal design of this project will allow these dynamic influences to be assessed. Finally, it is also argued that the intention-behaviour relationship could also be mediated by the social contexts evident at the time of interaction. Of these social contexts, it is the more immediate psychic and physical surrounds (Section 4.2 and Table 10 of Chapter 3) of the interaction which will receive most attention in this project (as opposed to the wider social contexts which will not be investigated in any depth in this project). The TPB includes perceived behavioural control (similar to self-efficacy; see Chapter 2)

as one of its constructs that can influence both intentions and behaviour more directly; this framework notes how this may also influence the perceived capability or skills in communicating contraceptive intentions.

Through this discussion and schematic representation of the conceptual framework, it is essential, by having highlighted the relevant sections from Chapter 3, that the reader fully appreciates how this framework and research objectives have been determined by the reviewed research. Finally, it is important to recognise that whilst Figure 6 indicates the lines of enquiry in this project, the qualitative approach will also assess (inductively through in-depth exploration) whether there are any other key influences on the intention-behaviour relationship that may have been overlooked at this stage.

Having outlined both literally and conceptually what the main aims of this project are, the final and largest section of this chapter illustrates precisely *how* the project will be undertaken and administered.

3. STUDY DESIGN

This section includes accounts of both what was ideally desired before the project was implemented, as well as what actually occurred and evolved once the project was under way. By adopting this reflexive stance, this section will also justify why certain decisions were made. Some of these design issues are also detailed in later chapters when presenting the research findings. Please note that the analytical approach including the realist or post-positivist epistemiological foundation to this analysis will be detailed fully in Chapter 6.

To illustrate the design of the study, the following issues will be discussed in turn:

1. Research design.
2. Sampling.
3. Methods of data collection.
4. Management and administration of the data collection.

3.1 Research design

The qualitative and semi-inductive nature of this project is reflected in the choice of research design; a non-experimental and descriptive design with no intervention or experiment being introduced or any specific hypotheses being tested. Moreover, the design reflects the longitudinal nature of the project, aiming to follow up respondents roughly eight months after their first interview. The non-experimental descriptive design employed over a minimum time period of 10 months is presented as follows in Figure 7:

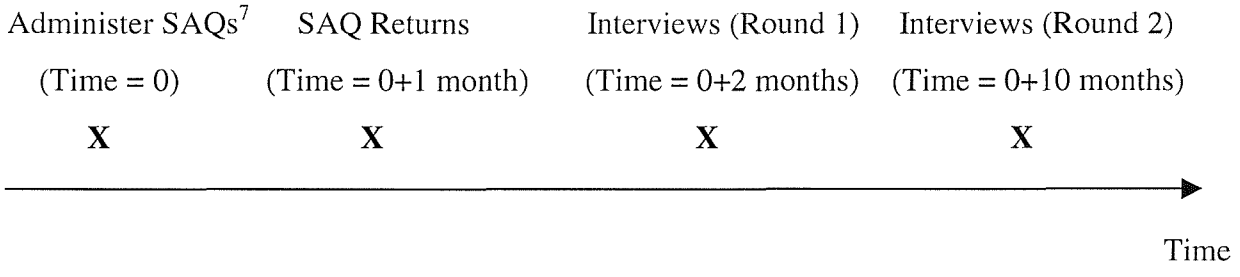


Figure 7: Research design employed over 10 months

Time is expressed as notional 'months' as opposed to real time since the project was multi-phased to spread the workload more evenly and to accommodate the school and college calendar as regard examinations and holidays (which may affect attendance at youth clubs, youth advisory centres, etc.).

3.2 Sampling

This project does not aim to create statistical representation but instead aims to recruit, through purposive sampling, a highly varied sample with people showing contrasting experiences of contraceptive use and non-use, few and many sexual partners, etc. It is important to note how this selection process is conducted strategically (see later in this section) to reflect the research question as opposed to something conducted in an *ad hoc* manner. On no account can the findings

[7] SAQs = self-administered questionnaires used to select people for interview.

be generalised, but they can be referred to as *transferable* in that they would be applicable to situations and contexts similar to those explored in this project.

However, with regard to this issue of generalisabiltiy, this is not to say that the findings may not have an impact upon the design of appropriate interventions or services. Indeed, this qualititive research can influence quantitative measures, which themselves can seek representativeness from a particular sample to confirm the conclusions from this project. In this way, this qualitative investigation clearly has an applied element, although its application is perhaps not so immediate or direct.

With such a varied sample, the main purpose of the project is to understand the processes involved in helping to explain to the use and non-use of contraception in a wide range of scenarios. Therefore, the emphasis is not to test for relationships between specific variables, but to uncover and identify a range of explanations as to how these decisions are reached in particular contexts. As new explanations and ideas are generated from the first few interviews, this purposive[8] sampling technique allows the themes in the interviews to be altered (once new ideas are generated).

Several different aspects of the project's sampling will be outlined as follows:

3.2.1 Sample units/selection criteria

It was originally proposed that there would be 60 first round interviews and 60 second round (assuming no drop-out). In line with the research question and project objectives, it was proposed that the final sample of interviewees would consist of:

- Those who are non-virgins.

[8] There are clear parallels between the purposive sampling detailed in this chapter and 'theoretical' sampling; both techniques permit the researcher to have some control or choice over who is recruited into the study (e.g. a highly varied sample) and also allow for sampling procedures or criteria to change following initial analyses of the first few transcripts. Both techniques are not claiming to recruit a representative sample.

- Those who are aged 16-19 inclusive at time of self-administered questionnaire (SAQ) completion.
- Those who are willing to take part in interview.

In accordance with the above, the sample would vary in terms of:

- Age (i.e. equal proportion of 16, 17, 18 and 19 year olds).
- Gender (i.e. equal proportions of males and females).
- Socio-economic class
- Contraceptive use (i.e. those who are regular contraceptive, including condom, users *and* non-users).
- Sexual experience (i.e. those who have experienced steady *as well as* casual relationships and also those who *are and are not* currently within a steady relationship, those reporting comparatively *many or few* sexual partners in the last six months).
- Service use (i.e. those who are regular attenders at family planning and sexual health services *as well as* those who have never sought advice from such services).

Finally, given the longitudinal nature of the project, selection priority would be given to those respondents who have recently entered a steady relationship and who have had fewer lifetime partners; any changes in their attitude and use of contraception will, arguably, be more likely in comparison to those, for example, already established in longer term relationships. However, this is not saying that *all* respondents selected for interview would be currently in a steady relationship.

3.2.2 Recruitment sites

The following sites were chosen to recruit the interview sample:

- Eight young people's sessions for sexual health advice and information held at seven Family Planning Clinics and one Health Centre within the Southampton Community NHS Trust Area.
- Four youth clubs within the Southampton Community NHS Trust Area.

- Two youth advisory centres within the Southampton Community NHS Trust Area.

These sites were selected primarily according to the willingness of the staff to help out with the project, and also represent the main differences towards the original research proposal. This amendment in the sites chosen (in rejecting schools and colleges for young people's clinics and youth advisory centres for recruitment) is not seen as a major issue; since the aim of the project was to recruit a range of young people (as quickly and as easily as possible), rather than to recruit them specifically from these originally chosen sites.

Wherever possible, the sites were chosen from census wards varying in socio-economic deprivation and also from areas characterising urban, suburban and rural locations within the Southampton Community NHS Trust. Of the 60 interviews desired, it was originally intended (but will be shown in later chapters to not be the case) that they would be evenly distributed from the three recruitment sites (i.e. approximately 20 interviews each from the young people's clinics, youth clubs and youth advisory centres). The strategy used from each recruitment site will be outlined in turn, although more detail will be provided as each set of findings are presented in forthcoming chapters.

3.2.3 Sampling strategy used at young people's clinics

A two stage non-probability purposive sampling strategy was used at these clinics. This is a sampling procedure commonly used by qualitative researchers who wish to have some control *who* they select to ensure a suitably varied sample and meet the criteria outlined previously in Section 3.2.1. The two stages of sampling were as follows. Stage 1 or screening involved around 500 SAQs being issued to the eight young people's clinics within the Trust area. Stage 2 would then be able to identify around 20 participants, according to the specified selection criteria, who would then be interviewed on two occasions (assuming no drop-out between rounds 1 and 2). The number of SAQs chosen to select the desired number of interviewees was based upon previous research (Coleman and Phillips, 1993) that showed that people attending clinics are likely to be aged anywhere from 11 or 12 to the late twenties and to be mostly female and non-virgin. By

recruiting from all clinics within the Trust area, respondents should represent a variety of socio-economic groups. It was therefore assumed that from 500 screening questionnaires, it would be feasible to recruit the desired sample of interviewees.

3.2.4 Sampling strategy used at youth clubs and youth advisory centres

The youth workers at both sites preferred to recruit interviewees directly rather than via the screening questionnaires used at the young people's clinics. The use of SAQs was rejected on two grounds. Firstly, with both clubs being closely tied with secondary schools, the youth workers would be obliged to contact all school staff as well as governors before administering questionnaires. They advised the author not only that this process would take considerable time, but also that the school staff and governors may well reject the project - due to the issue of approaching young people without parental consent in particular. Secondly, although the youth workers felt that the questionnaire would be well received by the young people, they thought it would breach the youth clubs' and centres' codes of confidentiality to record a contact address or telephone number. In light of the informal discussions held by the author with a selection of youth club attenders (potential interviewees), the young people supported this point and stressed that whilst they may be enthusiastic to be interviewed, they felt decidedly less keen to be contacted at home.

An alternative route for recruitment was therefore agreed. For both these sites, it was arranged that the author would introduce the project to the young people informally in a group. The author, aside to introducing the project, announced that interviewees had to be between the ages of 16-19 years. A timetable of interview times was circulated (for the few days immediately following) and respondents stated their first name and preference for either a male or female interviewer for their chosen 'appointment'. From there on, subsequent interviewees were recruited by suggestions from the interviewees proposing their friends, relatives, etc. Moreover, by attending the youth clubs and advisory centres on several occasions and by becoming 'known' and somewhat trusted, the author was able to recruit respondents with comparative ease. In addition, for those sites contacted later on in the project, 'on the spot' recruitment occurred more often than the use of appointments.

The only problem faced was that the numbers attending these sites (in comparison to the clinics) were relatively few; there were around 20 regular attenders for each youth club, each providing a potential of eight to 10 interviewees at a maximum, and even less at the youth advisory centres.

3.3 Methods of data collection

The two methods of data collection used in this project will be discussed in turn:

3.3.1 Self-administered questionnaires (SAQs)

As indicated earlier, the main purpose of this short questionnaire was to screen respondents from the young people's clinics in a quick and efficient manner by obtaining their age, sexual experience (i.e. virgin or non-virgin) and their willingness to be interviewed. However, given the groundwork required to administer the SAQs, it was decided to expand the questionnaire (still completed on average in five minutes) to collect some descriptive data regarding levels of sexual behaviour (number of partners and contraceptive use), timing of first intercourse within relationships, duration of relationships, experiences of talking to people (including partners) about contraception and the timing of this communication in relation to first intercourse with the most recent partner. This information would then allow participants to be strategically recruited according to the selection criteria outlined earlier in Section 3.2.1, rather than just if they were willing to be interviewed. A 'green sheet' was attached to the questionnaires to record participants' interest in being interviewed, as well as their preferred place for interview, preference for a male or female interviewer and point of contact (either address or telephone details). An envelope marked 'Private and Confidential' was attached to each questionnaire distributed. A copy of the SAQ is attached in Appendix 2, and will be discussed in greater length in Chapter 5, where the results (derived from its administration) are presented.

3.3.2 Face to face in-depth interviews

The introduction to the interview intended to record demographic and socio-economic data as well as some basic indices of sexual behaviour and relationship experience (which then guides the

interviewer into asking only relevant questions). The main part of the interview was conducted conversationally, loosely structured around the themes reflected in the research question and project objectives. This predominantly involved events surrounding the participants' experience of first intercourse with their current or most recent partner. A maximum of three occasions of first intercourse were recorded, with both 'steady partners' and 'one night stands' according to the participants' own classification of events. The record for each specific intercourse represented the majority of the data generated in the interview and included details such as expectation of intercourse, where intercourse occurred, how partners were feeling in the time leading up to intercourse (in terms of the 'psychic' context), how long partners had been 'going-out' together before intercourse, the main reasons for intercourse, whether any contraception was used (and if so what type), who took the main responsibility for contraception, whether there were any pressures from the partner and whether any communication occurred between partners (and if so, when this took place). More detail about the interview schedule will be outlined when presenting the results (Chapter 6).

An outline of the interview schedule is attached in its fullest form in Appendix 3 as well as a summary of key topics which was used by interviewers once a couple of interviews had been completed. After 15 interviews were returned and briefly analysed, the schedule was slightly modified (perceived as an important and 'natural' process in qualitative researching), and these amendments are outlined in the attachment to the original schedule. The interview schedule for the second round of interviews will be introduced in Chapter 7.

3.4 Management and administration of data collection

The final note to the study design concerns the management and administration of the data collection. There are five main parts and each will be presented in turn following a chronological order.

3.4.1 Designing the data collection tools

The SAQ was designed to reflect the research question and objectives and permit respondents to be selected according to the criteria outlined in Section 3.2.1. Above all, the SAQ was designed to be short, easy to understand as well as being able to record some introductory data. The interview schedule similarly reflects the aims of the study, but in addition, provides an option to record information not previously recognised, therefore preserving its semi-inductive nature (again to reflect the research question and objectives). Both protocols were circulated amongst colleagues at the Centre for Sexual Health Research and family planning staff for advice and comments.

3.4.2 Seeking ethical committee approval

Having opted for a design aimed not to test the ethical boundaries (e.g. no under 16s, etc.), it was anticipated that one month should suffice to gain approval. However, changes in the structure of the South and West Local Research Ethics Committee together with cancellation of meetings lead to ethical approval taking just over two months. Ethical approval from within the Department of Psychology took around one week. Incidentally, it was at the time of ethical committee approval that police checks were made on all the interviewers that would become involved in the project.

3.4.3 Pilot testing

One young people's clinic was chosen to pilot test the SAQs. The decision to use this (undisclosed) clinic was based on the particularly sound contact established between this site and the Centre for Sexual Health Research over a number of years. The SAQs were well received and no changes to the structure were made. At the time of SAQ distribution, informal discussions were held with the young people attending the practice to gain further feedback to not only assess the SAQ, but to also gain advice regarding the preliminary outline for the interview schedule.

3.4.4 Approaching 'gate-keepers' and staff at recruitment sites

The author sought to administer the SAQs (where appropriate) and first round of interviews in a multi-phased manner, commencing firstly with the 'pilot clinic' (where pilot testing occurred) and then extending to the seven remaining clinics. Following this, recruitment would then occur at the youth clubs and youth advisory centres. It was decided to contact these clinics first, primarily because they were likely to be the easiest of the sites to approach, given the sound contact with the clinic service already established with the Centre for Sexual Health Research. Any problems raised through clinic recruitment could then be resolved by the time recruitment occurred at the remaining sites. Moreover, the multi-phased approach allowed a more effective management of the author's resources. The three sites are discussed in turn:

Young people's clinics

The key 'gate-keeper' identified for the young people's clinics was the manager of family planning services for Southampton Community Health Services NHS Trust. A meeting was arranged to discuss the project between the manager, the lead consultant in family planning and the author. Upon their agreement to assist with the project, the best way to administer the SAQs within the clinics was discussed. In order to gain good co-operation from the reception staff at the clinics, the author was invited to present the project to all relevant staff representing the eight clinics in Southampton Community Health NHS Trust at their quarterly meeting. The main administrative aspects stressed to the audience were as follows:

- To offer a SAQ to *all* clients visiting the clinic, and note the numbers who refused to take part.
- To stress to the clients the sensitive nature of the SAQ, as well as its importance.
- To encourage the respondents to complete and return the SAQ to reception whilst they are waiting for their consultation.

These points were again stressed to the reception staff via the 'Receptionist/Clinic Staff Guide Sheet' which is attached in Appendix 4. Shortly after this meeting, the SAQs were delivered to all

of the eight young people's clinics (over a period of two weeks) and were then contacted weekly either by telephone or in person to check if there were any problems. The meeting and subsequent visit to the clinics also gave the opportunity to confirm that a suitably private room would be available so that the interviews could be arranged (for those who opted to be interviewed at the clinics).

Having confirmed the room availability, the next step was to arrange times for interviews with those who expressed an interest in the project (on the 'green sheet' of the SAQ) and who met the selection criteria outlined earlier in Section 3.2.1. With SAQ distribution running on average for five weeks at the young people's clinics, the interview arrangements commenced as soon as the first SAQs were collected. The interview arrangements were made either by post or by telephone - for the latter, the contact was made by the interviewers who were either male or female according to the preference of the respondents as indicated on the 'green sheet' of the SAQ. Moreover, if the interviewee was not in at the time of the telephone call, no detailed message was left regarding the project; 'a survey conducted by Southampton University' was the standard description.

Upon completion of the interviews, all interviewees were invited to express their willingness to take part in a further interview at a later date. This applied to respondents recruited from the youth clubs and youth advisory centres also.

Youth clubs and youth advisory centres

Although both youth clubs and youth advisory centres were approached in the same manner, it is important to clarify the differences between them. Whereas youth clubs were an informal gathering of young people, youth advisory centres were places where young people attend *specifically* for advice regarding housing, welfare, sexual health, etc. The principle 'gate-keeper' identified, for both sites, was the head of Youth Advisory within the Southampton District. However, the person concerned (retained as anonymous) declined to assist with the recruitment. Therefore, having had limited success contacting the head of the Youth Advisory, it appeared that approaching individual clubs and advisory centres directly would be the most suitable option.

All youth advisory centres were initially unable to assist with the project. Their reasoning was consistent, in that these were centres targeting vulnerable young people (particularly the abused, drug users, homeless, etc.), and that asking people to take part in the study was simply 'inappropriate'. However, in contrast, the youth clubs were keen to collaborate. Meetings were arranged initially with two clubs, referred to here as Club 1 and Club 2, to discuss the project in greater depth and to consider the most appropriate way to administer the recruitment process (outlined in full in previous Section 3.2.4).

The staff at the youth clubs were able to recommend further youth clubs in the area that were likely to be interested, obviously saving the time and energy of the author. Contact at both Club 3 and Club 4 were made, and, for these particular clubs, recruitment became even more informal and the use of 'appointments' was abandoned. Indeed, a week before the author and female co-interviewer attended the Club 3 and Club 4 sites, it was arranged that the project would be first introduced to the young people through the youth workers. Therefore, on first arrival at the club, the author and assistant co-interviewer were, for the majority of occasions, able to commence interviews there and then (without having to arrange appointments). Following this success, the further use of 'appointments' was rejected in favour of this 'on the spot' recruitment, reducing the effect of young people failing to hold to their earlier made appointments.

Contact with these additional youth clubs provided some access to the youth advisory centres that had initially rejected the study. Of the two centres, termed Centre 1 and Centre 2, interviews at the latter were conducted within a World AIDS day event dedicated to promoting sexual health.

3.4.5 Contacting personnel to assist with data collection

The key figures here were the two female interviewers (for those respondents requesting preference for a female interviewer) and the transcriber to convert the tape recordings of the interviews into text. All personnel were recommended through the Centre for Sexual Health Research and were highly skilled in their respective duties.

As mentioned earlier, the female interviewers had the additional task of arranging the interviews with which they would be involved. Copies of the original research proposal, research question and key objectives, conceptual framework, study design, SAQ and full interview schedule were provided to fully familiarise the interviewers with the project's outline and its main requirements. Prior to administering the interviews, meetings were held between the author and interviewees to ensure that the latter were sufficiently informed about their duties.

4. CONCLUSION

This chapter has outlined what the project intended to achieve as well as how the project had since been implemented and administered. A further aim of this Chapter was to outline and justify several of the important research decisions that have been made both prior to and during the project's implementation. Chapters 5 and 6 will now outline some of the research findings (as well as provide more methodological and analytical detail) from the SAQs distributed to the young people's clinics and the first round of interviews respectively.

CHAPTER 5: FINDINGS FROM THE SAQs ADMINISTERED AT THE YOUNG PEOPLE'S CLINICS

1. INTRODUCTION AND PURPOSE OF THE SAQs

For the next three chapters, the results will be presented with only minimal discussion about their implications. The implications of these research findings (from the SAQs and both rounds of interview) will be discussed at greater length in Chapter 8.

This particular chapter intends to provide an account of the key descriptive findings derived from the SAQs administered at the young people's clinics. These SAQs served two purposes in this project. Their primary use was to recruit interviewees from the eight different young people's clinics (seven held at Family Planning Clinics and one at a Health Centre – referred to here as Clinics 1-8 to preserve anonymity) in the Southampton Community Health NHS Trust area. The other purpose was to offer some insights into some of the research questions identified in Chapter 4, with the potential to impact upon the interview schedules (which intend to generate the vast majority of the data in this project). Whilst the recruitment role of this SAQ will be detailed in Chapter 6 (which will cover how *all* respondents were recruited for interview), this chapter will illustrate the key findings from this questionnaire.

More specifically the SAQs served to address the following research questions, some of which provided information requested by the service providers (who assisted with the questionnaire administration) and others which addressed some of the specific research objectives identified previously in Chapter 4:

Research Question (A) - Service information

- What sort of people are using these clinics (in terms of age, gender, relationship status, socio-economic profile, etc.)?
- How far have people travelled to attend the clinics?

- Where else do (or have) these attenders seek (sought) advice about contraception?
- What are the attenders' experiences of intercourse in terms of ever had intercourse, and if so, with how many different partners?

Research Question (B) - What are the attenders' previous experiences of contraceptive use, focusing in particular upon the *frequency* of use and non-use?

Thus meeting the immediate objectives regarding contraceptive use in relation to ultimate objective 1 (p. 111-113 of Chapter 4)

Research Question (C) - What are the key findings recalled from the first intercourse with the respondent's current or most recent partner, in terms of contraceptive use/non-use, onset of intercourse (in terms of how long they had been 'going-out' together) and whether they had discussed the issue of contraception (and if so, when in relation to this intercourse)?

Thus meeting the immediate objectives regarding contraceptive use in relation to ultimate objective 1 (p. 111-113 of Chapter 4), and the timing of communication and onset of intercourse in relation to ultimate objective 2 (p. 113-114 of Chapter 4).

Research Question (D) - What are the key factors that help to explain whether a person used contraception, and specifically condoms, on the occasion of first intercourse with their current or most recent partner?

Thus meeting the immediate objectives regarding contraceptive use in relation to ultimate objective 1 (p. 111-113 of Chapter 4), and the timing of communication and onset of intercourse in relation to ultimate objective 2 (p. 113-114 of Chapter 4).

2. METHODOLOGY AND RESPONSE

At the outset it is important to note that the administration and sampling frame for the SAQ and further detail regarding its piloting and structure has already been outlined in Chapter 4 and Appendix 2.

A total of 424 (92%) of the questionnaires were returned; nine clients opted not to complete the questionnaires and 29 questionnaires were returned incomplete or defaced. It was impossible to obtain any information on these non-responders. This relatively high response rate provides confidence that this sample is representative of the population using such services, at least during these months of the year. Finally, a paper derived from these findings has been published: Coleman L.M. and Ingham R. (1998). 'Attenders at young people's clinics in Southampton: variations in contraceptive use' *British Journal of Family Planning* vol. 24, p.101-104.

3. RESULTS

The results will be presented in direct relation to the specific research questions listed previously. On the majority of instances where frequency data is reported, the percentage values are given with the frequencies noted in brackets to give a greater indication of the numbers involved, as well as highlighting where the respondent numbers are particularly low (and thus should be treated with a degree of caution).

3.1 Research Question (A) - Service information

3.1.1 Clinic attenders

The eight sites showed distinct geographical variation from city-centre locations to those serving predominantly rural populations. They also showed marked differences in the type of clients that they are attracting. For example, Clinic 3 seemed most 'effective' in reaching the youngest of ages, more male clients and a notable proportion of people who had yet to have intercourse (perhaps understandably given that sexual experience is likely to be related to age). Moreover, this

particular clinic served predominantly the local population (more details to follow in this chapter). Clinics 2 and 3 collectively accounted for over 50% of the total sample. However, it is important to note that the number of SAQs returned does not represent the demand for the clinic (even though all attenders were invited to complete a SAQ), because the data collection time period varied across the clinics from four to 12 weeks. The following Table 12 details some of these reported variations.

Site	Rural, Sub-urban or urban[9]	No. SAQs returned	% aged 16 or under	% female	% ever had intercourse	Mean no. of partners in last 6 months	% of total sample
Clinic 1	Urban	73	16	89	97	1.49	17.2
Clinic 2	Urban	127	17	98	98	1.50	30.0
Clinic 3	Sub-urban	111	75	78	84	1.35	26.2
Clinic 4	Sub-urban	22	41	96	96	1.24	5.2
Clinic 5	Sub-urban	16	44	50	81	1.00	3.8
Clinic 6	Rural	37	65	92	81	1.37	8.7
Clinic 7	Rural	30	40	87	97	1.55	7.1
Clinic 8	Rural	8	25	100	100	1.38	1.9
Total	----	424	40	88	92	1.40	100

Table 12: Variations in the study sample according to clinic type

The demographic profile of the clinic attenders is detailed in Table 13.

Aged u.16	Aged 16/17	Aged 18/19	Aged o.19	Female	In a reln[10]	Mean length of reln	Reln < 1 month	Reln > 6 month
23 (98)	30 (127)	18 (76)	29 (123)	88 (373)	75 (318)	1 year + 5 months	11 (34)	61 (194)

Table 13: Demographic profile of clinic attenders - % (nos.)

[9] Classification based upon population density of the Wards in which the clinics were located.
[10] % of respondents in a relationship.

The age of people attending the clinics varied enormously from 12 to 34 with a mean age of 18.7 years (standard deviation or SD of 3.8 years). Whilst 29% were over 19, 23% were under 16 and 10% (or 42) were aged 14 or under. A summary of the age profile is provided in Figure 8. With 40% (or 170) of clients aged 16 or under, the young people's clinics clearly fulfil an important role for the youngest of people. However, although advertised as 'young people's clinics', it is also clear that this service is of value to age groups beyond the teenage years. It is interesting to note that the age distribution of attenders does not equate with the proportion of young people who are sexually active, per age group, as revealed in national surveys (see Chapter 1). Indeed, the proportion of 16 year olds attending these clinics is greater than 17, 18 or 19 year olds (despite the fact that 17, 18 and 19 year olds are more likely to be having intercourse), suggesting that the older groups (if they are seeking advice) are seeking this advice elsewhere.

However, this age profile is not truly representative of all the clinics sampled, given the different number of questionnaires returned from each of the clinics and the contrasting periods of data collection; for example, the sample is clearly weighted towards the Clinic 3 site (which accounts for 26.2% of the total sample) and attracts a relatively greater proportion of under 16s than the others. Moreover, it is important to note that this skewed age and gender profile (88% of attenders were women) is likely to have a profound influence upon some additional descriptive findings reported later on in this section; for example, experience of intercourse and number of partners are likely to be affected, in particular, by the age profile.

The majority of people (75%) attending the young people's clinics were currently 'going-out' with a boyfriend or girlfriend. Of these, 61% had been with this partner for over six months and 11% had been together for less than a month. Whilst the mean length of the relationship was around 1.5 years, the maximum was 11 years (SD 1.6 years).

An indication of the socio-economic profile of the sample was obtained by matching the postcodes (recorded by 399 or 94% of the sample) to their respective census Wards, and then to the Jarman index of deprivation for the Ward in question. The Jarman Index (Jarman, 1984) is a well recognised composite measures of deprivation. A score is devised from the following eight variables which are weighted differentially: unemployment, overcrowding, lone pensioners, single

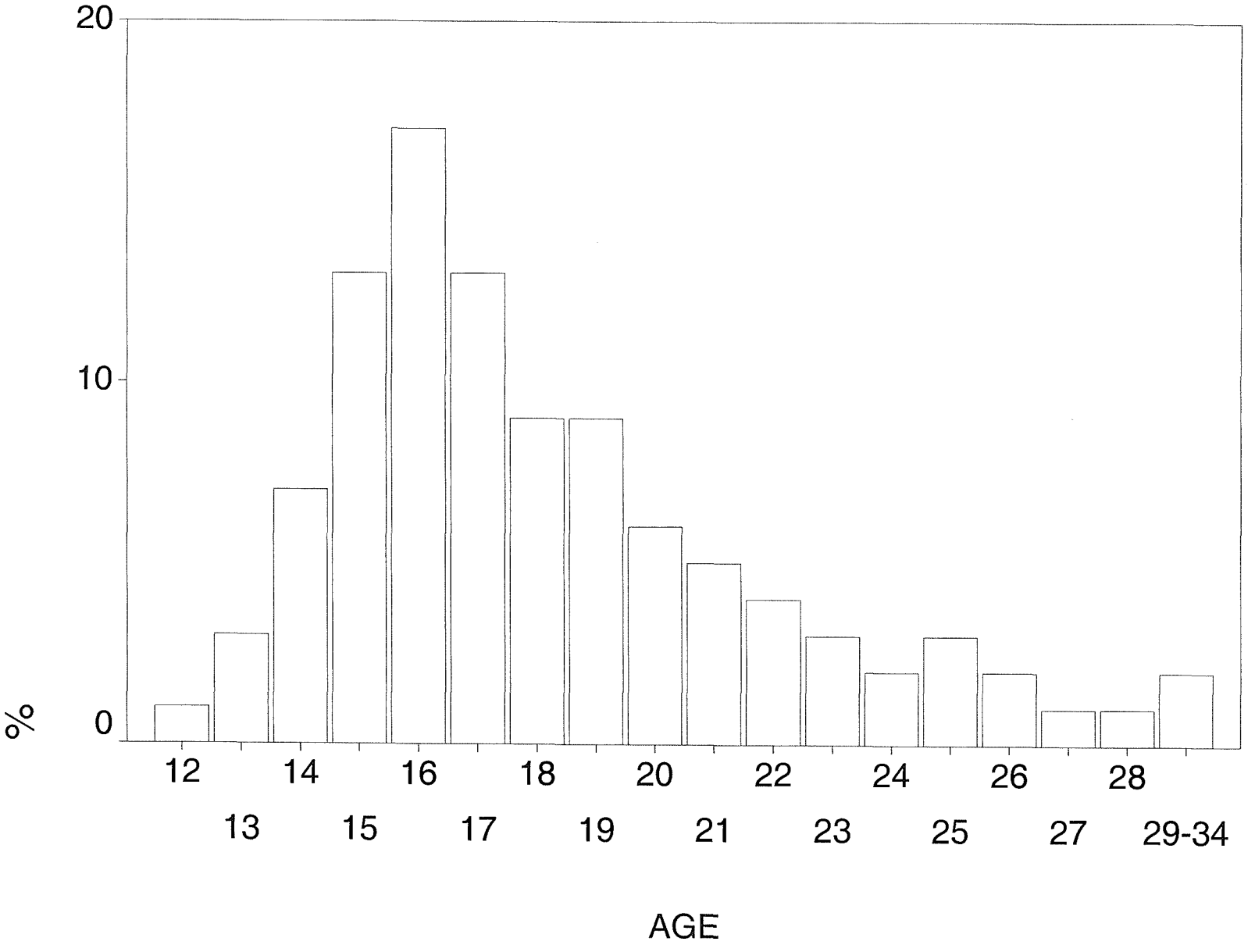


Figure 8: Age profile of people attending the clinics (%)

parents, born in the New Commonwealth, children aged under 5, low social class and one year migrants. Each variable is calculated as a proportion of a larger group, for example, unemployed residents aged 16+ calculated as a proportion of all economically active residents aged 16+.

Although a detailed socio-economic profile of the sample was not perhaps the primary purpose of this SAQ, it is nonetheless important to recognise some of the limitations of the Jarman index. For example, the Jarman Index omits certain variables such as car ownership, owner occupation of households and amenities within households as additional indicators of deprivation. Moreover, the weighting of variables may be less appropriate for the needs of this project. For example, recruiting young people from the more deprived areas may be less accurate given the relatively strong weighting awarded to Lone Pensioners (6.62 compared to unemployment at 3.34), for example. In addition, the smallest spatial unit of variation in representing this deprivation is the Ward. In some Wards, particularly in the more densely populated areas, the single value given to deprivation may not be truly representative of the areas within that Ward. For example, a single value of deprivation given to one Ward may be the product of two extremely different areas of deprivation *within* that single Ward. This is particularly the case in Southampton, where for example Bassett includes extremities of deprivation which are classified collectively in a single Ward. Finally, the latest available data available to calculate the deprivation scores are from the Census of 1991; at the time of administering these SAQs, the data used to represent variations in deprivation were almost eight years out of date.

Nonetheless, the Jarman Index scores indicate that the sample represented a fair spread in socio-economic deprivation, with values ranging from -29.73 to +49.74. The following Table 14 illustrates this range in deprivation.

Jarman index	Recoded index	Proportion of total sample
-29.73 to -3.25	Low deprivation	32.1 (128)
-2.30 to +12.18	Medium deprivation	36.3 (145)
+14.60 to +49.84	High deprivation	31.6 (126)

Table 14: Classification of socio-economic deprivation for the study sample - % (nos.)

The above table shows how the index has been recoded to form three distinct and relatively equally represented values of low, medium and high deprivation (suitable for use in multivariate analyses to be reported later in this chapter and to be used in respect to the interview analyses - see Chapters 6 and 7). To complement these findings it is worth mentioning that the different clinics served clients from contrasting areas of deprivation. The following Table 15 illustrates this, and supports the notion that a fair spread of deprivation was included in the total sample.

Clinic	Mean Jarman index of deprivation	Recoded deprivation	Sample size (n)
Clinic 1	15.53	High	69
Clinic 2	12.92	High	116
Clinic 3	-6.85	Low	105
Clinic 4	14.36	Medium	23
Clinic 5	8.64	Medium	13
Clinic 6	-9.41	Low	35
Clinic 7	2.58	Medium	30
Clinic 8	-10.46	Low	8
Overall	4.91	--	399

Table 15: Variations in deprivation scores according to clinic

3.1.2 Distance travelled to the clinics

For each postcode, it was possible to identify a precise grid reference thus allowing the distance to the clinic to be calculated, detailed to one-tenth of a km, (using Pythagoras' theorem). To give an idea of whether the clinics were serving predominantly 'local' or 'wider' populations, measures of central tendency such as the mean and median distance to the clinic were calculated. A measure of the variation in these distances is indicated by the SD. Given the areas defined by the most recent Census data, two additional Geographical measures were calculated; the percentage of clients residing in the same Enumeration District (ED) and Census Ward (in order of increasing geographical area). However, distance to the clinics could be considered to be the most accurate measure, simply because the clinics are not necessarily located in the centre of these EDs or Wards

(and hence a person travelling to their nearest clinic at two km distance, for example, may indeed traverse a Ward boundary). The following Table 16, therefore, gives an impression of whether the clinics in this sample were serving predominantly local or wider populations.

Clinic	Mean (km)	Median (km)	SD (km)	% within same ED	% within same Ward	Sample size
Clinic 1	3.8	3.0	3.6	0	6	69
Clinic 2	6.2	2.1	2.9	2	15	116
Clinic 3	1.3	0.8	1.4	2	27	105
Clinic 4	2.2	1.0	2.4	22	52	23
Clinic 5	1.6	0.4	2.2	8	69	13
Clinic 6	3.6	2.5	3.1	0	14	35
Clinic 7	2.0	1.7	1.6	0	13	30
Clinic 8	2.4	1.1	2.2	0	25	8
Overall	3.5	1.7	15.6	3	20	399

Table 16: Distance travelled to young people's Family Planning Clinics

From the detail provided in the above table, it can be seen that some clinics are notably serving a more local population than others. With respect to the three clinics reporting the largest samples, it appears that Clinic 3 is serving a predominantly local population with the mean distance to the clinic identified as 1.3 km (a relatively low SD indicates that most clients were close to this mean distance) and over one-quarter of the clients residing in the same Ward as the clinic. Both Clinic 1 and Clinic 2 serve a slightly wider population and their location closer to the city centre (especially Clinic 1) suggest that a number of their clients may incorporate a visit to these clinics when travelling to the city centre for work, leisure, college attendance, etc. Both their relatively inflated SDs suggest that they are also of value to a more local population; the previously mentioned proportion of clients travelling some distance to the clinic therefore responsible for their increased mean value. When directly comparing the Clinic 3 site with Clinics 1 and 2, it may be inferred that the distance travelled reflects the age profile of each site, in that the youngest clients (well represented at Clinic 3) are likely to less mobile and more reliant upon local services. The other site of interest is at Clinic 4, where 22% (although this only equates to 5 respondents) of the clients reside in the actual same ED as the clinic; this service is therefore of obvious value to those persons residing in the housing estate which immediately envelopes this particular clinic.

3.1.3 Additional sources of advice

In general, communication levels were high with friends (including partners) and family being important sources of contraceptive advice. The following Table 17 indicates who the young people had ever spoken to about contraception.

Friends (same sex)	Friends (opp[11] sex)	Teacher	Mum	Dad	Partner	GP	Someone else's GP	FP Clinic[12]	YC [13]	YAC[14]
96 (406)	70 (296)	21 (88)	63 (265)	18 (76)	83 (352)	42 (177)	5 (19)	65 (275)	12 (49)	16 (68)

Table 17: Sources of advice about contraception (who the young people had ever talked to) - % (nos.)

Talking to friends was a particularly important source of advice, but note also how more young people had talked to friends of the same sex than to members of the opposite sex. A greater proportion of people had ever talked to their mothers than fathers about contraception, whilst the clear majority had also talked to their partners; the timing of this discussion will be elaborated upon later in this chapter. Forty-two percent had ever seen their GP about contraception and about two-thirds had visited a Family Planning (or FP) Clinic before this particular occasion; for the remainder, they could be first time visitors or simply did not interpret young people's clinics as FP clinics in the questionnaire. It is not possible to infer from these data how often the attenders have visited these clinics.

[11] Friends of the opposite sex.
[12] Ever been to a FP clinic for advice *prior* to this visit (since SAQs were administered at young people's clinics).
[13] YC = someone at a youth club.
[14] YAC = someone at a youth advice centre.

3.1.4 Experiences of intercourse

Ninety-two percent (or 389) had experienced intercourse prior to this visit to the young people's clinic; for the remaining 8% (or 35), they were either seeking advice in preparation for intercourse or accompanying a friend to the clinic for moral support (although the precise proportion of these two categories was not recorded in the questionnaires). Evidence suggesting that a number of clients were seeking advice prior to having intercourse for the first time was encouraging. Indeed, this is an important target group for further research, to explore the means to encourage more young people to visit the clinics prior to their first ever intercourse.

However, given that only 8% had not experienced intercourse and that 35% were first time visitors, it could be inferred from these data that these clinics are less effective in providing sex education prior to first ever intercourse (given that the majority of first time visitors would have already experienced intercourse). Nonetheless, as stated in the previous section, because these clinics are rarely advertised as 'Family Planning' clinics, there is some uncertainty over the validity of this particular measure.

The following Table 18 details the number of intercourse partners reported by the clinic attenders.

Lifetime partners				Partners in last six months			
1	2-3	4+	Mean	1	2	3+	Mean
28 (109)	30 (117)	42 (163)	4.5	71 (275)	14 (56)	12 (46)	1.4

Table 18: Number of intercourse partners reported by the sample - % (nos.)

Most young people in this sample reported having had more than one lifetime partner; many (71%) reported only one partner in the last six months supporting the existence of 'serial monogamy', with the majority of clients currently involved in a 'long-term' relationship.

3.2 Research Question (B) - Overall previous use of contraception (findings relate to non-virgins only)

To identify the potential for conception it was felt that *times not used contraception* was a more appropriate indicator than the more commonly used *current use of contraception* or use *at last intercourse*. This was because these latter, more ambiguous terms, could overlook or disguise previous instances of contraceptive non-use, perhaps during the formative stage of a relationship (see Chapter 1 for details concerning contraceptive use at first and last intercourse compared). The findings are illustrated as follows in Table 19.

Ever not used cont.	Times not used cont. - *once only*	Times not used cont. - *a few times*	Times not used cont. - *many times*	Used condoms *always*	Used condoms *sometimes*	Used condoms *rarely* or *never*
61 (234)	15* (58)	32* (123)	14* (49)	23 (87)	59 (228)	18 (70)

* Percentage of 'Times not used contraception' does not add precisely to the 60% who had 'ever not used contraception', since % values have been rounded up or down

Table 19: Contraceptive use reported by the sample - % (nos.)

This study shows that a sizeable proportion (61%) of respondents (non-virgins) had been, on at least one occasion, at risk from conception. Moreover, there is a proportion of respondents who had been at risk from conception on a number of occasions, with nearly 46% (or 172) of all the non-virgin sample having had intercourse without contraception at least a *few times* or *many times*. In terms of STI potential, (18% or 70) used condoms *rarely* or *never*. Although these terms are rather subjective, and the context in which condoms were used or not used is important to determine the levels of risk associated with such behaviour (for example, whether condoms were used in the more casual relationships), these findings do indicate the worrying potential for STI in this sample. Greater investigation in the interviews may be able to explore in which relationships (steady or more casual) condoms are most widely used.

3.3 Research Question (C) - First intercourse with current or most recent partner

To date, little research has measured contraceptive (and condom) use on the *first* occasion of intercourse with the current or most recent partner (or 'FIRP'). This measure was again preferred to the more widely used *current use* or use *at last intercourse* for the reasons already detailed above. Moreover, the influence that the delay in onset of first intercourse between partners, and the timing of first discussion about contraception (before and after this first intercourse), may have upon contraceptive use, can be more accurately assessed only when contraceptive use at this first intercourse is recorded. Of course, this occasion may not necessarily be the respondent's first ever intercourse. Moreover, it is important to state that this episode of intercourse also receives especial investigation in the interviews, and Chapter 6 provides more detail on why this occasion of intercourse justifies such attention. The following Table 20 illustrates the use of contraception among these clinic attenders on this specific occasion of intercourse.

Pill only	Condom only	Condom and pill	Other	Nothing
14 (56)	49 (190)	19 (73)	1 (5)	17 (64)

Table 20: Contraceptive use on the first occasion of intercourse with the current/most recent partner - % (nos.)

The fact that 32% (or 125) failed to use condoms and that 17% (or 64) used no contraception at all, indicates the potential for STI and conception among these respondents on this first intercourse with the current/most recent partner.

For most respondents, onset of their first intercourse with their current or most recent partner had been gradual, with 41% reporting first intercourse with this partner after four weeks of 'going-out' together. For others, intercourse progressed more rapidly with 12% having intercourse on the same day as meeting someone (a proportion of these could be assumed to be 'one night stands' or ONS) and 27% between two and six days of 'going-out' together. These findings are detailed as follows in Table 21.

Same day	2-6 days	1-4 weeks	Over 1 month
12 (45)	27 (107)	19 (72)	41 (157)

Table 21: Onset of first intercourse since first 'going-out' together - % (nos.)

Whilst the clear majority (91% or 352) had ever talked to their current/most recent partner about contraception, 28% (or 99) of these people reported that they did *not* manage to talk to each other about contraception *before* having intercourse with them for the *first* time (75% or 74 of these reported *after having intercourse with them* and 25% or 25 reported that they *don't know*).

Having outlined some of the descriptive statistics, the next section details multivariate analyses which allow more investigation into some of the relationships that may be evident between a number a different variables.

3.4 Research Question (D) - Searching for greater explanation: the use of regression analysis

This section reports on the investigation into which variables play a key role in influencing both the use of contraception and condoms at the first intercourse with a current or most recent partner (FIRP). The use of regression analyses allowed the influence of certain independent variables (IVs) to be reported upon the dependent variables (DVs) relative to each other (i.e. to see which IVs were the most important influences) and whilst controlling for the potential effect of the remaining variables. The short screening questionnaire generated the following IVs which were used in the analyses (it is essential to appreciate the coding of these variables when interpreting the positive and negative relationships that will be presented):

- Age: 1=under16s, 2=16-19, 3=over19s
- Gender: 1=male, 2=female
- Lifetime partners: 1=1, 2=2-3, 3=4+
- Partner within last 6 months: 1=1, 2=2, 3=3+
- Socio-economic deprivation: 1=Low (Jarman index -29.73 to -3.25), 2=Medium (-2.30 to +12.18), 3=High (+14.60 to + 49.84)
- Ever not used contraception: 1=yes, 2=no
- How often not used contraception: 1=never, 2=once, 3=few times, 4=many times
- How often used condoms: 1=always, 2=sometimes, 3=rarely, 4=never
- Talked to each other before first intercourse together: 1=yes, 2=no
- Onset of first intercourse with most recent partner (FIRP): 1=same day, 2=2-6 days, 3=1-4 weeks, 4=over one month

The two dependent variables were contraceptive use at FIRP (1=yes, 2=no) and condom use at FIRP (1=yes, 2=no); the results from each regression test will be reported in turn. Finally, following the results of the regression tests, significant findings from correlation analyses will provide some further detail to the prediction of these behaviours (with particular reference to those variables correlated with the IVs that were identified as significant predictors of contraceptive and condom use from the regression tests).

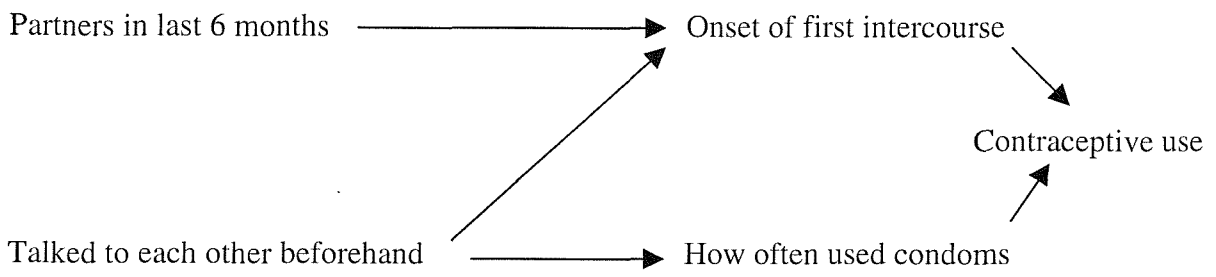
3.4.1 Influences upon contraceptive use at FIRP

Given the dichotomous measurement of this DV, a logistical regression analysis was used with all of the previously listed IVs entered into the equation. Contraceptive use at FIRP was significantly associated with two of these variables, namely how often used condoms and onset of this first intercourse relative to how long partners had been 'going-out' together. These significant relationships (as well as those that were non significant; shaded and not shaded respectively) are listed as follows:

Independent variable	B	Chi Square	df	p-value
How often used condoms	.98	10.78	1	p=<0.001
Onset of FIRP	-.45	5.75	1	p=<0.05
Age	-.42	1.79	1	p=0.18
Gender	-.73	1.60	1	p=0.20
Lifetime partners	-.50	3.02	1	p=0.08
Partner within last 6 months	.43	2.71	1	p=0.10
Socio-economic deprivation	.01	.004	1	p=0.94
Ever not used contraception	-9.10	.17	1	p=0.67
How often not used contraception	.31	1.28	1	p=0.25
Talked to each other before first intercourse together	.54	2.08	1	p=0.15

The significance of how often used condoms is arguably likely to indicate the importance of past behaviour predicting more recent experiences; for those who have used condoms regularly in the past, they are more likely to have reported contraceptive use on this more recent occasion of intercourse. It may be that the procedures used to ensure contraceptive use have become established and habitual, with effective strategies and general increased confidence in achieving usage having been acquired. For those people who have delayed their first intercourse with a partner, the likelihood of contraceptive use also increased. Delaying intercourse may reflect a greater time for 'getting to know' a partner, increasing the likelihood of planning and preparing for this intercourse in advance as opposed to experiencing this event quite unexpectedly and unprepared.

In addition to the results from the logistical regression, the consideration of a series of inter-relationships between each of the two significant IVs and the remaining variables (through bivariate correlation) permits the construction of a basic framework for predicting contraceptive use at FIRP. These inter-relationships between the remaining variables allow contraceptive use to be conceptualised in the following manner:



Partners in the last 6 months (r=.15, p=0.003) and talking to each other prior to intercourse (r=.25, p<0.001) were both significantly correlated with contraceptive use. Given that both of these were not identified as significant in the logistical regression, these correlations may be explained by their indirect influence through the two IVs earlier identified as significant by the regression analyses (onset of intercourse and how often used condoms).

It was found that partners in the last 6 months was negatively correlated with the onset of intercourse (r= -.308, p<0.001). In other words, those respondents reporting more partners were more likely to have their first intercourse with their most recent partner earlier than those who reported fewer partners (who were more likely to delay intercourse). Earlier intercourse, in turn, relates to a greater likelihood of contraception not being used (thus accounting for the positive correlation between partners in the last 6 months and contraceptive use reported above). These relationships may also illustrate the important influence of past sexual behaviour upon current patterns; those respondents that have experienced more sexual partners within 6 months are progressing to intercourse quicker than the remainder of young people (which in turn is increasing their reported number of partners - especially if a number of their partners were one-night stands or intercourses occurring on the 'same day' as meeting someone). In addition, with an increased number of partners within the last 6 months being related to less contraceptive use, this indicates that their maybe a proportion of young people who are at the greatest risk of conception and STI. Contraception is clearly not being used sufficiently among these most critical of people.

The relationship between talking to partners beforehand and the onset of intercourse is also important; a negative correlation between these variables was found (r= -.337, p<0.001). This confirms a logical argument suggesting that those who have talked before were more likely to have delayed intercourse given, perhaps, that such a delay leaves more opportunity and time for this

discussion to occur. The importance of such a discussion before intercourse will be explored in greater depth in forthcoming chapters, although at this stage it can intuitively be reported that this discussion can result in the confirmation of responsibilities for obtaining contraception and rebuke or confirm assumptions about the female partner who may or may not be already taking the pill. Talking together beforehand was also positively correlated with how often condoms were used ($r = .12$, $p<0.05$); those people who talked beforehand were also more likely to have used condoms in the past. This latter relationship also may show the important influence of previous behaviours predicting current patterns with the ability to initiate discussions, and perhaps experiencing the positive reactions to such discussions, resulting in a greater likelihood of consistent contraceptive use. These analyses have shown how talking to each other before intercourse, being negatively correlated with onset of intercourse and positively correlated with regularity of condom use support the positive correlation between this discussion and contraceptive use reported earlier.

Finally, separate multivariate regression tests, using onset of first intercourse and how often used condoms as the DVs, concluded that the influence of both talking to each other beforehand and partners in the last 6 months (as outlined above) remained significant when the other variables were controlled for. In other words, for example, the relationship between talking to each other beforehand (used as a IV) and how often used condoms (DV) remained significant when partners in the last 6 months (IV) was also entered into the regression equation. These regression tests indicate that both variables operate independently of each other and have a direct influence upon onset of intercourse and/or how often respondents had used condoms.

3.4.2 Influences upon condom use at FIRP

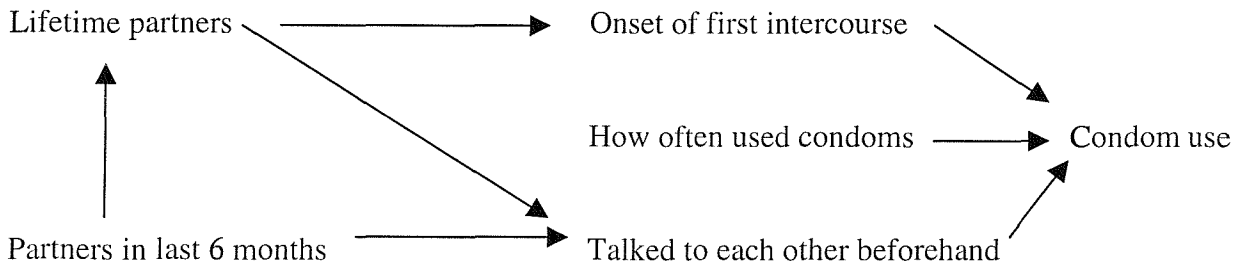
Condom use was significantly associated with three of the IVs that were entered into the logistical regression analysis as follows:

Independent variable	B	Chi Square	df	Significance
How often used condoms	1.37	35.79	1	p=<0.0001
Onset of FIRP	-.31	4.75	1	p=<0.05
Talked to each other before first intercourse together	.89	8.73	1	p=<0.005
Age	.41	2.67	1	p=<0.10
Gender	-.62	1.70	1	p=<0.19
Lifetime partners	-.02	.01	1	p=<0.91
Partner within last 6 months	.40	3.28	1	p=<0.07
Socio-economic deprivation	-.18	.89	1	p=<0.34
Ever not used contraception	-.16	.08	1	p=<0.76
How often not used contraception	.24	1.08	1	p=<0.29

The associations reported by onset of intercourse and how often used condoms reflect the discussion presented above in 3.4.1 (regarding the prediction of contraceptive use). Apart from previous patterns of condom use showing a stronger relationship (illustrating, perhaps, the increased importance of acquiring 'practice' and effective strategies to ensure their use), the key difference with condom use lies in the greater importance of a discussion prior to intercourse. This significant relationship may indicate the contrasting patterns in achieving the specific use of condoms as opposed to contraceptive use. It may be likely that an explicit discussion about contraception, prior to intercourse, is more of a necessity in achieving the use of condoms. Such a discussion may occur at the point when foreplay is interrupted so that the condom can be applied. This may start by a partner explaining why he or she is initiating this interruption. Additionally, a discussion may be more of a necessity since condoms must be obtained prior to this interaction. Compared to pill usage, for example, such a discussion may not be required to ensure contraceptive use; pill use generally involves less immediate preparation and an 'interruption' is not essential.

In addition, lifetime partners ($r = .15$, $p<0.005$) and partners in the last 6 months ($r = .17$, $p<0.001$) were both significantly positively correlated with condom use; increasing number of partners predicted a greater likelihood of not using condoms. As noted earlier, given that both of these variables were not identified in the logistical regression, these correlations may be explained by

their indirect influence through the three IVs identified above (onset of intercourse, how often used condoms and whether a discussion prior to intercourse occurred).



It can be argued that lifetime partners is more indicative of overall sexual experience rather than high risk sexual behaviour which, in terms of frequency of partner change, may be illustrated by partners in the last 6 months. The positive association between lifetime partners and condom use (in that people with more lifetime partners are less likely to use condoms at FIRP) can be further explained by the negative correlation between lifetime partners and onset of intercourse ($r = -.34$, $p<0.001$). People with more lifetime partners were less likely to delay intercourse and were correspondingly less likely to use condoms. Lifetime partners was also positively correlated with prior discussion ($r = .14$, $p<0.01$) in that those people reporting more partners were less likely (or more likely not to) talk about contraception beforehand (and again predicting a lesser likelihood of condom use). Assuming that lifetime partners reflects a degree of sexual experience, these analyses may indicate that the more sexually experienced people find it less of a necessity (or find it more difficult) to delay intercourse or to talk about contraception beforehand. Conversely, those with fewer partners may consider delaying intercourse and prior discussions to be more essential. Moreover, these analyses do not suggest that the ability to delay intercourse, talk to a partner beforehand (and hence ensure condom use) is acquired through this increased experience (assuming that this experience is mirrored by lifetime partners). These correlations observed for lifetime partners remained consistent when the other variables were controlled for (deduced from multivariate regression tests as described earlier in the context of contraceptive use) indicating that it had a direct effect upon onset of intercourse and whether a discussion occurred beforehand.

A positive correlation was found between partners in the last 6 months and whether a discussion occurred beforehand ($r = .11$, $p<0.05$). In other words those people reporting more partners in this specified time were less likely to have held (or more likely not to) a discussion beforehand. Assuming that the number of these partners is indicative of risk potential, it appears that quite paradoxically and despite their greater risk, these people are less likely to discuss the issue of contraception beforehand (and thus more likely to have intercourse without the use of condoms). While this effect remained significant when controlling for lifetime partners (deduced from multivariate regression tests), the same was not found for a negative relationship between partners within the last 6 months and onset of intercourse. In other words when lifetime partners was controlled for, the relationship between partners in the last 6 months and onset of intercourse was no longer found to be significant, implying that the influence of partners within the last 6 months upon onset of intercourse operates indirectly via lifetime partners. That partners within the last 6 months will generate a greater number of lifetime partners is a probable contributory factor for such a relationship.

4. CONCLUSION

The clinic sample as a whole was comparable with that of other similarly conducted surveys in that the vast majority of clients were women, non-virgin and currently in a long-term relationship (Coleman and Phillips, 1993; Phillips *et al.,* 1994). However, one particularly interesting feature was the variation in clients seen across the eight different clinics. Variations in age, gender, sexual experiences and distance travelled to the clinics were all evident. Further research may help to clarify such interesting differences and in particular why some clinics are reaching a different clientele to others. Moreover, lessons can be learned from those clinics that were more 'effective' in attracting more male attenders, more virgins, etc.

Potential for conception and STI was widespread; 46% (of non-virgins) had experienced intercourse without contraception *a few times* or *many times* and 18 % used condoms *rarely* or *never*. In terms of first intercourse with current/most recent partner (or FIRP), 17% had not used any contraception and 32% had failed to use condoms. These findings are of added concern given the nature of the sample; recruited from young people's clinics, these people could be viewed as

being the most knowledgeable and aware about the consequences of not using contraception compared to their fellow peer groups. However, since they were actually attending the clinics they could also be argued to be a group in most *need* of such a service (in terms of requests for pregnancy tests, emergency contraception, etc.). Other measures indicated that the largest proportion (or 41%) of respondents delayed intercourse beyond one month after first 'going-out' together, although 39% reported that intercourse had occurred within the first week. Of those people recording details of their FIRP, only around one-quarter had discussed the issue of contraception beforehand, perhaps illustrating the widespread difficulty that some people experience regarding this issue.

The SAQs also showed a number of innovative and particularly interesting statistically significant variations in contraceptive use, derived from the correlation and regression analyses, that are worth discussing. It appears that a combination of past behaviour, onset of first intercourse and whether a discussion about contraception occurred beforehand predict whether contraception and condoms were reported on these occasions of first intercourse. The main difference between contraceptive and condom use appears to be the latter's greater importance attached to a prior discussion. Finally, the findings concerning partners within the last 6 months suggest that a minority of young people, who may be at a higher risk for conception and STI, are not adopting the necessary precautions.

These findings detailed in Chapter 5 were derived from a sample of clinic attenders, with the SAQ used primarily to help recruit these young people for in-depth interview. Nonetheless, the demonstrated variations and statistical associations derived from the regression analysis have provided some interesting routes for further exploration in the first round of interviews. These interviews, for example, will be able to illustrate the problems experienced in holding a discussion about contraception before intercourse, the importance of such a discussion upon the outcome of contraceptive and/or condom use, what these discussions include and what partners' reactions or responses to these discussions are, etc.

CHAPTER 6: ROUND 1 INTERVIEW ANALYSES

1. INTRODUCTION

The aim of this chapter is to present findings from the first round of interviews. Prior to this, some detail will be provided about the research question intended to be met through the interviews (both rounds), the interviewee selection and recruitment process, the epistemological approach and research paradigm, the two key types of qualitative analyses that were used and the efforts to minimise the threats to the validity of this research. A concluding section summarises the main findings. It must be recognised at this early stage that the interviews generated a great deal of information; this chapter will outline and concentrate upon only the 'key themes' that emerged. As was the case for the preceding chapter, the main aim is to present the findings and themes that have emerged from the data in predominantly a descriptive fashion, with only minimal reference to their wider implications (including contribution to the reviewed literature, recommendations for future research, etc.). Although some reference to these implications is inevitable, they will be discussed in greater depth in Chapter 8 (alongside the limitations of this research). Two papers derived from this research are referenced under Coleman and Ingham 1998a and 1998b.

2. RESEARCH QUESTION

Chapters 2 and 3, by reviewing literature related to contraceptive use, identified a set of research objectives that were detailed in Chapter 4. The conceptual framework, presented as Figure 6 in Chapter 4, illustrates the impact that this review had upon this project's approach in the context of the TPB. The interview data presented in this chapter will be presented in a manner that matches the key constructs identified in the conceptual framework, thus relating them to the research objectives. The interviews will endeavour to explore how and why the interactional influences of communication and negotiation skills and gender power imbalances and pressures may help to explain patterns of use and non-use of contraception (see objectives 1 and 5, p.111 and 116 in Chapter 4). The interviews will also explore how and why the immediate psychic and physical contexts may influence contraceptive behaviour (see objective 3, p.114 in Chapter 4). Whilst some of the dynamic factors (see objective 2, p.113 in Chapter 4) will be explored in this chapter

through the discussion of events leading up to intercourse (see Section 5), Chapter 6, with the presentation of the round 2 interview findings, will elaborate further upon these issues (as well as detailing the intentions-behaviour relationship and essentially by reporting what differentiates between effective and ineffective contraceptive users – with particular reference to the innovative constructs detailed in Chapter 2, Section 4.2 and Chapter 3, Section 4.3).

The following sections discuss the epistemological approach and methods of qualitative analysis and will elaborate upon the semi-inductive element of the interviews alongside these objectives (or 'routes for exploration') listed in Chapter 4. At this stage, therefore, it is important to acknowledge that the research findings will not always tie in precisely to these research questions; that is other findings (beyond these objectives) will be derived from the more inductive, interpretative approach that has also been used.

3. INTERVIEWEE SELECTION AND RECRUITMENT

Chapter 4 (Section 3.2.1) has already indicated the preferred or desired selection and recruitment procedure; what follows now is a detailed account of what actually occurred during this project's administration. Two strategies were employed to select interviewees; either with or without SAQs. Within the young people's clinics, the short SAQs (the findings from which were reported in the previous chapter) were issued to all those attending the clinics over a four to 12 week period to screen people for interview. In addition to asking whether people would be willing to be interviewed, the SAQs also recorded some descriptive socio-demographic data as well as some detail of sexual behaviours to assist in the selection procedure. The recording of postcodes allowed interviewees to be selected from areas with different levels of social deprivation (once the postcodes had been matched to census wards). The following Table 22 illustrates the numbers of respondents recruited for the interviews and what proportion were from the clinic sample reported in the previous chapter.

	No. sites	SAQs used	SAQs refusals	SAQs returned	Response rate	Interviews (1st round)	No. Of men	Interviews (2nd round)	No. Of men
Young people's clinics	8	Yes	38	424	92%	19	0	12	0
Youth clubs	4	No	-	-	-	28	10	8	2
Youth advisory centres	2	No	-	-	-	9	3	2	2
Total	14	-	38	424	-	56	13	22	4

Table 22: Recruitment details for the three sites under investigation

These measures permitted the author to select a highly varied sample, from all those who volunteered and who met the selection criteria outlined in Chapter 4. To reiterate the point made in Chapter 4, the reason for focusing upon a varied sample was to generate a range or variety of possible responses/themes from the data; in no way to claim that the 'varied' sample is representative of the wider population of young people. Although all of the 19 clinic interviewees were women, they did represent a fair spread of age within the 16-19 year old group (21% aged 16, 26% aged 17, 26% aged 18 and 16% aged 19). The mean Jarman index for deprivation was +4.87, and 22% and 11% were residing in areas of 'high' and 'low' deprivation respectively, based upon the classification detailed in Chapter 5. Fifty-eight percent were currently in a relationship, 79% had used contraception on the occasion of first intercourse with their most recent partner (of which 73% used condoms). Of those who had talked to their most recent partner about contraception, 75% talked before intercourse and 73% of the sample had intercourse within two weeks of 'going-out' with this partner. The mean number of lifetime partners was 5.0 (SD 4.0), and 1.7 (SD 1.0) for those within the last six months.

The reasons for not administering the SAQs at the youth clubs and youth advisory centres have already been outlined in Chapter 4 (Section 3.3.4). As with the young people's clinics, it is important to stress that interviewees were selected not solely upon whether they were willing to be interviewed. Instead, interviews were conducted with those people who met some of the selection

criteria (partly[15] of those used at the young people's clinics) to ensure a wide variety of respondents. In contrast to the clinic interviewees, around one-third of all interviewees (or 13 from the 37 recruited from these sites) were men. The interviewees also had a slightly younger age profile (43% aged 16, 27% aged 17, 24% aged 18 and 5% aged 19). An indication of deprivation, given that residential postcodes were not recorded, was based on the postcodes for the six sites concerned (four youth clubs and two youth advisory centres). The mean Jarman index of deprivation was +15.59, and 84% of sites were located in areas of 'high' deprivation (approximately four times the proportion of clinic attenders). Forty-four percent were currently in a relationship, 69% had used contraception on the occasion of first intercourse with the most recent partner (of which 92% used condoms). Of those who had talked to their most recent partner about contraception, 57% talked before intercourse and 57% of this sample had intercourse within two weeks of 'going-out' with this partner. Unlike the clinic attenders (who had all sought contraceptive advice), 35% of this sample had never visited their GP or young person's clinic for such advice.

Although an element of volunteer bias still remains, to have some control over who was interviewed from those who did volunteer was considered to be an important strategic component of the selection process. The percentages provided above illustrate the varied nature of this interviewee sample.

4. EPISTEMOLOGICAL APPROACH AND RESEARCH PARADIGM

The epistemology asks 'how do we know the world?' and 'what is the relationship between the inquirer and the known?' (Denzin and Lincoln, 1994, p.99) and clearly has implications for the methods of qualitative analyses (relevant for Chapters 6 and 7) and the conclusions drawn (Chapter 8). Together with the ontology, or 'what is seen as the very nature and essence of things in the social world?' (Mason, 1996) and methodology, or 'how we can go about finding out whatever can be known?' (Denzin and Lincoln, 1994), the epistemological position constitutes the

[15] Details concerning the number of sexual partners were unfortunately not recorded for this sample recruited from the youth clubs and youth advisory centres (given that screening questionnaires were not administered).

research paradigm or 'basic set of beliefs that guides action' (Guba, 1990, in Denzin and Lincoln, 1994, p.13).

Denzin and Lincoln (1994) identify (at the broadest of levels) four research paradigms as positivist and postpositivist, constructivist-interpretative, critical (Marxist , emancipatory) and feminine-poststructural (Denzin and Lincoln, 1994, p.13). The first of these four paradigms reflects the stance adopted in this project. The essence of the positivist and postpositivist perspectives is that there is an underlying reality and truth which can be investigated. The critical difference between positivism and postpositivism is that the former contends that there is a reality out there to be studied, captured, and understood, whereas postpositivists argue that reality can never be fully apprehended, only appreciated (Guba, 1990, in Denzin and Lincoln, 1994). Huberman and Miles (1994) define a realist (or postpositivist) approach by a belief in that social phenomena exist not only in the mind but also the objective world; that there is an underlying stable relationship found among them (Huberman and Miles, 1994). Whilst positivism is typical of experimental designs adopting a hypothetico-deductive approach, the essence of postpositivism (the epistemological approach in the analysis of these interviews) and its relevance to this project is neatly summed by Denzin and Lincoln (1994) as follows:

> 'Post positivism relies on multiple methods as a way of capturing as much of reality as possible. At the same time, emphasis is placed on the discovery and verification of theories. Traditional evaluation criteria, such as internal and external validity, are stressed, as is the use of qualitative procedures that lend themselves to structured (sometimes statistical) analysis.'
>
> Denzin and Lincoln (1994) p.5

These postpositivist principles reflect the analysis and interpretation adopted in this research project. This perspective allows the conceptual framework (presented in Chapter 6) to be evaluated (as well as the array of theoretical principles that are reflected in its construction). Aside to the Content Analysis (CA) of the interview data, essentially derived from semi-structured reports from which low-level quantitative comparisons and tests can be performed to complement the qualitative data, the postpositivist perspective also acknowledges the semi-inductive and more

interpretative stance of these interviews that will enable new ideas and explanations to be generated from the data. It is in this way that descriptive yet also more inductive methods of study are included within this paradigm (Huberman and Miles, 1994). These analytical approaches, together with the consensus towards the internal and external validity of the research and the importance of locating a group of subjects within a larger population (both consistent within the postpositivist principles - Denzin and Lincoln, 1994) will be detailed in the following Sections 5 and 6 of this chapter and also reflected in the research limitations outlined in Chapter 8.

Guba and Lincoln (1994) provide a comprehensive chapter on competing paradigms in the Denzin and Lincoln (1994) handbook. Their chapter provides a thorough comparison of positivism, postpositivism, critical theory and constructivism. The particular relevance to this project's paradigm is with its detailed distinction between positivism and postpositivism. Guba and Lincoln (1994) define postpositivism as a representation of efforts in the past few decades to respond to the major criticisms of positivism, while remaining within the same set of overall beliefs (Guba and Lincoln, 1994, p.109). They compare each of the four paradigms according to their ontology, epistemology and methodology in a concise manner through a number of summary tables. In terms of their ontology, they note postpositivism's critical realism which, like positivism, assumes an objective reality, but grants that this can be reached only imperfectly and probabilistically (Guba and Lincoln, 1994, p.111). For epistemology, postpositivism is defined as a modified version of positivism's dualist/objectivist assumption in that it is not possible to fully know, and thus only possible to approximate, this reality (Guba and Lincoln, 1994, p.111). Finally, postpositivism's methodological approach postulates, once again, a modified version of positivism's experimental testing of hypotheses by focusing on critical multiplism and possible inclusion of qualitative methods (as is the case in this project) (Guba and Lincoln, 1994, p.111).

Based upon these ontological, epistemological and methodological distinctions, Guba and Lincoln (1994) present ten issues by which each paradigm compares, with particular consideration towards the practical conduct of inquiry and interpretation of the research findings. These ten issues are as follows: inquiry aim, nature of knowledge, knowledge accumulation, goodness or quality criteria, values, ethics, voice, training, accommodation and hegemony. Extensive detail is provided in their chapter, however for the scope of this section, it is important to note that these issues are

essentially based upon the ontological, epistemological and methodological comparisons (discussed previously), and that when these paradigms are compared in more detail there is considerable overlap between them - particularly between the positivist and postpositivist approaches.

5. METHODS OF QUALITATIVE ANALYSIS

Huberman and Miles (1994) detail 'the conventions of qualitative research require clear, explicit reporting of data and procedures' (p.439). The importance of this transparency of method has been echoed by Yardley (in press) as one of her indicators of high quality qualitative study (further reference will be drawn to this with regard to research validity – see Section 6). To meet this necessity for transparency, this section (having already detailed the sampling decisions and data collection procedures) will specify the units of analysis, the software used, and provide an extensive overview (with examples) of the analytic strategies adopted. These issues have been derived from Huberman and Miles (1994) account of what they consider should be included in a qualitative methods section (p.439). This section will be relevance to the round 2 interviews presented in Chapter 7 unless stated otherwise.

5.1 Units of analysis

The interviews explored a maximum of three occasions where the participants had experienced sexual intercourse with a partner for the first time. This could have been first intercourse with their most recent 'steady' partner (or FIRSP) and/or first intercourse with their most recent 'one night stand' (or FIRONS), according to the participants' own classification of their previous encounters. The occasion of first intercourse with a partner was chosen since it represents an identifiable and notable act of intercourse comparable across the sample (see later in this section). In addition, because contraceptive non-use tends to be more likely on this occasion compared to subsequent acts of intercourse with the same partner (see Chapter 1), detailed information on contraceptive non-use would be more likely to be generated. All interviews were tape-recorded and fully transcribed into text and stored securely in a locked file cabinet (as were the original cassette recordings).

Fifty-six in-depth interviews were conducted, lasting between twenty-five minutes and one and a quarter hours. Nineteen women were interviewed at the young people's clinics, 18 women and 10 men from the youth clubs and six women and three men from the youth advisory centres. This resulted in a total interview sample of 43 women and 13 men. All interviewees were aged between 16 and 19 years inclusive. A total of 113 instances of first intercourse with a new partner were recalled in the interviews (23 by men and 90 by women). Of these 113 instances of intercourse recalled, 60 were defined by the respondents as FIRSP and 53 as FIRONS. Although interviewees were not recruited according to their sexual preference, all reported instances of intercourse were heterosexual.

Since the majority of data relate to the 113 instances of intercourse, the discussion/texts relating to these events will represent the units of analysis when presenting the findings. However, there are occasional instances, when presenting non-intercourse specific themes, whereby the sample size (n=56) and text detailing aspects of the individual rather than the recall of intercourse will be the unit of analysis; this will be made explicitly clear when presenting the appropriate data.

5.2 Software used

When considering the software used, two important points will be discussed. Firstly, the reasons behind not continuing the use of The Ethnograph, and secondly, the use of a SPSS file to record some additional quantitative findings to complement the CA undertaken in this study.

5.2.1 Abandoning The Ethnograph

The Ethnograph (v. 4.0 in DOS; the Windows application was not released at the time of analysis) was used to code and retrieve the first 14 of the interviews at which point it was rejected on the following grounds. The principal reason was that this package was not ideally suited to the *type* of data that was gathered in this project. Given the amount of data surrounding each instance of intercourse (between one and three instances per case) that has been outlined above, The Ethnograph had to extract an enormous amount of data, *per case*, to compare with other cases across the sample. This proved not only to extremely time consuming, but the extensive detail

relating to each instance of intercourse often became separated or lost when eventually comparing these cases cross-sectionally or between other cases. By rejecting The Ethnograph, the author was, in contrast, able to be in closer contact with such data as it was compared cross-sectionally allowing greater scope for its explanation for contraceptive behaviours. The Ethnograph would have been more suitable for identifying, extracting and comparing themes cross-sectionally if these themes could be isolated at ease and without detriment or loss to further detail. For example, comparing respondents' attitudes to specific contraceptive methods would be more suitable, since it is not essential to relate these data to the remaining data recorded in each case. However, to compare instances of intercourse (in the detail illustrated above) was clearly less appropriate.

Moreover, to use The Ethnograph in this study would be of some additional detriment to the interpretative analysis of the data (Section 5.3), by enforcing the author to code individual themes which perhaps were not as straightforward compared to when conducting the CA. Although rejecting the use of The Ethnograph proved to be time consuming for the author, this was compensated by the greater potential for flexibility, detail and interpretation offered by the traditional cut and paste approach, particularly given the amount of within-case or vertical analyses that had to be performed. Using the coding strategies that will be outlined later, similar themes and explanations supported by extracts of the transcripts (or quotations) were literally photocopied and grouped together in separate box files.

5.2.2 SPSS

In order to assist the CA, some information from the interviews was coded quantitatively into SPSS. Only data that could be suitably coded were entered in this way; predominantly yes/no responses or interval data such as age, time before first intercourse, etc. In some respects, this quantitative approach gives an added feature to the findings, allowing the author to define the characteristics of the sample (by age, gender, socio-economic deprivation, etc.) and to show how the selection of interviewees was by no means *ad hoc* but, in contrast, a systematic process to ensure a highly varied sample (see earlier in Section 3).

Percentages and frequencies will be noted in the findings and also Chi square tests to indicate the significance of the cross-tabulations used (using the convention to report these tests only when the minimum number of expected counts per cell exceeds 5). These quantitative data are only applicable to the CA and are not used in the more interpretative approaches. The units of analysis from which the statistical data are derived will be made clear (sample size or number of intercourses recalled). These quantitative data serve only to complement and/or introduce the findings from the CA; no claims about generalisability or representativeness are being made.

5.3 ANALYTIC STRATEGIES

As has already been indicated in the previous section, the postpositivist research paradigm underlying this project is consistent with the two distinct types of analytic strategies that were used here. These are CA and Interpretative Phenomenological Analysis or IPA (Smith, 1996) and findings derived from both approaches will be distinguished on account of the contrasting principles guiding both techniques. This section will now present each of these approaches in turn to allow the reader to see exactly how the reported themes were derived from both rounds of interview.

5.3.1 Content analysis

The interview schedule attached in Appendix 3 illustrates that the majority of the questions were semi-structured surrounding the events leading up to a specific act of intercourse (this appendix also includes a summary of key topics and an indication of the changes made to the schedule following initial analyses). These events, although actually rarely 'yes' or 'no' responses, could be placed into fairly distinguishable and isolated coded categories. The CA served to compare and contrast (and literally 'count') these coded responses throughout the data set. This section will detail the coding process and then state more precisely the stages in which the CA took place following the construction of a suitable coding frame.

The coding process

The key difference between CA and IPA rests on the greater element of deductive reasoning within CA which, in this case, has been based around the more specific research questions derived from the reviewed literature (and presented in the conceptual framework). The second key difference is that CA enables a clear-cut coding strategy to be employed (which in turn lends itself to the quantitative comparison) which, in this project, is able to categorise the events surrounding each intercourse, as well as other non-intercourse specific characteristics.

There were five different types of data generated from the interview from which responses could be coded and the data entered into SPSS data file (the full coding frame for the interview data illustrating variable names, labels, codes and resultant frequencies is attached in Appendix 5).

- Socio-demographic/Introductory information: age, gender, recruitment site, etc.
- Intercourse specific: relationship types, expectancy of intercourse, partner communication, etc.
- Typologies defined in account of the intercourse specific data: consistent/inconsistent contraceptive users, etc.
- Non-intercourse specific: service use, preparatory skills, etc.
- Intentions/self-predictions towards future use (will be dealt with in Chapter 7).

The introductory information is relatively straightforward (specific data easily coded by 'yes' or 'no', male or female, etc.) and provides a profile to each individual respondent as well as the overall sample. The majority of the coded information was derived from the intercourse specific information (which could be recorded for up to three occasions of intercourse for each interviewee) and which was coded as follows (this Table 23 is a simplified account of the categories used and more detail will be provided when presenting the results in Section 7):

VARIABLE NAME	VARIABLE LABEL	CODING
rtype[16]	Relationship type	1=steady, 2=ons[17] known, 3=ons not known,
rcontus	Contraceptive use	1=yes, 2=no
rcondus	Condom use	1=yes, 2=no
rcert	Certainty of the relationship progression	1=clear, 2=not clear, 3=not stated, .=missing (all ONS)
ronset	Onset of 1st intercourse	1=long delay (>2 weeks), 2=some delay (1-14 days inclusive), 3=same day – including all ONS)
rcommin	Communication (include implicit) about intercourse before	1=yes, 2=no
rcommco	Communication (include implicit) about contraception before	1=yes, 2=no
rexpect	Expected intercourse	1=yes, 2=no
rreason	Reason for intercourse	1=strong emotions/love for partner, 2=more physical than emotional
rparres	Partner took responsibility	1=yes, 2=no
rpressi	Pressure for intercourse, include persuasions, image etc.	1=yes, 2=no
rpressc	Pressure for **no** contraceptive or condom use	1=yes, 2=no
rphys	Physical context	1=stable, 2=unstable
ralco	Alcohol consumption immediately before intercourse	1=yes, 2=no

Table 23: Coding categories for intercourse-specific data

In addition to noting whether contraception (and specifically a condom) was used on the occasions recalled by the interviewees, a measure of 'risk' was coded to each instance, so incorporating the potential for sexually transmitted infection alongside that of conception. To illustrate this point, for those interviewees reporting pill use, it is important to note that not everyone actually first took the pill in preparation for the occasions of intercourse recalled. Indeed, of those interviewees having

[16] Within each case, instances of intercourse were distinguished by using codes r1type, r2type, etc.
[17] ONS = 'one night stand'

ever taken the pill, 28% (12/43) had first taken it to reduce period pains rather than in preparation for intercourse. Moreover, 49% (21/43) of those who had ever taken the pill had stayed taking it ever since, despite not always having intercourse on a regular basis. To simply compare cases, therefore, by whether they did or did not use contraception would not only reveal little detail about the preparation for such contraceptive use in the recalled intercourses (given these patterns of pill usage), but would also overlook other important risks such as STI potential. For example, even if the pill was used to prevent conception (the pill having been taken at an earlier age to reduce period pains or perhaps when in a previous relationship), a lack of condom use for all one night stands (or immediate intercourse with a partner with whom a steady relationship was eventually established) would overlook the preparatory aspects of contraceptive use and also ignore the potential for STI. In light of this, the data set has been organised in a more systematic manner according to *risk* as opposed to use of contraception. To reduce the ambiguity, only two measures of risk were adopted: Risk or **R** (either high or low risk) and No Risk or **NR**. The measures of risk have been based on the following assumptions:

Scenarios	Category	Nature of risk
I. Using no contraception during intercourse	Risk	STI and conception
II. Using no condom[18] at FIRONS[19] (assuming that there is no certainty as to whether partner is a virgin or has been tested negative for all STIs) even if other methods of contraception are being used.	Risk	STI
III. Using no condom at FIRSP[20] (assuming that there is no certainty as to whether partner is a virgin or has been tested negative for all STIs) even if other methods of contraception are being used.	Risk	STI
IV. Using a method of contraception other than a condom at FIRSP (if there is a degree of certainty that partner is a virgin or has been tested negative for all STIs)	No Risk	None
V. Using a condom at FIRSP	No Risk	None
VI. Using a condom at FIRONS	No Risk	None

Table 24: Classification of Risk and No Risk scenarios

These categories are determined by the researcher's assessment of the respondents' risk. The area of complication concerns the boundary between categories III (**R**) and IV (**NR**) and hinges around what is interpreted (by the researcher) in the interviews as warranting such a *degree of certainty* as to the STI potential of the partner. This is based upon the respondents explaining to the interviewer how they were certain that their partner was a virgin, for example, and could include cases where a discussion about this had occurred before intercourse. The researcher would then be able to use his/her judgement to determine whether this would be classified as a sufficient 'degree of certainty' to warrant a no risk scenario (if methods other than condoms were used). The tentativeness of this assumption is acknowledged, but is also inevitable and essential if the data set is to be categorised more realistically rather than just by whether contraceptives or condoms were used. Even if it is recognised that false information may be exchanged between partners, it is assumed that discussions prior to intercourse about previous sexual partners (if any) and use of

[18] Incidentally, none of the interviewees had experienced use of the Femidom.
[19] FIRONS = First intercourse with the most recent one night stand
[20] FIRSP = First intercourse with the most recent steady partner

condoms with previous partners (as well as STI testing of course) is taken as such a degree of certainty, and will therefore be used, by the researcher, to distinguish between categories III (**R**) and IV (**NR**).

In account of the intercourse-specific codes provided above, the author was also able to categorise the interviewees in a number of ways that summed their overall use patterns, communicative skills, etc. as follows:

VARIABLE NAME	VARIABLE LABEL	CODING
contuse	Overall use of contraception (not just 1st intercourse)	1=consistent, 2=inconsistent
conduse	Overall use of condoms (not just 1st intercourse)	1=consistent, 2=inconsistent
condpers	Has been persuaded by partner to use condoms	1=yes, 2=no
condnotb	Shown not to be bothered about not using condoms	1=yes, 2=no
condnota	Has wanted to use condoms but cannot raise subject	1=yes, 2=no
condfait	Has talked about condoms with a partner but still ended up not using them	1=yes, 2=no
periodp	First went on pill for periods	1=yes, 2=no, 3=Don't know, .=missing or male
sti	Sti always perceived as a threat/issue?	1=yes, 2=no
concep	Conception always perceived as a threat/issue?	1=yes, 2=no
talkdiff	Talking about contraception is difficult	1=yes, 2=no
negcond	Negative associations with condoms	1=yes, 2=no
probcond	Problems with using condoms	1=yes, 2=no
habit	Evidence of habit or routine of contraceptive use or non-use	1=yes, 2=no

Table 25: Coding categories for the interviewees based on the intercourse-specific data

The categorisations listed immediately above were useful during the systematic comparison and verification of the themes and explanations generated by the interview data - essentially by being able to group together, for example, the consistent users to see what characteristics they shared and to compare them to the inconsistent users (see later in this section).

Non-intercourse specific themes were derived from the semi-structured questions towards the end of the interview which focused upon preparatory behaviours and service use. These codes are presented as follows:

VARIABLE NAME	VARIABLE LABEL	CODING
prepcond	Carry condoms	1=yes, 2=no, 3=not stated
continpi	Continual use of pill between relationships	1=yes, 2=no, 3=Don't know, .=missing or male
servuse	Ever used services	1=yes, 2=no
usedgp	Ever used GP	1=yes, 2=no
usedclin	Ever used clinic	1=yes, 2=no
usersebe	Used services before 1st ever intercourse	1=yes, 2=no, 3=not stated, .=missing (never been to service)
mfresp	Male or female responsibility for use of services (in past)	1=mainly male, 2=mainly female, 3=both equal, 4=not stated, .=missing (never been to service)
mfresp1	Male or female responsibility for obtaining condoms (in past)	1=mainly male, 2=mainly female, 3=both equal, 4=not stated, .=missing (never used condoms)

Table 26: Coding categories for non-intercourse-specific data

To illustrate the coding process further, examples of how the responses were coded will be provided using extracts from actual interviews that covered the intercourse specific themes, the typologies defined as a result of these, and the non-intercourse specific themes. These examples will indicate to the reader the basis upon which the responses were categorised to a particular code.

Example 1 (intercourse specific) - Talked to each other about contraception

I[21]: Did you talk to each other about contraception at all before having intercourse?
R: Yes we did
I: Can you tell me more about what was said?
R: Umm, he sort of kissed me and you know I sort of said before this goes too far I think you ought to be put a condom on and he said oh, something like, oh, I haven't got any and I was like well that's okay then because I have sort of thing but if he have had one then he could have used his but there you go....'
(Coding decision - Did talk to each other about contraception before their first intercourse together, so coded as 1 or talked about contraception beforehand).
(Next step - Compare and contrast with other transcripts to elaborate and explore whether talking about contraception is associated with its use. Perform Chi square tests to report if these associations are statistically significant)

Example 2 (general characteristics/typologies) - General use of condoms

Case 32 recalled three accounts of first intercourse with a new partner during which condoms were always used. Towards the end of the interview he was asked,

I: Have you always used condoms? Or have there been any occasions of first intercourse with someone where you haven't?
R: No. I've always used them, I would never chance it.
(Coding decision - Always used condoms, therefore his general use of condoms was coded as 1 or consistent user).
(Next step - Can compare and contrast consistent and inconsistent users and analyse the data set more systematically - see stages of CA)

[21] I=Interviewer and R=Respondent

Example 3 (non-intercourse specific themes) - ever attended a clinic for contraceptive advice

I: 'Have you ever been to a family planning clinic?'
R: 'No.'
(Coding decision - has never attended a family planning clinic, therefore coded as 2 or never attended).
(Next step - Can compare and contrast those who have/have not ever attended a family planning clinic)

On the whole, this coding process was fairly straightforward and there were few occasions upon which responses could not be accurately categorised into one of several possible responses. The reasons for this were not only due to the number of semi-structured (as opposed to free-response open-ended questions - see next section) and the range of possible codes offered, but also because the interviewees were asked to recount their experiences from a clearly identifiable and specific occasion of intercourse.

Stages of the content analysis

To provide more detail of the CA of these specific data (following the construction of a coding frame), a two stage process was used as follows. In the first stage, case by case summaries were compiled for each account of contraceptive use and non-use, recalled from the first intercourses with recent partners. For each of these occasions, as well as noting what type of contraception was used (if any), details relating to a number of issues surrounding the specific intercourse were extracted and coded appropriately (see earlier). These included intrapersonal details (age, gender, confidence, awareness, etc.), interactional or partner related details (age of partner, onset of first intercourse together, expectation of intercourse, reasons for intercourse, communication about intercourse and contraception and pressures or persuasions that may have been evident, etc.) and situational or contextual issues (location of intercourse, alcohol or drug use, etc.). Indeed, this record of each specific intercourse (for each case) represented the majority of data that were used to help explain levels of contraceptive use, and is consistent with the constructs outlined in the conceptual framework that was derived from the research questions noted earlier in this chapter

(and also in Chapter 4). This case study or 'vertical' approach (Van Zessen, 1995) allowed certain themes to be identified which were then checked and compared with other cases in the second stage of analysis. In this second stage, cases were compared horizontally or cross-sectionally (with other cases) to reveal how consistent and repetitive these explanations for contraceptive use/non-use were among the total sample.

This cross-sectional analysis (between other cases) took place in three main stages shown as follows, according to the definitions of risk noted earlier. In the first stage, all cases (n=56) were compared and contrasted with each other to reveal overall similarities or differences between them in terms of the themes and explanations derived from the within-case analysis. In the second stage, all cases reporting an instance of **R** and **NR** (n=28) were analysed to indicate the more critical findings and explanations. Finally, the third stage focused upon those cases who reported no contraception use in at least two of their recalled intercourses (n=7). Comparing all cases (Stage 1) appeared to be the most comprehensive way of deriving findings that may help to explain instances of **R** or **NR**. However, by concentrating in particular upon those cases which have experienced both **R** and **NR** situations (Stage 2), issues that may be critical in determining instances of **R** and **NR** became more obvious. This second stage allowed the author to look and compare the **R** and **NR** encounters *within* each case (hence controlling for the majority of intrapersonal influences) and ascertain which factors appeared to affect the likelihood of **R** or **NR** situations. Stage 3 concentrated on those cases that had not used contraception for at least two of their recalled instances of first intercourse, and were hence at risk from both conception and STI; this group were the least effective contraceptive users and analysis of this subset clarified the differences between this group and the remainder of the sample (in Stage 1). Throughout this analytical sequence, it was mainly the intercourse specific (especially) and non-intercourse specific themes that were compared and contrasted from the instances of where contraception (and condoms) had or had not been used.

This analytical sequence and the coding examples provided previously illustrate how the key explanations were extracted from the data in a systematic manner (although is not necessarily reflected in order in which the findings are presented) essentially by adopting a comparison and

contrast technique to develop themes from which verification could be drawn by the further reading and coding of the complete data set. This illustrates the main purpose of CA – by comparing scenarios to see if, for example, contraception was used less often if intercourse was unexpected, if there had been no discussion about contraception beforehand, etc. The qualitative responses were able to elaborate upon any of these relationships illustrating, according to the intercourse and non-intercourse specific themes especially, the reasons 'why' contraception was or was not used on this occasion. This is the point at which CA merges into the more interpretative approaches which search more inductively for greater explanations (the comparison and replication approach will also be shown to be a fundamental part of IPA in the next section).

This use of cross-case or cross-sectional analysis illustrates the main difference between the analytical methods used for the round 1 and 2 interviews. Whereas 56 cases and 113 episodes of intercourse permit cross-case analysis, the fewer respondents (and episodes of recalled intercourse) in round 2 (see Chapter 7) resulted in the wider use of within-case analysis (or use of case studies) for these follow-up interviews.

The coding strategies outlined previously formed the basis of the CA: quantitative information was entered into the data file thus allowing low level, descriptive statistical tests (such as Chi squares) to essentially complement and illustrate the contrasting themes and explanations as to why the respondents used or did not use contraception (and specifically condoms) on the occasion of first intercourse with their most recent partner.

5.3.2 Interpretative phenomenological analysis

This interpretative investigation took place in two key ways. Firstly, were the use of specific open-ended questions which were listed in the interview schedule and were asked to all respondents. These included general questions such as 'compare situations where you have and have not used contraception; what made the difference? or what made it easier or more difficult on these occasions?'. Secondly, and for the majority of the more inductive exploration, investigation followed the responses from the more structured responses identified in the CA. For example, if a respondent recalled that intercourse was unexpected, and that contraception (or condoms) had not

been used, he or she would then be asked to elaborate upon their answer (and to review if this was an influence upon the outcome, and if so how and/or why this was the case). General principles of the IPA approach will be presented first, including how the transcripts were handled in order to generate the themes that arose from the data, and this will be followed by an example of the coding and thematic construction for this type of investigation.

General approach of IPA

Smith (1996) defines the roots of IPA within phenomenology (individual's perceptions of an event or object) and symbolic interactionism (meanings individual's ascribe to events are the main focus, which themselves can only be unearthed through ongoing interpretation). Through the continual search for meanings and themes from transcripts (central to the inductive style of this analysis), Smith (1995) summarises the principles of IPA as 'a sustained engagement with the text and a process of interpretation' (Smith, 1995, p.18). Moreover, given this emphasis upon interpretation and search for meaning, there are certain similarities between this analytical approach and the Grounded Theory perspective (Glaser and Strauss, 1967), which essentially seeks 'for developing theory that is grounded in data systematically gathered and analyzed' (Strauss and Corbin, 1994, p.273). Whilst grounded theory also looks for verification of the emerging themes through the constant comparison with other data, its main difference to IPA is with grounded theory's more 'open' style (using a wide range of questions and observations to draw meanings); IPA, as used in this project, essentially searches for more meaning from the responses to the semi-structured questions asked to all respondents.

The author has followed the analytical principles defined by Smith (1995) in his use of IPA. He details the search for themes and begins by focusing and immersing within a single case or transcript to note preliminary interpretations and interesting explanations (that have not been revealed through the CA). Still within the single transcript, a list of these emerging themes and the relationships they have with each other may allow them to be grouped together as 'master themes'. To apply some form of coding mechanism and reference to where this theme was observed (i.e. a case identifier) is an essential part of this process. In this way, reference to a particular theme can be illustrated through the appropriate text segment or quotation when presenting the findings, and

it also makes the task of repeatedly reading and checking the data for similarities with the remaining cases a great deal easier. If different themes are evident in the remaining cases, then the cases already analysed are checked once more to see if they also offer such explanation. This process of interpretation and constant interaction with the text indicates the key difference between IPA and CA. This will be indicated in the example shown as follows:

Examples of coding and thematic construction

An example of how the themes were coded and constructed is as follows from a continuos segment of a single transcript (Case 19), starting with the initial investigation into, in this case, whether partners had talked to each other about contraception before their first intercourse together:

A) General, semi-structured questioning (coding as shown for CA) -

I: Did you talk to each other at all about contraception before having sex?
R: No, we didn't

B) Elaboration and search for explanation (coding as shown for CA) -

I: Do you think talking about it beforehand would have made it easier or harder to use a condom?
R: Probably would have made it easier I suppose. But it was really difficult.

C) Inductive exploration through IPA and a theme derived inductively -

I: Have you ever managed to talk to someone about condoms before having sex with them?
R: No
I: Why not? I mean what makes it so difficult. I'd really like to know.
R: Well, I don't know, it's quite hard.
I: Could you perhaps tell me in relation to your last partner. I mean, what made it difficult talking to him? That was if you wanted to use a condom with him.

R: Yeah, I did want to but couldn't talk about it.

I: What was the most difficult part?

R: His reaction I suppose. I mean I thinking about it, I was laid there and I thought God, cause he's quite cool, cause I was younger I saw him as a cool character do you know what I mean? If I was older, I was like, he's a dude and I thought I can't say anything cause he'll think I'm well sad.....I thought I can't say, oh, have you got a condom.....I thought I can't say that, it's uncool to say that, he'll think I'm really sad or something.....I was so scared of his reaction.

(Code response - note case identifier and line number in the transcript)

(Next step - Check with other transcripts to see if this theme is seen elsewhere. Group together similar themes into 'master themes' as well as search for comparable explanations within these larger groups)

In this case, the codes applied in parts A and B have been illustrated in the CA section. That is this respondent did not talk to her last partner about contraception before their first intercourse together (i.e. rcommco=2), she finds it generally difficult to talk about contraception (i.e. talkdiff=1) and she has wanted to raise the subject of contraception but just can't achieve this (i.e. condnota=1). However, coding the more interpretative responses (part C) is perhaps less clear-cut but, nonetheless, is based on the similar principles as before. In this case, the reasons for difficulty in communication is recorded as fear of partner's reaction. Referring back to the general principles of IPA, these barriers to communication due to *fear of partner's reaction* would constitute a 'master theme' and within which, for this example, the *partner's reputation* would appear to offer even more explanation for this. Having found this theme for Case 19, the remaining cases are checked to see if they also support this argument (if so, then the code and point of reference is noted). Again, the exploration and probing for responses will be become clearer when presenting the results.

This example also illustrates the important link between CA and IPA, the importance of the interviewer's skill in probing for more explanation and the less clear cut coding methods in IPA (that are very much inductively derived and cannot be predefined as in CA). Once the coding frame for these emerging themes has been derived, then comparison and verification for these are undertaken according to the general principles of IPA noted earlier in this section. Given that some

of these themes are derived inductively, and thus may be revealed in relatively few cases, the emphasis for verification from similar explanations among other cases (which is more paramount in CA) is less of a requirement here (and as such, interesting themes derived inductively from one or two cases will be reported in the findings alongside those more widely evident).

6. THREATS TO THE VALIDITY OF THE RESEARCH

The importance of considering the validity of the research within a post-positivist paradigm was acknowledged earlier by Huberman and Miles (1994) in Section 4 of this chapter. This section intends to illustrate the attempts to minimise the threats to validity and to discuss some of the criteria (in relation to this project) by which valid qualitative research is judged.

Whilst acknowledging the element of volunteer bias associated with these interviews (and the subjectivity of the interpretative analytical approach), the author is confident about many aspects of the reliability and validity of the data that have been generated. In other words, he is confident that the questions and prompts were providing consistent and dependable findings, and that responses to these lines of enquiry were accurate and truthful. Every attempt was made to build up a strong rapport with the interviewee, both during the recruitment phase (either when arranging an interview via the telephone or when introducing the project to groups of young people) as well as during the interview itself. This rapport was fostered by paying particular attention to reducing the power imbalance between the interviewer and interviewee (for example by dressing 'appropriately' and by not emphasising the author's personal responsibilities for the research project). For those interviews conducted by the author, all were positively received, highly enjoyable and most informal and relaxed. Reports from the female interviewers suggested that their interviews were similarly well received. This provides confidence in that the embarrassment that some respondents may have felt in discussing such sensitive issues was negligible; certainly not to the extent of determining their responses to particular questions or prompts. Moreover, the relaxed, informal setting allowed the interviewers to clarify any terms or questions that could arise (for example, sexual *intercourse* as opposed to having sex, the difference between steady and more casual partners, etc.). Indeed, given the discrepancies noted in young men's reported sexual behaviours, who were interviewed twice at a year's interval (first as part of a structured survey and

followed by an in-depth interview), Wight and West (1999) note contrasting verbal reports (subject to embarrassment) and inadequate understanding of the question as possible explanations for such differences. These data gathered in this project, in a relaxed and informal manner, show some support for Wight and West's (1999) argument that in-depth interview data have a greater validity than their survey based data (in the context of sexual behaviour research). Wight and West (1999) also note that poor recall may play a role in determining the validity of responses; hence in this project, all respondents were discussing first intercourses (a clearly identifiable occasion) with *recent* partners rather than *first* ever partner (if respondents have experienced intercourse with more than one partner); the latter which could have been more likely to involve problems with recall.

Moreover, Sheeran and Abraham's (1994) review of the measures of condom use in 72 studies of HIV-preventive behaviour has also helped influence the questions and prompts offered in these interviews. For example, condom use has been focused upon a specific occasion (see above) and frequency measures (i.e. how often have you used condoms?) have been avoided due to their subjective responses. Also, condom use or non-use has been explored in conjunction with the 'type' of partner and whether instances of intercourse were classified as **R** or **NR** (for example, STI/HIV testing prior to intercourse, how well they 'knew' their partner, STI/HIV risk assessment of partner, etc.). In terms of 'activity specification' (Sheeran and Abraham, 1994, p.201), these interviews have focused specifically upon vaginal intercourse and this was clarified early on in all interviews. In addition, to reduce response bias, all interviewers made a specific point to respond positively, following declarations of condom use *or* non-use. For example, a typical response from the interviewer would be, 'thanks for your honesty, there are no right or wrong answers and we are *really* interested in hearing more about this.....'. Moreover, for those interviewees who had completed a SAQ during the recruitment phase, their patterns of sexual behaviour recorded in the interviews were consistent, assuring the author that social desirability effects (at least for these respondents) were negligible.

A number of these issues noted above meet Yardley's (in press) characteristics of 'good' qualitative research. 'Sensitivity for context' (Yardley, in press) is reflected by the earlier discussions regarding epistemology and Chapters 2 and 3 which illustrated how this research

acknowledges the relevant theoretical and empirical literature (particularly with its impact on the research questions drawn out in Section 2 of this chapter). In addition, the context of the relationship between interviewer and respondent is noted by the efforts (discussed above) to reduce the power imbalances that may be evident. Previous accounts of the research questions shaping the interview schedule (Section 2), the selection and recruitment process (Section 3) and the methodology of qualitative analyses (Section 5) have all illustrated the author's 'commitment, rigour, transparency and coherence' (Yardley, in press) towards the research, and this will also be shown when presenting the interview findings. In conjunction with this, it is also worth noting that analysing the transcripts of 56 cases went beyond the 'saturation point' (at which point the analysis of more cases generates little new explanation); this was to ensure a greater likelihood of achieving a sufficient number of round 2 interviewees. Chapter 8, detailing the research implications will meet with Yardley's (in press) 'impact and importance' with reference to both theoretical and policy-related issues.

Finally, this research project, along with all similarly conducted qualitative research, must also acknowledge that particular validity issues (such as generalisability and the search for causation beyond association) do contribute to the limitations of the study. Moreover, some of Yardley's (in press) criteria of 'good' qualitative research, having not been met sufficiently, will also be reflected in these limitations. This section has sought to acknowledge issue of validity, detail how some of these threats have been minimised, but also recognises that the research also has several leading limitations (which will be detailed further in Chapter 8).

7. RESEARCH FINDINGS FROM THE FIRST ROUND OF INTERVIEWS

According to the two methods of analysis used, the results will indicate (in the section heading) whether they were derived from CA or IPA; unless stated, it should be assumed that CA was used. Where CA was used, percentages and frequencies will be shown. Where sufficient numbers can support meaningful statistical tests (i.e. more than 5 expected counts per cell), Chi square tests will be used to report any significant differences between **R** and **NR** situations.

Some introductory quantitative findings will be presented first. Of the 113 instances of intercourse recalled by the interview sample, contraception was used on 74% (or 83) of occasions, of which 86% (70) involved condom use. Moreover, of the total sample of respondents (56), 46% (26) reported *always* having used contraception of which 88% (23) had *always* used condoms. Consistency of contraceptive and condom use (both throughout respondents' sexual careers and with reference to the specific intercourses recalled) did not differ significantly according to the age or gender of the respondent, where they were recruited from (clinic or non-clinic based) or whether they had ever or never used services (either their GP or clinic) in the past. On the whole, the occasions of intercourse recalled were unexpected (only 20% or 23 of intercourses were expected). This was recorded in terms of whether respondents knew intercourse was going to occur *earlier on that same day* (see *Expectation of intercourse* for more detail). Intercourse was more likely to be unexpected in a one night stand scenario, with 92% (49/53) of FIRONS reported as unexpected compared to 70% (42/60) of FIRSP (Chi square=9.05/df=2/p=0.011). The likelihood of contraceptive and condom use did not differ significantly between these two scenarios. When looking at FIRONS only, 77% (41/53) were among partners who 'knew' each other beforehand (such as existing friends) whereas 23% (12/53) had met each other for the first time that same day. Contraceptive and condom use was least likely in these one night stands among comparative 'strangers', although the absolute numbers (12 instances) are too small to make meaningful comparisons.

Since the majority of the data relates to the specific instances of first intercourse, the first set of findings to be presented (*intercourse specific themes*) will cover this area. Many of these themes (interactional especially) were represented in the conceptual framework detailed in Chapter 4. Additional analyses that are non-intercourse specific will follow (in Section 7.2) which detail confidence, self-esteem and self-efficacy, problems using condoms and service issues.

7.1 Intercourse specific themes

Key themes surrounding intercourse specific events will be outlined at three conceptual levels in conjunction with the objectives and conceptual framework (Figure 6) presented in Chapter 4: Intrapersonal (or individual) themes, Interactional (or partner-related) themes and finally,

Contextual (or situational) themes. To reiterate, the more 'dynamic' issues recorded in the round 1 interviews will be presented in Chapter 7. These categories have been set purely to aid the presentation of the data and are not necessarily mutually exclusive. Finally, it is worth mentioning that the findings presented represent the main *differences* that are observed across the data set (in relation to **R** and **NR** scenarios), and less emphasis has been given to issues which, in essence, show minimal difference and that therefore offer comparatively less explanation.

7.1.1 Intrapersonal themes - Content Analysis (CA)

Of all the intrapersonal themes derived from the interviews that are intercourse specific, the issue of awareness proved to be most important. It appears that having a base level of knowledge regarding the behaviours required to prevent conception and STI is essential. Respondents' lack of full awareness of the potential for conception and/or STI was apparent for a minority (too small to make meaningful quantitative comparisons according to age or gender) and they indicate an area of great concern. For example,

'Cause I didn't think it [CONTRACEPTION] was needed.....we didn't have sex that often.' F(18)FIRSP-**R**[22] (2)

'It just didn't occur to me.....cause I was sixteen and just didn't know much about it [CONTRACEPTION].' F(18)FIRONS-**R** (4)

The majority of people, however, were aware of the potential for both conception and STI, but some perceived themselves as not being personally susceptible to this risk or 'unrealistically optimistic' about the outcomes (Weinstein, 1982). For example,
'I was a bit naive, well still am naive, but not as naive as I was. And I don't know. I don't even really think that I thought about it until a month or so after I started sleeping with him.....it was sort of at the back of my mind. I thought, oh, no it won't happen to me.' F(19)FIRSP-**R** (7)

[22] For clarification: F = Female, M = Male, 18 = Age, FIRSP = First intercourse with most recent steady partner, FIRONS = First intercourse with most recent one night stand, **R** = Risk example, **NR** = No risk example, case number in brackets.

'I didn't even think about it, I don't know why I just didn't....I just thought oh, it's not going to happen to me, not yet.' F(18)FIRSP-**R** (19)

In relation to this unrealistic optimism, other people reported that, at the time of intercourse (perhaps due to high states of emotion or arousal), they simply did not think about contraception, condoms or consider any of the potential consequences,

'Well it [INTERCOURSE] just happened, I mean we just, it [CONTRACEPTION] just wasn't thought about at the time.....when it comes to having sex, your mind is on different things, it's not actually saying, oh yeah, you should use a condom or you should be using this or whatever, it's on just one thing, you're going to have sex and you just do it.' F(19)FIRONS-**R** (22)

'.....during it [INTERCOURSE] it was just sort of like yeah get on with it but then afterwards I thought, I thought shit what if she's pregnant, do you know what I mean, you know and so I thought right then, go and get some condoms from then on.' M(17)FIRSP-**R** (30)

In relation to the Health Locus of Control (Rotter, 1966), some people perceived the likelihood of STI as more down to fate or chance rather than a product of their own behavioural choice. The next example illustrates this clearly and note, even though perceived as fate, her relief when the test for HIV was returned as negative,

'Don't know, if it's [HIV] gonna happen.....it don't really bother me cos you're going to die one day anyway, so don't really bother me, cos if you're going to get it, you're going to get it aren't you..... but I've been tested for it, but it came up as negative, thank God.' F(17) (56)

Although this lack of awareness about contraception and/or STI potential was evident for a minority, most participants were aware of the risks involved. For the majority of participants, additional explanations thus play a role in accounting for their experience of risk situations. The following sections offer such explanations.

7.1.2 Interactional themes - CA and IPA

The majority of the data generated by the interviews surrounded the interactions between partners leading up to their first intercourse. These interactional themes were as follows: relationship certainty, onset of first intercourse (with a current or most recent partner), expectation of intercourse, reasons for intercourse, pressures and persuasions (relating to the gender power imbalances and pressures), verbal communication about intercourse and contraception and, finally, taking primary responsibility for contraception and non-verbal communication based strategies.

Relationship certainty - CA

In around one-fifth of all recalled instances of intercourse, there was little certainty as to whether respondents were actually involved in a steady or committed relationship (at the time of first intercourse) with this partner. Given the proportion of relationships showing such 'uncertainty', quantitative comparisons are not included. The following example illustrates a typically uncertain relationship status at the time of first intercourse, and which for this example, resulted in a lack of condom use,

'....we used to get on well, we just ended up snogging one night at a club and then for ages it was just we were seeing each other but it was like not being at all serious.....we were sleeping together then and that's why I was getting so fed up cause I felt like I was just that's all he wanted.....I just wanted more, we had the physical thing but I wanted a bit more sort of and so that's when we sort of became more together'. F(17)FIRSP-**R** (4)

Even in situations where the relationship status was more clear-cut or 'official', risk situations often arose when people moved into a relationship quickly (relates to the onset of first intercourse to be discussed next). This was in contrast to the no risk situations where progression to a relationship was often more gradual, with partners taking the opportunity to get to know each other beforehand. The following risk and no risk examples illustrate the difference,

'.....it was like we went out to a friend's barbecue or something that was it, from then on it was quite a heavy relationship, it wasn't like a gradual thing, like be friends for a while and then see how it goes, we did just jump in.....' F(18)FIRSP-**R** (19)

'Oh well, at first we were friends anyway. And then we sort of, when we got together we were sort of friends again, just got to know each other a bit better and it just went on from there.' F(19)FIRSP-**NR** (12)

Onset of first intercourse (with a current or most recent partner) - CA

In developing steady relationships (as opposed to a ONS), first intercourse tended not to occur immediately after first 'getting-off' with each other; indeed intercourse was normally delayed from anything from a couple of weeks to six months (62% of the instances of FIRSP, or 37/60, were delayed beyond two weeks). There were no differences in this response according to age or gender. For those who had delayed this first intercourse, it was more likely that a no risk situation would arise. Indeed, 89% (or 33/37) of those instances of intercourse where intercourse was delayed beyond two weeks (after first 'getting-off' with each other) involved condom use, compared to 51% (35/68) of those where intercourse had occurred within the first two weeks (Chi square = 14.938/df=1/p=0.000). These findings support the statistically significant association between delayed intercourse and contraceptive use reported from the multiple regression analyses of the SAQs (Chapter 5). The reasons behind such a delay range from not feeling 'ready', to not wanting their partner to get the wrong impression about them,

'I didn't really feel that I was totally ready because when we said before I would have gone along with it and that but I felt happier doing it when we did really.' F(16)FIRSP-**NR** (14)

'We could have had quite a lot of opportunities but they.....didn't really want it to I don't think, not right at the beginning, so sort of left it a while.....about a month and a half.....I didn't want him to think I was just sort of sleeping around or whatever, so I was, rather like to wait a while.' F(19)FIRSP-**NR** (12)

In situations where intercourse was more immediate, the majority of these were one night stands. In such scenarios, there were examples of where intercourse was particularly rapid and which led to risk situations,

'It was just like a mad like of the moment thing.....we just went straight into it quite quick.' F(18)FIRONS-**R** (18)

Expectation of intercourse - CA and IPA

Expectation of intercourse was assessed according to whether respondents knew, *earlier on that same day*, that they were going to have intercourse with their partner for the first time. For the whole sample, first intercourse in all scenarios was more likely to be unexpected (see introductory paragraph to the *interview findings*), and hence accurate comparisons according to age and gender and likelihood of risk and no risk situations cannot be made. However, this measure was related to the communication between partners before intercourse (see later). Indeed, for those instances where communication about contraception occurred beforehand, 26% (16/61) reported this intercourse as expected, compared to 8% (6/52) of those who had no such prior communication. The qualitative extracts indicate how unexpected intercourse is reported, and in these examples, how this may lead to a risk situation,

'....my friend was having a free-house and we all just used to like just in and out, but I came home upset one night.....XXXX was making me feel better, yeah anyway it ended up that we just, I know that I'd never ever thought of doing anything with XXXX.' F(17)FIRONS-**R** (4)

A key reason why unexpected intercourse may result in a risk situation could be that it reduces the likelihood of partners having time to obtain condoms beforehand, and may also have allowed less time for partners to have a discussion about contraception. For example (this further explanation was derived from IPA),

'Well that first time it just sort of happened right, it wasn't arranged and I never had any [CONDOMS].....I was expecting it to be like three weeks later.' M(17)FIRSP-**R** (30)

'So obviously that night when we did decide to do it, with my present boyfriend it was all unexpected and you know, we didn't talk about it at all, you know.' F(19)FIRSP-**R** (9)

In situations where intercourse was less unexpected, it was not necessarily the case that partners had talked openly to each other about intercourse or contraception beforehand, or that they had planned a specific date or time. Indeed, it was much more likely that any discussion was brief and occurred just prior to intercourse (see *Verbal communication about intercourse and contraception*). It is also worth reiterating that the less unexpected intercourses were more evident in developing steady relationships implying that, for most ONS, intercourse was more likely to be unexpected (in terms of knowing about intercourse earlier on that same day).

Reasons for intercourse - CA and IPA

Emotional fulfilment as the predominant reason for intercourse was cited in 44% (50) of the total instances of intercourses recalled. There were no differences in this response according to age or gender. When the reasons for intercourse were more emotionally based (rather than purely physically driven), with respondents citing 'trust' and 'love' towards their partner, a no risk situation was slightly more evident (although this difference was not statistically significant). Indeed, in these predominantly 'emotionally-based' intercourses, condoms were used on 68% (34/50) of occasions compared to 57% (36/63) of occasions where the reasons were more physically motivated. The following examples illustrate these contrasting reasons for intercourse,

'Cause I liked him and I thought that you know, he liked me too and it would be a nice thing to do.....we didn't just do it cause it was the thing to do, you know, sort of everyone does it so we'd better do it as well.....it just meant at that moment we were more together than we had been before, if you know what I mean. It'd be like something, if you get that intimate it means you really are together if you do that I would say.' F(19)FIRSP-**NR** (12)

'It was a physical thing.....it wasn't emotional. I'd been going out with him for a month and you know, snogs really brilliant and whah! And I'd had a bit to drink, I wasn't drunk, but you know tipsy.' F(18)FIRSP-**R** (17)

These reasons for intercourse relate closely to the aspirations that some people have had towards their partners (in either a ONS or a steady relationship). These aspirations were unearthed through the further investigative probing by the interviewers and the subsequent analysis using IPA. Indeed, when first intercourse occurred, respondents were often uncertain as to whether, as they hoped, a steady relationship would develop. In this situation, their partners generally had more control of the situation with the respondent being less assertive due to his or her uncertainty about their partner's feelings and aspirations for a steady relationship. In these examples of incompatible aspirations, the likelihood of a risk situation is enhanced (and relates closely to the communication difficulties reported in *Verbal communication about intercourse and contraception*),

'I actually liked him for a long time but I felt that he didn't know I existed.....so I thought you know there's going to be a relationship or something out of it but obviously.....' F(18)FIRONS-**R** (2)

'I wasn't very experienced and wasn't very willing to. But I do remember that night, he followed me around and I was enjoying the attention but then we ended up going into his room and then it just happened, but I did, I let him do it and yeah I was quite happy to do it, but wasn't very experienced and I think I was a bit shy, cause I didn't know. And I didn't know what was gonna happen. I didn't know if it was just gonna be a one night stand or if he liked me.....we went into his room, we were talking for a bit and basically we got out of control.' F(18)FIRSP-**R** (16)

Pressures and persuasions - CA and IPA

Cases of men pressurising their partners for intercourse (there were no examples of women exerting this pressure) were documented in 9% (10/113) of the recalled instances of intercourse. The numbers were too small to make inferences about any age differences or likelihood of risk or no risk situations. For cases where such pressure had been evident, the use of contraception and/or

condoms was usually left to the discretion of the dominant or pressurising partner, and this tended to lead to a risk situation (although acknowledging that the occasions of where pressure was evident was rare). The qualitative extracts illustrate the nature of this pressure and how this is likely to lead to difficulties in ensuring condom use. At the one extreme, this pressure has included intense physical dominance whereby a risk situation was more likely to occur,

'I didn't want it to happen at all..... I mean it hurt, it always hurt before. And I used to be in such pain and I just, so it gets you even worse, you know, thinking about it. And I didn't want to, and we started getting off with one another, and then he just got on top of me and said, you're on the pill aren't you, and I went yeah and then he just started. And I was just lying there like that, and then he came and then that was it, and he got back dressed and went to play with his records and I thought, oh fine! I'm going now like that.' F(18)FIRONS-**R** (17)

'He's a bit of a dangerous man and I thought it was better to sleep with him than say not to basically.....and so like a couple of us went back and he locked his flat door so we couldn't get out anyway, so basically that's the story. I couldn't get out and rather than get, cause I'd asked him whether he'd hit a woman before and he said yes.....and it was just the fact that the front door was locked, you know. It was like, oh, God, I'm not gonna get out of this.' F(19)FIRONS-**R** (9)

Whilst most cases report being on the receiving end of such pressure, the following case was an exception. This young man recalls trying to have intercourse with someone who would only agree if he wore a condom,

'She said to me have you got a condom, and I said no, so she goes hard luck basically, that was it she said basically, she didn't want to do it without a condom.....just one point I did try, you know a little bit and then you know she said we'd better not so I said all right.' M(16) (20)

Aside to this physical pressure, reported more frequently were cases of *persuasion* where the respondents felt less able to respond negatively to intercourse for fear of stigmatisation, poor reputation and image, etc., particularly if they were hoping that a steady relationship would develop (see *Verbal communication about intercourse and contraception* for more detail about

how this persuasion can affect the likelihood of a discussion about contraception prior to intercourse). These findings were derived through more investigative analytical techniques using of IPA. For example,

'I was thinking oh, I'm tired, I can't be bothered with this but if I'd said no, then the attitude would have been there and he would have been like, what do you think you're doing getting in my bed, winding me up and all this lot, then he would have just had a go and it would have been too annoying really.' F(18)FIRONS-**R** (16)

'I don't know, I didn't feel I had to but it was like, it was like I knew he wanted and it was like to be his girlfriend you have to.....' F(17)FIRSP-**R** (1)

Specific pressure not to use contraception or condoms was less widespread (around one in twenty of the intercourses recalled) than pressures for intercourse. Of the few[23] examples available, the following respondents note how their partners were not initially keen to use condoms even though, in both cases, condoms were eventually used. Again, explanation into how this pressure may manifest itself reflected the use of IPA,

'.....cause he kept saying no, no I can't be bothered [TO USE CONDOMS] and I just told him that I wouldn't sleep with him unless he did.....he was just going, oh, I haven't got AIDS you know, I was thinking well you know there's more to it than just AIDS.....he goes, oh, he goes do I have to and I goes yeah.' F(16)FIRSP-**NR** (21)

'I asked her if she had any condoms, she goes why I'm on the pill, I goes I don't really care, have you got any, she was like yeah, I'll go and get you one.' M(18)FIRONS-**NR** (28)

It could also be inferred from failed instances of communication (see *Verbal communication about intercourse and contraception*), whereby a discussion taking place about contraception before first intercourse does not prevent a risk situation from occurring, that pressure or persuasion not to use

[23] The term 'few', when presenting these interview findings, refers to a minority of the sample (of either respondents or instances of intercourse) - typically between 5% and 10%.

contraception has some role to play in these reported situations of risk (together with high states of emotion or arousal and lack of condom availability). For example,

'.....well we both, I checked my pockets, she checked hers, we didn't have none [CONDOMS] so I went along to see my friends and none of them had one. I went back round there and we just thought don't worry about it cause we was both drunk anyway, so we didn't think nothing.....I said shall we do it anyway.' M(17)FIRSP-**R** (24)

'But one time I said to him, because I didn't have any condoms, have you got any and he said no we'll be all right, and I said no. And he said oh you'll be all right. I said I might get pregnant something like. And he said no, it'll be all right like that. It sort of happened.....' F(18)FIRONS-**R** (17)

Verbal communication about intercourse and contraception - CA and IPA

This section and the following *Taking primary responsibility for contraception and non-verbal communication based strategies* reflect the main use of IPA in the analysis of the interview findings. Most of these findings were derived from the more exploratory, investigative analysis of the transcripts.

As already stated previously, intercourse tended to be less unexpected if partners had talked to each other about it beforehand. For all instances of intercourse recalled, around one-half or 48% (54/113) included some form of verbal communication between partners about this intercourse beforehand (both implicit and more blatant communication). Whilst the likelihood of this communication occurring was not associated with age, there was a slight relationship with gender; 65% (17/26) of instances of intercourse recalled by men had included communication about intercourse beforehand, compared to 43% (37/87) of those recalled by women (Chi square=4.19/df=1/p=0.041). Where there had been some communication about intercourse beforehand a no risk situation was the more likely result. Condoms were used in 80% (43/54) of instances of intercourse where there had been such a discussion beforehand, compared to 48%

(28/59) of those where no such discussion had occurred (Chi square=12.49/df=1/p=0.000). The next two extracts help to illustrate this difference,

'So we sort of talked about it [INTERCOURSE] a few times and he said oh I want to and I said yeah, I want to so we sort of kept our eye on a time and a place, cause like when you're fifteen it's a bit difficult and finally his mum was going out for the evening, so we got a bottle of wine and went down to the field near our home and drank it and went back to his house, so it was all very premeditated.' F(18)FIRSP-**NR** (23)

'.....it wasn't any decision. We didn't sit down and say, you know, shall we take this further or anything like that.....it was something that just happened.' F(19)FIRSP-**R** (9)

Communication about intercourse may not always be so far advanced of this first intercourse, and was indeed more likely to have occurred immediately beforehand. The following example illustrates this relatively late communication,

'....We didn't really, umm, we did a lot of kissing and then he said, better stop, and I said to him I think now is the right time [FOR INTERCOURSE].' F(17)FIRSP-**NR** (6)

Moreover, communication about intercourse was not only more likely to be later, but also tended to be more implicit and scripted (compared to communication about contraception - see later). Such communication styles ensure that these 'ambiguous cues' can better protect against possible rejection in comparison to the more explicit discussions or advances during this courtship phase (Wellings and Mitchell, paper submitted). The following two examples illustrate the implicit styles of communication, both of which were associated with a risk situation (more research could be undertaken to tease out the relationship between communication 'style' and condom use).

'Well we were just talking and I mentioned the fact that my parents were away, and I can't remember what happened to be honest but he ended up coming back here and then he got up in the morning and left and I never saw him again.' F(18)FIRONS-**R** (8)

'He didn't ask me [ABOUT INTERCOURSE], he just goes well are you going back downstairs then? And I goes well what are you doing then? And he goes oh, I'm going to stay up here and I goes oh, all right then and I thought, goes what are you doing up here? He said I'm just going to go and sit in here, oh all right then, so we just went in and were sort of talking and just you know.....' F(17)FIRSP-**R** (1)

Partners communicating verbally to each other about contraception before first intercourse together was more widespread than any talk about intercourse; for all instances recalled, 54% (61/113) included some form of discussion about contraception before intercourse (compared to 48% for communication about intercourse). The other key difference was that communication about contraception was predominantly overt and there were only a few cases of the more implicit or scripted styles. A discussion about contraception was more likely in a FIRSP scenario (60% or 36/60 of these occasions) compared to a FIRONS (47% or 25/53 of these occasions). There were no differences in the likelihood of communicating about contraception according to either age or gender.

In no risk situations, verbal communication about contraception between the partners was more likely to have occurred before their first intercourse together, thus supporting the multivariate analyses from the SAQs (Chapter 5). Indeed, of the 113 instances of first intercourse recalled, condoms were used on 44% (23/52) of occasions where there had been no verbal communication and 79% (48/61) of the those where there had been verbal communication beforehand. According to the precise timing of this discussion, the analyses revealed two patterns of verbal communication. These differences in timing were derived from the more investigative analysis of IPA. For some people, these discussions occurred well before their first intercourse together, as indicated in the following example which took place three weeks in advance of this intercourse,

'I said I wanted to talk to him about sex and he was interested, he turned round and said yes. And like how we would go about it and things like that. We was both young so we decided to use contraceptive.....and he said he was willing to use the condom and when we decided to do it, we used the condom.' F(18)FIRSP-**NR** (52)

This advanced discussion appears to commence with an expressed intention for intercourse and then focuses towards a preference for a particular contraceptive method (in this case a condom). In this scenario, the discussion was usually more extended, bi-lateral (involving both partners equally) and responsibilities for obtaining condoms in advance were often explicitly defined. In contrast, and more often reported in this sample, were the discussions that occurred immediately before intercourse. These discussions tended to be more brief, uni-lateral (with one partner taking the lead with the discussion) and often relied on one of the partners assuming responsibility for obtaining condoms beforehand. For example,

'Umm, he sort of kissed me and you know I sort of said before this goes too far I think you ought to be put a condom on and he said oh, something like, oh, I haven't got any and I was like well that's okay then because I have sort of thing but if he have had one then he could have used his but there you go....' F(17)FIRSP-**NR** (5)

As indicated earlier with reference to condom use, a discussion or conversation prior to intercourse was far less likely to have occurred in a risk situation. However, this pattern was not totally consistent: it is interesting that, for those occasions where there had been such a discussion beforehand, around one-fifth or 21% (13/61) of these participants still experienced a risk occasion. For these cases, it appears that a lack of contraceptives being available, together with high states of arousal and emotion, were the key issues fostering the onset of a risk scenario. In addition, it could be argued that following a discussion which revealed that neither partner had any contraceptives available at that time, interviewees may have been persuaded or pressured by their partners into having intercourse.

Apart from supporting the findings in the SAQs (Chapter 5) and other studies that support an association between communication and contraceptive use (Chapter 3), the beauty of the interview technique and the use of IPA allowed the author to investigate the difficulties attached to initiating such discussions in greater depth. These results indicate where IPA was most widely used in the analysis of these data.

Amongst the entire interview sample, around one-third (21/56) found it difficult talking to partners about contraception prior to their first intercourse together. Moreover, around one-quarter (15/56) had reported that on at least one occasion they had wanted to initiate such a discussion with their partner about contraception, but had failed to do so. The following example demonstrates the inability faced by some people in talking about contraception (with a future partner in this case),

'I don't know cause it's quite hard to you know to just actually say something, but like you'd have to like, I don't know it would just probably be like trying to push him away a bit and like, sort of like, you know but, oh I don't know. I really don't know. I would just come out and say it really, I don't know, it is quite hard.....you can't just stop and say, oh, can you put a condom on please.' F(19) (22)

Concentrating upon those cases who found it more easy or difficult on different occasions to hold discussions about contraception, together with those who had rarely discussed such matters, was a fruitful way of investigating some of the obstacles that prevented these discussions from occurring. Analysing the data following the principles of IPA revealed that concern about a partner's hostile or negative reaction to any discussion about contraception was central to explaining why some people found it so difficult to initiate such discussions. Furthermore, the use of IPA revealed two interesting findings that related to this difficulty. Firstly, *why is the partner's reaction is perceived so negatively?* Secondly, *when does the partner's reaction become more important?*

Why is the partner's reaction is perceived so negatively? - IPA

The interviews generated two key themes that help explain *why* some people fear such negative reactions from their partner. Firstly, initiating a discussion about contraceptive use may admit an intention for intercourse and, secondly, the negative associations which are attached to specifically requesting condom use. Each will be discussed in turn. A few people noted that enacting a discussion about contraception prior to intercourse would blatantly express an intention for intercourse. The participants perceived that their partners would interpret such discussions negatively in that they were being too 'forward', and interested solely in having intercourse. It is

also interesting to note that this theme was reported by a greater proportion of men than women in the sample. The following two cases are typical examples,

'[REASONS FOR NOT TALKING ABOUT CONTRACEPTION] I don't know, I suppose I didn't know how she'd react to it.....I didn't want me to say something and her to think, oh, he's only with me cause he wants to have sex with me.' M(17) FIRSP-**R** (30)

'[REASONS FOR NOT TALKING ABOUT CONTRACEPTION] She might have got funny, I didn't really sort of like, you know.....she might have thought that's [INTERCOURSE] all I wanted out of her.....where I liked her so much I think, I didn't want to push it too far.' M(17)FIRSP-**R** (49)

Issues associated with discussing condoms (as opposed to other forms of contraception) were also identified as potential explanations of their inconsistent use. These findings are particularly pertinent as condoms are the most likely method of contraception available at first intercourse with a new partner, given that (in this sample) such intercourse is reported as being predominantly unexpected. The key issue identified by a few interviewees was that condoms are associated more with the prevention of disease than conception; thus by initiating a discussion about them before intercourse may not only imply that one's partner is potentially infected with a sexually transmitted infection (including HIV), but that they also may have had numerous sexual partners in the past. The following examples refer to the problems talking to a *future* partner about condom use,

'.....cause I do feel really bad cause using a condom is basically telling them that they've got something that you don't want to get if you're on the pill, do you know what I mean, you're saying they've got HIV or you know they've got you know, whatever.' F(18) (2)

'Just the fact that, generally if you imply someone's got a sexually transmitted disease [IF YOU SUGGEST USING A CONDOM], you're saying they're dirty really, aren't you.....you're sort of saying you're absolutely disgusting.....' F(16) (21)

It is not surprising (given these perceptions about admitting the intention for intercourse and the associations attached to condom use) that for those interviewees who had ever discussed contraception with their partner, around one-third (17/48) had not managed to discuss the issue prior to their first intercourse together. Furthermore, talking after intercourse was often perceived as being easier than talking beforehand, essentially since there is no longer a 'problem' in expressing an expectation of intercourse. By already having experienced intercourse together, people also tend to feel 'closer' to their partner and thus more able to talk about condom use. For example,

'.....I reckon it was because we were more used to each other [AFTER INTERCOURSE] and also it was like umm, that first occasion changed our relationship from being like friends.....[TALKING BEFORE] would have been just like saying would you like to have sex, which is sort of really.....' F(17)FIRSP-**R** (31)

'I don't know, umm, before[INTERCOURSE] I sort of like I knew her and everything, I liked her a lot, but afterwards it made like me even a lot closer to her so I could like ask her anything I suppose.' M(17)FIRSP-**R** (49)

When does the partner's reaction become more important? - IPA

There were three factors identified through the use of IPA (not necessarily mutually exclusive) as likely influences upon the importance of the partner's reaction. Firstly, the partner's reputation, secondly, personal reputation and thirdly, desire for a committed relationship. Each of these influences were recorded by a few participants in the sample and indicate scenarios where the pressures to not initiate any verbal communication about contraception were increased.

If a partner holds a particularly high reputation or status among a group of mutual friends, then it is likely that this will make any discussions about contraception even more difficult to initiate before intercourse. For example, the following woman was clearly aware of the importance of talking to her partner about contraception, but could just not bring herself to initiate such a discussion given her concern about how her partner would react,

'[REASONS FOR NOT TALKING ABOUT CONTRACEPTION]....I was thinking about it, I was laid there and I thought God, cause he's quite cool, cause I was younger I saw him as a cool character do you know what I mean? If I was older, I was like, he's a dude and I thought I can't say anything cause he'll think I'm well sad.....I thought I can't say, oh, have you got a condom.....I thought I can't say that, it's uncool to say that, he'll think I'm really sad or something.....I was so scared of his reaction.' F(18)FIRONS-**R** (19)

This concern about a partner's reaction is intensified by the possible detriment to a person's own reputation, not only in how their partner may respond, but also how they may be perceived by the wider social group. To forego initiating a discussion about contraception is preferable to considering how detrimental this discussion could be to one's own reputation, for example,

'[REASONS FOR NOT TALKING ABOUT CONTRACEPTION] Where he's real popular and that you know like he's one of the big blokes and that I suppose I was a bit embarrassed but I shouldn't have been really and that, cause I'd been with him for a while.....I mean it's embarrassing for me it's probably embarrassing for him.....I think it's just like he thought that they're probably go back to all their mates and that and say oh, she asked me to do this, blaa, blaa, blaa.' F(16)FIRSP-**R** (35)

This fear of a negative reaction is also exacerbated if a person is particularly keen to develop a longer-term relationship with their partner. In such a situation, their partner's reaction becomes even more important, as initiating a discussion could be perceived as a threat to the developing relationship. For example,

'[REASONS FOR NOT TALKING ABOUT CONTRACEPTION]....cause he's really laid back and I just thought I might scare him off.' F(17)FIRSP-**R** (4)

'[REASONS FOR NOT TALKING ABOUT CONTRACEPTION] I liked him so much, I really did like him. I wasn't ready for it [INTERCOURSE], but because I liked him so much.....I just, I just don't know, he would have just made me feel silly, something like that.' F(18)FIRONS-**R** (17)

This final set of results concerning verbal communication and contraceptive use has far reaching implications. It has already been noted the extent to which people find it difficult to initiate discussions about contraception prior to first intercourse. A number of themes have been put forward to help explain this, centred around the perception that the partner would react negatively to such a discussion. However, when the interviewees were asked to consider how they themselves would react to a partner initiating a discussion about contraception, the vast majority showed only positive responses, suggesting that their own concerns about others' negative reactions are largely unjustified. The overall consensus was that a partner talking about condom use, for example, was perceived as being caring and respectful,

'.....if we discussed it [USING CONDOMS] it would like mean loads to me sort of thing that he really cares and that.....if he did speak about it and that so it would like make me feel, I suppose make me feel more close to him and confident and that.' F(16) (35)

'[IF SHE SUGGESTED A CONDOM] I'd say fair play.....I'd say give it here!' M(16) (39)

Moreover, a partner who responds negatively to a request to use a condom shows not only a lack of respect, but also implies that they would not be a worthy partner. For example,

'.....cause it shows that they don't care for how you feel and that they're just out for a shag really, not thinking about me or looking after me or anything, so.' F(16) (14)

'I've got to the stage now I'm sort of, I'm in the state of mind that I'm thinking well, if he really wants to have sex with me he'll use a condom and if he doesn't care that I might get pregnant, then obviously he doesn't really care about me, so I shouldn't be having sex with him in the first place.' F(17) (31)

The following case study illustrates this important point further. This young man would find it most difficult to initiate a discussion about contraception prior to having intercourse with a partner for the first time. He perceives that his partner's reaction would be negative,

'Well I couldn't say nothing really.....cause they might take it as a shock or something, I'm not sure about it. They might be embarrassed and then it might ruin the whole thing.' M(17) (24)

However, when exploring how this same person reacted when *his partner* raised the issue of contraception, before intercourse, his reaction was far more positive and thus quite paradoxical to his perceptions expressed earlier,

'It didn't embarrass me [THAT HIS PARTNER SUGGESTED USING A CONDOM], it was kind of a shock at first, I wasn't expecting it but it made me happy more than anything else.....cause I knew that I was going to do it [INTERCOURSE] with her.' M(17) FIRSP-**NR** (24)

The full implications of these findings concerning the barriers and misconceptions about these communications that were derived through the investigative analytical approach of IPA, possibly one of the most significant findings of the entire project, will be outlined in Chapter 8.

Taking primary responsibility for contraception and non-verbal communication based strategies - CA and IPA

In 26% (29/113) of the total instances of intercourse recalled, it was reported that the partner took the lead or primary responsibility for contraceptive use, often by initiating a discussion with the partner beforehand. Although most stated that they were waiting to say something to their partner or reach for condoms themselves, etc., some attribute their partner's responsibility or initiative to the fact that contraception (most likely condoms) were used at all. The following example refers to the only time this particular person has used a condom on the occasion of first intercourse with a new partner,

'.....he goes hang on a minute and I goes what and he goes just hang on a minute and he just sort of walked and then came back in and then he goes I'm just going to put one of these [A CONDOM] on.' F(17)FIRONS-**NR** (1)

In addition, and as indicated earlier, partners explicitly communicating to each other before intercourse appeared to be associated with a greater likelihood of ensuring condom use. However, these findings are notable from an alternative perspective; on the occasions where there had not been any verbal communication about contraception prior to intercourse, condoms were nevertheless used on 44% (23/52) of occasions. The use of IPA revealed three contrasting situations to account for this. Firstly, some young people did not have an intention to use a condom and hence were unlikely to trigger any discussion about condoms prior to intercourse. Secondly, some felt unable to initiate a discussion, even though they had an intention to use a condom (thus supporting the argument for communication skills enhancement programmes). Thirdly, the interviews suggest that a proportion of this sample preferred to take 'sole responsibility' for condom use without finding it necessary to engage in any discussion. This direct action or non-verbal approach to ensure condom use includes strategies such as just putting on a condom either yourself or on your partner, without openly discussing this beforehand. In total, 7% (8/113) of all instances of intercourse recalled in these interviews included this non-verbal communication style. Earlier research by Rademakers *et al.* (1992) (see Chapter 3), who documented seven 'protection styles', also identified similar patterns. It is this third situation identified in these interviews (akin to the 'determined protectors' of Rademakers *et al.,* 1992) that is of most interest. The following examples illustrate this strategy of 'sole responsibility' for ensuring condom use,

'It was him. He was just like this is the thing to do sort of thing, just done it without, with no questions asked.....he was just sort of like, you know, he just had them [CONDOMS] there, all ready to use.' F(19) FIRSP-**NR** (12)

'I put it [A CONDOM] in his hand, when I was sure it [INTERCOURSE] was going to happen.....I've some in my wallet.....I just put it in his hand and see what he said about it really.' F(16) FIRSP-**NR** (13)

Further investigative exploration of the interviews revealed that this non-verbal communication based strategy was particularly used by the young men (although acknowledging the small number of respondents) as a means to ensure condom use without causing any embarrassment or conflict between partners. For example,

'.....I mean actually, I whenever I do have sex I don't actually think twice about it, I'll always use one [A CONDOM], there hasn't been a time when I haven't used one, so it's not like we actually talked about it, I mean I just put it on.....I don't think I've ever actually talked about it to a girl, I mean I just, I just automatically use one now.....I don't really know really cause in a way it could be like a bit embarrassing.....I mean let's say she didn't want to use one and she wanted to get pregnant, but I didn't want her to get pregnant, then it could like be an argument sort of.' M(17) (41)

'Well I wouldn't really like to ask a girl, like I really wouldn't like to say do you want me to wear a condom because then they'd think oh, well they might think oh he'd do it without one, he must not really care that much.' M(16) (20)

The fact that more men reported this non-verbal strategy perhaps indicates the gender power relations evident within partnerships (where women may feel less able to adopt such a strategy - see Chapter 8). The interviews also illustrate that the particular strategy adopted (either verbal communication based or non-verbal communication based) appears to relate to the type of relationship; whether the partnership is perceived as potentially longer-termed (such as developing 'steady' relationship) or shorter-termed (such as a ONS). Whilst acknowledging the small numbers to make such comparisons, these could indicate interesting areas of follow-up work: less than 2% (1/60) of developing steady relationships (or FIRSP scenarios) included non-verbal communication compared to 10% (5/53) of those FIRONS recalled. Moreover, it is worth reiterating that verbal communication about contraception was more likely in a FIRSP scenario compared to a FIRONS (see *Verbal communication about intercourse and contraception*): 60% (36/60) of those occasions of intercourse within a 'steady' relationship included such verbal communication prior to intercourse compared to 47% (25/53) of those in perceived ONS. The following extracts illustrate how such verbal communication is often found to be easier within these developing steady partnerships,

'I don't know I thought we were really close and I could talk to him.....I can talk to him really well like I used to talk to him for hours and I felt I could talk to him about anything.....but I knew I could talk to him and he would listen to me, so.....if I don't know someone then I just sort of seem to, I don't know, not really want to.' F(17) (1)

'Well if I've been with them for a long time and that I'd probably find it easier to talk to them and that, but where it's just like one night stands and that, it's harder to say anything.....' F(16) (35)

In addition, the interviews indicated that the non-verbal communication based strategies were perhaps more effective within ONS scenarios (given the difficulties reported above); of the instances of first intercourse where there had been no verbal communication, condom use occurred in 38% (9/24) of developing 'steady relationships', and 50% (14/28) of perceived ONS[24]. It could be inferred from this data that a proportion of these instances of condom use in the ONS were the result of the non-verbal communication based strategies that were more evident in such scenarios (compared to the developing steady relationships). This also suggests that different strategies are perhaps perceived (by some people) as being more appropriate in contrasting relationship scenarios. Analysing the communication experiences of 'known' and 'not known' ONS produced mixed results. The following example (both from ONS) illustrates how discussions with someone already known for sometime may be easier to initiate during a ONS, compared to someone they had only just met (23% of all ONS, or 12/53, had met each other for the first time that same day - see introductory findings to this section),

'[TALKING ABOUT CONTRACEPTION WAS EASY] cause I know what he's like, where he's a friend and I do know what he's like.' F(18) FIRONS-**NR** (2)

'I don't know I thought we were really close and I could talk to him.....I can talk to him really well like I used to talk to him for hours and I felt I could talk to him about anything.....but I knew I could talk to him and he would listen to me, so.....if I don't know someone then I just sort of seem to, I don't know, not really want to.' F(17) FIRONS-**NR** (1)

[24] Again, whilst acknowledging the small numbers here, these do indicate interesting areas of follow-up work.

However, verbal communication in a ONS where the partner is 'known' may also be perceived as being more difficult in terms of the reputation issues discussed earlier, particularly in terms of the perceived detriment to their status amongst a mutual group of friends. In addition, verbal communication in a ONS where a longer term relationship was initially desired may be perceived as jeopardising the likelihood of such a relationship developing (a theme also reported earlier in this section). There is clearly a need for more research into this area of how ease of holding discussions may vary according to the relationship type (see Chapter 8).

7.1.3 Contextual themes - CA and IPA

In line with the work of Davies and Weatherburn (1991) (see Chapter 3), the situational or contextual influences are outlined in terms of the physical and psychic context. Apart from a few extreme examples, the impact of the physical location upon the likelihood of a risk or no risk situation was minimal. However, on some specific occasions the location of the intercourse did increase the likelihood of a risk situation, for example,

'.....he said we'll do something about it cause I don't want any children just yet and I said well, I've you know, I don't really know so I said I'm getting the injection and he turned round and said we'll have to use some protection until you know, we were living in a tent at the time, it was really difficult.' F(18)FIRSP-**R** (2)

Moreover, unstable environments (as reported in 14%, or 16/113, of intercourses recalled) such as cars, beaches, parks, etc. could indicate situations where condoms are less likely to be obtainable at short notice. For example, the following intercourse took place in a park,

'But that night I just didn't have my wallet on me, cause I usually carry it around with me but I didn't have it on me that night.' M(17)FIRSP-**R** (24)

The impact of alcohol upon the psychic context (moods, meanings, etc.) was frequently noted in the build-up to intercourse. With attending pubs and night-clubs frequently reported by the young people in this sample, it may not come as too much surprise that many cited 'feeling drunk' as an

influence upon their willingness (at that time) for intercourse; 42% (47/113) of the recalled instances involved alcohol consumption prior to intercourse, usually in excessive quantities. Although showing no relationship with age, young men were more likely to have been drinking immediately beforehand (62% or 16/26 of the instances of intercourse recalled by men had included alcohol compared to 36% or 31/86 for women - Chi square=5.32/df=1/p=0.021). When consumed to such an extent, control over the decision to use condoms (for example) is often lost by the inebriated partner and the likelihood of a risk situation increases, as illustrated as follows,

'.....When I lost my virginity and I was extremely drunk.....I could hardly tell you what happened so.' F(17)FIRONS-**R** (1)

However, a risk situation is not always inevitable (indeed condom use shows little association to alcohol consumption across the whole sample), given that the partner may have taken responsibility for using necessary precautions against conception and STI. In the next two examples, resultant from the use of IPA, condom use was attributed to the actions of their partners (in similar fashion to the non-verbal communication based strategies reported earlier),

'I was very very drunk, it was my friend's eighteenth and we were all completely wasted.....I just didn't know what I was doing to be honest I was far too drunk to worry about it, I mean I remember very little about it.' F(19)FIRONS-**NR** (10)

'Well, we started going out drinking together and it all sort of went from there.....and then one night we just were both steaming and ended up in bed together.' F(19)FIRONS-**NR** (11)

Moreover, the complexities of alcohol-behaviour relationship are further illustrated by the few respondents who reported that disinhibition gave them more 'courage' to insist upon their contraceptive intentions (again derived from the use of IPA). For example,

'And I said I'm not sleeping with you without anything, he goes aren't you on the pill, right no he goes most girls your age are on the pill, don't you think you'd better go on the pill. No cause I'm not in a steady relationship, I don't need to go on the pill, we'll just use something [A CONDOM]

this time.....I'd had a bit to drink with XXXX.....cause I was laughing about it when I was saying it. I'm not sleeping with you without anything and he was like.....' F(18)FIRONS-**NR** (19)

Reported drug use, in contrast to alcohol, was shown (by two respondents) to have a more direct influence upon contraceptive use. This young woman, apart from this occasion, had always used contraception,

'I was so out of my head I didn't have a clue what I was doing.....I think it was just one of those things, you know, crack cocaine is like a, what do you call it, one of those sex boost things.' F(16)FIRONS-**R** (48)

7.2 Non-intercourse specific themes - CA and IPA

Having outlined themes specifically relating to a number of risk and no risk situations, attention can now be drawn towards more *general* themes that may help explain the likelihood of such situations occurring. These themes do not relate to specific episodes of intercourse that have been recalled in the interview, but relate to more general attributes of the individual or method of contraception in question. The majority of these findings were derived from the use of CA.

Three specific themes will be outlined in this section. Firstly, confidence, self-esteem and self-efficacy will be considered not only in terms of their earlier definitions in Chapter 2, but also in reference to their wider application to communicative capabilities (see conceptual framework in Chapter 4). Secondly, problems using condoms will highlight the extent to which some people have questioned the reliability of condoms (akin to response-efficacy, Chapter 2) and also identifies some of the negative attitudes to this method of contraception. Third and finally, service issues will note some descriptive findings surrounding the participants' attitudes and utilisation of various contraceptive advice outlets.

7.2.1 Confidence, self-esteem and self-efficacy - CA

It must be acknowledged at the outset that self-esteem and self-efficacy were not measured objectively; in contrast, respondents were asked, at the start of the interview, how confident they felt in general, whether they felt more or less confident in certain situations, what they felt most or least confident about, etc. This confidence was assumed to be closely tied to their sense of self-efficacy and self-esteem.

On the whole, most respondents described themselves as fairly confident. Although there were a few extreme examples of low confidence (11% or 6 people), these did not seem to have much bearing on the reported situations of risk and no risk (although the numbers were too small to infer any comparisons). In contrast, the link between confidence and risk situations was often reported to be in the opposite direction to what may have been expected. For example, two people who have reported risk situations in the past note that,

'I think I am quite confident, I don't get embarrassed that much.' F(17) (4)

'Basically I mean if someone came in and I didn't know them I'd go up to them and say, oh hi, my name's XXXX and like I'd talk to them and make them feel comfortable and whatever, whatever environment we're in, I mean I'd talk to anybody, whether I'm drunk or whether I'm sober.' F(19) (22)

However, there were a few extreme and isolated examples of low confidence and self-esteem which appeared to impinge on the likelihood of risk situations. This next example is cited from a person who had experienced numerous risk situations,

'I haven't got much self-confidence at all, I'm always convinced that everyone else is right and I'm wrong, even if I'm 100% in my own mind, I know it's right, I still think no they're right, I'm wrong always, I'm always convinced everyone else knows better than I do. I don't know why, I've always been like it.' F(19) (10)

This same person partly attributed her inability (relating to self-efficacy) to talk to partners about contraception to her lack of confidence,

'I think it's to do with my confidence as well, as I don't like to sort of bring anything up, I let everyone else bring it up and then I'll happily join in and talk about it but I won't bring it up.' F(19) (10)

As noted previously, with the interactional issues receiving most of the emphasis in this project, intrapersonal issues were not discussed in such depth in the interview, and this may go some way to explaining this inconsistent relationship between confidence, self-esteem and reported risk situations; that is to say that if these issues were tackled in greater depth, it could be argued intuitively that a more consistent relationship may well have emerged.

However, the measures did show interesting variations in that people defined examples of where they felt more or less confident, and this may offer a more critical explanation of why people experience both risk and no risk situations. For example, one respondent reported her variation in confidence as follows,

'In sort of close company, you know, I am [CONFIDENT], but outside of that I'm not very confident at all.....I suppose if there's somebody I like, who I meet, I wouldn't be very confident then.' F(19) (7)

In a situation where this same respondent felt so strongly for her partner, the control was switched towards her partner and her own intentions to avoid conception and STI were dismissed,

'I don't think I thought about it [CONTRACEPTION] at the time. I was so blinded, you know infatuated with him, anything at all that he did.' F(19) (7)

When considering self-esteem and self-efficacy, parallels can be drawn with the ability to initiate discussions about contraception or 'communicative capability'. Self-efficacy, when applied to

communicative capability, may offer a commanding explanation towards the patterns of contraceptive and condom use shown in this sample (see earlier sections in this chapter).

7.2.2 Problems using condoms - CA and IPA

Twenty-one percent of this sample (12/56) reported (from their own or friends' experience) condoms either splitting or falling off during intercourse. There were no differences in this response according to age or gender. In addition to these 'reliability' issues, people's perceptions of condom use (as a means of preventing STI rather than conception) have also been noted under *Verbal communication about intercourse and contraception*, and was identified as a possible hindrance to their consistent use. Additional negative perceptions of condom use were derived from the use of IPA, and indicated that some people report how they 'interrupt' intercourse. For example,

'.....if you're going to use a condom now then it's going to lose everything, it's going to lose all the feeling that you've just got there and it's all just going to die and then you know, you're going to have to work up again.' F(19) (22)

'It's just the hassle of getting the condom ready and putting them on and that.....after that, you like you want it there and then, you don't want to wait like three minutes, looking for the condoms, opening the packet, breaking the seal around the packet of condoms, taking them open, putting it on, you think fuck that, you're hard anyway, fuck it's gone.' M(18) (51)

Moreover, other respondents reported additional problems,

'.....so wouldn't like to get in the habit of using a condom because I don't like them.....they stink.' F(17) (43)

'.....he didn't really like using a condom and I don't really like the feel of them anyway, you know what I mean, so we decided not to use any contraception, just take the risks.' F(17) (56)

People's perceptions of how members of the opposite sex view condoms may serve to reinforce their own negative perceptions. The following respondent hardly ever used condoms and had experienced numerous risk situations,

'And you find that most girls don't like them [CONDOMS] either, they like you shooting in them, as easy as that.' M(18) (50)

7.2.3 Service issues - CA and IPA

It is worth reiterating that consistency of contraceptive and condom use (throughout respondents' sexual careers and with reference to the specific intercourses recalled) did not differ significantly according to where they were recruited from (clinic or non-clinic based) or whether they had ever or never used services (either their GP or clinic) in the past.

Service issues were considered in terms of both participants' use and perceptions towards Family Planning Clinics (or young people's clinics)[25] and General Practice (GP). Perceptions towards these services referred to service qualities and suggested improvements. In terms of actual use of contraceptive advice services, it is necessary to split the findings according to the recruitment site so as not to bias the interpretations (since 19 or 34% of the sample were recruited from young people's clinics). For each sample (either *clinic based* or *non-clinic based*), patterns of usage, service awareness issues and interactional issues will be outlined. Content Analysis was used to report the frequency and patterns of service use, whereas IPA was used to analyse the responses from the more open-ended and inductive questions detailing first awareness of service, attitudes towards the service, suggested improvements, etc.

[25] Although one out of the eight young people's clinics was actually held at a GP run Health Centre, it was assumed that the respondents perceived *all* these sessions held specifically for young people to be synonymous with Family

Clinic based sample

Over 80% of the sample recruited from clinics (28/34) had never seen their GP for contraceptive advice. This not only shows the valuable role offered by these clinics but also indicates the overall level of satisfaction for the service that they offer (especially as most of those who had visited their GP before have not returned to their GP since they started visiting these clinics). Additional aspects of service satisfaction will be outlined under the perceptions towards these services.

Using IPA, it was evident (and must be of some concern) that the most frequently reported source of awareness towards the clinic service was through word of mouth, usually through friends or family members. For example,

'Cause a friend went with a friend and the friend who went with the friend is a close friend of mine. I came with her and she came with me.....I've never seen anything about it, I just know through friends.' F(16) (14)

'Through a friend.....just word of mouth, she, my best friend heard from her cousin, who was a couple of years older then us, you know, to come down here.' F(19) (9)

There is clearly a need to identify additional forums for strategic leafleting and dissemination of information relating to the contraceptive advice services within the local area. Following word of mouth, the next most frequently cited source of information was through schools and colleges, *'Through school.....and they came here and went to put this condom on a pretend willy.....and everybody in the class had to do it so we got a leaflet then, a little card saying when and where, what times and so I went along.'* F(17) (6)

'Through college when I first started they has umm, a week where they had loads about AIDS umm, family planning clinics and all that sort of thing and there were little cards for the Romsey one, up until then I didn't know.' F(19) (10)

Planning Clinics and clearly distinct from their GP. Indeed, the young person's clinic in question was held in a physically distinct location from the GP practice itself.

It is worth noting that only a minority of this clinic based sample (11% or 2/19) had first visited a clinic before they had intercourse for the first time; this may well reflect both an awareness issue and also illustrate some of the interactional issues that will now be outlined. Responsibility for the utilisation of contraceptive advice services had predominantly been by the woman (as reported by 84% or 16 members of the clinic sample). Around one-half (or 9/19) of the sample had never discussed the issue of contraceptive advice services with their partners. For those who had talked to each other (usually after their first intercourse together), communication was very limited and the main role for the man partner had been providing company or transport to the clinic (derived from IPA),

'He said he'd give me a lift if I knew where to go.' F(18) (18)

'.....he wasn't really too bothered about the pill as long as I was on the pill it didn't really bother him.....he didn't mind giving me a lift down here and picking me up again.' F(16) (13)

Indeed, most of the time the male partners refused to actually enter the clinic and instead found it less embarrassing to wait outside,

'He didn't really say much about it, sort of thing. He came, walked down to Romsey with me but he wouldn't come anywhere near here, he said, oh, I'll just go over there, meet me back here when you've finished but he was quite happy to let me get on with it.' F(19) (10)

'He came with me.....but he sat in the car he wouldn't come in.....she [THE NURSE] asked if the lads would come in as well to show how to put a condom on. One of them did but XXXX [PARTNER] didn't. He was too embarrassed to come in.' F(18) (2)

For the most part, this illustrates how the young men were embarrassed about the prospect of accompanying their partners into the clinic, and this may be exacerbated by male partners assuming that it was predominantly the female's responsibility to attend such services. Moreover, this attitude was supported by some of the women respondents themselves, whilst others preferred

their male partners to have a greater role in the use of services. The next two examples, both from women, illustrate these contrasting perceptions that were unearthed through the use of IPA,

'I don't think he should be up there [THE CLINIC] with me. I think I should be doing that on my own. I don't want him around, cause he's not going to be around for ever is he.' F(19) (11)

'I just felt he should say or, oh yeah, we had sex last night or whatever yeah, I don't know whether I'm wrong thinking like that but I just felt that he should feel some sort of responsibility.' F(17) (4)

In terms of the perceptions towards the clinic service, most respondents were generally very positive and complimentary. Most people reported that the staff at the clinics were both approachable and friendly, and that the atmosphere was relaxed and informal,

'Just you know, got no prejudices and you just come in and they're quite friendly.....they don't just sit there and judge you or anything, so it's a really helpful place.....I'm quite satisfied.' F(19) (9)

'I think they're more easy going than you think.....Just everything really. I mean it's easy going, phone up that night and get one [POST-COITAL CONTRACEPTIVE] if you're really desperate. I mean I've phoned up a couple of times when I didn't use any contraception with XXXX [PARTNER], I phoned up that night and got one half an hour later.' F(19) (11)

The clinics were often compared to the service people had previously received from their GP. Many people indicated that attending the clinics was more convenient than visiting their GP, and also more anonymous and confidential,

'It's easier to come here than to make an appointment at the doctor's and wait ages for your appointment, it's easier to come here.' F(17) (6)

'I just think that it's somewhere, it's great if you know that if you need to you can come here every Wednesday and talk to someone, but if I don't want to walk into the doctors to do that.....if you feel like you might see one of your friends or your mum's friends that kind of thing.' F(17) (4)

Whilst outlining a number of qualities for the clinics, many respondents also suggested a number of ways in which the service could be improved. The most frequently stated improvement concerned the opening times of the clinic. Many people suggested that the clinics should be open for more hours during the week or perhaps opened at more convenient times,

'Maybe if it was open a bit more because, umm, not in my case but cause I'm on the pill now but if I ever wasn't and I didn't use contraception and I wanted sort of to get the after morning pill where it's only open on Wednesday if you sort of did it on Thursday then it wouldn't be any good by the next Wednesday, so.....maybe if it was open a bit more it would be useful.' F(16) (15)

'I suppose maybe they could do it every Saturday or something like that.....because obviously being at work all day, it's a bit difficult if you're doing something in the evening, but I suppose for people if they need the morning after pill or something like that, it might be a good idea.' F(19) (12)

Other improvements concerned an increase in medical expertise at the clinics to prevent the need to visit the GP for specific problems that could not be tackled at the clinic. For example,

'The thing is there's not always a GP here. Sometimes it's just XXXX [THE NURSE] or someone who's not totally qualified GP. Like when I've been here with my problems, they can't help me really. And I'm, oh God, now I've got to go to the doctor's when I thought I could come here and get out of doing all that, but that's not their problem.' F(18) (16)

'I don't know, when I came here about my periods always being, kept changing the pill and that did start annoying me and they gave me other tablets to stop the bleeding but it wasn't stopping it for a time, it was only temporary and so my mum said go to the doctors next door and he gave me an internal examination and a smear which they didn't do here.' F(17) (6)

Returning to the issue of service awareness, some people directed possible improvements to this important concern, with particular reference to alternative sources of advice (given the limited opening hours of some of the clinics). For example,

'I think just make it more wide, more knowing about.....if they'd been there at school or.....round the town or something. Yeah, cause I don't think at this age we're all sort of frosty and up tight about talking about things like that but I think basically you need some big sign saying when and where basically, because I've never seen anything about it, I just know through friends.' F(16) (14)

'It was on a Friday night and I phoned XXXX [THE CLINIC] on the Saturday and I said, where do I get an emergency pill from and we didn't know where to get them from, cause this place is only open on a Wednesday.....I mean we get given cards here, with the number on, but it's only open Wednesdays, it's not much help, so.....' F(18) (17)

Non-clinic based sample

This sample were far less likely than the clinic based sample to have been either to their GP or a Family Planning Clinic for advice. Thirty-two percent (12/37) and 54% (20/37) had ever visited their GP and clinic respectively, and 35% (13/37) had never sought advice from either of these outlets (including 69% or 9 of the male interviewees). This represented the main difference between the clinic based and non-clinic based sample.

It appears that this lack of attendance could not be fully explained by people not knowing about these services. Indeed, many cited specific reasons for opting not to attend such services. As before, these issues derived from open-ended questions were analysed using IPA. The following example illustrates the perceived embarrassment of attending a clinic; although this person is aware of where the nearest clinic is,

'.....too embarrassed [TO GO TO THE CLINIC] .....cos I don't look my age, do I, I look a lot younger then sixteen, so, don't think they would give them [CONDOMS] to me would they.' F(17) (46)

Becoming aware of the Family Planning Clinic service was similar to that reported by the clinic sample; most people had found out predominantly through word of mouth from friends or family. Again, a minority of this non-clinic based sample (35% or 13) who had ever visited a service had not done so before they had intercourse for the first time. For both clinic based and non-clinic based samples combined, only around one-third (or 15/43) of all those who had ever attended a service had done so *before* their first ever intercourse. Few had ever discussed such services with their partners, and even less had discussed these issues prior to their first intercourse together. The following scenario is typical of many of this non-clinic based sample,

I: 'Have you ever been to a family planning clinic?'
R: 'No.'
I: 'Has she [GIRLFRIEND] ever been to a family planning clinic?'
R: 'I don't know.'
M(17) (24) (Been in this relationship for one month and already had intercourse)

Many of the non-clinic based sample held similar perceptions to those reported earlier by the clinic based sample. Friendly staff, sufficient advice and assured confidentiality were regularly mentioned qualities of the clinic service. In addition, there still seemed to be a preference for the clinic service over that offered by the GPs,

'They [CLINICS] just know more about it. And your doctors give you the wrong advice because they are speaking from a doctors point of view, whereas a clinic is talking from a young persons point of view.....doctors don't understand. If you go to a doctor, and you're 14 years old and you say, oh I want to go on the pill, yeah, you need your mums permission, but my mum don't know I'm having sex, I'm trying to be responsible, mum don't know I'm having sex, I can't go and tell her.....so you go to the family planning instead and they do it for you, they're the ones that try and make you be more responsible and doctors turn you away. I blame doctors for most of the under age pregnancies anyway, cos they don't deal with it.' F(16) (48)

Improvements suggested were again comparable, including extended opening hours and wider advertising of services. Perhaps the main difference between these samples was that the non-clinic based samples cited more negative aspects of the services on offer, again suggesting that some people had deliberately opted not to attend such services, even though they are aware of their existence. For example,

'It's like they're [CLINIC STAFF] trying to be nice to you but they're like shouting at you at the same time, like what have you been doing? Cause I went with my friend and she wanted a pregnancy test and they just started shouting at her and saying, oh, you stupid girl, you're stupid, you should be using contraception at your age, all this and she was really hurt by it.' F(16) (21)

'.....they [CLINIC STAFF] were all right, but when we were young just looked at you.....they should have younger people there to talk to younger people and go through things.' F(18) (52)

8. CONCLUSION

This chapter commenced by outlining several important aspects of the research methodology. Detail was provided about the research questions (that were being addressed), the interviewee recruitment and selection procedures, the epistemological approach and research paradigm, the use of CA and IPA in analysing the data and the recognition of the threats to the research validity. These sections outlined how the analytical methods of CA and IPA are consistent with the post-positivist epistemology underlying this project. With CA and IPA being distinct analytical methods, the particular technique used in generating the research findings has been made explicitly clear throughout.

At the outset it can be concluded that from the 56 round 1 interviews completed, the systematic recruitment process ensured a varied sample in terms of the socio-demographic and sexual behaviour indices chosen. This variety was to generate as many possible variations and explanations from the interviews; this variety does not equate to a representative sample (see Chapter 8 for *Research limitations*). In addition, of the 113 instances of intercourse recalled by the interview sample, contraception was used on 74% (83) of occasions, of which 86% (71) involved

condom use. The likelihood of contraceptive and condom use on this occasion did not differ significantly according to the age or gender of the respondent, where they were recruited from or whether they had ever or never used services in the past. From the evidence of this sample, experience of service use appears to have little impact upon use patterns.

Although there was a minority of the interview sample who were currently not aware of the behaviours required to prevent conception and STI, most of the sample were knowledgeable about preventive behaviours. This suggests that not only is a knowledge base required, but more importantly that a lack of knowledge cannot fully account for the extent of reported risk behaviours by this sample. Progressively deeper analyses and the use of IPA have shown the importance of a number of the interactional themes in helping to explain risk and no risk situations: relationship certainty, onset of first intercourse (with a current or most recent partner), expectation of intercourse, reasons for intercourse, pressures and persuasions, verbal communication about intercourse and contraception, and taking primary responsibility for contraception and non-verbal communication based strategies. Although communication between partners (both verbal and non-verbal) does appear to be the key explanation that has emerged from these data, these interactional themes clearly have a compounding impact and hence cannot always be separated as more or less important than the others. For example, a steady progression to a relationship is likely to involve a delay in the first intercourse which is also more likely to be for positive reasons such as emotional attachment, love and trust, etc. In this situation of a delayed intercourse, it is also more likely that people have had the time to talk to each other about intercourse and contraception which in itself allows greater preparation for intercourse and which together makes this first intercourse less unexpected. This is a most significant finding of the interviews, and shows that these interactional issues *collectively* can help explain the likelihood of risk and no risk situations. The qualitative extracts, occasionally complemented by statistical data where CA was used, clearly illustrate the importance of these interactional issues and how they 'operate' to facilitate or hinder the likelihood of condom use on these occasion of first intercourse with a new partner.

Nonetheless, in the most common situation of immediate and unexpected intercourse, the importance of communicating verbally about contraception becomes even more critical.

Moreover, in terms of the immediate social contexts, it appears that unstable environments (such as cars, beaches, etc.) may encourage more risk situations, particularly since obtaining contraception (often at short notice) may be more difficult, and the added pressure, emotion or arousal of the situation may make any such communication harder to initiate. In addition, excessive alcohol consumption goes further than reducing people's inhibitions for intercourse, and often renders people completely less able to ensure contraceptive and/or condom use (although the alcohol-behaviour relationship has been shown in this chapter to be more complex than is indicated by this statement). Taking primary responsibility for contraception (most likely to be condoms), perhaps without talking to each other about it (through 'sole responsibility') is an equally effective alternative to ensuring a no risk situation, and has been shown to be a preferred and deliberate choice (particularly by young men) in such scenarios where verbal communication is particularly difficult to initiate. The latter point was generated inductively through the use of IPA.

Having labelled the particular importance of partners talking to each other about contraception, the analysis (IPA in this instance) explored some interesting paths as to why such discussions were difficult to initiate. Concern about a partner's hostile or negative reaction to any discussion about contraception was central to explaining these difficulties. Admitting the intention to have intercourse, together with a perceived association between condom use and disease prevention, were the main concerns. Furthermore, this negative reaction is perceived to be exacerbated according to the partner's reputation, the potential for harming one's own reputation and whether there is a desire for a longer-term relationship with this partner. Perhaps the most important outcome of the interviews was that these concerns about a partner's negative reaction were largely unjustified, with the vast majority of participants showing only positive responses to scenarios of future partners initiating discussions with them about contraception. In addition to the need to improve communication skills, the data suggest that greater awareness about the positive reactions towards such discussions should be encouraged. Nonetheless, partners' communicating to each other prior to intercourse does not appear to offer a complete explanation for the non-use of contraception; even when there had been a discussion beforehand, 21% (13/61) of these instances still led to a risk situation. This point suggests that, in addition to pressures and persuasions, contraceptive availability may also be a key issue.

These particular findings concerning the communication barriers (resultant from the exploratory, investigative technique of IPA), together with the notion of sole-responsibility noted above, represent the most innovative contribution of these round 1 interviews and have distinct theoretical implications (by potentially extending the models articulated previously in Chapter 2). These implications will be discussed in Chapter 8.

Events not relating to the recalled acts of intercourse (the more distal themes) show the importance of confidence, self-esteem and especially self-efficacy (when considering its wider applicability of communicative capability) as possible explanations of contraceptive use. Persistent negative attitudes towards condoms, as held by a proportion of the sample appear to counter any condom promotion efforts. Experiences of condom failure only serve to exacerbate these attitudes, although incorrect use may play a role in these failures. In terms of service use, most people were positive about the clinic service (compared to that of the GP), but a sizeable proportion (mainly men) had never been anywhere for advice. Communication between partners about service use was almost non-existent, with men playing a minimal role in service uptake. Suggestions for improvements were largely positive including extended opening hours and more advertising of the services; the latter point is particularly pertinent given that most people first became aware of the services through friends and family members.

This chapter has sought to present the main themes that emerged from the first round interviews and that responded to the research questions outlined in Section 2 of this chapter. The findings have been outlined descriptively, and more detail concerning their theoretical and policy implications will be considered in Chapter 8. These findings, given the sampling procedures, are also applicable only to these interviewees; Chapter 8 will elaborate upon the issue of 'generalisability' under *Research limitations*.

At the end of this first interview, all respondents were asked about their intentions and expectations towards future scenarios of intercourse. The second round interviews, conducted between eight and 10 months after, aimed to compare these measures to the actual reported behaviours in the time interval between interviews. This 'longitudinal' component of the project

was a unique feature of this study and dominates the following chapter which will outline the key themes derived from the round 2 interviews. Chapter 8, as well as detailing this intentions-behaviour relationship, will also elaborate upon what differentiates between effective and ineffective contraceptive (and condom) users, drawing from the theoretical research, and in particular upon some of the innovative constructs outlined in Chapter 2.

CHAPTER 7: ROUND 2 INTERVIEW ANALYSES

1. INTRODUCING THE LONGITUDINAL COMPONENT OF THE STUDY

The aim of this chapter is to present two sets of longitudinally-based findings that were derived from the interviews. Firstly, those relating to the intentions-behaviour relationship, whereby the intentions recorded at round 1 were matched with the behaviours recalled in the eight to 10 months before the round 2 interview. To reiterate the point made in the previous chapter, although these intentions were recorded in the round 1 interviews, it was felt more suitable to present them in this chapter alongside the actual reported behaviours. Secondly, the 'dynamics of change' refer to the participants' recollections concerning if and how their attitudes and behaviours regarding contraceptive and service use may have altered from when they were younger. These two elements of the longitudinal design are reflected in the semi-structured round 2 interview schedule (see Appendix 6). As for the preceding two chapters, the emphasis here will be on outlining the findings, with the implications of these findings (including particular reference to the theoretical literature reviewed in Chapters 2 and 3) being presented in the following chapter. Prior to these findings, reference will be made towards the research question specific to these round 2 interviews (thus linking this chapter to the objectives outlined in Chapter 4), the administration of these interviews and some analytical features unique to their analysis.

2. RESEARCH QUESTION

As for the preceding chapter, the aim of the round 2 interviews will be detailed prior to presenting the findings. At the end of the first interview, all participants were asked to think about a hypothetical scenario of having intercourse with a new partner for the first time. The reason for this question was to record people's intentions and expectations regarding contraceptive (and especially condom) use on this occasion. The difference between a 'behavioural intention' and an 'behavioural expectation' towards future use of contraception has been outlined earlier in Chapter 2, Section 2 and will be further elaborated in Section 5.1 of this chapter. This chapter reports these intentions and expectations and, for those who were reinterviewed, matches these measures to

contraceptive (and condom) use on the occasions of first intercourse with a new partner that had occurred in between the two rounds of interview (thus meeting objective 4, p.115 in Chapter 4).

By reporting on the intentions-behaviour relationship, these findings will help illustrate what distinguishes a successful contraceptive user from those who are less successful (successful in terms of whether they had behaved in a way in which they had intended).This qualitative exploration will help to explain how and why, for example, communication and negotiation skills, gender power imbalances and pressures, planning and preparatory measures, interpersonal factors (such as relationship type and risk assessment) may not only influence the formation of an intention and expectation, but also whether they help to explain the intentions-behaviour relationship. This research focuses not only upon the interactional issues that are the core of this project (communications and partner pressures) but also contributes to our understanding of the additional innovative influences (some of which are interactional) upon intentions and behaviours that were detailed in Chapter 2 (Section 4.2) such as planning and preparatory behaviours, risk assessment, etc.

This chapter also draws upon the dynamic issues that are reflected in Objective 2 (p.113 in Chapter 4) and, as stated earlier, will report on participants' own accounts of how their attitudes and behaviours regarding contraceptive and service use may have changed.

With reference to the conceptual framework (Figure 6), this chapter explores the intentions-behaviour relationship and investigates how the interactional and dynamic influences may affect this relationship. It is in this way that the research findings are set in the context of the literature reviewed in Chapters 2 and 3. The research implications, in Chapter 8, will further this link between the findings and the theoretical ideas outlined in these earlier chapters.

3. ADMINISTERING THE SECOND ROUND OF INTERVIEWS

Of the 56 participants originally interviewed, 22 of these were successfully recalled for a second interview. Exhaustive attempts were made to contact all of the original 56, and the following table outlines why it was unattainable to conduct a second interview for 34 of these respondents.

Participants interviewed in round 2	22
Unable to trace - moved address, invalid contact number or no contact number	27
Contact made, but missed appointment on at least three occasions	4
Contact made but opted not to be re-interviewed	3
Total sample/number of round 1 interviewees	56

Table 27: Reasons for interviewee drop-out

Clearly, the main problem arranging the round 2 interviews was re-contacting participants. This was particularly so among those recruited from the youth clubs and youth advisory centres who had not left a contact number after their first interview. All those recruited from the young people's clinics had left such contact details since they all completed a self-administered screening questionnaire. In hindsight, greater effort should have been made to ensure respondents from the youth clubs and youth advisory centres left either a contact address or telephone number at the round 1 interviews (see research limitations in Chapter 8). However, it is worth reiterating (see Chapters 4 and 6 for interviewee round 1 recruitment details) that the staff at the youth clubs and youth advisory centres were concerned that to record these details would infringe upon their own codes of confidentiality. Upon returning eight to 10 months after the first interview, due to the fairly high turnover in attenders, it was simply not possible to contact many of the original interviewees. Although the staff at the youth clubs and youth advisory centres were most helpful, they were unable to assist with this predicament. Only those who were still attending these sites were, therefore, able to be interviewed at round 2.

Nonetheless, the 22 who were re-interviewed generated a substantial amount of data and, by ensuring comparatively higher numbers at round 1, this at least ensured an 'adequate' number for round 2 given the anticipated drop-out. The following table illustrates a comparison of the two interviewee samples; the round 2 sample was more clinic-based (given the contacting problems highlighted previously) and contained fewer representatives of the more deprived areas, but the

proportion of female respondents, the age-structure and previous use of contraception and condoms were more similar.

	Round 1 Interviewees	Round 2 Interviewees
Number interviewed	56	22
% female	77	82
% male	23	18
% recruited from clinics	34	55
% recruited from youth advisory	16	9
% recruited from youth clubs	50	36
% from low deprivation[26]	4	9
% from medium deprivation	33	55
% from high deprivation	63	36
% aged 16 (at first interview)	36	27
% aged 17 (at first interview)	27	18
% aged 18 (at first interview)	25	36
% aged 19 (at first interview)	12	18
% inconsistent[27] contraceptive user (at first interview)	54	55
% inconsistent condom user (at first interview)	56	68

Table 28: Comparing participants interviewed at round 1 (n=56) and those interviewed at round 2 (n=22)

This quantitative comparison gives the reader an idea of the nature of the interview sample and, as emphasised in Chapter 6, there are no claims towards a representative sample being made.

[26] Using the Jarman Index, deprivation was calculated as follow: -29.73 to -3.25 = Low, -2.30 to +12.18 = Medium, +14.60 to +49.84 = High. These categories were derived from the 399 respondents who recorded their postcodes in the screening SAQs (see Chapter 5). For the SAQ respondents, these categories produced broadly equal proportions, but this was not the case for either of the interviewee samples.

[27] Inconsistent defined here as not using contraception or condoms on every occasion of intercourse (opposite for consistent)

4. METHODS OF QUALITATIVE ANALYSIS

As stated in the start of Section 5 in Chapter 6, the methods of analysis outlined in the previous chapter are applicable to the analysis of the round 2 interviews. However, prior to presenting the findings, a brief summary of the three main differences in the analytical approach to these interviews will be recalled.

Firstly, given the smaller data set in these round 2 interviews (n=22) there will be minimal reference to any quantitative findings. Secondly, (and in conjunction with this first point) given the more open ended, exploratory nature of the round 2 interview schedule, the use of content analysis (CA) will also be less than was observed in the previous chapter. Having adopted a more inductive, exploratory stance in these round 2 interviews, the use of IPA will be more evident when presenting the findings. Nonetheless, as for round 1, it will be noted whether CA or IPA was used when presenting each of the findings. Thirdly, and once more with regard to the smaller numbers interviewed here, the use of case studies to illustrate the findings will be more evident that cross-case comparisons and contrasts that were the feature of the CA (in particular) in the previous chapter. Apart from these differences, the same principles of analysis apply in terms of the epistemologcal perspective, how themes and explanations were generated from the data, etc. Also, it is important to bear in mind that these very first set of findings referring to intentions were, however, derived from the round 1 interviewees and it is only when referring to the intentions-behaviour relationship and the dynamics of change that these differences will become more evident (given the reduction in respondent numbers).

5. FINDINGS PART 1 - THE RELATIONSHIP BETWEEN INTENTIONS AND BEHAVIOUR

The first set of findings to be presented are the participants' intentions and expectations derived from the end of the first round of interviews. The second set of findings will then report on the actual behaviours reported at re-interview to compare with those measures derived from round 1.

5.1 Participants' intentions and expectations - CA and IPA

Bearing in mind the differences between an intention and expectation (see Chapter 2, Section 2), the way these were translated into comprehensible questions was as follows. It was decided to record a behavioural intention (from now on termed as intention) as '*would you want to or intend to.....*'. The opening question, when considering the hypothetical scenario of first intercourse with a new partner, was *would you want to or intend to use contraception on this occasion?* Without too much surprise, all, except one participant, responded positively to this question. However, the main interest was to record participants' intentions to use *condoms*. The reasoning for this was the assumption that in all such cases of first intercourse, unless both partners were virgins or had been tested negatively for STI, there would be a potential risk from STI (as explained in Chapter 6). Moreover, given the continuous pill usage reported by some young women in this sample irrespective of whether they have a regular sexual partner or not, to record intentions and behaviours purely for contraception (as opposed to condoms) could not only overlook the likely potential for STI, but also fail to explore the interactive processes by which partners 'negotiate' such precaution on this first occasion of intercourse together. Responses to these more structured questions were analysed through CA.

When asked, *would you want to or intend to use a condom on this occasion*?, the majority (84% or 47/56 round 1 interviewees who were all asked this question) responded positively. There was no significant difference in this response according to age or gender. When comparing this positive response to that of the previous question regarding contraceptive use, the difference immediately suggests that a proportion of this sample recognise the potential for pregnancy but do not extend this potential to STI. With 16% (or 9/56) of the sample not intending to use a condom (even though the majority of these intended to use contraception), these may reflect a group in need of more awareness and more general information about STI. Returning to the 84% who did intend to use a condom, many cited themselves as 'very determined', and this response showed no bearing upon previous patterns of condom use; i.e. people were determined to use a condom irrespective of whether they had ever or never experienced a risk situation in the past.

In order to ascertain expectations of condom use a number of different scenarios were provided to the respondent such as, *imagine you are at a night-club chatting to some young man, you get back to his house and are about to have intercourse, would you realistically think that you would manage to use a condom, even if your partner perhaps did not want to?* This clearly differs from the behavioural intention and is more comparable to the behavioural expectation (now defined purely as an expectation) construct (Sheppard *et al.,* 1988) discussed earlier in Chapter 2 (Section 2).

When comparing these intentions and expectations reported by the sample the results were quite startling. For those who stated they would want to use condoms (equivalent to the intention), around one-half (24/47) thought it was likely that they might well abandon this intention when faced with a situation of impending intercourse with a partner who was not so keen to use them (equivalent to the expectation). The quite large extent to which these expectations differed from the intentions regarding condom use was not anticipated, and is clearly a major issue of concern in the prevention of STI; how difficult will it be for promoters to instil people with the skills to insist on condom use at first intercourse if the young people themselves *realistically* believe that they may not use them when the situation arises? (See Chapter 8 for further implications of these findings).

Respondents were asked to explain why they had *expected* to behave differently to how they had essentially *wanted* to behave. Using IPA, the reasons (that the participants cited themselves) behind this deviation between intention and expectation were fourfold with participants citing up to all four of these influences upon their expectations[28]. To reiterate, the quantitative data do not infer that some reasons would be more important than others among the wider population of young people. Firstly, is the notion that excessive alcohol consumption may be the key to some people (as reported by 25% or 6 out of the 24 *respondents who, despite intending to use condoms, predict that they might not do so*), in that if they were drunk, they would be less likely to adhere to their intentions to use a condom. For example[29],

[28] None of these reasons cited showed any significant differences according to age or gender.
[29] This and the following examples also illustrate how the intentions and expectations were actually measured.

'Well I'd like to say I would use a condom, but if I'd been drinking I'd probably be likely not to.....if I hadn't been drinking I would have a much more of a level head and think, I mean just think about the consequences really.....when you're sober you think oh yeah, I really want to [USE A CONDOM] but would be cause the bark's a lot bigger when you say that and when you've had a bit to drink and you're thinking oh, but sod it, I'll sort it out tomorrow.' F(18) (4) - interview round 1[30]

Unlike the role of alcohol, the second, third and fourth themes relate to interactional issues and the role of the partner in explaining the inconsistent relationship between intentions and expectations. The second theme refers to the partner's attitudes towards condoms and in particular whether this partner would have any objections to their use (as reported by 21% or 5/24 respondents). For the people citing this as a key reason for their expectations, they would appear to be those most easily persuaded by their partner's preference (and clearly tie in with the gender power relations represented in the conceptual framework - see Figure 6 in Chapter 4). For example,

'.....I'd have to know what he was like with them [CONDOMS]. If he was unhappy using them, I'd be stuck really cause I'd go back to thinking well I am on the pill and I don't want to get him upset, if he was nice, then maybe we could.' F(18) (16) - interview round 1

'If he doesn't want to wear one [A CONDOM] then it's fair enough.' F(19) (22) - interview round 1

The third and fourth issues are the most widely documented in the interviews. Third, is the issue of how well they 'knew' their partner and predominantly whether they thought he or she could be someone infected with a sexually transmitted infection (as reported by 46% or 11/24). The importance of risk assessment is noted in the work of Abraham and Sheeran (1993) and Sheeran *et al.* (1999) reviewed in Chapter 2. The examples show that perceptions of risk assessment (in terms of potential STI) are largely inaccurately based, compounded by the fact that some STIs are asymptomatic,

[30] When presenting these findings, F = Female, M = Male, followed by the age and then case number. Given that quotes from both rounds of interview will be referred to in this chapter, it will also be indicated from which interview the responses were derived.

'I think I'd definitely try to use one [A CONDOM].....because if it's someone that I don't particularly know their past or anything like that then I'd try definitely make sure that it's used.' F(16) (15) - interview round 1

'If I didn't know him very well then I'd use condoms every time, but if I knew him from school and it's been years since I've known him, it might not come into it.....cause basically I'd know what they'd been up to and I'd know what they're like.....you can tell how forward they are, whether they like do it all the time and if they're really shy then you know that they haven't really.....and if he comes up to you and he's been chatting girls up all night, then you pretty much know that he's not safe.' F(16) (13) - interview round 1

The fourth theme refers to how well the person 'liked' their partner (as reported by 33% or 8/24). This theme mirrors those relationships where partners were hopeful of a steady relationship developing in the future, and hence would not want any discussion about contraception to jeopardise this potential (see Chapter 6). It is important to reiterate that respondents were asked to consider the *first* intercourse with a new partner. For example,

'I'd probably, if I liked him so much then I probably wouldn't. In the heat of the moment, I probably wouldn't think about it at the moment.....it would probably run through my head that I shouldn't be doing this and then it'll go.' F(16) (9) - interview round 1

'.....but you really like them then you're probably just likely to say yeah, all right whatever.....he'll probably go away if I say no [TO NOT USING A CONDOM] so might as well just say yes....' F(16) (21) - interview round 1

The following person had always used condoms in the past, often insisting or persuading his partners to do so. However, his intentions to use a condom could be swayed by his strong feelings towards his partner, for example,

'.....if I wanted to go out with her and I liked her then I probably wouldn't use one [A CONDOM].....if she's that nice and you know, I like her that much, then you just, I would

probably just get on with it and not worry about a condom really and just put the trust in her really.' M(17) (41) - interview round 1

This section has shown the important distinction between an intention and expectation. Most of the sample would want to use a condom at their first intercourse with a new partner; however, around one-half of these people thought they could well abandon this intention. It seems that a combination of emotions for the partner and how well they were 'known' by the respondent, together with excessive alcohol consumption at the time of intercourse, may help to explain these expectations of condom use. That these interactional concerns are so paramount lends support to the partner-related influences upon contraceptive and condom use (such as negotiation skills and gender power imbalances) that were highlighted in the theoretical literature and the extension of the TPB presented as this project's conceptual framework (Figure 6 in Chapter 4). The influence of previous behaviours seem to have little bearing upon the nature of these intentions and expectations. The only exception to this is for those who intend *and* expect that they would use a condom; they are far more likely to have used them consistently in the past, in similar scenarios of first intercourse with a new partner.

These first set of findings have explored participants' intentions and expectations towards future scenarios of first intercourse with a new partner. The second set of findings that follow will outline to what extent these measures were consistent with the actual behaviours reported by the 22 who were interviewed on a second occasion.

5.2 Behaviours reported at round 2 and the qualitative associations between intentions, expectations and behaviours - CA and IPA

Of the 22 round 2 interviewees, eight had not had intercourse with a new partner in the eight to 10 months since the first interview. Seven of these eight had intercourse only with their steady partner discussed in round 1, and one had not had intercourse at all during this time. To compare the intention-behaviour relationship regarding *new* partners, only 14 of the 22 round 2 interviewees could therefore be used. Table 29 illustrates respondents' intentions and expectations towards future encounters and how these were related to the behaviours reported at round 2

Case No.	Intention/behaviour relationship	Expectation/behaviour relationship
32	+ve (2 occasions): "wanted to use condoms" and did use them	+ve (2 occasions): "Definitely would use condoms" and did use them
2	-ve (1 occasion): "wanted to use condoms" but did not use them	-ve (1 occasion): "Definitely would use condoms" but did not use them
15	-ve (2 occasions): "wanted to use condoms" but did not use them	+ve (2 occasions): "Might not use condoms" and did not use them
17	+ve (3 occasions): "wanted to use condoms" and did use them	+ve (3 occasions): "Definitely would use condoms" and did use them
31	+ve (1 occasion): "wanted to use condoms" and did use them	+ve (1 occasion): "Definitely would use condoms" and did use them
26	-ve (1 occasion): "wanted to use condoms" but did not use them	+ve (1 occasion): "Might not use condoms" and did not use them
14	+ve (1 occasion): "wanted to use condoms" and did use them	-ve (1 occasion): "Might not use condoms" but did use them
13	+ve (1 occasion): "wanted to use condoms" and did use them	-ve (1 occasion): "Might not use condoms" but did use them
16	-ve (1st 3 occasions): "wanted to use condoms" but did not use them. +ve (4th occasion): "wanted to use condoms" and did use them	+ve (1st 3 occasions): "Might not use condoms" and did not use them. -ve (4th occasion): "Might not use condoms" but did use them.
18	-ve (1 occasion): "wanted to use condoms" but did not use them	+ve (1 occasion): "Might not use condoms" and did not use them.
4	-ve (1 occasion): "wanted to use condoms" but did not use them	+ve (1 occasion): "Might not use condoms" and did not use them.
50	+ve (2 occasions): "did not want to use condoms" and did not use them	+ve (2 occasions): "Definitely would not use condoms" and did not use them.
29	+ve (4 occasions): "wanted to use condoms" and did use them	+ve (4 occasions): "Definitely would use condoms" and did use them
36	+ve (1st 2 occasions): "wanted to use condoms" and did use them. -ve (3rd occasion): "wanted to use condoms" but did not use them.	+ve (1st 2 occasions): "Definitely would use condoms" and did use them. -ve (3rd occasion): "Definitely would use condoms" but did not use them.

Table 29: Summarising the relationships between intention, expectation and behaviour

interview (analysed through CA). Participants reported between one and four episodes of intercourse with a new partner between interviews. For those seven participants who reported more than one partner since round 1 interview, only two had experienced both condom use and non-use at these intercourses (see case study analyses later in this chapter). The main aim of this section is to qualitatively investigate the reasons behind some of these relationships reported by 14 respondents.

The qualitative analysis (following the principles of IPA) revealed six distinct patterns of condom use/non-use, based upon respondents' intentions, expectations, actual reported use and whether they had ever initiated this use (usually by mentioning condoms or contraception prior to intercourse). The six patterns of use were classified as follows: *Consistent users* (positive[31] intention and expectation, always used condoms and had initiated their use), *Converted users* (positive intention and expectation, used condom between interviews but not always prior to interview round 1 and had initiated their use), *Influenced users* (positive intention, negative expectation, had both used and not used condoms between interviews and had never initiated their use), *Over-optimists* (positive intention and expectation, not used condoms between interviews and had never initiated their use), *The resigned* (positive intention, negative expectation, not used condoms between interviews and had never initiated their use), *Consistent non-users* (negative intention and expectation, not used condoms between interviews and had never initiated their use).

Although these are the most prominent patterns of condom use reported in this study, they are by no means mutually exclusive; i.e. some cases, for example, categorised as *influenced users* may also exhibit traits of a *converted user*. With the continual reference to the cases identified with each pattern, this section seeks to explore, in greater depth, the nature of these relationships between intentions, expectations and behaviour that have been observed in these interviews.

[31] Positive in the context of intention and expectation refers to 'yes' for intending to use a condoms and 'yes' to estimating that condoms would be used.

Consistent users

These people are the most effective contraceptive and condom users, with all their experiences of intercourse (both with steady partners and ONS) having included condom use. Case 32 had always used condoms with his four lifetime partners and 29 had done the same with her seven. They both reported a positive relationship between their intentions, expectations and behaviour and both were able to raise the issue of condoms prior to intercourse with their first partner since round 1 interview (which were both ONS). With both participants having the foresight to obtain condoms beforehand in the event of what were both unexpected encounters, all conditions were indicative of successful condom use. The clarity and timing of their discussions are illustrated as follows and have been presented alongside their intentions recorded earlier,

Case 29:

'I don't think I'd ever have sex without using some form of contraception, usually a condom. For the first time I'd definitely would use a condom.' F(18) (29) - interview round 1

'.....we was sort of like getting a bit more into it, you know what I mean, a bit of touchy feely and all that, and umm, I just goes are you going to have sex, are you going to shag me and he goes umm, yeah, and I goes well there's some condoms in a drawer in there.....it was just sort of like waiting to make sure that was where everything was going, you know what I mean, cause I don't want to bring up condoms and having sex if he's thinking no I just want a bit of touchy feely if you know what I mean.....I think he wasn't used to someone turning round and saying yeah, there's some condoms over there, get one and come back, you know what I mean, the way I was so abrupt about it, but he never sort of like said no or whatever.....' F (18) (29) condom use - interview round 2

Case 32:

'I'd be very determined.....so if you're not using one [A CONDOM], we don't do it [INTERCOURSE].' M (19) (32) - interview round 1

'I took my wallet out and she said she was on the pill, cause I was going for a rubber and she said she was on the pill but I said you know, double dutch and sort of you know, may as well use it anyway.....she said fair enough you know, she wasn't against it.....she said that's all right, that's good.....I think she was quite chuffed really.' M (19) (32) condom use - interview round 2

The participants' consistent use of condoms is typified by both their experiences of refusing intercourse unless condoms were to be used. On one occasion this was because a lack of availability and for the other because their partner refused to use one. These two cases are illustrated in turn,

'I mean there have been times when we haven't had any [CONDOMS] around and he's like are you sure you're not on the pill, are you sure, do you know what I mean? No I'm not so you'll wear one anyway mate, you know what I mean, I don't know who you've slept with before me and I'm not risking it.....he went out at three o'clock in the morning to get some [CONDOMS] because it was like, it was just like oh, come on please, there's got to be a way, no not unless you've got any!' F (18) (29) - interview round 2

'.....it was back to her car in the car park, the subject of sex came up, I got out the condom as I do, and she didn't want to.....she said what's that? I said it's a condom you know, she said I really don't want to use one of them and I said well, I do, and she was like no, you know, if you're going to wear one of them we're not doing it. So right, fair enough, I went back to the club.' M (19) (32) - interview round 2

When examining both the transcripts for each of these cases, there is a definite sense of high self-esteem and self-efficacy (particularly in the ability to discuss condom use with their partners). A partner opposing condom use, or even persuading them to have intercourse when condoms are unavailable, would certainly not influence their behaviour. This confidence is typified as follows,

'I mean don't get me wrong, if I say no [TO INTERCOURSE WITHOUT A CONDOM] and I'm like really gagging for a shag then I'm like why did I say no, why do I have to be so moral, do you

know what I mean, but at the end of the day I'm not going to compromise myself in that way.....it's my life, I'm eighteen years old.' F (18) (29) - interview round 2

Finally, when focusing in upon these unique case studies, it is interesting to note how both of these participants attribute their consistent use of condoms. A combination of parental support and often negative experiences of their peer groups appears to spur on such consistent use. For example,

'I think, my mum's always brought me up and I've seen the way my mum's had to struggle, she had the first kid when she was seventeen and last year when I turned seventeen I thought I couldn't handle kids, you know I've seen, I've got mates they're sixteen they're having kids and I'm seeing them now, what a state they are in, I mean they're with blokes who slap them around and stuff, I refuse to be treated like that, so I ain't being no one's bitch cause that's all they are basically is they're men's bitches to do what they want and I just, I'd never let a man treat me like that and sort of like to me making sure that you're covered, making sure that you're in control of that is sort of like saying you're not going to treat me how you want me to cause I've got a mind of my own to do as I want with.' F (18) (29) - interview round 1

Whilst the theoretical implications of these cognitive categorisations will be referred to more extensively in Chapter 8, there are a few points worth noting alongside these findings. Of the four variables proposed in the conceptual framework (Figure 6, Chapter 4) as influences upon the intention-behaviour relationship (as an extension to the TPB), it is apparent when examining these *consistent users* that the ability to openly discuss contraceptive intentions prior to intercourse is particularly likely to ensure that these intentions are successfully translated into behaviour. Moreover, the ability, confidence and high sense of self-efficacy to negotiate against opposing intentions has also been illustrated. These communication and negotiation skills, illustrated above in the context of matching intentions with behaviour, show more clearly why they are so necessary in ensuring contraceptive use (and hence lend support to the findings identified earlier in Chapters 5 and 6). This also supports much of the theoretical ideas documented in Chapter 2 such as the 'behavioural skills' of Fisher and Fisher (1993) and the 'enactment stage' of Catania's *et al.* (1990) AIDS Risk Reduction Model. These communication skills are categorised in the reviewed literature in a number of other ways, such as interpersonal variables (Sheeran *et al.*, 1999) and

relationship characteristics (Abraham and Sheeran, 1993) - see Chapter 3, Section 2 for a more comprehensive account of the empirical support. It is also important to note that these users do not only communicate effectively but are also capable of negotiating (or withhold intercourse as shown in Case 29) in situations of conflicting intentions between partners. Additional skills-based constructs beyond communication and negotiation, such as preparatory behaviours (for example, Gollwitzer 1993, Abraham *et al.*, 1998, Bagozzi and Edwards 1998, and Sheeran *et al.*, 1999) are also reflected in these most effective of condom users. The quotations illustrate that these *consistent users* are likely to have the foresight and ability to prepare and plan for largely unexpected instances of intercourse by obtaining and carrying condoms in advance. Gollwitzer's (1993) implementation intentions and the contextual cues detailed by Orbell *et al.* (1997) in Chapter 2 have also been illustrated in the above, for example, by Case 32 who, when in a recognisable situation of impending intercourse acted accordingly by '....*the subject of sex came up, I got out the condom as I do.....*'.

Converted users

Although these people reported using condoms consistently between interviews, this had not always been the case throughout their sexual careers. Cases 17 and 31 had both experienced first intercourse with a new partner without the use of any contraception, but more recently and especially in the time in between interviews, have used condoms consistently. In this way, they have been termed *converted users.*

Both cases reported positive associations between their intentions, expectations and behaviour. For the experiences of first intercourse with a new partner in between interviews (three new partners for case 17 and one for case 31), both had talked about condom use with their partners immediately before intercourse. As for the *consistent users*, both obtained condoms in advance and discussing the issue of condoms beforehand certainly encouraged their use. Once again, intentions recorded at round 1 are illustrated. For example,

Case 17:

'I really don't think I would without a condom.....if we just brought it up in the conversation, and he'd said I haven't got any condoms, I'd say, right, not doing it.' F(18) (17) - interview round 1

'.....I said have you got a condom and he went yeah, yeah in my wallet and then that was the only one cause I made sure, cause when I come here [CLINIC] they was given to me so I gave some to him and made sure he had some.' F (18) (17) condom use - interview round 2

The competence in talking about condom use is typified by case 17, who ensured condoms were used even when her partner first talked to her about the pill. Even though her partner knew she was protected against pregnancy, she had the ability to insist upon condom use (other cases had found this particularly difficult - *see Verbal communication about intercourse and contraception* in Chapter 6).

'.....He said to me.....anyway he said are you on the pill and I said yeah, but I said I want you to use a condom.' F (18) (17) - interview round 2

What is particularly interesting about these cases is their contrast in communicative ability and insistence to use condoms when referring back to their first interview. Condoms were not used on either of the following occasions of first intercourse with a partner (recorded at round 1 interview),

'It [INTERCOURSE] really sort of did come as a surprise so I wasn't, I wasn't thinking that far ahead.....[TALKING ABOUT CONDOMS] would have been just like saying would you like to have sex, which isn't really the sort of right thing really.' F (17) (31) - interview round 1

'I said to him, because I didn't have any condoms, have you got any and he said no, we'll be all right, and I said no. And he said oh, you'll be all right. I said I might get pregnant, something like and he said no it'll be all right like that. It [INTERCOURSE] sort of happened.' F (18) (17) - interview round 1

Both cases identify quite specific 'triggers' to this change in self-efficacy and general confidence in using condoms (such themes are of relevance to the *dynamics of change*, later in this chapter). For 31, it was the trauma of a pregnancy scare that made her really take the issue of contraceptive and condom use more seriously,

'When I sat in 'No Limits' and it took, I don't know it [PREGNANCY TEST] takes two minutes I think for it to show up when you're pregnant you know. I just sat there with my friend like looking at the clock and it was just like the seconds were ticking away.....and it was like the worst two minutes of my life so I'm not going through that again, no way.' F (17) (31) - interview round 2

For 17, it was the experience of a partner first talking about condoms and from then on it seemed more 'natural' to engage in such discussions,

'When XXXX said to me before we had sex are we going to use condoms.....and it progressed from there. I've never been scared to say that umm, when you're younger I just, well yeah when I was younger it was more difficult.' F (18) (17) - interview round 2

This theme of taking the first 'step' in talking about condoms was also reported by 31. Following her pregnancy scare (reported above), she had initiated (for the first time) a discussion about condoms with her partner. With this discussion being received positively, the perceived threat of a partner's negative reaction to such discussion had been dispelled and thus her ability to negotiate condom use in future situations had similarly increased,

'I said if we're going to do this [intercourse] we're going to do it properly.....I mean I always thought you know I'd feel really silly if someone just said do you want to have sex.....I always thought it might ruin it, ruin the moment sort of thing, cause that's like go through all the preparation again and that seemed clinical but you know it made everything a bit more comfortable and a bit more, you know.' F (17) (31) - interview round 2

Incidentally, of these cases reporting such behavioural change, none had attributed this change to the experience of partaking in the interviews. A few of the other respondents had noted a positive impact upon their attitudes towards contraceptive use (see Section 6.4 of this chapter for more detail).

Much of the theoretical literature related to the *consistent users* applies here also. The ability to communicate their intentions, plan and prepare for intercourse is shared for both of these types of users. The fact that the *converted users* have *changed* their behaviour marks them as different. Returning to the extended TPB presented in the conceptual framework, it would appear that the dynamics construct, representing changed behaviour is of particular relevance here. Reasons for this changing behaviour, to be detailed under Section 6.4, include the influence of the sexual partner and thus support the importance of considering contraceptive use in an interactional context. Having changed their behaviour, these respondents now have an enhanced perception of control which increases their likelihood of repeating these behaviours in the future. This link between skills enhancement and increased control, evident for these *converted users*, was outlined by Abraham *et al.* (1998), Bandura (1998) and Conner and Armitage (1998) in Chapter 2; the latter noted how 'frequent performance of a behaviour may bring subsequent behaviour under the control of habitual processes' (p.1436-1437). It is likely , having changed their behaviours and possibly enacted the use of condoms on a number of occasions, that the future use of condoms is assured; the 'goal' of using condoms is now firmly prioritised (Karoly, 1993, - see Chapter 2) and it is now less likely that varying contextual or interpersonal factors will be of distraction. The priority of using condoms, as for the consistent users, is now part of the *converted users* 'central identity' (Abraham, et al., 1998, p.584 - see Chapter 2). Having now established the cognitive processes required to ensure condom use, these *converted users* (and the *consistent users*) also illustrate the powerful influence of past upon current behaviour (see Abraham *et al.*, 1995 and Sheeran *et al.*, 1999, in Chapter 3).

Influenced users

Those people whose use of condoms is particularly subject to their partners' actions are termed the *influenced users*. When examining their positive intention to use a condom alongside the expectation that condom use may not occur, it could be argued that these cases do not exhibit as much willpower or belief in their own capabilities to use condoms when compared to the *consistent* and *converted*

users depicted previously. Cases 13 and 14 had estimated that they might well not use condoms on their first intercourse with a new partner (despite intending to), but quite to their own surprise had managed to do so. The following example illustrates how case 13 recorded her expectation (at round one interview) and then reported her actual use of condoms (at round 2). Her partner's role in ensuring condom use is quite clear,

Case 13:

'I think it [using a condom] would depend on what I said before, if he looked like a bloke that would just try it on with everybody, cause usually you can tell how forward they are, whether they like do it all the time and if they're really shy then you know that they haven't [got anything to hide] really.' F (16) (13) - interview round one

'We was at my house.....I think he just got one [a condom] out, we didn't really talk about it.' F (16) (13) condom use - interview round 2

Unlike the above cases where they have been influenced by their partners only in a positive way, the next two cases were also been influenced in a negative way (i.e. by not using condoms) on occasions. Cases 16 and 36, having experienced both use and non-use of condoms in between their interviews, can also be classified as *influenced users*[32]. For both, condoms had always been available at the time of intercourse, so the key difference is more likely to be their partners' preference for condom use or non-use. These people are more likely to wait for their partner to say something or take the initiative rather than they themselves assuming responsibility. For example, case 36 reports from two ONS where condoms were and were not used respectively,

'I started kissing her and that and I said to her, I want sex, and she goes have you got anything, I goes yeah, showed her a johnnie and started having sex.' M (16) (36) condom use - interview round 2

[32] Unlike other *influenced users* cases 16 and 36 intended *and* expected to use a condom with their new partner.

'I just carried on [after partner said she did not like condoms]. She said I'm on the pill you know, so didn't bother using them.....there was nothing in the way like, you just feel complete.' M (16) (36) no condom use - interview round 2

In contrast to the above two patterns of use, the lesser ability to communicate their intentions, to negotiate in scenarios of conflicting intentions, plan and prepare for intercourse results in the *influenced users* as having less control over whether condoms are used (see the literature cited at the end of the converted users). In contrast to Gollwitzer's (1993) implementation intentions whereby preparatory behaviours result in the cognitive pairing of context and behaviour (see Chapter 2), as shown in the previous patterns of use, it is the sexual partner who has control of the situation and his or her actions determine the outcome for these *influenced users*. It is likely that the inability to counter the gender power or interactional influences (see conceptual framework) is also exacerbated by the lower self-efficacy of these people (or perception of whether they are capable of ensuring condom use), when compared to the two previous patterns of use. Planning and rehearsal of these actions could be a means of increasing their self-efficacy; see Abraham *et al.*'s (1998) enhanced coping self-efficacy detailed in Chapter 2.

Over-optimists

The next three patterns of use (*over-optimists, the resigned* and *consistent non-users*) all refer to cases of intercourse without the use of condoms. As reported earlier in Section 5.1 of this chapter, the nature of the expectation was not associated with respondents' previous use of contraception and/or condoms. This is typified by case 2 (female aged 18) who from three of her four experiences of first intercourse prior to round 1 had failed to use condoms, but nonetheless estimated that she would use condoms on her next occasion. For this reason, case 2 is categorised as an *over-optimist* (although with her partner taking responsibility for condom use on her 4th occasion, suggests she also has traits of an *influenced user*). The reasons behind this non-use are shown from the following extracts from her round 1 interview,

Partner 1 - Steady partner (no condom used)

'I was too shy to ask him out for a drink so I got one of the other doormen to do it for me and this was when my mum and dad was on holiday and umm, we got on really well, went out for a drink, we came back here and he stayed for two weeks.....things just went a little bit too far.....I just didn't think it [CONTRACEPTION] was needed, we didn't have sex that often.' F(18) (2) - interview round 1

Partner 2 - ONS (no condom used)

'I mentioned the fact that my parents were away, and I can't remember what happened to be honest but he ended up coming back here and then he got up in the morning and left and I never saw him again.....I actually liked him for a long time but I felt that he didn't know I existed.....it [CONTRACEPTION] just didn't occur to me, cause I was about sixteen and just didn't know much about it really.' F(18) (2) - interview round 1

Partner 3 - ONS (no condom used)

'I went over to his new flat that he was painting and it [INTERCOURSE] just happened one night.....I thought well he's recently had a baby so I don't think he's likely to have any diseases or anything, I never had anything [A CONDOM] on me and he didn't either cause you know, neither of us expected it.' F(18) (2) - interview round 1

Although extracts relating to partners 1 and 2 suggests a lack of awareness, this is less so for partner 3 (the most recent). Moreover, throughout the interview, she indicates a sound appreciation of the necessity to use a condom and a thorough awareness of HIV in particular. However, this has not led to consistent preventative behaviour. Given her experiences recorded at round 1, her expectations were most surprising (or *over-optimistic*),

'Well at the end of the day if it's between ruining sex and getting a deadly disease or a disease that can stop me from having kids, then I'd rather say no [TO NOT USING A CONDOM].....if he

suggested it [CONDOM USE] then fair enough, if not I'd bring up the subject.....I'd say to him if you respect me then you will [USE CONDOMS].' F(18) (2) - interview round 1

Given that she has more often than not, failed to use condoms and that she has never discussed the issue with a partner, her optimism towards the future typifies an *over-optimist*. She recognises the need for a discussion and is convinced that to initiate one prior to intercourse with a new partner is feasible.

In between interviews, case 2 failed to use a condom with her new partner (a ONS), thus quite in contrast to her expectations recorded earlier. In similar fashion to her earlier experiences, intercourse occurred unexpectedly,

'.....we went out umm, that's when he had his old car, we had loads of people in his car, we stopped off at the lakeside and went for a walk and just one thing led to another, then it [INTERCOURSE] happened.....it [CONTRACEPTION] really slipped my mind.....I didn't know what was going on, I could hardly walk that night.' F(18) (2) no condom use - interview round 2

The *over-optimist* does not lack willpower or belief in his or her capability in using condoms (as shown by their expectations), but does lack the facility to transfer positive intentions and expectations into subsequent behaviour. For such cases, acquiring the skills to discuss condoms with their partners could be a way to cement this intention-behaviour relationship. Later in her round 2 interview, case 2 typifies the *over-optimist* by highlighting her difficulties in discussing such matters with her partners,

'Because it's, if you don't feel confident enough and you feel stupid asking them [ABOUT CONDOMS] you don't know how they're going to react.' F(18) (2) - interview round 1

Given that the over-optimists are aware of the necessity for condom use, it is likely that it is the inability of initiating a discussion about contraceptive use that contributes to the inconsistent relationship between intentions, expectations and behaviour. Moreover, despite a positive sense of self-efficacy or belief in their ability to use condoms (indicated by their expectation of use), the lack

of communication skills reduces the influence of this perceived control upon actual condom use (see conceptual framework and link between PBC, communication skills and behaviour). A lack of planning and preparation is also evident, for example in Case 2 (see above) who '*never had anything [A CONDOM] on me*'.

The resigned

The key difference between *the resigned* and the *over-optimist* is that the former expresses less willpower and perceives that they are incapable of using condoms and, given their previous behaviours, are perhaps more realistic in predicting that they 'might well not' use them. Those cases categorised as *the resigned* (15, 26, 18, 4) have regularly failed to use contraception and condoms with their previous partners.

'I wasn't bothered [ABOUT CONTRACEPTION].....didn't really think about it at the time.....I suppose I did think it [PREGNANCY] wouldn't happen to me.' F (17) (26) - interview round 1

'I really liked him and I wasn't going out with a bloke who he thought I was, so I went round there [TO HIS HOUSE] and ended up in his bedroom.....it was just like a mad like of the moment type thing, I was umm, a million miles away.....that [CONTRACEPTION] was the last thing on my mind.' F (18) (18) - interview round 1

These patterns of inconsistent use can not simply be attributed to a lack of awareness. This is illustrated by respondents' positive intentions to use condoms with their future partners, as recorded at round 1 interview. However, respondents' lack of determination or belief in their own ability is noted in their expectations: all four cases, despite wanting to use condoms, report that they could well end up having intercourse with a new partner without taking such precaution. In line with their previous behaviours, these cases are perhaps more realistic about their likelihood of using condoms. For example,

'Well I'd like to say I would use a condom but if I'd been drinking I'd probably be likely not to.' F (17) (4) - interview round 1

'I think I would be pretty determined [TO USE A CONDOM], but then again I might give up in the end and just umm, do it anyway cause I sort of give in quite easily.' F (16) (15) - interview round 1

When considering their behaviours reported in between interviews, it is perhaps of little surprise that this negative expectation of condom use has resulted in them not being used at all. All four cases reported a new sexual partner at round 2, and condoms had not been used in any of these recalled instances of intercourse. It appears that the inability to initiate discussions about condoms may contribute to this lack of use (as for the *over-optimists*), together with this perceived inability of translating their intentions into practice (unlike the *over-optimists*). The following examples are taken from behaviours reported in between interviews, and refer to cases 4 and 15 whose negative expectations of use have been outlined above,

'I mean, although it's probably best to say no, no it probably didn't at the time but then probably the next day I would have thought oh, you know I should have used a condom.....it wasn't that I was thinking oh, shit we should use a condom, it wasn't that at all it was just probably just had a few drinks, came back start, you know it was just like went like that.....it just wasn't the intention, I don't know it just wasn't, no it wasn't the fact that I didn't feel I could ask him it was probably the fact that I wasn't really thinking about it.' F (17) (4) no condom use - interview round 2

'.....I stayed round his house that night basically, it was the first time I'd stayed there so it just kind of happened.....I did sort of think about it [CONDOM USE] but I just didn't do anything about it. It's the fact that we didn't really talk about stuff like that.....' F (16) (15) no condom use - interview round 2

As stated earlier, the key difference between *the resigned* and *over-optimists* is regarding the formers expectation that they may not use condoms. This low self-efficacy and inability to discuss contraception makes *the resigned* vulnerable to non-use and risk situations. These findings relate to Bagozzi and Edwards (1998) construct of 'trying' which was argued to be an integral part of translating a goal intention into instrumental acts (see Chapter 2). They illustrate that willpower and self-discipline are required to cement this relationship and these attributes are clearly lacking in *the resigned* who, whilst wanting to use condoms, realistically believe that this would indeed be unlikely.

Consistent non-users

From the 22 round 2 interviews, one participant had not only consistently failed to use a condom on every occasion of intercourse, but had shown no regret about this. Case 50 (male, aged 18) had always intended to, and indeed had never used a condom. For his 12 partners prior to round 1, he never felt concerned about using condoms even if his partners were not on the pill. Not only does case 50 have extremely negative attitudes to condoms, but he also perceives that these views are shared by women,

'I don't like condoms, I don't like the smell of rubber, you know what I mean.....It's the time that it takes to put the condom on. After that, you like you want it there and then you don't want to wait like three minutes, looking for the condoms, opening the packet, breaking the seal around the packet of condoms, opening the condoms, taking them open, putting it on, you think fuck that, you're hard anyway, fuck it's gone.....it's just the hassle of getting the condom ready and putting them on and that, and you find most girls don't like either, they like you shooting in them, as easy as that.' M(18) (50) - interview round 1

Later in the round 1 interview, case 50 expressed his concerns about an impending appointment at the Genito-Urinary Clinic for an HIV test (subsequently reported as negative in round 2). Unlike the *converted users*, this experience clearly had no impact upon his attitudes towards condoms as indicated in his intentions towards future their use,

I[33]: *'And you know that you're going to have sex, would you want to use a condom?'*
R: *'No.'* M(18) (50) - interview round 1

Perhaps without surprise, Case 50 had failed to use condoms with his two partners reported at round 2 interview. Like many of his previous instances of intercourse, not only did intercourse occur without a condom, but having had no discussion about contraception beforehand, there was little certainty about whether pregnancy, alongside STI, could potentially result. The HIV test had clearly not had any influence upon his reported behaviours,

[33] I = interviewer and R = respondent.

R: *'Yeah, I don't care, you know what I mean. I go for a test and that.'*

I: *'Yeah, okay. So do you sort of not worry as much about diseases?'*

R: *'I don't think about it.'*

I: *'So you just don't worry about this at all?'*

R: *'No, don't think about it.'* M(18) (50) - interview round 2

Case 50, who has chosen consistently not to use condoms, represents the greatest challenge to sexual health promoters. Indeed, it is difficult to explain this behaviour in any obvious way. Case 50 appears confident, certainly confident in attracting sexual partners, is aware of the risks of pregnancy and STI (especially after having an HIV test), but nonetheless still prefers *not* to use condoms. Having extremely negative attitudes towards condom use appears to stifle any possible increased likelihood of using condoms in the future.

The *consistent non-users*, having no intention to use condoms, do not contribute to the discussion surrounding the intentions-behaviour relationship. For these people, it is the issues of intention formation that are of relevance which have been identified in the theoretical literature (see Conner and Norman's, 1996, and Abraham *et al.*'s, 1998, core constructs of intention formation in Chapter 2) and the conceptual framework, such as perceived threat from conception/STI, subjective norms, etc.

Having covered the dominant patterns of condom use in this section and related them to the theoretical literature outlined in earlier chapters, it has been possible to distinguish between the cognitive characteristics that separate condom users from non-users. The final set of findings, or 'dynamics of change', moves away from the intentions-behaviour relationship and focuses instead upon the changes experienced throughout participants' sexual careers.

6. FINDINGS PART 2 - THE DYNAMICS OF CHANGE

This section reports the participants' recollections of how their attitudes and behaviours regarding contraceptive and service use may have altered from when they were younger. More precisely, all participants (n=22) at round 2, were asked to consider the changes following their *first experience of sexual intercourse*. Although some reference will be made to potential changes between interviews

round 1 and 2, respondents were more likely to refer to changes they had experienced *prior* to their *first* interview. There are four sets of findings that will be presented in this section. First, changes in contraceptive awareness, second, changes in contraceptive behaviour, third, changes in the use of contraceptive advice services and, fourth, the main reasons or 'triggers' behind these changes. Whilst the categories of change were identified mainly through CA, greater exploration and in particular the reasons behind these changes were generated through IPA. Reference to quantitative data do not imply that this sample is representative of the wider population of young people in any way.

6.1 Changes in contraceptive awareness - CA and IPA

All 22 respondents reported some change in their overall awareness and knowledge about contraception, for the better, since their first ever intercourse. For most, this increased awareness had been a gradual accumulation of more and more information building upon a base level of knowledge already established prior to this intercourse. For example,

'I read a lot of leaflets when I was waiting to go places and from friends, from their experiences, and magazines have always got articles about this and that, and just through that sort of thing. You always knew sort of basics of the pill and that kind of thing but you just developed more and more, either as you're taking it [THE PILL] or from different sources.' F (19) (10) - interview round 2

However, for the minority, this increased awareness was more dramatic, where intercourse at an early age was occurring without any basic acknowledgement towards contraception. For example,

'.....I was like fifteen when I had sex the first time and I didn't think it was being 'sexually active', but just the situation I'd been in umm. Basically down at The Grip [A YOUTH ARTS CENTRE] there was so much information there, with the play especially and I came expert overnight.' F (18) (23) - interview round 2

More specifically, respondents were likely to mention an increased awareness towards STI in particular, since having intercourse for the very first time. For example,

'When you were younger you really didn't think about HIV, you just thought about getting her pregnant.' M (18) (50) - interview round 2

'When you're younger you just think if you use a condom you wouldn't get pregnant and that's all you really think about, you don't think about all the diseases you can catch.....I mean I've been on the pill since I was thirteen for my periods and umm, when I was sixteen and first slept with someone I was on the pill then, but you just think about the pill as not getting pregnant. You don't look it as, you know, you still can catch things on the pill.' F (18) (17) - interview round 2

This changing awareness about STI (from a general poor level of recognition earlier on) may to some extent help explain the level of condom non-use (see Chapter 6 for more detail) that has been reported in these interviews, as well as the contrasting intentions and expectations of condom use reported in Section 5.1 of this chapter. For those respondents who had not always used condoms in the past, this is perhaps more likely to indicate their indifference towards STI rather than that of pregnancy, especially since in many cases either they themselves or their partners were already taking the pill (see Chapter 6). Since those respondents who reported an increased awareness about STI tend to be slightly older, there may be an argument to suggest this awareness is not so apparent among young people who are just commencing their 'sexual careers', but instead may be something 'obtained' or considered as more important with increased experience.

Beyond awareness, other noteworthy changes concerning contraception (other than its use - see next section) relate to the general 'seriousness' surrounding the issue. Apart from becoming more aware of the 'facts', a few respondents recall how they consider themselves far more responsible about contraception now, in comparison to their earliest intercourses. For example,

'I think I'd probably just sort of umm, didn't realise that sort of the seriousness of actually not using it [CONTRACEPTION] so I just sort of pretended that I couldn't get pregnant and things like that and just put it to the back of my mind, rather than thinking sort of seriously about it.' F (16) (15) - interview round 2

'Well it's not that I wasn't aware. I knew about AIDS, HIV, pregnancy and that but I didn't know everything about them you know, I didn't really understand what was going on, then I grew up and started thinking about it.....I think it was more the fact that I was young and stupid and I just wouldn't have bothered.....it would have just been like getting my end away with it, you know.' M (19) (32) - interview round 2

The interviews suggest that to adopt such 'responsibility' is the next step towards ensuring consistent contraceptive use from first becoming knowledgeable about the 'facts'. With such responsibility, the issue of contraception, and the consequences for its non-use, are taken far more seriously and the potential risks become more personalised. This 'responsible' phase ties in with the perception of severity and susceptibility argued in the social cognition models (see Chapter 2), and indeed may be a prerequisite to actual behaviour change, or at least having the intention to change (see next section).

Finally, this section closes by noting the changes that some respondents have reported concerning their attitudes towards pregnancy. For some of the sample, pregnancy has not always been a condition that they have wanted to avoid. As an example, one respondent has always wanted a child (and has recently become pregnant prior to round 2) since she first had intercourse. She notes how this had influenced (quite 'rationally') her lack of concern towards contraception in the past,

'I've always wanted a baby, always, and I think that's why I've never been that bothered about contraception to be honest. I just, I really, really wanted a baby, that's all I've ever wanted. I am so chuffed, do you know what I mean, I really am.' F (18) (19) - interview round 2

For some of the others that have not always wanted to avoid pregnancy, their views have often changed in more recent times. The pattern of change has been consistent, with respondents becoming more negative towards the prospect of pregnancy with increasing time since first intercourse. For example,

'.....but now it's more like I know that having a child would be bad now, whereas before I'd still think if I did ever get pregnant for some stupid reason and I decided to keep it I think I could handle it, whereas now I think no I couldn't.' F (18) (29) - interview round 2

As far as pregnancy is concerned, it must not therefore be assumed that these young people have always (or are always) intending to avoid conception. This raises the point (often overlooked in the literature) that it is not only important to encourage positive attitudes and responsibility for contraception, but also that countering attitudes towards pregnancy itself (particularly amongst those who are just becoming sexually active) may also be equally influential in fostering consistent contraceptive use.

6.2 Changes in contraceptive behaviour - CA and IPA

Whilst Section 5.2 of this chapter detailed comparatively more recent changes in behaviour (for the *influenced* and *converted* users), this section outlines such changes reported by the respondents at round 2 and, by contrast, are *relative to when they first ever experienced intercourse*. Two aspects of contraceptive behaviour change will be presented in turn: first, changes in the consistency or regularity of contraceptive use and, second, changes in contraceptive method (particularly in the context of a developing steady relationship).

Around one-third (or 7) of the round 2 interviewees had reported a change in their consistency of contraceptive use since first ever intercourse. For the remaining two-thirds, they were split evenly into those who have always used contraception (and condoms at first intercourse with their previous partners as recorded in round 1) and those who have always used contraception inconsistently. For the one-third that had reported a change, all (except one case to be discussed later in this section) had increased their use of contraception, and in particular their use of condoms where 'appropriate' (especially first intercourse with a new partner, during the early stages of a developing steady relationship, etc.). The next two examples illustrate these changes in behaviour,

'I think when you're first having sex it's sort of like you're experimenting really you know really know, obviously you're not that knowledgeable about contraception, when you're younger it's like you know everyone laughs at it at school and that and it's not something so much of a serious thing I think and then as you get a bit older and you know your teachers start discussing it with you at school and your mum starts talking to you about it you obviously think well all these people are

talking to me about it it's obviously got to be something of a big issue so maybe you take more notice.' F (16) (21) - interview round 2

'I mean it's changed about how I want it to be now, cause I do definitely, I really want to sort it out and do it proper so I never used to really bother about much I didn't take my pill, I wouldn't be bothered I'd be really gutted now if I missed a day, do you know what I mean but umm.....I've always been knowledgeable of what it is and what happens, umm, I think my attitude's changed towards it.' F (18) (19) - interview round 2

In contrast to the above examples, the following case (9) is the exception, whereby her use of condoms, in particular, has actually become less regular then before. This change, in the opposite direction to the others, is attributed by her as being less constrained by her mother,

'I've always been on the pill since thirteen, since the beginning. I mean it's just a case of who I've decided to use a condom with and not you know, it's I mean I've had times more recently when I haven't used a condom and it has been in a stupid situation and I should have done.....I was ever so, so much more careful (WHEN YOUNGER]. It was mostly because of my mum, my mum put the fear, you know like I said my mum ruled my life basically.' F (19) (9) - interview round 2

In terms of contraceptive method change within a developing steady relationship, the following points have been derived from both round 1 (n=56) and round 2 (n=22) interviews, since it was an issue discussed throughout. For this sample, the most likely contraceptive method change within such a relationship is from either condoms only or condoms and the pill to using the pill only. The reasons reported for such a change are widespread although only a few are based on the certainty that neither themselves or their partner have any STIs that could be passed on as a result. Of considerable concern, both partners being tested for STI before such a change has only once been cited,

'I just thought it would be easier, really I mean I wanted to go on the pill sort of like cause then it's peace of mind if you run out of something, condoms then it's sort of like, and we'd discussed

like his sexual background and everything and I felt safe, I mean we got checked out [TESTED FOR STI] and everything and I felt it was safe to do so.' F(16) (21) - interview round 1

Moreover, only two cases illustrate such a change with both partners having discussed and assured each other that they had never previously had intercourse with a partner without always using a condom,

'Mmm, sort of I mean I'd learnt a lot more about his past and who he'd been with and things.....and what he was like.' F(18) (23) - interview round 1

'We didn't feel we had to in a way because in a way we'd both always used condoms before [WITH PREVIOUS PARTNERS] and then, I mean, after we knew how we felt about each other anyway it didn't seem necessary.' F(19) (10) - interview round 2

This latter case illustrates the most frequently documented reason for switching from condoms to the pill. Condoms are often perceived not purely as contraceptives but as tools to prevent the transmission of STIs; by switching away from condoms symbolises an increase in trust, commitment and love within the relationship (just as maintaining condom use may imply detriment to a partner's previous sexual behaviour - see Chapter 6),

'....I don't know, we felt it was more permanent if we didn't, it sound stupid but it was like condoms are what you use for one night stands and you don't really worry about sort of thing, but it just felt more permanent and sort of don't know, hard to describe.' F(19) (10) - interview round 1

'I have a relationship with him and I trust him a lot more, I mean I've actually got a relationship with him whereas with the others I didn't have a relationship so really I didn't know what they were like as a person compared with XXXX [STEADY PARTNER].' F(17) (5) - interview round 1

This notion of 'knowing' or judging a person as to whether it is necessary to use condoms with them is not only evident with the changes in contraception reported above, but has also been

reported in the contrast between intentions and expectations towards future condom use, reported earlier in this chapter.

6.3 Changes in the use of contraceptive advice services - CA and IPA

The participants' experience of using contraceptive advice services, such as young people's Family Planning Clinics, GPs and youth advisory centres, shows an increase following first ever intercourse. A minority of this sample had attended an advice service in advance of their first intercourse. Since experiencing intercourse, all the remaining respondents had visited a service at least once, usually a young people's clinic (acknowledging that 12 of the 22 round 2 interviewees were originally recruited from these clinics), anything from one day to one year after. The explanations, generated through IPA, for this inappropriate timing of first attendance appear to be two-fold. Firstly, there seems to be a general lack of awareness about these services, with respondents not knowing about these services prior to their first ever intercourse, and secondly, that the experience of first ever intercourse itself was almost universally unexpected and unplanned (as were many first intercourses with more recent partners - see Chapter 6). The reasons and triggers for this attendance will be outlined in the next section.

One final note about service use: although 'ever visited' may register as increased since first ever intercourse, the actual frequency of visits per case may well have actually decreased. Previous sections in this chapter have suggested that a person's general consistency in contraceptive use increases with experience, and thus requests for pregnancy tests, emergency contraception, etc. (which may intuitively account for a fair proportion of the attendance at young people's clinics in particular) may be reduced in time. Moreover, with the predominance of the pill use (alone) in ongoing steady relationships, the older respondents (who are more likely to be involved in such relationships) may find it only necessary to attend these clinics only once every three or six months for repeat prescriptions. These findings may help to explain the age structure of the sample attending the young people's clinics reported in Figure 8 of Chapter 5, suggesting that visits to such clinics may well reduce with increased sexual experience and relationship stability, assuming both are related to an increase in age.

6.4 Reasons and triggers behind the reported changes - IPA

From the analysis of the in-depth interviews (using IPA), there appears to be three sets of 'triggers' initiating the changes reported above: personal experiences, friend's experiences and the influence of 'powerful others'. Each will be discussed in turn. At the outset, it is also worth making the distinction between the triggers according to their degree of impact. Within the three sets presented, there exist influences that are behavioural (that may result in the immediate use of condoms, for example), and those which have more of an attitudinal influence. These attitudinal changes are likely to make respondents 'think' more about certain issues, but are unlikely to have an immediate impact upon behaviour (but nonetheless may ultimately lead to behaviour change in the longer-term).

Personal experiences

The experiences of a pregnancy 'scare' and a positive test for STI have both been shown to impact upon participants' contraceptive behaviour. The impact of a pregnancy scare has been illustrated earlier in this chapter by case 31 (under *converted users*), who is now a consistent user of contraception. The impact of such a scare is not only confined to young women, but may also have an important influence upon the 'potential' father. For example, this young man, who has always used condoms, notes how a ripped condom has made him even more vigilant about their use in the future,

'When you're young, you're sort of untouchable aren't you, you haven't got a care in the world, when you get old you've actually got to take responsibility for yourself and so.....ever since I had the pregnancy scare [RIPPED CONDOM] with my second ever girlfriend I had sex with, that sort of brought it home.....it could well have been a turning point in my life.' M (19) (32) - interview round 2

Moreover, the profound experience of a pregnancy scare may also initiate a first ever visit to a service, to either obtain emergency contraception or to have a pregnancy test.

In terms of STI, the impact of a positive test makes it absolutely essential that condoms are used to prevent further transmission. Having changed over to using condoms, the future use of this method of contraception (as indicated in the following example) may well become more habitual,

'When I had Chlamydia, it started off with one of use, we don't know who, and got passed on to the other and then passed back again, and all through that time after that when we were getting treated for it we had to use condoms anyway, so it's just habit now.' F (18) (2) - interview round 2

All respondents were asked about how having the first interview may have influenced them in any way. For those who reported an influence, a positive impact upon their attitude (as opposed to their behaviour) towards contraception was reported. In this way, the interviews represented more of an attitudinal trigger compared to the influence of a pregnancy scare or STI, which could be considered as having more of a behavioural impact. For example,

'It's [THE INTERVIEW] made me think about it [CONTRACEPTION] more.....I don't know that it's changed anything [BEHAVIOUR] much, it's just made me think about it.' F (19) (10) - interview round 2

'I just think it [THE INTERVIEW] makes you think about it, talking about things, makes you think about contraception, so umm, don't know if it's changed what I do but it does make it probably stick out in my mind more.....but I don't think it would change my behaviour.' F (17) (4) - interview round 2

Friend's experiences

A number of participants have noted in these interviews how they would wish to avoid the experiences that their friends had reported concerning pregnancy and/or STI. There are no examples where participants have intended to follow the more positive aspects of a friend's behaviour. Having witnessed their friend's experiences, often at close hand, this raises their own determination to avoid such unwanted episodes of pregnancy and/or STI. For example,

'I think when you see, I think it's easier when you see your friends doing it as well [NOT USING CONTRACEPTION] you think oh, look at them, I don't want to be making a fool of myself like that.' F (16) (21) - interview round 2

'I had a friend got pregnant loads of times but then she's never bothered to go on the pill she's always saying, oh well if I go on the pill I'll forget to take it and she's been pregnant, she's had two abortions, she's had a serious load of STDs, she got infected when, she had a D&C umm, cause the baby died inside her, she had to have a D&C and they didn't take it all out, so it was infected she had to go back and get it out again, and just watching her go through that and then for her to come up to me and tell me that she's pregnant again, it's ridiculous.' F (18) (16) - interview round 2

Participants' friends have also had a direct impact upon their use of contraceptive advice services with several participants recalling that their first visit to such a service was either to support their friend, or was on the suggestion of a friend to seek advice themselves. Section 7.2.3 of Chapter 6 also reported the influence of friends in raising people's first awareness of these services.

The influence of 'powerful others'

In terms of 'behavioural triggers', the influence of the sexual partner has played an important role for some of these interviewees. Previously reported case studies in this chapter, under *converted users* and *influenced users*, have already shown how the actions of the sexual partner may shape the other's use of contraception. The *converted users* are most interesting in that their partner's actions have resulted in their own contraceptive behaviours being permanently changed for the better. This is usually by their partners either insisting on contraceptive use or by their 'unexpected' positive reaction to a discussion about contraception. Referring back to the theoretical arguments proposed in Chapter 2, this again adds support for the models that acknowledge an interactional component as well as those proposing the role of an enhanced perception of control (also see *converted users*). In terms of service use, partners as well as members of the immediate family (particularly mothers and older sisters) appear to play a role in initiating the participants' first ever visit.

Having identified some of the 'key triggers' behind the reported attitude and behaviour changes, this section closes by acknowledging that such changes are not always so easily attributed to any specific event. Indeed, returning to the round 1 interviews briefly (n=56), around one-fifth (or 11) of this sample had noted a gradual increase in their confidence and self-esteem (that could not be attributed to a single event) since their first ever had intercourse, which in turn had resulted in a general increase in their regularity of contraceptive use. The following two examples illustrate this point further,

'I think I have in some ways, I mean I'm more confident now, I never used to be when, in relationships I never used to be very confident and so I suppose I used to let them take control a bit.....but now I am more confident so I have more say in things.' F(16) (15) - interview round 2

'I think it was partly because it was, you're unaware when you're younger and when you're unaware of what's coming you tend to let other people take control.....and he'd [BOYFRIEND] already been there, he was that bit more older, he'd already had his relationships and so he sort of like knew the ropes and I just tended to follow.' F(17) (44) - interview round 2

7. CONCLUSION

This chapter has presented findings that have been generated from the longitudinal design of this project. The first key finding outlined in this chapter was the unexpected divergence between a person's intention and expectation about future condom use. With one-half of respondents realistically expecting themselves to forego the use of condoms on the occasion of first intercourse with a new partner (if their partner objected to their use), this suggests, perhaps, that greater awareness towards the *susceptibility* and *severity* of pregnancy, and in particular STI, is necessary for these people alongside a greater 'belief' in their own capabilities of ensuring condom use. Excessive alcohol consumption, partner's objection to condoms, how well the respondents 'knew' their partner and how well they 'liked' their partner, were all identified as possible influences upon this intention and expectation-behaviour relationship.

With the behaviours recorded at the round 2 interview, it was possible to match the intentions and expectations to actual reported instances of condom use or non-use. From the detailed qualitative analyses (using IPA) of the 14 cases who had experienced intercourse with a new partner since round 1, six contrasting patterns of condom use were defined according to the intention-behaviour relationship. These patterns clarify what cognitive characteristics distinguish condom users from non-users. From a sexual health promotion perspective, each pattern of condom use clearly requires a different emphasis or focus according to the constructs used to define them. For example, the *over-optimists* (given their positive intentions and expectations and previous experiences of inconsistent use) were particularly lacking the skills to ensure condom use (such as the ability to discuss this with their partner), whereas the *influenced users* and *the resigned* were identified as requiring skills enhancement alongside an increase in their willpower and perceived ability (or self-efficacy) in using condoms (given their positive intentions but negative expectations). These patterns of condom use were also unique from other typologies (such as Edgar, 1992 and Rademakers *et al.,* 1992 - see Literature Review, Chapter 3) in that they were not all necessarily static representations. Indeed, the *converted users* had become more consistent in their use compared to when they first ever had intercourse, and the *influenced users* were able to be persuaded both into use and non-use according to the actions of their partners. Some implications derived from these contrasting patterns of use for the socio-psychological theory outlined in Chapters 2 and 3 will be discussed in the following Chapter 8.

The final set of findings concerned the changes in contraceptive awareness and behaviour that respondents had experienced since their first ever intercourse. Whereas all respondents had experienced a general improvement in their awareness, particularly towards STI, a proportion of the round 2 interviewees had reported increases in their overall consistency of contraceptive use (with a particular increase in condom use at first intercourse with new partners). Moreover, with only a few of the respondents first attending a contraceptive advice service prior to their first ever intercourse, the majority had reported an increase in their 'ever use' of such services following this intercourse. The reasons or 'triggers' for such changes in awareness and behaviour were attributed to respondents' personal experiences and the experiences of their friends (in particular a pregnancy 'scare' or a positive test for STI), as well as the influence of their partners and members of the close family.

The last three chapters have outlined the findings that have been generated from the clinic survey and the two rounds of interviews. The important impact that these findings have upon socio-psychological theory will be discussed in the forthcoming (and final) chapter of this thesis, as well as some of the research limitations.

CHAPTER 8: CONCLUSION AND RESEARCH IMPLICATIONS

1. INTRODUCTION

This chapter will first present a summary of the main research conclusions that have resulted from the SAQs administered at the clinics and reported in Chapter 5 and the two rounds of interviews outlined in Chapters 6 and 7. Following these conclusions, a section will discuss these key findings further to see how they met the objectives and conceptual framework detailed in Chapter 6. This will lead on to a presentation of the research limitations, which in turn will be followed by the impact of this research upon the literature reviewed in Chapters 2 and 3. The final sections will discuss the implications for health policy and propose directions for future research.

2. SUMMARY OF KEY CONCLUSIONS

A summary of the key conclusions from this project is presented as follows, including which chapters they have been reported in and what type of analysis was predominantly used for their generation. It is important to emphasise that these conclusions are applicable to this project's sample only, and no claims about wider generalisability are being made (see Section 4 of this chapter of research limitations).

2.1 Contraceptive use is more complex than awareness and knowledge - Chapter 6 (CA and IPA)

With the generally high level of knowledge and awareness toward contraception reported by this project's sample, encouraging more consistent use will clearly require more than just the conveyance of factual material about contraception. Although there was a minority of the interview sample who were currently not aware of the behaviours required to prevent conception and STI, most of the sample *were* knowledgeable about preventive behaviours. This suggests that not only is a knowledge base required, but more importantly that a lack of knowledge cannot fully account for the extent of reported risk behaviours by this sample. Additional issues, that will be

explained further in this section, clearly have a role to play in explaining these instances of contraceptive non-use.

2.2 Importance of communication and negotiation skills - Chapters 5, 6 and 7 (Multivariate analysis, CA and IPA)

The ability to talk to a partner about contraception, prior to intercourse, has offered a commanding explanation as to why some people have failed to use contraception use in the past and has been reported in both the SAQs and the interviews.

Analysis of the SAQs (n=424) administered at young people's clinics showed that those persons who had ever talked to their partners about contraception, prior to having intercourse with them for the first time, were significantly more likely to use contraception on this occasion. A logistical regression analysis (Chapter 5) showed that such a discussion was particularly important in the context of condom use (Chi square = 8.73, df=1, $p<.005$) as opposed to contraceptive use as a whole. For the latter, the relationship between prior discussion and contraceptive use appeared to operate indirectly by relating to the onset (or delay) of this first intercourse.

The case for communication skills was strengthened by the more in-depth interview findings. These data illustrated that communication between partners (both verbal and non-verbal) are likely to have a compounding influence upon contraceptive use along with many of the interactional themes reported in Chapter 6. A steady progression to a relationship is likely to involve a delay in the first intercourse which, for example, is also more likely to provide the time and opportunity for people to talk to each other about intercourse and contraception beforehand. This communication allows greater time for preparation for intercourse (to obtain contraception in advance) and which together makes this first intercourse less unexpected. Furthermore, when looking at the case studies reported in Chapter 7 (see later) the *consistent* and *converted users* are distinct (from the remaining patterns of use) in that they have the ability to communicate timely and effectively with their partners about contraception (and to also negotiate in situations of competing intentions between partners).

2.3 Further analysis into the importance of communication and negotiation skills and perceived barriers - Chapter 6 (IPA)

This study suggests one possible explanation for why communication could be so important to ensuring contraceptive use. It has transpired from the round 1 interviews that young men may well assume that for their female partners to express agreement for intercourse (where there has been no discussion about this beforehand), then they are likely to be already taking the pill. The lack of discussion about contraception beforehand confirms this assumption, just as a conversation about this beforehand may rebuke this crucial misconception. In addition, the ability to communicate contraceptive intentions clearly and without warning is seen as being particularly critical, given that the young people in this sample reported that their first intercourse with a current or recent partner was more likely to be unexpected.

Through the exploration of the main barriers to partner communication (using IPA), this research has identified the following two explanations for why communicating intentions to partners may be so difficult. Firstly, because a discussion would express an interest in intercourse, which would be perceived negatively by a partner and second, that any reference to condom use would imply detriment towards one's own or the partner's previous sexual history (with condoms being more associated with the prevention of disease rather than conception).

Finally, when considering the twin influence of communication skills and gender power imbalances, further exploration of the data suggests that the former component of 'partner interaction' (see conceptual framework in Figure 6) was more likely to be reported by the interviewees as influencing their patterns of contraceptive use. Nonetheless, it is likely that situations of high pressure or power imbalance impact upon contraceptive use by making this communication between partners much more difficult. This was particularly the case for the minority of participants who recalled accounts of extreme physical pressure, where communicating their intentions for contraception was almost impossible. Less intense instances of pressure were more widely reported, but similarly rendered any attempt at communication as more difficult. In pressure-related scenarios, for example, where the partner's reputation was perceived as being particularly high, where there was possible detriment to the person's own reputation or where one

of the partners wanted a long-term relationship to develop, the likelihood of any communication occurring was again reduced.

2.4 Communication barriers largely unjustified - Chapter 6 (IPA)

Critically, the round 1 interviews report that the perceptions of a partner's negative reaction (detailed above) were largely unjustified, by comparing these observations to interviewees' responses to hypothetical scenarios of partners talking to *them* about contraception beforehand. All interviewees reported that any prior discussion about contraception (initiated by a future partner) would be received in a positive manner and thus in contrast to these perceived negative reactions.

2.5 Communication skills and importance of taking the first step - Chapters 6 and 7 (IPA)

The interview findings reported in earlier chapters have emphasised that some young people, prior to first intercourse in particular, were clearly fearful of discussing the issue of contraception with their partner. Given that this research indicates, on the whole, that partners would react positively to such a discussion (see above), it appears that the *first* attempt at initiating such a conversation would be likely to raise the confidence to hold similar discussions in the future (also see the *converted users* later in this section).

2.6 Alternative strategies and 'sole responsibility' - Chapter 6 (IPA)

The findings indicate that if, in certain high pressure scenarios where such *verbal* communication is perceived as being particularly difficult, then 'sole responsibility' for condom use could play a key role. These strategies could include men just putting on a condom without saying anything or a woman putting one on her male partner. Of the accounts of sole responsibility reported in the interviews, there were no examples of where a partner had opposed this strategy; once again, positive reactions to this strategy, as for overt discussions, were reported.

2.7 Importance of preparation for intercourse and obtaining and carrying condoms - Chapters 6 and 7 (IPA)

The impact of communicating to a partner about contraception will be dependent upon whether one or both partner(s) has a condom ready to use. As most instances of first intercourse between partners in this sample were unexpected, having condoms at the ready has been shown to be an important part of ensuring their use on this occasion. The most effective condom users (see Section 2.9) were more likely to carry condoms at all times.

2.8 Intention-expectation relationship - Chapter 7 (CA and IPA)

For those who stated they would want to (or *intend*) to use condoms, around one-half thought it was likely that they might well (or *expect* that they could) abandon this intention when faced with a partner who was less keen on their use. Key themes (generated through IPA) which accounted for the deviation between intentions and expectations were excessive alcohol consumption, the role of the partner in opposing condom use and how much respondents 'liked' or 'knew' their partner (the latter relates to risk assessment).

2.9 Intention, expectation and behaviour relationship and the cognitive categorisations of condom use - Chapter 7 (CA and IPA)

Chapter 7 identified six contrasting patterns of condom use/non-use from the 14 cases who had reported sexual intercourse with a new partner in between the two rounds of interviews. These typologies were classified according to their recording of intentions and expectations towards *future* use of condoms with a new partner recorded at interview round 1, and *actual* patterns of condom use recorded at round 2. These patterns (in between interviews) included two of consistent use (*consistent users* and *converted users*), one of inconsistent use (*influenced users*) and three of consistent non-use (*over-optimists*, *the resigned* and *consistent non-users*). These patterns help differentiate between effective and ineffective condom users. The importance of carrying condoms, communicating to your partner beforehand, ability to negotiate in situations of conflicting intentions and/or pressure were key indicators of condom use (unless the sexual partner

took control as for the *influenced users*). A strong sense of self-efficacy to perceive that one is capable of initiating condom use as well as, of course, having the intention to use condoms, were also important.

2.10 Dynamics of change: descriptions and key triggers - Chapter 7 (CA and IPA)

This research shows that, from first ever intercourse, participants reported an increase in their overall awareness of contraception (and in particular towards STI), increased consistency in contraceptive use, abandonment of condoms in favour of the pill in long-term relationships and a general increase in the likelihood of having ever attended a service outlet. It could be suggested from this research that, perhaps, these changes may also lead to a more positive intention-behaviour relationship through increased experience (or time since first ever intercourse). The triggers behind these changes are categorised into personal experiences (such as a pregnancy scare), friend's experiences and influence of 'powerful others' (such as partners, close family members, etc.).

2.11 Service data: Attenders at young people's clinics - Chapter 5 (univariate analyses)

Questionnaires were administered to all the young people's clinics within the Trust area, and the high response rate (92%) provides confidence that this sample was representative of the population using such services, at least during that time of year. The clinic sample was shown to be predominantly female, non-virgin and currently in a long-term relationship. One particularly interesting feature was the variation in clients seen across the eight different clinics that were surveyed. Variations in age, gender, sexual experiences and distance travelled to the clinics were all evident.

2.12 Service data: Attitudes to contraceptive advice services - Chapter 6 (IPA)

For those who had ever been to a Family Planning Clinic for advice, satisfaction was generally high. Indeed, comparisons made directly towards previous visits to their GP indicate that these clinics serve as a particularly important source of advice for young people. Evidence from this

study supports the argument for a continuation of the clinic service alongside and, indeed, complementary to that of the GP.

However, there were a number of more specific service issues raised in the round 1 interviews which have important implications upon developing the services further to suit the needs of young people. These findings are particularly relevant for the Family Planning Clinics, since interviewees were more likely to have attended these sites rather than their GP, due to the interviewee recruitment process (see Chapter 4) [34]. When considering recommendations for service improvement, opening times were frequently mentioned; both to extend opening hours (i.e. more hours per week) and also to modify the opening to more suitable times (i.e. after school and evenings for weekdays, and especially Sunday mornings for emergency contraception requests). The other key recommendation was for the wider advertising of these services, particularly through schools and youth groups. This is particularly important considering that the vast majority of interviewees had first become aware of these services through 'word of mouth' from friends and relatives, rather than through the more professional sources such as leaflets, posters, school visitors, GP referrals, etc. This awareness issue was reflected in the proportion of interviewees (from the sample not recruited from the clinics) who had never sought advice from either their GP or Family Planning Clinic. This concern was particularly apparent for the young men interviewed from this non-clinic sample; nearly three-quarters had never been anywhere for advice. However, a lack of awareness could not fully explain this poor attendance from these young men; it was of some concern that a proportion of this sample cited specific reasons, centred around the hostility of the staff, for opting not to attend these sites (even though they were aware of their existence).

[34] Seven out of the eight young people's clinics surveyed in this project (to recruit interviewees) were held at family planning clinics (see Chapter 5 for more detail) - the point has been made earlier in Chapter 6 that the respondents tended to perceive the remaining young people's clinic, in fact held at a GP practice, to be synonymous with a young people's family planning clinic and clearly distinct from their GP.

3. RESEARCH FINDINGS IN VIEW OF THE PROJECT OBJECTIVES AND CONCEPTUAL FRAMEWORK

This section essentially seeks to discuss whether the findings derived from this project have met the challenge set out by the objectives and conceptual framework outlined in Chapter 4. To foster this discussion, each objective will be reiterated and followed by an account of whether this has or has not been met by the research undertaken here. This section will link to the limitations of the research which will be detailed in the next section. To remind the reader of the broad research question, the project intended *to assess the influence that partner interaction has in explaining contraceptive use patterns among young people and to interpret if and how these patterns change through time*. The five ultimate objectives (or main routes of exploration) that sought to meet this question will each be considered in turn:

3.1 Ultimate objective 1

To assess the role of Partner Interaction (PI) or more precisely the Communication and Negotiation Skills (CNS) and Gender Power Imbalances and Pressures (GPIP) present within partnerships that may help explain patterns of use and non-use of contraception (including condom use). To undertake this research among young men and women aged 16-19 inclusive, recruited from young people's clinics, youth clubs and youth advisory centres within the Southampton Community Health NHS Trust.

The importance of communication and negotiation skills has already been stated in the key conclusions and indicates the area in which this project has conducted most of its investigation. The different types of communication in terms of timing (in relation to intercourse), whether this was explicit or implicit and bi-lateral or uni-lateral have been provided in Chapter 6. Chapter 7 illustrates, through the *consistent* and *converted users* how the ability to communicate contraceptive intentions to a partner is important to ensure its use and essentially confirms and elaborates upon the communication skills identified in the first round of interviews. By contrast, GPIP, ranging from mild persuasions to intense physical pressure is likely to have a more secondary impact upon contraceptive use by affecting the likelihood of whether any

communication between partners will occur. Additionally, these data have shown that alongside CNS and GPIP, the ability to use contraception by adopting 'sole-responsibility' (for example, by just putting on a condom without talking about it) is an effective strategy to ensure its use and, having been generated inductively, was not referenced under the interactional issues comprising this first objective. The barriers to communication were also generated inductively; the main perceptions reported by this sample were outlined in the key conclusions.

3.2 Ultimate objective 2

To examine a range of dynamic factors that may be related to levels of CNS and GPIP and/or use and non-use of contraception (especially condoms).

The likelihood of a discussion occurring is subject to a number of the dynamic issues surrounding the events up to intercourse such as onset of first intercourse (in terms of time since first 'getting-off' with each other), whether intercourse was expected or not, etc. It is by facilitating or hindering the likelihood of partner communication, that these dynamic issues are likely to help to explain whether contraception (and condoms) are used on these occasions. The dynamics of change in Chapter 7 reported the various changes in awareness, use, method choice, etc. since first ever intercourse.

There was little investigation in to whether young people had an increased ability to communicate with partners as they became more sexually experienced. Although this investigation is somewhat constrained by the research design, in that a greater time interval between interviews and/or greater number of interviewees who had just become sexually experienced would have been desirable for such an investigation, this does indicate an important area in which this objective was not met.

3.3 Ultimate objective 3

To examine a range of contextual factors that may be related to levels of CNS and GPIP and/or use and non-use of contraception (especially condoms).

The impact of the immediate social context or situation upon contraceptive use was less widely researched in this project and indicates an area where the research failed to sufficiently meet one of its objectives. Although questions were raised in the interviews, the lack of detailed response to fuel further investigation was the main reason behind this; this is more understandable when considering the exploration in some areas, such as partner communication, generated much more detail and response than was expected. Nonetheless, the interviews did indicate that certain situations or scenarios are likely to have an indirect influence upon contraceptive use by, for example, making communication difficult (if in someone else's house, car, etc.) or making it less possible to obtain condoms at short notice.

3.4 Ultimate objective 4

To conduct this research into PI using a longitudinal design (by examining previous behaviour and also by interviewing respondents on two occasions to record behaviour between interviews) to explore the relationship between intentions and behaviour regarding the use and non-use of contraception (especially condoms).

The difference between intentions and expectations were noted in this research, and the reasons for this were reported in the key conclusions. The patterns of condom use reported in Chapter 7 were able to illustrate the key differences between effective and less effective condom users, by the ability of the former to carry condoms, communicate to a partner beforehand, to negotiate in situations of conflicting intentions and/or pressure and by possessing a perceived capability of initiating condom use. These issues are clearly important in successfully translating intentions into behaviours in the context of condom use.

3.5 Ultimate objective 5

To conduct this research into PI and use of contraception in predominantly a qualitative manner, using appropriate methods of data collection and analysis.

Qualitative investigation has generated the vast majority of the data reported in this thesis. The two analytical techniques of CA and IPA (especially) have fostered the investigative and often inductive generation of new explanations and findings.

3.6 The conceptual framework (Figure 6 in Chapter 4)

Of the four key variables proposed in the project's conceptual framework to mediate the intention-behaviour relationship (immediate social contexts[35], dynamics, gender power imbalances and communication between partners), this research has shown that communication between partners, both verbally and non-verbally, appears to be a particularly influential construct. Of the two concepts constituting 'partner interaction' in ultimate objective 1, this research suggests, therefore, a greater role (or more of a *primary* influence) for communication skills compared to gender power imbalances in explaining patterns of contraceptive use. In contrast, the remaining three variables tend to have a more of a *secondary* impact upon this intention-behaviour relationship, and appear to operate by hindering or facilitating communication between partners (see ultimate objectives 1 and 2). For example, the dynamic influences of time before first intercourse help to explain whether any communication occurs, in that the intercourses that happen soon after partners first 'get-off' with each other leave less time for this communication to occur beforehand. Moreover, in situations of high pressure (or gender power imbalances) or unstable environments or contexts, for example, discussions are again more difficult to initiate and hence an intention to use condoms may not always result in their use. The research findings, having shown that communication skills have a more *primary* influence upon the intention-behaviour relationship and contraceptive use as a whole, represents the main difference from the arguments illustrated in the conceptual framework outlined in Chapter 4. Additionally, important influences not represented in the conceptual framework, such as taking 'sole-responsibility' and carrying condoms have also been shown to be powerful influences upon whether intentions to use contraception are successfully translated into condom use.

[35] It was acknowledged in the conceptual framework (Chapter 4) that to investigate the influence of the *wider* social contexts upon contraceptive use would be beyond the scope of this project.

4. RESEARCH LIMITATIONS

The previous section, as a means of introducing the research limitations, noted that little investigation had been conducted in to any changes in communication abilities which may occur with age or increasing sexual experience and, also, into the potential influence of the immediate social context upon contraceptive use. These are the first limitations to note. The remainder of this section will detail the remaining study limitations under four main headings, namely, Sample, Research Design, Research Team and Analysis.

4.1 Sample

With the bulk of the data generated through interviews, it must be acknowledged at the outset that these interviewees were selected purposively and not through random allocation. The young people who were interviewed volunteered for this, and as such, this sample does not include those who met the selection criteria (Chapter 4) but decided that they did not want to be interviewed. It is obviously difficult to know how these 'non-responders' may have differed from this sample; however, noting the particular characteristics of the interviewee sample may well shed some light on this. To volunteer to talk to a researcher about personal and sensitive issues such as sexual intercourse implies that these people, compared to the wider population of young people, are perhaps more comfortable about these issues and, therefore, could be biased towards those who are more confident or capable about enacting contraceptive use, forming positive intentions about contraception or, at the very least, those who are aware of the necessity for contraception. The fact that one-third of the round 1 interviewees were selected from young people's clinics implies that these respondents would be particularly aware of this necessity. However, given that they were recruited from these clinics, and that instances of non-use were widely reported, they could also be argued to perhaps be those in most need of contraceptive advice. In short, it is impossible to know for sure how much this sample differs from the wider population except, given its self-selecting element, it cannot be claimed that this sample is representative in any way of the wider population. As such, the findings and conclusions derived from this project are applicable to this sample and this sample only.

Particular properties of the sample beyond the voluntary aspect and the nature of the recruitment sites also illustrate some limitations upon this research, in terms of its representativeness of the wider population, that need to be recognised. The sample is clearly biased to 16 year olds and over, those who have experienced sexual intercourse and young women in general (men only make up 23% of the first set of interviewees and 18% of those from round 2). The first two issues were reflected in the initial proposal and were essentially governed by ethics approval (see Chapter 4). The third issue of a predominantly female sample was also somewhat out of the author's control as the recruitment sites selected were simply frequented more by young women than men. Moreover, for those attended by men (mainly the youth clubs), they were generally less keen to be interviewed compared to the women. Given the low proportion of men in this sample has certainly restricted any conclusions from this study to illustrate any clear or obvious differences in gender, such as the ability to discuss contraception, obtain condoms, etc. However, the fact that less men volunteered for interview in itself may reflect the particular difficulties that men face (compared to women) in discussing contraceptive matters (see Hillier *et al.*, 1998 and Sheeran *et al.*, 1999 in Chapter 3, Section 2.3).

In addition (and in hindsight), to recruit a sample which included younger people, perhaps yet to have intercourse (or who perhaps might experience intercourse for the first time in between interviews), would allow the research to investigate some more of the issues that shape people's patterns and perceptions surrounding contraceptive use. Given that most of this interview sample had experienced more than one partner (or at least one long-term partner), there was a notion that their patterns of use were somewhat 'established', and whilst interesting to note the differences, there was less insight into how these attitudes and behaviours had been formed.

Finally, although dependent on resources throughout this project, the size of the sample does indicate a further possible limitation to this project. Although vast amounts of data were generated in the round 1 interviews in particular, the problems of re-contacting respondents resulted in a much smaller sample being re-interviewed. Although drop-out is inevitable, more details surrounding respondents such as addresses, contact numbers, etc. (of course if they were agreeable) could have boosted the number of follow-up interviewees (particularly the proportion who had intercourse with a new partner since round 1).

4.2 Research Design

Without doubt it was the time interval between interviews which constitutes a further limitation to this study. With only a maximum of 10 months elapsing between interviews, it was perhaps understandable that only 14/22 had experienced intercourse with a new partner in between interviews. However, given the finite time and resources associated with this project, to conduct a longitudinal interview-based investigation would always be somewhat pushed for time. Moreover, to leave a much longer time gap could also have posed new challenges for re-contacting given that this population tend to be highly mobile (moving to universities, new employment opportunities, etc.). Given more resource, a preferred option would have been to recruit more interviewees at round 1 to hopefully increase the proportion of re-interviews and then to follow up with a further or third interview sometime in the future. In this way, more people would have been likely to have experienced intercourse with new partners (to facilitate the intentions-behaviour investigation) and could have done so with several different partners. By contrast, the intentions-behaviour investigation hinged frequently upon one instance of intercourse; different 'types' of partners or situations could have added greater depth to these findings.

4.3 Research Staff

This project involved a host of people, from interviewers to clinic and youth club staff, that undoubtedly influenced the administration of the questionnaires and interviews. Again, this is somewhat unavoidable with the finite resources, but the author did not have extensive time to fully inform people about the importance of this project, precisely define their role in this project, fully train them for interviews, etc. The latter example is particularly pertinent as, if the respondent requested only a female interviewer, then the author had to delegate these interviews to other staff. Whilst the two female interviewers were experienced with such investigation, it is impossible to know how much different responses or exploratory paths could have been governed by the actual interviewer. The fact that these interviewers were experienced in these types of interviews indicates their experience, but also means they were not so 'fresh' or unbiased about the field, and in that sense they brought to the interview their own 'baggage' from previously conducted

research. As much as the author explained to them the nature and purpose of investigation, the two interviewers would, quite understandably, never have been as much immersed in the topic under exploration as the author.

4.4 Analysis

Whilst Section 6 in Chapter 6 indicated the strengths of the analysis in terms of its validity and reliability, this section refers to the limitations of this part of the research process. The issue of staffing discussed above, particularly by the author conducting the analysis alone, has clear implications upon this research. Analysing the interviews, particularly the more open-ended responses, can be argued to be a subjective process, and there is no way of knowing if another researcher had performed the analysis (using the same techniques) whether precisely the same issues and explanations would have been put forward. Furthermore, a lack of reliability checks (for those who argue that all or part of this analysis could be conducted objectively) questions whether another researcher, for example, would have coded the text material in exactly the same way, and ultimately challenges the author's own bias towards the data.

Finally, and again influenced by resource, a fuller understanding of contraceptive use could have been achieved through the triangulation of data collection by using different techniques to generate data (such as questionnaires, interviews, observations, etc.). Of the points noted by Yardley (in press - see Chapter 6), it is the issue of triangulation noted in her 'criteria of quality' that is particularly identifiable as having not been incorporated into the collection of these data.

5. IMPLICATIONS UPON THE LITERATURE REVIEWED IN CHAPTERS 2 AND 3

The previous account of the research limitations, in particular the issue of generalisability, sets a useful introduction to the implications of this research upon the reviewed literature. Whilst the contribution of this research is limited by its lack of wider application, it strengths and merits lie in its greater descriptive clarity and explanation surrounding contraceptive use and non-use. Indeed, with several themes unearthed quite inductively, this research clearly has an important contribution to make upon the theoretical literature previously reviewed but, nonetheless, will be subject to

wider investigation and 'verification' by more generalisable empirical research. The contribution of this research to the literature (both theoretical and empirical) will be discussed in relation to the key conclusions outlined previously in Section 2 of this chapter

5.1 Contraceptive use is more complex than awareness and knowledge

The social-cognition models, and those others that have built upon their principles (detailed in Chapter 2), all argue that the prediction of contraceptive use includes more than just an acknowledgement of young people recognising the need to use contraception. That this project supports such an argument is relatively unsurprising. Bandura (1998), in his introduction to the principles of social-cognitive theory, illustrates this argument as follows,

> 'Applications of theories of health behavior have tended to assume adequate knowledge of health risks. It is usually high. Knowledge creates the precondition for change. But additional self-influences are needed to overcome the impediments to adopting new lifestyle habits.'
>
> Bandura (1998) p. 624

Applying this to our understanding of contraceptive use, it is the consideration of some of these additional issues detailed below that makes a more specified and innovative contribution to the literature.

5.2 Importance of communication and negotiation skills

These findings suggest that the ability to talk to a partner about contraception before first intercourse together may be a fruitful way of encouraging contraceptive use on that occasion. This conclusion supports theory that has made similar acknowledgements (Chapter 2); for example, the 'presex negotiation of AIDS prevention' in the 'behavioural skills' component of Fisher and Fisher (1993), the 'enactment' stage of Catania's *et al.* (1990) AIDS Risk Reduction Model, the 'planning' stage of Dillard's (1990) Goal Driven Model of Interpersonal Influence and the 'interactional competence' highlighted in Ingham's *et al.* (1996) Dynamic Multifactorial Model of Sexual Conduct. In addition, the importance of communication and negotiation skills, to ensure

condom use perhaps when a partner is less keen to use them, is reflected in the interactive skills proposed by Abraham and Sheeran (1993) and the preparatory component of Abraham's *et al.* (1998) 'action control'.

The importance of communication skills supports the empirical studies outlined in Chapter 3 (Section 2.1) that reported similar conclusions (or at least associations between communication and contraceptive use). The more recent studies supporting such associations, usually with specific reference to condom use, include Barthlow *et al.* (1995), Detzer *et al.* (1995), Lear (1995), Bengel *et al.* (1996), LoConte *et al.* (1997), Hillier *et al.* (1998) and Sheeran *et al.* (1999). Intervention studies undertaken by Kelly *et al.* (1994) and DiClemente and Wingood (1995), that have enhanced communication and negotiation skills to good effect (i.e. reported increases in condom use at follow-up), are also supported by these findings.

5.3 Further analysis into the importance of communication and negotiation skills and perceived barriers

When considering the barriers to communication, the perception that a discussion would express an interest in intercourse, which would be perceived negatively by a partner supports the concept of the 'identity goals' proposed by Edgar, 1992, Chapter 2, Section 4.1 (these goals constitute a series of secondary goals which are proposed to influence the likelihood of partner communication) and the findings reported by Hillier *et al.* 1998 in Chapter 3, Section 2. The additional perception that any reference to condom use would imply detriment towards one's own or the partner's previous sexual history ties in with the perceived negative reactions for those who carry condoms also reported by Hillier *et al.*, 1998. The overall fear or concern about the partner's reaction is reflected in the 'relational resource goals' and 'interaction goals' reported by Edgar (1992), in that avoiding a discussion is less likely to jeopardise the developing (potential) relationship and that a negative impression (which could arise from such communication) would not be made at this formative time of the partnership.

This study supports the association between communication skills and gender power imbalances as noted, in particular, by Holland *et al.* (1992) in their WRAP study (see Chapters 2 and 3). Similar associations have been reported by Kippax *et al.* (1990), Bandura (1992) and Hillier *et al.* (1998). However, the argument that gender power imbalances and immediate social contexts perhaps offer a more *secondary* influence upon the intention-behaviour (through partner communication), conflicts with earlier theoretical research (mentioned above) which has attached greater importance to these constructs. Detail of the additional scenarios where communication is perceived as being particularly difficult (for example, the issue of partner and personal reputation - see summary of key conclusions) has not been evident in the reviewed literature.

5.4 Communication barriers largely unjustified

With all interviewees reporting that any prior discussion about contraception (initiated by a future partner) would be received positively is an innovative contribution of this research. This finding recognises that the 'interaction goals' identified by Edgar (1992), in that a discussion could create a *negative* impression, need to be countered. Moreover, this interesting conclusion does link in with the current moral 'code' of courtship prior to intercourse, in that this is largely one of ambiguity and ambivalence as argued by Lear (1995) and Wellings and Mitchell, paper submitted (Chapter 3, Section 2.4). Changing attitudes to this 'code' of communication could be fostered by increasing people's acknowledgement of these more positive aspects of communication that have been reported in these interviews. These positive aspects of the communication, aside to the 'You' or 'I care about you very much and don't want anything to happen to you' strategy identified in Edgar (1992) in Chapter 3 (Section 2.3), have rarely been reported in the reviewed literature.

5.5 Communication skills and importance of taking the first step

The importance of taking the first step to condom use is reflected in the 'unjustified' negative perceptions of suggesting condom use (see previous section) and the *converted users* identified in Chapter 7. These *converted users* exhibit an enhanced perception of control which increases their likelihood of repeating these behaviours in the future. This link between skills enhancement and increased control supports the work by Abraham *et al.* (1998), Bandura (1998) and Conner and

Armitage (1998) in Chapter 2. Having converted into effective condom users, it is likely that the 'goal' of using condoms is now firmly prioritised (Karoly, 1993, - see Chapter 2) and the importance of condom use is now established as part of their 'central identity' (Abraham, *et al.*, 1998, p.584 - see Chapter 2).

This theme of adopting a positive 'habit' and taking the 'first step' also partly supports the work of Moore *et al.* (1995) in Chapter 3, Section 4 who reported that women who used condoms with their primary partners perceived that future partners will react more positively towards condom use. Increasing current personal use of condoms could therefore enhance their use in future situations.

5.6 Alternative strategies and 'sole responsibility'

The importance and effective use of sole-responsibility has not been documented in the literature reviewed in Chapters 2 and 3. This strategy to ensure condom use, particularly important in situations where overt discussion is not easy, could be a means of encouraging consistent use in *all* scenarios. This strategy, generated inductively and investigated through IPA, represents one of the most important contributions of this study and could (subject to wider testing and generalisability) earn a place in the innovative models setting out to identify effective ways of ensuring condom use among young people.

5.7 Importance of preparation for intercourse and obtaining and carrying condoms

The importance of preparatory behaviours (such as obtaining and carrying condoms) in ensuring condom use, as shown by the risk and no risk comparisons in Chapter 6 and the *consistent* and *converted users* in Chapter 7, is reflected in the 'sophisticated interactive skills' from Abraham and Sheeran (1993), the 'action control' process defined by Abraham *et al.* (1998) and the preparatory influences labelled by Sheeran *et al.* (1999).

The planning and preparatory influences are also reflected in Gollwitzer's (1993) implementation intentions and the contextual cues detailed by Orbell *et al.* (1997) in Chapter 2. These concepts have been illustrated by the *consistent users*, who, in the situation of impending intercourse (or environmental cue) are able to remember rapidly and without distraction the necessity for condom use (and/or a discussion about this with their partner beforehand). Similarly, the 'automacity' of ensuring condom use for the *consistent users* ties in with the spontaneous processing of attitudes noted by Fazio (1986) and Abraham *et al.*'s (1998) paper on the psychology of action control (detailed in Chapter 2).

5.8 Intention-expectation relationship

The contribution of positive 'expectations' leading to future condom use supports the arguments of Warshaw and Davis (1985), Sheppard *et al.* (1988), and Conner and Norman (1996) who state that these expectations need to be considered, above intentions, as important predictors of health related behaviour. However, Sheeran and Orbell (1998), by contrast, showed from their meta-analytic review of condom use that 'measures of behavioural intention versus behavioural expectation appeared to have similar average correlations with condom use' (p.244).

Considering the reasons that were put forward to explain the deviation between intentions and expectations (namely excessive alcohol consumption, the role of the partner in opposing condom use and how much respondents 'liked' or 'knew' their partner), three out of these four key explanations refer to partner influence. 'Knowing' your partner ties in with the interpersonal variables and the perception of partner's risk noted by Sheeran *et al.* (1999). Kelly and Kalichman (1995) and Lear (1995) had similarly noted how personality attributes such as 'likeability' influenced people's decision upon whether condoms would be required (Chapter 3, Section 4.1.2). The overall importance of the partner role also supports many of the models that have extended the principles of social cognition to include a more interactionalist approach (Chapter 2, Section 4) such as Fisher and Fisher (1993), Catania's *et al.* (1990), Dillard's (1990) and Ingham *et al.* (1996). However, explanations detailing the reasons for the intentions and expectations relationship, specifically in the context of condom use, have yet to be reported in such depth in the related literature.

5.9 Intention, expectation and behaviour relationship and the cognitive categorisations of condom use

Consideration of those people who intended to and managed to translate their intention into condom use supports the intention-behaviour relationship outlined in many of the reviewed social-cognition models (Chapter 2). Meta-analyses reviewed in Chapter 2 by Hodgkins *et al.* (in press), Godin and Kok (1996), Sutton (1998), Sheeran *et al.* (1999) and Sheeran and Orbell (1998) had all demonstrated that the intentions-behaviour relationship exhibited a medium to strong average correlation. The findings presented in Chapter 7 illustrated by the *consistent* and *converted users* support the importance of intentions predicting behaviour.

However, with positive intentions to use condoms not *always* leading to their use also supports those researchers (reviewed in Chapter 2, Section 3) who have argued that, whilst the social cognition models offer a valuable contribution to our understanding of contraceptive behaviours, they must also be extended to offer a more complete explanation of this behaviour; Bengel *et al.* (1988), Fazio (1990), Ingham *et al.* (1992), Rosenthal *et al.* (1992), Wight (1992), Abraham and Sheeran (1993), Ingham (1993), Abraham and Sheeran (1994), Ingham and van Zessen (1995), Conner and Norman (1996), Ingham *et al.*(1996), LoConte *et al.* (1997), Rosenthal and Fernbach (1997), Hillier *et al.* (1998) and Sheeran *et al.* (1998).

The incomplete relationship between intentions and behaviour also shows support for the interaction-based models, that have extended the principles of social-cognition, outlined earlier in Chapter 2 (Section 4) and that argue for separate constructs operating 'between' the intention and behaviour. Indeed, returning to the findings generated from the round 1 interviews, the *collective* influence of a number of these interactional issues was noted as helping to explain risk and no risk situations, with partner communication offering a particularly important contribution (and as further illustrated in the differences between the *consistent* and *inconsistent users* in the round 2 interviews).

When comparing the six patterns of condom use identified from the round 2 interviews, there is a suggestion of a sequential link between the different approaches which is of interest. At the outset,

a base level of knowledge or awareness and a positive attitude is required to at least formulate an intention to use condoms (not evident in the *consistent non-users*). This awareness could then be a foundation for developing the willpower and perceived capability of achieving condom use as indicated in the recording of positive expectation (not in the case of *the resigned* or *consistent non-users*). The importance of will-power and self-discipline supports Bagozzi and Edwards' (1998) construct of 'trying' which was argued in Chapter 2 to be an important component of ensuring behaviour enactment. When examining the substantial divergence between the intention and expectation recorded at the end of the round one interviews, it appears that self-efficacy and will-power (or shifting a positive intention to a positive expectation) could be one of the most important issues for this sample as a whole. Once a positive expectation is formulated, then it appears that only a lack of skills, particularly in respect to communicating about condoms among partners, can prevent the actual use of condoms (as is the case for the *over-optimists*). This sequential process clearly ties in with the stage by stage models reported in Chapter 2, for example, Prochaska and DiClemente (1984), Catania *et al.* (1990), Dillard (1990), Schwarzer (1992), Byrne *et al.* (1993) and Conner and Norman (1996).

These findings also relate to the aspects of empowerment outlined by Holland *et al.* (1992) and Holland *et al.* (1998). From a subset of relatively empowered young women, they detail two concepts of empowerment that are of particular relevance to the findings presented in this study. Intellectual empowerment refers to the knowledge, expectations and intentions brought to the sexual encounter, whereas experiential empowerment refers to their actual sexual practice. Intellectual empowerment ties in with the *over-optimists* detailed here (in that they had a positive expectation of condom use but nonetheless failed to achieve this), and experiential empowerment is more akin to the *converted users* who have since achieved consistent condom use with new partners. The linkage between these concepts, in achieving regular condom use, is recognised in that 'for effective strategies for safer sex, there must be some congruence between the intellectual and experiential levels of empowerment' (Holland *et al.,* 1992, p.279).

Moreover, this sequential aspect of these typologies of condom use/non-use marks these classifications differently to those reported earlier in the literature by Edgar *et al.* 1992 and Rademakers *et al.* 1992 in Chapter 2. Also, this study's classifications are not always static or set;

note the *converted* and *influenced users*, whose condom use patterns have changed. Nonetheless, it is likely that these cognitive categorisations reflect the individual differences in commitment towards condom use as depicted by the 'action' and 'state-oriented' individuals (Conner and Armitage, 1998), and the motivational differences between 'certainty' and 'uncertainty-oriented' individuals (Sorrentino, 1996, in Abraham *et al.*, 1998) - see Chapter 2 for more detail.

5.10 Dynamics of change: descriptions and key triggers

The incorporation of a dynamic component towards our understanding of contraceptive use shows added support for the stage based models that propose an increased ability to use contraception through time (Catania *et al.,* 1990; Dillard, 1990; Schwarzer, 1992; Byrne *et al.,* 1993; Conner and Norman, 1996). Additionally, of the changes in contraceptive method noted from these interviewees, the abandonment of condoms in favour of the pill in long-term relationships is supported by the work of Edwards (1993), Ford (1993), Edwards (1994), Fergusson *et al.*, 1994, Lynskey and Horwood (1994), Ku *et al.* (1994) and Lear (1995) detailed in Chapter 3. Research documented by Wight (1990) and Rosenthal and Fernbach (1997) in Chapter 3 also highlighted the association between trust and commitment and the abandonment of condoms.

The interesting aspects of service use detailing the *timing* of young people's first ever visit are an innovative part of this project and there is no evidence in the current literature of similar research (besides a study by Stone and Ingham, 1999, which was since undertaken *after* this project[36]).

Finally, although a number of reviewed interactionalist theories have incorporated a similar appreciation towards a dynamic component (for example, through the 'continual evaluations' of Fisher and Fisher, 1993, the 'maintenance' stage of Conner and Norman, 1996, and the 'consequent factors' of Ingham *et al.,* 1996), little empirical research (except Poppen, 1994) has focused upon the changes in contraceptive use associated with increased sexual experience (as has been detailed in this project). However, whilst Poppen (1994) similarly noted increases in

[36] Stone and Ingham, 1999, used data from this study as well as an additional 460 questionnaires administered at young people's clinics in the Southampton area. For the complete data set, they found that 77% of young people had first attended a sexual health service *after* they had experienced intercourse for the first time. Of this 77%, a quarter attended within three weeks and a quarter waited over a year since their first intercourse.

contraceptive use (at first intercourse) from 70% with the first partner to 85% for the current partner (see Chapter 3), there is little evidence in the literature towards the documentation of the main 'triggers' behind these changes that have been identified in this project.

5.11 Service data: Attenders at young people's clinics

The nature of the clinic sample, as a whole, was comparable with that of other similarly conducted surveys, documented by Coleman and Phillips (A review paper - 1993) and Phillips *et al,* (1994); the vast majority of clients were female, non-virgin and currently in a long-term relationship. However, the interesting variation in clients seen across the eight different clinics (especially) and the further analyses into distance travelled have only rarely been reported; two Community Health Council surveys conducted in Newcastle (1989) and Anglesey (1990) had also investigated distance travelled.

5.12 Service data: Attitudes to contraceptive advice services

The importance of 'word of mouth' in people's awareness of these services supports findings from the following Community Health Council surveys: Anglesey (1990), North Tyneside (1991), and Newham (1992). A survey conducted in Dudley (1988) found that 81% (n=145) of their clinic attenders first heard about the service through a friend or relative.

The general high satisfaction levels for the clinic service reported in this project supports the work of Coleman and Phillips (1993) who, by reviewing a number of consumer surveys, argued for a continuation of the clinic service alongside and, indeed, complementary to that of the GP. The positive reasons for attending the clinic services identified by Coleman and Phillips (1993), including confidentiality, friendliness of staff and likelihood of seeing a female doctor have been similarly reported by this research in Chapter 6.

Having provided an account of the key conclusions from this project and how they have contributed to the reviewed literature, whilst also recognising the research limitations, the final

sections of this chapter will discuss the 'potential' policy and applied implications and finally close by proposing areas in need of further research.

6. POTENTIAL IMPLICATIONS OF RESEARCH FOR HEALTH POLICY

These implications will be discussed briefly, in light of the limitations detailed earlier; these implications indicate areas of 'potential' and only more quantitative, representative research will be able to confirm how far this project can impact upon policy initiatives. In line with the key conclusions drawn out from this research, two areas will be discussed[37]: *The importance of communication skills enhancement* and *the importance of tailoring interventions.*

6.1 The importance of communication skills enhancement (or CSE)

Given the arguments presented above, communication skills enhancement (CSE) interventions may, therefore, be a promising way of promoting the consistent use of contraception among young people. These interventions could employ a number of media such as brief drama productions, peer education strategies or workshops administered at service outlets, schools or youth groups (or indeed anywhere else frequented by young people). Indeed, fostering links between schools and services (proposing school visits to young people's clinics, for example) could be a valuable way to administer these interventions.

The main obstacle that could to be directly addressed in these interventions is that any discussion would *not* be received negatively by the partner. These data suggest that CSE interventions should focus upon the positive aspects of such communication, for example, by fostering an association between 'maturity', 'trust' and 'respect' through *'show them you care'*, *'show them you're responsible'*, etc. In addition, changing attitudes to young people obtaining and carrying condoms could also be covered, by emphasising such behaviour as 'mature', 'responsible' and 'caring'. Moreover, these interventions must acknowledge that the current moral 'code' of courtship prior to intercourse, is largely one of ambiguity and ambivalence (Wellings and Mitchell, paper

submitted) and that, for CSE to be effective, it will have to recognise that open communication opposes this courtship. Changing attitudes towards this 'code' is likely to be the most difficult issue to resolve but could also be an issue directly addresses through such interventions. More publicity and importance specifically attached to communication could be a means to 'kick-start' this procedure and hence enable communication prior to intercourse to be more of a 'norm' that it appears to be at present. To complement this change in attitude, role-plays, drama productions, peer group interventions, etc., could then provide precise examples to young people of how to phrase or word these important issues and at what stage in the interaction, thus preparing them for the predominantly unexpected occurrence of first intercourse with a partner (building upon the importance planning and rehearsal issued in the findings from this project and supporting literature - see Abraham *et al.*, 1998).

A CSE programme could also link in with ways to resist the pressure or coercion that has been reported in these interviews to reduce the likelihood of any communication occurring. These situations indicate specific issues that could be directly addressed in such intervention programmes; for example, *'how to say no'*, *'how to insist on using a condom when you think your partner doesn't want to'*, etc.

6.2 The importance of tailoring interventions

The patterns of condom use identified in Chapter 7 included two of consistent use (*consistent users* and *converted users*), one of inconsistent use (*influenced users*) and three of consistent non-use (*over-optimists*, *the resigned* and *consistent non-users*). It could be argued, from these findings and evidence in the reviewed literature (see earlier Section 5.9), that contraceptive use interventions will be more applicable to some rather than others. For example, the *influenced users* represent those young people who frequently use and do not use condoms; the actions of their partner are likely to determine the outcome. Resisting pressure or persuasion from the sexual partner, through negotiation as well as assertiveness training, could be the key to transform these

[37] The specific recommendations for the clinic service surveyed by this project, including issues such as first awareness, recommendations for extended opening hours, etc. were reported to the Clinic staff during

influenced users into *consistent users*. Those cases who intended to use condoms, but nonetheless predicted that they might not (such as *the resigned*) would appear to be the greatest beneficiaries from efforts targeting STI awareness, negotiation strategies and self-efficacy regarding condom use, to raise their expectations of future use. For those whose expectation towards future use is more positive (as for the *over-optimists*), it appears that acquiring the necessary skills to translate this expectation into use would be most appropriate, assuming that their self-efficacy (as indicated by their expectations) towards condom use is relatively high. For example, CSE interventions enabling them to initiate conversations about condom use prior to intercourse, could help translate these positive expectations into use. The *consistent non-users* represent the greatest challenge to sexual health promoters; they have no interest or intention to use condoms. Raising awareness to the potential for conception and STI (and pathways for prevention) and focusing upon the perceived severity and susceptibility to the health issues associated with condom non-use, together with promoting more positive attitudes towards condoms would appear to be a prerequisite for changing their intentions. Promoting self-efficacy could then help formulate more positive expectations, at which point CSE interventions could follow to foster greater consistency in condom use.

7. DIRECTIONS FOR FUTURE AREAS OF RESEARCH

Through the semi-inductive nature of this project, certain specific explanations for patterns of contraceptive use have been proposed. It has been noted throughout this chapter that further research of a larger scale and tighter design will determine the true potential of these explanations. Following on from this important point, this section, by contrast, will identify a series of more *specific* recommendations for areas of follow-up research.

7.1 Specific recommendations for further research

Explaining patterns of contraceptive and condom use through the ability (or inability) to communicate such desires between partners has been argued to be one of the main contributions provided by this research. Through the in-depth exploration of partner communication, a number

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presentations/workshops provided by the author.

of themes explaining this ability to communicate effectively have been generated, as well as some which warrant further investigation. Indeed, various themes, having been generated inductively, were only researched in minimal detail in this project. If the author had been aware of these themes prior to conducting this research, then greater investigation into these areas could have been made; it is now up to ongoing research to continue this investigation.

Indeed, with the main emphasis of this project leaning towards the interactive processes between partners, comparatively little investigation had been shown towards any of the intrapersonal influences upon the ability to communicate. Although a base level of awareness, confidence and self-esteem have been related to contraceptive use (see Chapter 6), more research is required to specifically examine how these issues, and other intrapersonal qualities, could be related to communicative capabilities. The personality factors noted in Section 4.3.3 in Chapter 3 (Conner and Armitage, 1998, and Sheeran *et al.,* 1999) could be of interest here. Moreover, further research could clarify what proportion of young people experience such difficulties in communication, as well as investigate any age, gender and/or social class differences in these reported difficulties, and also examine the influence of sex education, parental roles etc., upon the ability to communicate effectively. The sample included too few men and limited age variations (see limitations) to propose any differences by gender or age.

The more detailed exploration of the interactional influences upon communication skills unearthed some additional areas of potential research that are of interest. Scenarios where verbal communication about contraception was perceived to be particularly difficult (and thus where non-verbal communication based strategies such as 'sole responsibility' would be more appropriate) require further investigation; for example, the contrast between 'steady' and ONS relationships as well as differentiating between ONS among prior 'friends' in comparison to those who have just met for the first time.

The dynamic component of this project has generated some interesting findings, particularly surrounding the changes in contraceptive use, that also require more research. Although some key 'triggers' have been identified, longitudinally designed research could extend the investigation into how the ability to communicate within partnerships may change through time. Given the

importance attached to adopting a positive 'habit' and taking the 'first step' to initiating discussions about contraception (see earlier), identifying the processes leading up to a person's *first ever* communication (if applicable) about contraception to a partner will be of obvious interest. Such processes could then be incorporated into the design of CSE interventions to encourage these discussions among partners. In addition, ongoing longitudinal research over extended time periods (beyond the eight to 10 months investigated here - see limitations), particularly among younger and less sexually experienced respondents (whilst acknowledging the potential ethical constraints encountered when interviewing the under 16s), could provide more detail to those attitudinal and behavioural changes recorded retrospectively at round 2 (such as changes in awareness, use of services, etc.).

Aside to communicative capabilities, this research has also noted the importance of young people carrying condoms. This is particularly important given that the first intercourses recorded in this study were predominantly unexpected (see Chapter 6), thus allowing little time to obtain condoms at such short notice. More investigation is required to ascertain the barriers that prevent all young people from obtaining and carrying condoms, perceptions about people who do carry condoms (and how these may vary between genders) and why some people are more or less likely to carry them on *particular* occasions.

Investigating young people's attitudes and use of services, alongside contraception itself, has formed an important part of this project. From this investigation, three interesting issues have emerged from the data which are worthy of more research. Firstly, the analysis of the SAQs (Chapter 5) indicated that some of the clinics surveyed served a distinctly different clientele to others (for a range of variables such as age, gender, sexual experience, distance travelled, etc.). Greater investigation could determine some of the key reasons behind these variations. Moreover, by using the experience of those clinics who were serving the traditionally 'hard to reach' groups (for example, the very young, those yet to have intercourse or young men), other clinics may well be able to increase the accessibility of their own service to these important population sub-groups. Secondly, given that the majority of the round 1 interview sample had visited a service *after* their first ever intercourse, longitudinal research (over greater time scales and among those people yet to experience intercourse for the first time) could investigate not only the key 'triggers' for this first

visit, but also the main barriers preventing people attending the clinics in advance of, and in preparation for, this intercourse. Thirdly, and finally, the interviews had identified differences of perceived responsibilities for seeking contraceptive advice; new research could investigate the influences upon whether joint (partnership) or sole responsibilities are preferred and whether this may change over the course of a developing relationship.

8. CONCLUSION

This chapter has sought to distil the main research findings in light of the main limitations, literature reviewed in Chapters 2 and 3 and the project objectives defined in Chapter 4. Although this is the final chapter, it is hoped that the previous section, *Directions for future areas of research*, has illustrated how this project can contribute to ongoing research into such a critical area. It cannot be overstated that this project's contribution to further research is of equal (if not greater) importance than its own specific conclusions.

The opening line of Chapter 1 read, 'This project is concerned with promoting the use of contraception among young people in the UK.'. Chapters 1 to 8 inclusive have endeavoured to provide greater insight, through researching interactional and dynamic influences in particular, into this most important of tasks.

REFERENCES

ABBEY, A. 1982. Sex differences in attributions for friendly behaviour: Do males misperceive female's friendliness? *Journal of Personality and Social Psychology*, vol. 42, p.830-838.

ABRAHAM, C.S., SHEERAN, P., ABRAMS, D., SPEARS, R. & MARKS, D. 1991. Young people learning about AIDS: a study of beliefs and information sources. *Health Education Research*, vol. 6, p.19-29.

ABRAHAM, C.S. & SHEERAN, P. 1993. In search of a Psychology of safer-sex promotion: Beyond beliefs and texts. *Health Education Research: Theory and Practice*, vol. 8, no. 22, p.245-254.

ABRAHAM, C.S. & SHEERAN, P. 1994. Modelling and modifying young heterosexuals' HIV-preventive behaviour: A review of theories, findings and educational implications. *Patient Education and Counselling*, vol. 23, p.173-186.

ABRAHAM, C.S., SHEERAN, P., ABRAMS, D. & SPEARS, R. 1995. Health beliefs and teenage condom use: A prospective study. *Psychology and Health*, vol. 11, no. 5, p.641-655.

ABRAHAM, C.S. & WIGHT, D. 1996. Developing HIV-preventive behavioural interventions for young people in Scotland. *International Journal of STD & AIDS*, vol. 7, Suppl. 2, p.39-42.

ABRAHAM, C.S. & SHEERAN, P. 1998. From health beliefs to self-regulation: theoretical advances in the psychology of action control. *Psychology and Health*, vol. 13, p.569-591.

ABRAMS, D., ABRAHAM, C., SPEARS, R. & MARKS, D. 1990. AIDS invulnerability: Relationships, sexual behaviour and attitudes among 16-19 year olds. In P. AGGLETON, P. DAVIES & G. HART (Eds), *AIDS: Individual, cultural and policy dimensions*. London: Falmer Press.

ADELMAN, M.B. 1992. Healthy passions: Safer sex as play. In T. EDGAR. M.A. FITZPATRICK & V.S. FREIMUTH (Eds), *AIDS: A communication perspective*. New Jersey: Lawrence Erlbaum.

ADLER, M.W. 1991. Sexually transmitted diseases and their effect upon fertility and pregnancy outcome. *The British Journal of Family Planning*, vol. 16 (Suppl), p.46-50.

ADLER, M.W. 1997. Sexual health - A health of the nation failure. *British Medical Journal*, vol. 314, p.1743-1747.

AGNEW, C.R. 1998. Modal versus individually-derived beliefs about condom use: measuring the cognitive underpinnings of the theory of reasoned action. *Psychology and Health*, vol. 13, p.271-287.

AJZEN, I. & FISHBEIN, M. 1980. *Understanding attitudes and predicting social behaviour.* New Jersey: Englewood Cliffs.

AJZEN, I. 1988. *Attitudes, personality and behaviour.* Milton Keynes: Open University Press.

ALLARD, R. 1989. Beliefs about AIDS as determinants of preventive practices and of support for coercive measures. *American Journal of Public Health*, vol. 71, no. 4, p.448-452.

ALTHAUS, F.A. 1991. An ounce of prevention.....STDs and women's health. *Family Planning Perspectives*, vol. 23, no. 4, p.173-177.

ANDERSON, J.E., KANN, L., HOLTZMAN, D., ARDAY, S., TRUMAN, B. & KOLBE, L. 1990. HIV/AIDS knowledge and sexual behavior among high school students. *Family Planning Perspectives*, vol. 22, no. 6, p.252-255.

ANGLESEY COMMUNITY HEALTH COUNCIL. 1990. *Consumer survey of family planning services in Anglesey.*

ANONYMOUS. 1990. Heterosexual behaviours and factors that influence condom use among patients attending a sexually transmitted disease clinic - United States (Comportements heterosexuels et facteur influent sur l'usage du condom parmi des malades en consultation de venereologie - Etats-Unis), *Canada Diseases Weekly Report*, vol. 16, no. 46, p.233-234;237-238.

ARAL, S., CATES, W. & JENKINS, W. 1985. Herpes: Does knowledge lead to action? *American Journal of Public Health*, vol. 75, p.69-71.

BAGNALL, G., PLANT, M.A. & WARWICK, W. 1990. Alcohol, drugs and AIDS-related risks: Results from a prospective study. *AIDS Care,* vol. 2, no. 4, p.309-317.

BAGOZZI, R.P. & EDWARDS, E.A. 1998. Goal setting and goal pursuit in the regulation of body weight. *Psychology and Health*, vol. 13, p.593-621.

BALDWIN, J.D. & BALDWIN, J.I. 1988. Factors affecting AIDS-related sexual risk-taking behavior among college students. *The Journal of Sex Research*, vol. 25, no. 2, p.181-196.

BANDURA, A. 1977. Self-efficacy: Toward a unifying theory of behavioural change. *Psychological Review*, vol. 84, p.191-215.

BANDURA, A. 1982. Self-efficacy mechanism in human agency. *American Psychologist*, vol. 37, p.122-147.

BANDURA, A. 1992. *Social foundations of thought and action.* Englewood Cliffs, NJ: Prentice-Hall

BANDURA, A. 1992. A social cognitive approach to the exercise of control over AIDS infection. In R.J. DIcLEMENTE (Ed), *Adolescents and AIDS: A generation in jeopardy.* New Jersey: SAGE Publications.

BANDURA, A. 1998. Health promotion from the perspective of social cognitive theory. *Psychology and Health*, vol. 13, p.623-649.

BARTHLOW, D.J., HORAN, P.F., DiCLEMENTE, R.J. & LANIER, M.M. 1995. Correlates of condom use among incarcerated adolescents in a rural state. *Criminal Justice and Behaviour*, vol. 22, no. 3, p.295-306.

BASEN-ENGQUIST, K. 1992. Psychosocial predictors of "safer sex" behaviours in young adults. *AIDS Education and Prevention*, vol. 4, no. 2, p.120-134.

BECK, K.L. & LUND, A.K. 1981. The effects of health threat seriousness and personal efficacy upon intentions and behaviour. *Journal of Applied Social Psychology*, vol. 35, p.401-415.

BECKER, M.H. 1974. *The health belief model.* New Jersey: Thorofare

BECKER, M.H. & ROSENSTOCK, I.M. 1987. Comparing social learning theory and the health belief model. In W.B. WARD (Ed), *Health care and human behaviour.* London: Academic Press.

BECKER, M.H. & JOSEPH, J.G. 1988. AIDS and behavioural change to reduce risk: A review. *American Journal of Public Health*, vol. 78, p.394-410.

BELL, T.A. & HEIN, K. 1984. Adolescents and sexually transmitted diseases. In, K.K. HOLMES, P.A. MARDH, P.F. SPARLING & P.J. WIESNER (Eds), *Sexually transmitted diseases*. McGraw-Hill: Book Company.

BENGEL, J., BELZ-MERK, M. & FARIN, E. 1996. The role of risk perception and efficacy cognitions in the prediction of HIV related preventive behaviour and condom use. *Psychology and Health*, vol. 11, p.505-525.

BIGLAN, A., METZLER, C.W., WIRT, R., ARY, D., NOELL, J., OCHS, L., FRENCH, C. & HOOD, D. 1990. Social and behavioural factors associated with high-risk sexual behaviour among adolescents. *Journal of Behavioural Medicine*, vol. 13, no. 3, p.245-261.

BILODEAU, A., FORGET, G. & TETREAULT, J. 1994. Contraceptive self-efficacy in adolescents: Testing the French version of the Levinson Scale as applied to both males and females. *Canadian Journal of Public Health*, vol. 85, no. 2, p.115-120.

BIRCH, D. 1992. Teenage pregnancy: A problem for the nineties? *Novum*, vol. 50, p.8-9.

BOLDERO, J., MOORE, S. & ROSENTHAL, D. 1992. Intention, context and safe sex: Australian adolescents' responses to AIDS. *Journal of Applied Social Psychology*, vol. 22, no. 17, p.1374-1396.

BOWIE, C. & FORD, N. 1989. Sexual behaviour of young people and the risk of HIV infection. *Journal of Epidemiology and Community Health*, vol. 43, no. 1, p.61-65.

BREAKWELL, G.M., FIFE-SCHAW, C. & CLAYDEN, K. 1991. Risk-taking, control over partner choice and intended use of condoms by virgins. *Journal of Community and Applied Social Psychology*, vol. 1, p.173-187.

BREAKWELL, G.M. & FIFE-SCHAW, C. 1992. Sexual attitudes and preferences in a UK sample of 16-20 year olds. *Archives of Sexual Behaviour*, vol. 21, p.271-293.

BRUCE, K.E., SHRUM, J.C., TREFETHEN, C. & SLOVIK, L.F. 1990. Students' attitudes about AIDS, homosexuality and condoms. *AIDS Education and Prevention,* vol. 2, no. 3, p.220-234.

BUCHAN, H. & VESSEY, M. 1989. Epidemiology and trends in hospital discharges for pelvic inflammatory disease in England, 1975-1985. *British Journal of Obstetrics and Gynaecology*, vol. 96, p.1219-1223.

BURY, J. 1984. *Teenage Pregnancy in Britain*, London: Birth Control Trust.

BYRNE, D., JAZWINSKI, C., DENINNO, J.A. & FISHER, W.A. 1977. Negative sexual attitudes and contraception. In D. BYRNE & L.A. BYRNE (Eds), *Exploring human sexuality.* New York: Crowell.

BYRNE, D. 1983. Sex without contraception. In D. BYRNE & W.A. FISHER (Eds), *Adolescents, sex and contraception.* Hillsdale New Jersey: Erlbaum.

BYRNE, D., KELLEY, K. & FISHER, W.A. 1993. Unwanted teenage pregnancies: Incidence, interpretation and intervention. *Applied and Preventive Psychology*, vol. 2, p.101-113.

CAMPBELL, B.K. & BARNLUND, D.C. 1977. Communication style: A clue to unplanned pregnancy. *Medical Care*, vol. 15, p.181-186.

CATANIA, J.A., COATES, T.J., GREENBALT, R.M., DOLCINI, M.M., KEGELES, S.M., PUCKETT, S., CORMAN, M. & MILLER, J. 1989. Predictors of condom use and multiple partnered sex among sexually active adolescent women: Implications for AIDS-related health interventions. *Journal of Sex Research*, vol. 4, p.514-524.

CATANIA, J.A., KEGELES, S.M. & COATES, T.A. 1990. Towards an understanding of risk behaviour: An AIDS risk reduction model (ARRM). *Health Education Quarterley*, vol. 17, no. 1, p.53-72.

CATANIA, J.A., COATES, T.J., KEGELES, S. & FULLILOVE, M.T. 1992. Condom use in multi-ethnic neighbourhoods of San Francisco: The population-based AMEN Study. *American Journal of Public Health*, vol. 82, no. 2, p.284-287.

CATANIA, J.A., COATES, T.J., GOLDEN, E. & DOLCINI, M.M. 1994. Correlates of condom use among black, hispanic and white heterosexuals in San Francisco: The AMEN longitudinal study. *AIDS Education and Prevention*, vol. 6, no. 1, p.12-26.

CENTERS FOR DISEASE CONTROL (CDC). 1990. Patterns of sexual Behavior change among homosexual/bisexual men in selected US sites. *Morbidity and Mortality Weekly Report*, vol. 40, p.792-794.

CENTERS FOR DISEASE CONTROL (CDC). 1990. HIV-related behaviours among high school students. *Morbidity and Mortality Weekly Report*, vol. 39, p.385-387.

CENTERS FOR DISEASE CONTROL (CDC). 1991. Premarital sexual experience among adolescent women - United States, 1970-1988. *Morbidity and Mortality Weekly Report*, vol. 39, p.51-52.

CLARE, A.W. & TYRELL, J. 1994. Psychiatric aspects of abortion. *Irish Journal of Psychological Medicine*, vol. 11, no. 2, p.92-98

CLIFT, S., STEARS, D., LEGG, S., MEMOM, A. & RYAN, L. 1989. *Report on phase one of the HIV/AIDS education and young people project.* Canterbury: Christchurch College.

CLINE, R.J.W. & McKENZIE, N.J. 1994. Sex differences in communication and the construction of HIV/AIDS. *Journal of Applied Communication Research*, vol. 22, no. 4, p.322-337.

COLEMAN, L.M. & PHILLIPS, D.R. 1993. *Consumers' use of family planning services and sources in the UK: A review of the current literature and findings from surveys 1985-1992.* University of Exeter: Institute of Population Studies.

COLEMAN, L.M. & FORD, N. 1993. *An Extensive Review of the Literature Concerning the Use and Non-Use of the Condom.* University of Exeter: Institute of Population Studies.

COLEMAN, L.M. & FORD, N.J. 1996. An extensive review of the evaluation of HIV prevention programmes. *Health Education Research: Theory and Practice*, vol. 11, no. 3, p.327-338.

COLEMAN, L.M. & INGHAM, R. 1998. Attenders at young people's clinics in Southampton: Variations in contraceptive use. *British Journal of Family Planning*, vol. 24, p.101-104.

COLEMAN, L.M. 1999. Comparing contraceptive use surveys of young people in the UK. *Archives of Sexual Behavior,* vol. 28, no. 3.

COLEMAN, L.M. & INGHAM, R. 1999a. Contrasting strategies used by young people to ensure condom use: some findings from a qualitative research project. *AIDS Care,* vol. 11, no. 4, p.473-479

COLEMAN, L.M. & INGHAM, R. 1999b. Exploring young people's difficulties in talking about contraception: How can we encourage more discussion between partners? *Health Education Research: Theory and Practice*, vol. 14, no. 6, p.741-750.

COLEMAN, L.M. & INGHAM, R. (In Press). Contrasting strategies used by young people to ensure condom use: key findings from a qualitative research project. *AIDS Care.*

CONNER, M. & NORMAN, P. 1996. *Predicting health behaviour.* Buckingham: OUP.

CONNER, M. & ARMITAGE, C.J. 1998. Extending the theory of planned behaviour: A review and avenues for further research. *Journal of Applied Social Psychology*, vol. 28, no. 15, p.1429-1464.

CURRIE, C. & TODD, J. 1990. *Health behaviours of Scottish schoolchildren: Report 3: Sex education, personal relationships, sexual behaviour and HIV/AIDS knowledge and attitudes.* University of Edinburgh: Research Unit in Health and Behavioural Change.

CURTIS, H.A., LAWRENCE, C.J. & TRIPP, J.H. 1988. Teenage sexual intercourse and pregnancy. *Archives of Disease in Childhood,* vol. 63, p.373-379.

CURTIS, H.A., LAWRENCE, C.J. & TRIPP, J.H. 1989. Teenage sexuality: Implications for controlling AIDS. *Archives of Disease in Childhood*, vol. 64, p.1240-1245.

CVETKOVICH, G. & GROTE, B. 1981. Psychological maturity and teenage contraceptive use: An investigation of decision-making and communication skills. *Population and Environment*, vol. 4, p.211-226.

DAVIES, A. 1998. Chlamydia: The most common sexually transmitted infection. *Nursing Times*, vol. 19, no. 5, p.56-58.

DAVIES, P. & WEATHERBURN, P. 1991. Towards a general model of sexual negotiation. In P. AGGLETON, G. HART & P. DAVIES (Eds), *AIDS: Responses, interventions and care.* London: The Falmer Press.

DiCLEMENTE, R.J. 1990. The emergence of adolescents as a risk group for human immunodeficiency virus infection. *Journal of Adolescent Research*, vol. 5, p.7-17.

DiCLEMENTE, R.J. 1991. Predictors of HIV-preventive sexual behavior in a high-risk adolescent population: The influence of perceived peer norms and sexual communication on incarcerated adolescents' consistent use of condoms. *Journal of Adolescent Health*, vol. 12, no. 5, p.385-390.

DiCLEMENTE, R.J. & FISHER, J.D. 1991 *Social norms and aids-risk and preventive behaviour in a sample of ethnically diverse urban adolescents.* San Francisco: University of California.

DiCLEMENTE, R.J. 1992. *Adolescents and AIDS: A generation in jeopardy.* New Jersey: SAGE Publications.

DiCLEMENTE, R.J., DURBIN, M., SIEGAL, D., KRASNOVSKY, F., LAZARUS, N. & COMACHO, T. 1992. Determinants of condom use among junior high school students in a minority, inner-city school district. *Paediatrics*, vol. 89, no. 2.

DiCLEMENTE, R.J. & WINGOOD, G.M. 1995. A randomized controlled trial of an HIV sexual risk-reduction intervention for young African-American women. *Journal of the American Medical Association*, vol. 274, no. 16, p.1271-1276.

DEBRO, S.C., CAMPBELL, S.M. & PEPLAU, L.A. 1994. Influencing a partner to use a condom. *Psychology of Women Quarterly*, vol. 18, no. 2, p.165-182.

DENZIN, N. & LINCOLN, Y. 1994. *Handbook of Qualitative Research*. New Jersey: SAGE Publications.

DETZER, M.J., WENDT, S.J., SOLOMON, L.J. & DORSCH, E. 1995. Barriers to condom use among women attending planned parenthood clinics. *Women and Health*, vol. 23, no. 1, p.91-102.

DICKSON, N., PAUL, C., HERBISON, P. & SILVA, P. 1998. First sexual intercourse: Age, coercion and later regret reported by a birth cohort. *British Medical Journal*, vol. 316, p.29-33.

DILLARD, J.P. 1990. A goal-driven model of interpersonal influence. In J.P. DILLARD (Ed), *Seeking compliance: The production of interpersonal influence messages*. Scottsdale, AZ: Gorsuch-Scarisbrick.

DONALD, M., LUCKE, J., DUNNE, M., O'TOOLE, B. & RAPHAEL, B. 1994. Determinants of condom use by Australian secondary school students. *Journal of Adolescent Health*, vol. 15, no. 6, p.503-510.

DONOVAN, C. 1990. Adolescent sexuality. *British Medical Journal*, vol. 300, p.1026-1027.

DUBOW, E.F. & LUSTER, T. 1990. Adjustment of children born to teenage mothers: The continuation of risk and protective factors. *Journal of Marriage and the Family*, vol. 52, p.393-404.

DUDLEY COMMUNITY HEALTH COUNCIL. 1988. *Survey of family planning clinics in Dudley.*

EDGAR, T., FREIMUTH, V.S. & HAMMOND, S.L. 1988. Communicating the AIDS risk to college students: The problem of motivating change. *Health Education Research: Theory and Practice*, vol. 3, no. 1, p.59-65.

EDGAR, T. 1992. A compliance-based approach to the study of condom use. In T. EDGAR, M.A. FITZPATRICK & V.S. FREIMUTH (Eds), *AIDS: A communication perspective.* New Jersey: Lawrence Erlbaum.

EDGAR, T., FREIMUTH, V.S., HAMMOND, S.L., McDONALD, D.A. & FINK, E.L. 1992. Strategic sexual communication: Condom use resistance and response. *Health Communication*, vol. 4, no. 2, p.83-104.

EDWARDS, S. 1993. Young women more likely to use condoms with new partners who prefer method. *Family Planning Perspectives*, vol. 25, no. 1, p.45-46.

EDWARDS, S. 1994. As adolescent males age, risky behaviour rises but condom use decreases. *Family Planning Perspectives,* vol. 26, no. 1, p.45-46.

EHRHARDT, A.A., YINGLING, S., ZAWADZKI, R. & MARTINEZ-RAMIREZ, M. 1992. Prevention of heterosexual transmission of HIV: Barriers for women. *Journal of Psychology and Human Sexuality*, vol. 5, nos. 1-2, p.37-67.

EISER, J.R. & FORD, N. 1995. Sexual relationships on holiday: A case of situational disinhibition. *Journal of Social and Personal Relationships*, vol. 12, no. 3, p.323-339.

ELLIOT, P.M., TATTERSHALL, M.H.N., COPPLESON, M., RUSSELL, P., WONG, F., COATES, A.S., SOLOMON, H.J., BANNATYNE, P.M., ATKINSON, K.H. & MURRAY, J.C. 1989. Changing character of cervical cancer in young women. *British Medical Journal*, vol. 298, p.288-290.

EMMONS, C.A., JOSEPH, J.G., KESSLER, R.C., WORTMAN, C.B., MONTGOMERY, S.B. & OSTROW, D.G. 1986. Psychological predictors of reported behavior change in homosexual men at risk for AIDS. *Health Education Quarterley*, vol. 13, no. 4, p.331-345.

ERICKSEN, K.P. & TROCKI, K.F. 1992. Behavioural risk factors for sexually transmitted diseases in American households. *Social Science and Medicine*, vol. 34, no. 8, p.843-853.

FARRELL, C. 1978. *My mother said....the way young people learned about sex and birth control.* London: Routledge and Kegan Paul.

FAZIO, R.H. 1990. Multiple processes by which attitudes guide behaviour: The MODE model as an integrative framework. In M.P. ZANNA (Ed), *Advances in Experimental Social Psychology*, vol. 23, p.75-109. San Diego: Academic Press.

FERGUSSON, D.M., LYNSKEY, M.T. & HORWOOD, L.J. 1994. AIDS knowledge and condom use in a birth cohort of 16 year olds. *New Zealand Medical Journal*, vol. 107, no. 990, p.480-483.

FIFE-SCHAW, C.R. & BREAKWELL, G.M. 1992. Estimating sexual behaviour parameters in the light of AIDS: A review of recent UK studies of young people. *AIDS Care*, vol. 4, no. 2, p.187-201

FINE, M. 1988. Sexuality, schooling and adolescent females: The missing discourse of desire. *Harvard Education Review,* vol. 58, no. 29.

FISHER, J.D. 1988. Possible effects of reference group-based social influence on aids risk behaviour and AIDS prevention. *American Psychologist*, November, p.914-920.

FISHER, J.D., MISOVICH, S.J. & FISHER, W.A. 1992. impact of perceived social norms on adolescents' aids-risk behaviour and prevention. In R.J. DiCLEMENTE (Ed), *Adolescents and AIDS: A generation in jeopardy.* New Jersey: SAGE Publications.

FISHER, W.A. and FISHER, J.D. 1993. A general social psychological model for changing aids risk behaviour In, J.B. PRYOR & G.D. REEDER (Eds), *The social psychology of HIV infection.* New Jersey: Lawrence Erlbaum Associates.

FLEISSIG, A. 1994. A rise in 'unintended' babies. what are the implications? *British Journal of Family Planning,* vol. 19, p.260-263.

FORD, N. and BOWIE, C. 1989. Sexual behaviour of young people and the risk of HIV infection. *Journal of Epidemiology and Community Health*, vol. 43, no. 1, p.61-65.

FORD, N. 1992. The sexual and contraceptive lifestyles of young people: Part I. *British Journal of Family Planning*, vol. 18, p.52-55.

FORD, N. 1993. The sexual and contraceptive lifestyles of young people: Part II. *British Journal of Family Planning*, vol. 18, p.119-122.

FORD, N. & MORGAN, K. 1989. Heterosexual lifestyles of young people in an English city. *Journal of Population and Social Studies,* vol. 1, no. 2, p.167-185.

FORD, N., HALLIDAY, J. & LITTLE, J. 1997. *Changes in drug use and sexual lifestyles of young people in Somerset, 1990-1996.* University of Exeter: Department of Geography.

FORMAN, D. & CHILVERS, C. 1989. Sexual behaviour of young and middle aged men in England and Wales. *British Medical Journal*, vol. 298, p.1137-1142.

FRANK, O. & ZIMMERMAN, E. 1991. *Social control and negotiation over sex in heterosexual couples.* Paper presented at a workshop of the EC Concerted Action on Sexual Behaviour in Portugal, 1991.

FREIMUTH, V.S., EDGAR, T. & HAMMOND, S.L. 1987. College students' awareness and interpretation of the AIDS risk. *Science Technology and Human Values*, vol. 12, p.37-40.

FREIMUTH, V.S., HAMMOND, S.L., EDGAR, T., McDONALD, D.A. & FINK, F.L. 1992. Factors explaining intent, discussion and use of condoms in first-time sexual encounters. *Health Education Research: Theory and Practice*, vol. 7, no. 2, p.203-215.

GAGNON, J.H. 1990. The explicit and implicit use of the scripting perspective in sex research. In, J. BANCROFT (Ed), *Annual Review of Sex Research vol. 1.* The Society for the Scientific Study of Sex.

GALLOIS, C., TERRY, D., TIMMINS, P., KASHIMA, Y. & MCCAMISH, M. 1994. Safe sex intentions and behaviour among heterosexuals and homosexual men: testing the theory of reasoned action. *Psychology and Health*, vol. 10, no. 1, p.1-16.

GALT, M., GILLIES, P. & WILSON, K. 1989. Surveying knowledge and attitudes towards aids in young adults - just 19. *Health Education Journal*, vol. 48, no. 4, p.162-166.

GALT, M. & GILLIES, P. 1990. *A survey of AIDS related knowledge, attitudes and behaviour in North Derbyshire.* University of Nottingham: Department of Public Health Medicine and Epidemiology.

GERRARD, M., GIBBONS, F.X., WARNER, T.D. & SMITH, G.E. 1993. Perceived vulnerability to HIV infection and AIDS preventive behaviour: A critical review of the evidence. In J.B. PRYOR & G.D. REEDER (Eds), *The Social Psychology of HIV Infection.* New Jersey: Lawrence Erlbaum Associates.

GILLMORE, M.R., BUTLER, S.S., LOHR, M.J. & GILCHRIST, L. 1992. Substance use and other factors associated with risky sexual behavior among pregnant adolescents. *Family Planning Perspectives*, vol. 24, no. 6, p.255-268.

GLASER, B.G. & STRAUSS, A.L. 1967. *The discovery of grounded theory.* Chicago: Aldine.

GODIN, G. & KOK, G. 1996. The theory of planned behaviour: a review of its applications to health-related behaviors. *American Journal of Health Promotion*, vol. 11, p.87-97.

GOLD, R.S., SKINNER, M.J., GRANT, P.J. & PLUMMER, D.C. 1991. Situational factors and thought processes associated with unprotected intercourse in gay men. *Psychology and Health*, vol. 5, p.259-278.

GOLD, R.S. & SKINNER, M.J. (1992) Situational factors and thought processes in young gay men. *AIDS*, vol. 6, p.1021-1030.

GOLD, R.S., KARMILOFF-SMITH, A., SKINNER, M.J. & MORTON, J. 1992. Situational factors and thought processes associated with unprotected intercourse in heterosexual students. *AIDS Care*, vol. 4, no. 3, p.305-323.

GOLLWITZER, P.M. 1993. Goal achievement: The role of intentions. In W. STROEBE & M. HEWSTONE (Eds), *European review of sociology*, vol. 4, p.141-185. Chichester: Wiley.

GOODMAN, E. & COHALL, A.T. 1989. Acquired immunodeficiency syndrome and adolescents: Knowledge, attitudes, beliefs and behaviours in a New York City adolescent minority population. *Paediatrics*, vol. 84, no. 1, p.36-42.

GORDON, A.N. 1990. New STD menace: HPV infection. *Medical Aspects of Human Sexuality*, February, p.18-23.

GRAVES, K.L. & LEIGH, B.C. 1995. The relationship of substance use to sexual activity among young adults in the US. *Family Planning Perspectives*, vol. 27, p.18-23&33.

GUBA, E. & LINCOLN, Y. 1994. Competing paradigms in qualitative research. In N. DENZIN & Y. LINCOLN (Eds), *Handbook of Qualitative Research*. New Jersey: SAGE Publications.

HARBIN, R.E. 1995. Female adolescent contraception. *Paediatric Nursing*, vol. 21, no. 3, p.221-226.

HARPER, G.W. 1994. *Increasing condom use among high school students: recommendations from a review of multivariate models.* Paper Presented at the 122nd Annual Meeting of the American Public Health Association, Washington DC, Oct.30th-Nov.3rd.

HARVEY, M. & BECKMAN, L.J. 1986. Alcohol consumption, female sexual behavior and contraceptive use. *Journal of Studies on Alcohol*, vol. 47, no. 4, p.327-331.

HENNINK, M., DIAMOND, I. & COOPER, P. 1997. *Sexual behaviour and contraceptive use of seasonal workers.* Report to the South and West Regional Health Authority, University of Southampton: Department of Social Statistics.

HEROLD, E.S. & MCNAMEE, J.E. 1982. An explanatory model of contraceptive use among young women. *Journal of Sex Research*, vol. 18, p.289-304.

HILLIER, L., HARRISON, L. & WARR, D. 1988. "When you carry condoms all the boys think you want it": Negotiating competing discourses about safe sex. *Journal of Adolescence*, vol. 21, p.15-29.

HINGSON, R., STRUNIN, L. & BERLIN, B. 1990. Acquired immunodeficiency syndrome transmission: Changes in knowledge and behaviours among teenagers, Massachusetts statewide surveys, 1986-1988. *Paediatrics*, vol. 85, p.24-29.

HINGSON, R., STRUNIN, L., HEERAN, T. & BERLIN, B. 1990. Beliefs about AIDS, use of alcohol and drugs and unprevented sex among Massachusetts adolescents. *American Journal of Public Health*, vol. 80, p.295-299.

HINGSON, R. & STRUNIN, L. 1992. Monitoring adolescents' response to the aids epidemic: changes in knowledge, attitudes, beliefs and behaviours. In R.J. DiCLEMENTE (Ed), *Adolescents and AIDS: A generation in jeopardy*. New Jersey: SAGE Publications.

HIRST, J. 1994. *Not in front of the grown-ups: A study of the social and sexual lives of 15 and 16 year olds.* Sheffield Hallam University: Health Research Centre Report no.6, Health Research Institute.

HODGKINS, S., SHEERAN, P. & ORBELL, S. (In press). Prediction and intervention in health-related behavior: a meta-analytic review of protection motivation theory. *Journal of Applied Social Psychology.*

HOLLAND, J., RAMAZANOGLU, C., SCOTT, S., SHARPE, S. & THOMSON, R. 1992. Pressure, resistance, empowerment: Young women and the negotiation of condom-use. In P. AGGLETON, P. DAVIES & G. HART. (Eds), *AIDS: Rights, risk and reason.* London: The Falmer Press.

HOLLAND, J., RAMAZANOGLU, C., SCOTT, S., SHARPE, S. & THOMSON, R. 1993. Don't die of ignorance - I nearly died of embarrassment: Condoms in context. In M. BERER & S. RAY (Eds), *Women and HIV/AIDS: An international resource book.* London: Pandora Press.

HOLLAND, J., RAMAZANOGLU, C., SHARPE, S. & THOMSON, R. 1998. *The male in the head: Young people, heteroseuality and power.* London: Tufnell Press.

HOLLWAY, W. 1984. Gender differences and the production of subjectivity. In J. HENRIQUES, W. HOLLWAY, C. URWIN, C. VENN, & V. WALKERDINE (Eds), *Changing the subject.* London: Methuen.

HUBERMAN, A & MILES, M. 1994. Competing paradigms in qualitative research. In N. DENZIN & Y. LINCOLN (Eds), *Handbook of Qualitative Research.* New Jersey: SAGE Publications.

HUDSON, F. & INEICHEN, B. 1991. *Taking it lying down - sexuality and teenage motherhood.* Basingstoke: Macmillan.

INGHAM, R., WOODCOCK, A. & STENNER, K. 1991. Getting to know you.....young people's knowledge of their partners at first intercourse. *Journal of Community and Applied Social Psychology*, vol. 1, no. 2, p.117-132.

INGHAM, R. 1992. *Personal and contextual aspects of young people's sexual behaviour: A brief methodological and theoretical review.* Geneva: World Health Organisation.

INGHAM, R., WOODCOCK, A. & STENNER, K. 1992. The limitations of rational decision-making models as applied to young people's sexual behaviour. In, P. AGGLETON, P. DAVIES, P. & G. HART (Eds), *AIDS: Rights, risk and reason.* London: The Falmer Press.

INGHAM, R. 1993. Some speculations on the concept of rationality: a reconsideration of health behaviour change models. In G. ALBRECHT (Ed), *Advances in medical sociology, vol IV: A recommendation of models of health behaviour change*, p.89-111.

INGHAM, R. & VAN ZESSEN, G. 1995. Towards an alternative model of sexual behaviour: from individual properties to interactional processes. In L. VAN CAMPENHOUDT, M. COHEN, G. GUIZZARDI & D. HAUSSER (Eds), *Sexual interactions and HIV risk: new conceptual perspectives in European research.* London: Taylor and Francis.

INGHAM, R., JARAMAZOVIC, E., STEVENS, D., VANWESENBEECK, I. & VAN ZESSEN, G. 1996. *Protocol for comparative qualitative studies on sexual conduct and HIV risks: Deliverable seven.* European Commission Biomed Concerted Action.

JARMAN, M. 1984. Underprivileged areas: Validation and distribution of scores. *British Medical Journal*, vol. 289, p.1587-1592.

JOFFE, A. & RADIUS, S.M. 1993. Self-efficacy and intent to use condoms among entering college freshmen. *Journal of Adolescent Health*, vol. 14, no. 4, p.262-268.

JOHNSON, A.M., WADSWORTH, J. & ELLIOT, P. 1989. A pilot study of sexual lifestyle in a random sample of the population of Great Britain. *AIDS*, vol. 3, p.135-141.

JOHNSON, A.M., WADSWORTH, J., WELLINGS, K., BRADSHAW, S., & FIELD, J. 1994. *Sexual attitudes and lifestyles.* Oxford: Blackwell Scientific Publications.

JOSEPH, J., MONTGOMERY, S., EMMONS, C., KESSLER, R., OSTROW, D., WORTMAN, C., O'BRIEN, M. & ESHLEMAN, S. 1987. Magnitude and determinants of behavioural risk-reduction: Longitudinal analysis of a cohort at risk for AIDS. *Psychology and Health*, vol. 1, p.73-96.

JUDD, C.M., SMITH, E.R. & KIDDER, L.H. 1991. *Research Methods in Social Relations.* London: Holt, Rinehart and Winston, Inc.

KAROLY, P. 1993. Mechanisms of self-regulation: a systems view. *Annual Review of Psychology*, vol. 44, p.23-52.

KAROLY, P. 1998. Expanding the conceptual range of health self-regulation research: a commentary. *Psychology and Health*, vol. 13, p.741-746.

KASHIMA, Y., GALLOIS, C. & McCAMISH, M. 1992. Predicting the use of condoms: Past behaviour, norms and the sexual partner. In T. EDGAR, M.A. FITZPATRICK & V.S. FREIMUTH (Eds), *AIDS: A communication perspective*. New Jersey: Lawrence Erlbaum Associates.

KASPRYZK, D., MONTANO, D.E. & FISHBEIN, M. 1998. Application of an integrated behavioural model to predict condom use: A prospective study among high HIV risk groups. *Journal of Applied Social Psychology*, vol. 28, no. 17, p.1557-1583.

KEGELES, S., ALDER, N. & IRWIN, C. 1989. Adolescents and condoms: Associations of beliefs with intentions to use. *American Journal of Diseases in Childhood*, vol. 143, p.911-915.

KELLY, J.A., ST.LAWRENCE, J.S., BRASFIELD, T.L., LEMKE, A., AMIDEI, T., ROFFMAN, R.E., HOOD, H.V., KILGORE, H., SMITH, J.E. & MCNEILL, C. 1990. Psychological factors that predict AIDS high-risk versus aids precautionary behavior, *Journal of Consulting and Clinical Psychology*, vol. 58, no. 1, p.117-120.

KELLY, J.A., ST.LAWRENCE, J.S. & BRASFIELD, T.L. 1991. Predictors of vulnerability to AIDS risk behavior relapse. *Journal of Consulting and Clinical Psychology*, vol. 59, no. 1, p.163-166.

KELLY, J.A., MURPHY, D.A., WASHINGTON, C.D. & WILSON, T.S. 1994. The effects of HIV/AIDS intervention groups for high-risk women in urban clinics. *American Journal of Public Health*, vol. 84, no. 12, p.1918-1922.

KELLY, J.A. & KALICHMAN, S.C. 1995. Increased attention to human sexuality can improve HIV-AIDS prevention efforts: Key research issues and directions. *Journal of Consulting and Clinical Psychology*, vol. 63, no. 6, p.907-918.

KETTING, E. 1994. *Teenage pregnancy - A problem that can be reduced.* Paper presented at the Organon conference, London.

KIPPAX, S., CRAWFORD, J., WALDBY, C. & BENTON, P. 1990. Women negotiating heterosex: implications for AIDS prevention. *Women's Studies International Forum*, vol. 13, no. 6, p.533-542.

KLEPINGER, D.H., BILLY, J.O.G., TANFER, K. & GRADY, W.R. 1993. Perceptions of AIDS risk and severity and their association with risk-related behavior among US men. *Family Planning Perspectives*, vol. 25, no. 2, p. 74-82.

KOST, K. & FORREST, J.D. 1992. American women's sexual behaviour and exposure to risk of sexually transmitted diseases, *Family Planning Perspectives*, vol. 24, no. 6.

KU, L., SONENSTEIN, F.L. & PLECK, J.H. 1992 The association of AIDS education and sex education with sexual behaviour and condom use among teenage men. *Family Planning Perspectives*, vol. 24, no. 3.

KU, L. SONENSTEIN, F.L. & PLECK, J.H. 1994. The dynamics of young men's condom use during and across relationships. *Family Planning Perspectives*, vol. 26, no. 6, p.246-251.

KU, L. SONENSTEIN, F.L. & PLECK, J.H. 1995. Why we use condoms and why we stop. *Population Today*, vol. 23, no. 3, p.3.

LoCONTE, J.S., O'LEARY, A. & LABOUVIE, E. 1997. Psychosocial correlates of HIV-related sexual behaviour in an innercity STD clinic. *Psychology and Health*, vol. 12, p.589-601.

LEAR, D. 1995. Sexual communication in the age of AIDS: The construction of risk and trust among young adults. *Social Science and Medicine*, vol. 41, no. 9, p.1311-1323.

LEIGH, B.C., MORRISON, D.M., TROCKI, K. & TEMPLE, M.T. 1994. Sexual behavior of American adolescents: Results from a national survey. *Journal of Adolescent Health*, vol. 15, no. 2, p.117-125.

LEVINE, O.H., BRITTON, P.J., JAMES, T.C., JACKSON, A.P., HOBFOLL, S.E. & LAVIN, J.P. 1993. The empowerment of women: A key to HIV prevention. *Journal of Community Psychology*, vol. 21, p.320-334.

LIANG, W.A. 1982. *Family planning: The benefits and costs*. London: The Policy Studies Institute.

LINDEMANN, C. 1977. Factors affecting the use of contraception in the nonmarital context. In R. GEMME & C.C. WHEELER (Eds), *Progress in sexology.* New York: Plenum Press.

LUSTER, T. & SMALL, S.A. 1994. Factors associated with sexual risk-taking behaviours among adolescents. *Journal of Marriage and the Family*, vol. 56, no. 3, p.622-632.

MALOW, R.M., CORRIGAN, S.A., CUNNINGHAM, S.C. & WEST, J.A. 1993. Psychosocial factors associated with condom use among African-American drug abusers in treatment. *AIDS education and prevention*, vol. 5, no. 3, p.244-253.

MALOW, R.M., WEST, J.A., CORRIGAN, S.A. & PENA, J.M. 1994. Outcome of psychoeducation for HIV risk reduction. *AIDS Education and Prevention*, vol. 6, no. 2, p.113-125.

McCUSKER, J., ZAPKA, J.G., STODDARD, A.M. & MAYER, K.H. 1989. Responses to the AIDS epidemic among homosexually active men: Factors associated with preventive behaviour. *Patient Education and Counselling*, vol. 13, p.25-30.

MEL. 1989. *HIV/AIDS and young people: Trends 1987 to 1988.* Aston Science Park, Birmingham: Public Health Research Unit, Midland Environment Limited.

MEL. 1990. *Perceived vulnerability and behaviour change.* Aston Science Park, Birmingham: Public Health Research Unit, Midland Environment Limited.

MELLANBY, A., PHELPS, F. & TRIPP, J.H. 1993. Teenagers sex and risk taking. *British Medical Journal*, vol. 307, p.25.

McEWAN, R.T., McCALLUM, A., BHOPAL, R.S. & MADHOCK, R. 1992. Sex and the risk of HIV infection: The role of alcohol. *British Journal of Addiction*, vol. 87, p.577-584.

McEWAN, J., WADSWORTH, J., JOHNSON, A.M., WELLINGS, K. & FIELD, J. 1997. Changes in the use of contraceptive methods in England and Wales over two decades: Margaret Bone's surveys and the national survey of sexual attitudes and lifestyles. *The British Journal of Family Planning*, vol. 23, p.5-8.

McGLEW, T., BURY, J.K. & JAMIESON, L. 1989. *Rationality, risk taking and advice seeking amongst new clients at a contraceptive advisory service.* Edinburgh: Brook Advisory Centre.

McGUIRE, A. & HUGHES, D. 1995. *The economics of family planning services.* Report prepared for the Contraceptive Alliance, London: Family Planning Association.

MILLER, C. 1992. An empirical study of the psychological antecedents and consequences of induced abortion. *Journal of Social Issues*, vol. 48, no. 3, p.67-93

MILLER, L.C., BETTENCOURT, B.A., DEBRO, S.C. & HOFFMAN, V. 1993. Negotiating safer sex: Interpersonal dynamics. In J.B. PRYOR & G.D. REEDER (Eds), *The social psychology of HIV infection.* New Jersey: Lawrence Erlbaum Associates.

McKUSICK, L., HORTSMAN, W. & COATES, T.J. 1985. AIDS and the sexual behaviour reported by gay men in San Francisco. *American Journal of Public Health*, vol. 75, p.493-496.

McKUSICK, L., COATES, T.J., MORIN, S.F., POLLACK, L. & HOAD, C. 1990. Longitudinal predictors of reductions in unprotected anal intercourse among gay men in San Francisco: The AIDS behavioural research project. *American Journal of Public Health*, vol. 80, no. 8, p.978-982.

McKUSKER, J., WESTENHOUSE, J., STODDARD, A.M., ZAPKA, J.G., ZORN, M.W. & MAYER, K.H. 1990. Use of drugs and alcohol by homosexual men in relation to sexual practices. *Journal of AIDS*, vol. 3, p.729-736.

MOLGAARD, C.A., NAKAMURA, C., HOVELL, M. & ELDER, J.P. 1988. Assessing alcoholism as a risk factor for AIDS. *Social Science and Medicine*, vol. 27, no. 11, p.1147-1152.

MOORE, S. & ROSENTHAL, D. 1991. Adolescent invulnerability and perception of AIDS risk. *Journal of Adolescent Research*, vol. 6, p.164-180.

MOORE, J., HARRISON, J.S., KAY, K.L., DEREN, S. & DOLL, L.S. 1995. Factors associated with Hispanic women's HIV-related communication and condom use with male partners. *AIDS Care*, vol. 7, no. 4, p. 415-427.

MORI. 1990. *Young adults health and lifestyle: Sexual behaviour.* Health Education Authority: Research Department, Public Health Division.

NATIONAL HEALTH SERVICE STATISTICS. 1992. *Abortion statistics, England and Wales, 1990.*

NATIONAL OPINION-POLL GROUP (NOP). 1993. *Contraception and Sex in 1993.* Schering Health Care.

NATIONAL RESEARCH COUNCIL. 1992. *Understanding the spread of HIV.* Washington DC: National Academy Press.

NEWCASTLE COMMUNITY HEALTH COUNCIL. 1989. *Family planning clinic attenders: a report of a consumer survey.*

NEWHAM COMMUNITY HEALTH COUNCIL. 1992. *Family planning provision in Newham: a survey of family planning services in Newham.*

NORTH TYNESIDE COMMUNITY HEALTH COUNCIL. 1991. *Survey of family planning clinics.*

OGDEN, J. 1996. *Health psychology: A textbook.* Buckingham: Open University Press.

OPCS. 1995. *General Household Survey 1993.* Series GHS, No.24.

ONS. 1996. *Conceptions in England and Wales 1994: Residents of regional and district health authority areas.* ONS Monitor FM1, No.23.

ONS. 1997. *Conceptions in England and Wales 1995: Residents of regional and district health authority areas.* ONS Monitor FM1, No.24 .

ONS. 1998. *Conceptions in England and Wales 1996: Residents of regional and district health authority areas.* ONS Monitor FM1, No.25 .

ORBELL, S., HODGKINS, S. & SHEERAN, P. 1997. Implementation intentions and the theory of planned behaviour. *Personality and Social Psychology Bulletin*, vol. 23, no. 9, p.945-954.

ORBELL, S. & SHEERAN, P. 1998. 'Inclined abstainers': A problem for predicting health-related behaviour. *British Journal of Social Psychology*, vol. 37, p.151-165.

OSTROW, D.G., VAN RADEN, M., FOX, R., KINGSLEY, L., DUDLEY, J. & KASLOW, R.A. 1990. Recreational drug use and sexual behaviour in a cohort of homosexual men. *AIDS*, vol. 4, p.759-765.

PARKER, I. 1992. *Discourse dynamics: Critical analysis for social and individual psychology.* London and New York: Routledge.

PECKHAM, S. 1992. *Unplanned pregnancy and teenage pregnancy: A review.* University of Southampton: Institute for Health Policy Studies.

PETTY, R.E., GLEICHER, F., BLAIR, W & JARVIS, G. 1993. Persuasion theory and AIDS prevention. In J.B. PRYOR & G.D. REEDER (Eds), *The social psychology of HIV infection.* New Jersey: Lawrence Erlbaum Associates.

PHILLIPS, S.R. 1995. Turning research into policy: A survey on adolescent condom use. *Siecus Report*, vol. 24, no. 1, p.9-12.

PHILLIPS, D.R., PEREIRA-GRAY, D, OWEN, M.R., MARSHALL, M.N., PEARSON, V.A.H. & COLEMAN, L.M. 1994. *Family planning services in general practices and family planning clinics: A Devon case study.* University of Exeter: Institute of Population Studies.

PHLS. 1994. *Annual STD Figures for England and Wales: 1989-1992.*

PHLS. 1994. *Age Group of HIV-Infected Persons at the Time of First Positive Test: England and Wales and N.Ireland.*

PHLS. 1998. *AIDS/HIV quarterly surveillance tables 1997.* (98/1).

PHLS. 1996. *Department of Health GUM Clinic Returns 1994.* (KC60).

PHLS. 1997. *Department of Health GUM Clinic Returns 1995.* (KC60).

PHLS. 1998. *Department of Health GUM Clinic Returns 1996.* (KC60).

PHLS. 1999. *Department of Health GUM Clinic Returns 1997.* (KC60).

PHOENIX, A. 1991. *Young Mothers?* Cambridge: Policy Press.

PIDGEON, N. & HENWOOD, K. 1997. Using grounded theory in psychological research. In N. HAYES (Ed), *Doing qualitative Analysis in Psychology.* Hove: Psychology Press.

PITTS, M. & PHILLIPS, K. 1991. *The psychology of health: An introduction.* London: Routledge.

PLANT, M.A. 1990. Alcohol, sex and AIDS. *Alcohol and Alcoholism*, vol. 25, nos. 2-3, p.293-301.

PLECK, J.H., SONENSTEIN, F.L. & KU, L.C. 1991. Adolescent males' condom use: Relationships between perceived cost-benefits and consistency. *Journal of Marriage and the Family*, vol. 53, p.733-745.

POLIT-O'HARA, D. & KAHN, J.R. 1985. Communication and contraceptive practices in adolescent couples. *Adolescence*, vol. 20, p.33-43.

POPPEN, P.J. 1994. Adolescent contraceptive use and communication: Changes over a decade. *Adolescence*, vol. 29, no. 115, p.503-514.

POTTER, J. & WETHERELL, M. 1987. *Discourse and social psychology: Beyond attitudes and behaviour.* London: SAGE Publications.

PRICE, J.A. & PRICE, J.H. 1983. *Psychological constructs of alcoholism and substance abuse.* US: Haworth Press.

PRICE, J.H., EASTON, A.N., TELLJOHANN, S.K. & WALLACE, P.B. 1996. Perceptions of cervical-cancer and PAP smear screening behaviour by women's sexual orientation. *Journal of Community Health*, vol. 21, no. 2, p.89-105.

PROCHASKA, J.D. & DiCLEMENTE, C.C. 1984. *The transtheoretical approach: crossing traditional boundaries of therapy.* Homewood: Dow Jones Irwin.

RADEMAKERS, J. 1991. Contraception and interaction among Dutch boys and girls. *Planned Parenthood in Europe*, vol. 19, no. 3, p.7-8.

RADEMAKERS, J., STRAVER, C.J., ZIJLMANS, W., VAN ZESSEN, G., VAN DER RIJT, G. & LUIJKX, J.B. 1991. *Interactional aspects in the construction of heterosexual behaviour.* Paper resented at the 17th IASR meeting, Barrie, Ontario, August 6-10, 1991.

RADEMAKERS, J., LUIJKX, J.B., VAN ZESSEN, G., ZIJLMANS, W., STRAVER, C.J. & VAN DER RIJT, G. 1992. *AIDS-Preventie in heterosexuele contacten*. Amsterdam: Swets and Zeitlinger (English summary).

READER, E.G. CARTER, R.P. & CRAWFORD, A. 1988. AIDS knowledge, attitudes and behaviour: A study with university students. *Health Education Journal*, vol. 47, no. 4, p.125-127.

REEL, B.W. & THOMPSON, T.L. 1994. A test of the effectiveness of strategies for talking about AIDS and condom use. *Journal of Applied Communication Research*, vol. 22, no. 2, p.127-140.

REEVES, W.C., BRINTON, L.A., GARCIA, M., BRENES, M.M., HERRERO, R., GAITAN, E., TENORIO, F., DE BRITTON, R.C. & RAWLS, W.E. 1989. Human papillomavirus infection and cervical cancer in Latin America. *The New England Journal of Medicine*, vol. 320, no. 22, p.1437-1441.

REINARMAN, C. & LEIGH, B.C. 1987. Culture, cognition and disinhibition: Notes on sexuality and alcohol in the age of AIDS. *Contemporary Drug Problems*, Fall, p.435-459.

RICKMAN, R.L., LODICO, M., DiCLEMENTE, R.J. & MORRIS, R. (1994) Sexual communication is associated with condom use by sexually active incarcerated adolescents. *Journal of Adolescent Health*, vol. 15, no. 5, p.383-388.

ROBERTSON, J.A. & PLANT, M.A. 1988. Alcohol, sex and risk of HIV. *Drug and Alcohol Dependence*, vol. 22, p.75-78.

ROGERS, R.W. 1975. A protection motivation theory of fear appeals and attitude change. *Journal of Psychology,* vol. 91, p.93-114.

ROMER, D. & HORNIK, R. 1992. HIV education for youth: The importance of social consensus in behaviour change. *AIDS Care*, vol. 4, no. 3, p.285-304.

ROMER, D., BLACK, M., RICARDO, I., FEIGELMAN, S., KALJEE, L., GALBRAITH, J., NESBIT, R., HORNIK, R.C. & STANTON, B. 1994. Social influences on the sexual behaviour of youth at risk for HIV exposure. *American Journal of Public Health*, vol. 84, no. 6, p.977-985.

ROSENTHAL, D., MOORE, S. & FLYNN, I. 1991. Adolescent self-efficacy, self-esteem and sexual risk-taking. *Journal of Community and Applied Social Psychology*, vol. 1, p.77-88.

ROSENTHAL, D., HALL, C. & MOORE, S. 1992. AIDS, adolescents and sexual risk taking: A test of the health belief model. *Australian Psychologist*, vol. 27, no. 3, p.166-171.

ROSENTHAL, S.L., BIRO, F.M., SUCCOP, P.A., BAKER, J.G. & STANBERRY, L.R. 1994. Reasons for condom utilization among high risk adolescent girls. *Clinical Paediatrics*, vol. 33, no. 12, p.706-711.

ROSENTHAL, S.L., COHEN, S.S. & BIRO, F.M. 1996. Developmental sophistication among adolescents of negotiation strategies for condom use. *Developmental and Behavioural Paediatrics*, vol. 17, no. 2, p.94-97.

ROSENTHAL, D. & FERNBACH, M. 1997. The singles scene: Safe sex practices and attitudes among at-risk heterosexual adults. *Psychology and Health*, vol. 12, p.171-182.

ROSS, M.W. 1988. Personality factors that differentiate homosexual men with positive and negative attitudes toward condom use. *New York State Journal of Medicine*, vol. 88, p.626-628.

ROTTER, R.B. 1966. Generalized expectancies for internal and external control of enforcement. *Psychological Monographs: General and Applied*, vol. 80, p.1-28.

SCHAALMA, H., KOK, G. & PETERS, L. 1993. Determinants of consistent condom use by adolescents: The impact of experience of sexual intercourse. *Health Education Research: Theory and Practice*, vol. 8, no. 2, p.255-269.

SCHILLING, R.F., EL-BASSEL, N., GILBERT, L. & SCHINKE, S.P. 1991. Correlates of drug use, sexual behaviour and attitudes toward safer sex among African-American and Hispanic women in methadone maintenance. *Journal of Drug Issues*, vol. 21, no. 4, p.685-698.

SCHOFIELD. M. 1965. *The sexual behaviour of young people.* London: Longmans.

SCHWARZER, R. 1992. Self-efficacy in the adoption and maintenance of health behaviours: Theoretical approaches and a new model. In R. SCHWARZER (Ed), *Self-efficacy: Thought control of action.* Washington DC: Hemisphere.

SEAL, D.W. & AGOSTINELLI, G. 1994. Individual differences associated with high-risk sexual behaviour: implications for intervention programmes. *AIDS Care*, vol. 6, no. 4, p.393-396.

SECRETARY OF STATE FOR HEALTH. 1992. *The health of the nation.* Government white paper, UK: Department of Health.

SHEER, V.C. 1995. Sensation seeking predispositions and susceptibility to a sexual partners's appeals for condom use. *Journal of Applied Communication Research*, vol. 23, no. 3, p.212-229.

SHEER, V.C. & CLINE, R.J.W. 1994. The development and validation of a model explaining sexual behaviour among college students: Implications for AIDS communication campaigns. *Human Communication Research*, vol. 21, no. 2, p.280-304.

SHEER, V.C. & CLINE, R.J.W. 1995. Individual differences in sensation seeking and sexual behaviour: Implications for communication intervention for HIV/AIDS prevention among college students. *Health Communication*, vol. 7, no. 3, p.205-223.

SHEERAN, P., WHITE, D. & PHILLIPS, K. 1991. Premarital contraceptive use: A review of the psychological literature. *Journal of Reproductive and Infant Psychology*, vol. 9, p.253-269.

SHEERAN, P. & ABRAHAM, C. 1994. Measurement of condom use in 72 studies of HIV-preventive behaviour: A critical review. *Patient Education and Counselling*, vol. 24, p.199-216.

SHEERAN, P. & ORBELL, S. 1998. Do intentions predict condom use? Meta-analyses and examination of 6 moderator variables. *British Journal of Social Psychology*, vol. 37, p.231-250.

SHEERAN, P., ABRAHAM, C. & ORBELL, S. 1999. Psychosocial correlates of condom use: a meta-analysis. *Psychological Bulletin*, vol. 125, p. 90-132.

SHEPPARD, B.H., HARTWICK, J. & WARSHAW, P.R. 1988. The theory of reasoned action: A meta-analysis of past research with recommendations for modifications and future research. *Journal of Consumer Research*, vol. 15, p.325-343.

SHERR, L. 1988. Has AIDS changed women's attitudes to condoms? *The Psychologist*, vol. 1, no. 2, p.48-49.

SHEW, M.L., BEARINGER, L.H. & RESNICK, M.D. 1995. *The validity of self-reported condom use among adolescents.* Unpublished Manuscript.

SHOOP, D.M. & DAVIDSON, P.M. 1994. AIDS and adolescents: The relation of parent and partner communication to adolescent condom use. *Journal of Adolescence*, vol. 17, no. 2, p.137-148.

SMITH, J. 1996. Beyond the divide between cognition and discourse: Using interpretative phenomenological analysis in health psychology. *Psychology and Health*, vol. 11, p.261-271.

SMITH, J., HARRE, R. & VAN LANGENHOVE, L. 1995. *Rethinking methods in psychology*. London: SAGE Publications.

SONENSTIEN, F.L., PLECK, J.H. & KU, L.C. 1989. Sexual activity, condom use and AIDS awareness among adolescent males. *Family Planning Perspectives*, vol. 21, p.152-158.

SPINGARN, R.W. 1995. Condom availability and prevention issues for adolescents. *Current Opinion in Paediatrics,* vol. 7, no. 4, p.360-365.

STALL, R., MCKUSICK, L., WILEY, J., COATES, T.J. & OSTROW, D.G. 1986. Alcohol and drug use during sexual activity and compliance with safe sex guidelines for AIDS: the AIDS behavioural research project. *Health Education Quarterley*, vol. 13, no. 4, p.359-371.

STALL, R., EKSTRAND, M., POLLACK, L., MCKUSICK, L. & COATES, T.J. 1990. Relapse from safer sex: The next challenge for AIDS prevention efforts. *Journal of AIDS*, vol. 3, p.1181-1187.

STOKES, T. 1997. Chlamydia infection in the UK family planning clinics. *British Journal of Family Planning*, vol. 23, p.47-50.

STONE, N. & INGHAM, R. 1999. *Exploring the variations in the characteristics of users of young people's services in Southampton.* Interim report for Southampton Community Health Services NHS Trust. The Centre for Sexual Health Research, University of Southampton.

STRAUSS, A. & CORBIN, J. 1994. Competing paradigms in qualitative research. In N. DENZIN & Y. LINCOLN (Eds), *Handbook of Qualitative Research.* New Jersey: SAGE Publications.

STRETCHER, V., DEVILLIS, B., BECKER, M. & ROSENSTOCK, I. 1986. The role of self-efficacy in achieving health behavior change. *Health Education Quarterley*, vol. 13, p.73-91.

STROEBE, W. & STROEBE, M.S. 1995. *Social Psychology and Health.* Birmingham: OUP.

STRUNIN, L. & HINGSON, R. 1987. Acquired immunodeficiency syndrome and adolescents: Knowledge, beliefs, attitudes and behaviors. *Paediatrics*, vol. 79, no. 5, p.825-828.

STRUNIN, L. & HINGSON, R. 1992. Alcohol, drugs and adolescent sexual behavior. *The International Journal of the Addictions,* vol. 27, no. 2, p.129-146.

SUTTON, S. 1994. The past predicts the future: Interpreting behaviour-behaviour relationships in social psychological models of health behaviour. In, D.R. RUTTER AND L. QUINE (Eds), *Social psychology and health: European perspectives*, Aldershot: Avebury.

SUTTON, S. 1998. Predicting and explaining intentions and behaviour: How well are we doing? *Journal of Applied Social Psychology*, vol. 28, no. 15, p.1317-1338.

SVENSON, G. & HANSSON, B.S. 1993. *Utililizing peer education and target group empowerment to induce diffusional behavior change on a university campus.* Paper presented at the IXth International Conference on AIDS, Berlin, June 7-11.

THOMAS, R.M., PLANT, M.A. & PLANT, M.L. 1990. Alcohol, AIDS risks and sex industry clients: Results from a Scottish study. *Drug and Alcohol Dependence*, vol. 26, p.265-269.

THOMPSON, S.C., ANDERSON, K., FREEDMAN, D. & SWAN, J. 1996. Illusions of safety in a risky world: A study of college students' condom use. *Journal of Applied Social Psychology*, vol. 26, no. 3, p.189-210.

THORNTON, S. & CATALAN, J. 1993. Preventing the sexual spread of HIV infection: What have we learned? *International Journal of STD and AIDS*, vol. 4, p.311-316.

THUEN, F. & RISE, J. 1994. Young adolescents' intention to use seat belts: The role of attitudinal and normative beliefs. *Health Education Research: Theory and Practice*, vol. 9, no. 2, p.215-223.

TURNER, C., ANDERSON, P., FITZPATRICK, R., FOWLER, G. & MAYON-WHITE, R. 1987. *Sexual behaviour, contraceptive practice and knowledge of AIDS of Oxford University students.* Oxfordshire Health Authority Department of Community Medicine and University of Oxford Department of Community Medicine and General Practice.

TURTLE, A.M., FORD, B., HABGOOD, R., GRANT, M., BEKIARIS, J., CONSTANTINOU, C., MACEK, M. & POLYZOIDIS, H. 1989. AIDS related beliefs and behaviours of Australian university students. *The Medical Journal of Australia*, vol. 150, p.371-377.

VANWESENBEECK, I., VAN ZESSEN, G., DE GRAAF, R. & STRAVER, C.J. 1994. Contextual and interactional factors influencing condom use in heterosexual prostitution contacts. *Patient Education and Counselling*, vol. 24, no. 3, p.307-322.

VANWESENBEECK, I., VAN ZESSEN, G. INGHAM, R., JARAMAZOVIC, E. & STEVENS, D. In press. Factors and processes in heterosexual competence and risk: An integrated review of the evidence. *Psychology and Health.*

VAN ZESSEN, G. 1995. *Wisselend contact: Seksuele levensverhalen van mensen met veel partners.* Leiden: DSWO Press.

WEEKS, K., LEVY, S.R., ZHU, C., PERHATS, C., HANDLER, A. & FLAY, B.R. 1995. Impact of a school-based AIDS prevention programme on young adolescents' self-efficacy skills. *Health Education Research: Theory and Practice*, vol. 10, no. 3, p.329-344.

WEINSTEIN, A.J. 1984. Sexually transmittable diseases and other genital infections during adolescence. *The Journal of Reproductive Medicine*, vol. 29, no. 6, p.411-415.

WEINSTEIN, N.D. 1982. Unrealistic optimism about susceptibility to health problems. *Journal of Behavioural Medicine*, vol. 5, p.441-460.

WEINSTEIN, N.D. 1989. Perceptions of personal susceptibility to harm. In V.M. MAYS, G.W. ABLEE & S.F. SCHNEIDER (Eds), *Primary prevention of AIDS: Psychological approaches.* London: SAGE publications.

WEINSTOCK, H.S., LINDAN, C., BOLAN, G., KEGELES, S.M. & HEARST, N. 1993. Factors associated with condom use in a high-risk heterosexual population. *Sexually Transmitted Diseases*, vol. 20, no. 1, p.14-20.

WEISMAN, C.S., NATHANSON, C.A., ENSMINGER, M., TEITELBAUM, M.A., ROBERTSON, J.C. & PLITCHA, S. 1989. AIDS knowledge, perceived risk and prevention among adolescent clients of a family planning clinic. *Family Planning Perspectives*, vol. 21, no. 5, p.213-217.

WELLINGS, K., FIELD, J., WADSWORTH, A.M., ANDERSON, R.M. & BRADSHAW, S.A. 1990. Sexual lifestyles under scrutiny. *Nature*, vol. 348, p.276-278.

WELLINGS, K. & MITCHELL, K. Paper submitted. *Ambiguity and ambivalence in sexual encounters: Barriers to condom use?*

WEST, P., WIGHT, D. & MACINTYRE, S. 1993. Heterosexual behaviour of 18 year olds in the Glasgow area. *Journal of Adolescence*, vol. 16, p.367-396.

WIGHT, D. 1990. *The impact of HIV/AIDS on young people's heterosexual behaviour in Britain: A literature review.* Glasgow University: Working Paper No. 20, Medical Sociology Unit.

WIGHT, D. 1992. Impediments to safer heterosexual sex: A review of research with young people. *AIDS Care*, vol. 4, no. 1, p.11-21.

WIGHT, D., ABRAHAM, C. & SCOTTT, S. 1998. Towards a psycho-social theoretical framework for sexual health promotion. *Health Education Research*, vol. 13, no. 3, p.317-330.

WIGHT, D. & WEST, P. 1999. Poor recall, misunderstandings and embarrassment: Interpreting discrepancies in young men's reported heterosexual behaviour. *Culture, Health & Sexuality*, vol. 1, no. 1, p.55-78.

WILSON, M.D., KASTRINAKIS, M., D'ANGELO, L.J. & GETSON, P. 1994. Attitudes, knowledge and behaviour regarding condom use in urban black adolescent males. *Adolescence*, vol. 29, no. 113, p.13-26.

WINGOOD, G.M., HUNTER-GAMBLE, D. & DIcLEMENTE, R.J. 1993. A pilot study of sexual communication and negotiation among young African American women: Implications for HIV prevention. *Journal of Black Psychology*, vol. 19, no. 2, p.190-203.

WOODCOCK, A., STENNER, K. & INGHAM, R. 1992. Young people talking about HIV and AIDS: Interpretations of personal risk of infection. *Health Education Research: Theory and Practice*, vol. 7, p.229-247.

YARDLEY, L. (In Press). Dilemmas in qualitative health research. *Psychology and Health.*

YEP, G.A. 1993. Health beliefs and HIV prevention: Do they predict monogamy and condom use? *Journal of Social Behaviour and Personality*, vol. 8, no. 3, p.507-520.

ZIELONY, R.D. & WILLS, T.A. 1990. *Psychosocial predictors of AIDS risk behavior in methadone patients.* New York: Ferkauf Graduate School of Psychology and Albert Einstein College of Medicine. Unpublished Manuscript.

ZIMET, G.D., BUNCH, D.L., ANGLIN, T.M., LAZEBNIK, R., WILLIAMS, P. & KROWCHUK, D.P. 1992. Relationship of AIDS-related attitudes to sexual behaviour changes in adolescents. *Journal of Adolescent Health*, vol. 13, no. 6, p.493-498.

APPENDICES

HELPING TO EXPLAIN YOUNG PEOPLE'S USE AND NON-USE OF CONTRACEPTION: INTERACTIONAL AND DYNAMIC INFLUENCES

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2000

APPENDICES

APPENDIX 1: Original research proposal submitted to the NHS Research and Development Directorate, April 1996.

APPENDIX 2: Self-administered questionnaire issued at the young people's clinics.

APPENDIX 3: Round 1 interview schedule.

APPENDIX 4: Receptionist and clinic staff guide sheet for questionnaire administration.

APPENDIX 5: Coding frame for round 1 interviews

APPENDIX 6: Round 2 interview schedule.

APPENDIX 1

Name of candidate .....Mr. I. M. Coleman.....

12. Proposed research project

This must be typewritten in no less than 10 point typeface on one side only, single spacing and must, as detailed in *Guidance for Education and Training Support*, include: title; summary; aims (state main hypothesis or research question if possible); background; plan of investigation (covering, where possible, study design, justification of sample size, selection and exclusion criteria, methods of data collection and analysis); time schedule. Please also indicate the plan for supervision of the project.

TITLE 'Partner Interaction as a Predictor of Attitudes Towards Family Planning Services and Contraceptive Use Among Teenagers: A Qualitative Research Project'.

SUMMARY

Failure to consistently use contraceptives has numerous health consequences for teenagers. These include complications associated with full-term pregnancy and termination, as well as the possibility of Sexually Transmitted Disease (STD) infection. National statistics reporting conceptions, terminations and STD infections illustrate the current magnitude of this problem. To date, little in-depth qualitative research has examined partner interaction (i.e. communication and negotiation skills, gendered power imbalances and overall influence of the partner) and the impact this may have upon respondents' attitudes towards family planning services and contraceptive behaviours. This project proposes, therefore, to conduct face to face in-depth interviews and issue diaries to examine qualitatively the role of partner interaction and attitudes to family planning services, among a sample of 60/70 sexually active males and never-pregnant females aged 15-19 years inclusive in the Southampton District. In addition to determining the role of these interactional and attitudinal factors, it is hoped that the semi-inductive nature of the project will create new areas of research interest for health professionals and academics to pursue.

BACKGROUND

It is well documented that early sexual experience and risks following a termination of pregnancy (or abortion) have serious health and social consequences for young women and their children (Alan Guttmacher Institute, 1990). Failure to use condoms (even if other contraceptives are used to prevent conception) increase the possibility of infection with a Sexually Transmitted Disease (STD). Threats from STD infection, which are particularly serious for young women, include possible infertility, ectopic pregnancy and chronic pelvic pain. The health risks also include cervical cancer (related to age at first sexual intercourse without consistent use of a condom and with multiple sexual partners). In addition, sexual intercourse without a condom presents the possibility of becoming infected with the Human Immunodeficiency Virus (HIV). The *Health of the Nation* White Paper (1993) recognised these issues by calling for the progressive reduction in reported conceptions by at least 50% among the under-16s by the year 2000 (from 9.5 per 1000 girls aged 13-15 years in 1989 to no more than 4.8). It is also hoped that these reductions will be reflected in the 15-19 age group, for whom conception rates are currently reported at 65.1 per 1000 women, having increased from 57.1 in 1981 (OPCS, 1994). Paralleled with this increase in conception rates has been a steady rise in conceptions terminated by abortion, from 18.2 per 1000 women aged 15 to 19 in 1981 to 22.4 in 1991, with a peak of 24.6 in 1990 (OPCS, 1994). Although conception rates may now appear to be following a slight downward trend, in line with the *Health of the Nation* targets, the fact remains that approximately one-third of all teenage conceptions in 1991 were terminated by abortion. STD prevalence rates per 100,000 females aged 16-19 have also steadily increased. For example, between years 1989 and 1992, increases have been reported for Chlamydia (346 to 350), Wart Virus (461 to 530) and Herpes Simplex (123 to 144) (PHLS, 1994). In respect to the heterosexual transmission of HIV, cumulative totals of cases for females aged under 24 years have increased from 23 in 1986 to 494 by end of June 1994 (PHLS, 1994). The Health of the Nation White Paper (1993) has also called for a reduction in the incidence in STDs, including HIV. Underlying these trends, national surveys by Johnson *et al.* (1994; n=18,876) and MORI (1990; n=7000) have shown not only a progressive decrease in the age at first intercourse, but also that approximately one-half of persons aged 16-19 have ever experienced sexual intercourse. The more detailed regional surveys have shown insufficient levels of contraceptive (including condom) use to support this increase in sexual activity (for example, Curtis *et al.* 1988, Ford 1992 and Mellanby *et al.* 1993).

When examining the possible reasons for such sexual and contraceptive behaviours, attention must be focused towards a range of sociological and psychological theories of health related behaviours. The more 'traditional' models such as the Health Belief Model (Becker 1974), Roger's Protection Motivation Theory (1975) and the Theory of Reasoned Action (Ajzen and Fishbein 1980) have been subject to much criticism. Ingham (proposed supervisor) and van Zessen (1992) document three major criticisms of such theories: firstly the theories assume that people act as rational decision-makers; secondly, little reference is given to the significance of past sexual experiences; thirdly, and perhaps most significantly, the theories show minimal emphasis to the role of the dynamic and interactive processes

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Proposed research project *(continued)*

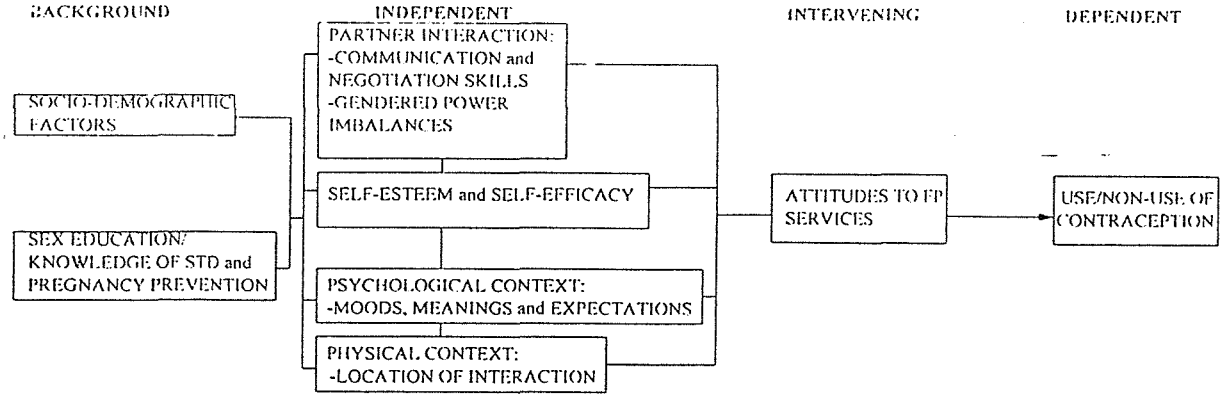
that occur between partners. In short, the theories are too individualistic and assume that the attitudes, intentions and motivations of the partner will have no bearing on the nature of the sexual encounter.

Given these criticisms, this project will be supported and governed by the more 'alternative' sociological and psychological models of health related behaviours that lend more emphasis to the interactive processes that occur between partners (Dillard 1990, Edgar 1992, Ingham and van Zessen 1992, Holland *et al.* 1992 and Fisher and Fisher 1993). These alternative theories of health-related behaviour, that collectively hypothesise the role of partner interaction, have illustrated the importance of communication and negotiation skills, gendered power imbalances and overall influence of the partner as determinants of contraceptive behaviour. From a review (undertaken by candidate) of empirical research studies that have examined the role of partner interaction, several key issues have emerged: 1) quantitative research examining these interactional variables has concluded support for their inclusion as possible determinants of teenage contraceptive use; 2) there is a distinct paucity of in-depth qualitative research examining the role of partner interaction upon attitudes towards family planning services and teenage contraceptive use; and 3) no qualitative research (to date) has examined the role of partner interaction upon attitudes towards family planning services and teenage contraceptive use patterns over a specific length of time, to assess changes with increased sexual experience or throughout the course of a monogamous sexual relationship.

AIMS/OBJECTIVES

In light of the issues outlined above, the ultimate objective of this study is to help programme administrators and policy makers to design new intervention strategies aimed at increasing the consistent use of contraception among teenagers. The immediate objective of this study is to assess the role of partner interaction in determining attitudes towards family planning services and contraceptive use among and sexually active males and never-pregnant females aged 15-19 years inclusive. The study will also examine how and why these interactional, attitudinal and behavioural variables may change during the course of both shorter and more longer-term sexual relationships. Particular attention will be shown towards the intention/behaviour relationship and also to the more sudden changes in reported contraceptive and sexual behaviours.

CONCEPTUAL FRAMEWORK



The relationship between socio-economic status and conception rates in the UK is well documented. This project seeks, therefore, to not further examine this relationship but, by controlling for socio-economic status, to test for variations in conception rates within each of the defined socio-economic groups. The project will also assess contraceptive behaviours among sexually active males and never-pregnant females, aged 15-19 years inclusive. Whilst the background variables are acknowledged as possible important determinants of contraceptive use (dependent variable), most emphasis in this study will be afforded to the role of the independent variables. The independent variables include partner interaction (communication and negotiation skills, gendered power imbalances and overall influence of the partner). In addition to partner interaction, the central theme of this project, reviewed theoretical literature (Davies and Weatherburn, 1991 and Fisher and Fisher, 1992) has argued that this variable should not be examined as an isolated concept, since it is itself hypothesised to be influenced by the self-esteem and self-efficacy of the individual, as well as the psychological and physical contexts that are apparent during the

Name of candidate ....Mr. L. M. Coleman.....

Proposed research project *(continued)*

interaction. The conceptual framework illustrates how the independent variables are hypothesised to influence the attitudes towards family planning services offered both by GPs and at family planning clinics (intervening variable), and how this in turn may determine contraceptive use patterns.

STUDY DESIGN

A non-experimental research design will be used. This is essentially because the study, in light of the criticisms of the individualistic, rational-based theories, will adopt a more dynamic approach in explaining the relationship between the interactional and attitudinal variables thought to affect contraceptive use. No specific intervention strategy is being evaluated.

SAMPLING

To qualify for inclusion into this study, the respondents (or sampling units) must be sexually experienced and aged between 15 and 19 years inclusive. They must also not be, or have ever been pregnant since their attitudes and responses to questions regarding contraception are likely to have changed in response to their condition.

Sampling will be conducted in two stages. Stage 1 or 'screening' will determine whether respondents will be suitable for entry into the study: respondents will be randomly selected from schools, colleges and youth clubs (appropriate staff personnel fully briefed about the project to reduce logistical problems) from a variety of socio-economic districts (or strata) within the study area. Self-administered questionnaires (SAQs) will be issued to determine respondents' age, sexual experience, relationship status, use of family planning services, experience of pregnancy and general enthusiasm to take part in the study. Although respondents' level of enthusiasm will itself increase the selection threat to validity, it is seen as an important determinant to ensure the success of such a qualitative research project. All those persons meeting the selection criteria will then be put forward for Stage 2 of the sampling. In similar fashion to the previous Stage, a stratified sampling technique will be employed to represent respondents not only from a variety of socio-economic backgrounds, but also for variations in age, sex, sexual experience (including history of contraceptive use), use of family planning services and relationship status. Under the judgement of the researcher, Stage 2 of the sampling will help identify a representative and reliable selection of respondents who will then be invited for face to face in-depth interview and for issuing of diaries.

Given the qualitative, in-depth nature of the study, it is perceived that a final sample of 60/70 teenagers partaking in face to face interview and completing diaries of their sexual experiences will suffice. However, especially given the longitudinal nature of the study and the associated maturation threats to validity, a reserve of 20/30 teenagers will be required should interest begin to wane. Assuming, therefore, that a minimum of 100 enthusiastic teenagers will be required for in-depth qualitative research, it is estimated that several hundred teenagers will have to be screened with SAQs during Stage 1 of the sampling. With regard to the levels of sexual experience documented in national and regional surveys, it is estimated that around one-half of these respondents will be suitable for transfer to Stage 2.

DATA COLLECTION

The concise and semi-structured SAQ, subject to pilot testing among 10/20 teenagers recruited from a different region of the UK, will be distributed to the selected schools, youth clubs and colleges in the study area. They will be collected from the relevant institutions one week later. Focus group discussions will also be conducted to finalise the precise format for the interviews and diaries. For those respondents selected for interviews and issuing of diaries, the following procedures will apply: The first round of interviews (location for which will be determined from the focus group discussions) will be conducted at the start of the 12 month data collection period to record not only personalised aspects of partner interaction, attitudes to family planning services and contraceptive use, but to also assess interviewees' intentions and expectations regarding their future sexual encounters. Following the interviews, all respondents will be issued with diaries to record their sexual experiences and their attitudes and use of family planning services over the following 12 months, with particular emphasis shown towards interpersonal communication and negotiation skills and the gendered power imbalances that may be existent during these encounters. Respondents will be invited to return their diary entries at the end of each month by SAE, so preserving anonymity. Subject to the continual analysis of the diary returns, the second and final round of interviews will be conducted with those proportion of respondents who reported the most and least safe sexual behaviours, in respect to contraceptive (and condom) use and frequency of partner change. Importance will also be afforded to those respondents reporting sudden changes in their sexual behaviours and/or uptake of family planning services over the 12 month period, and also for those whom reported behaviours were in contrast to their intentions recorded in the first round of interviews. For the second round of interviews (as for the sexual diaries), emphasis will be placed towards the self-esteem and self-efficacy of the individual, the interactive processes occurring between partners, the psychological and physical contexts apparent during sexual encounters and the attitudes towards family planning

Name of candidate ..... Mr L M Coleman .....

Proposed research project *(continued)*

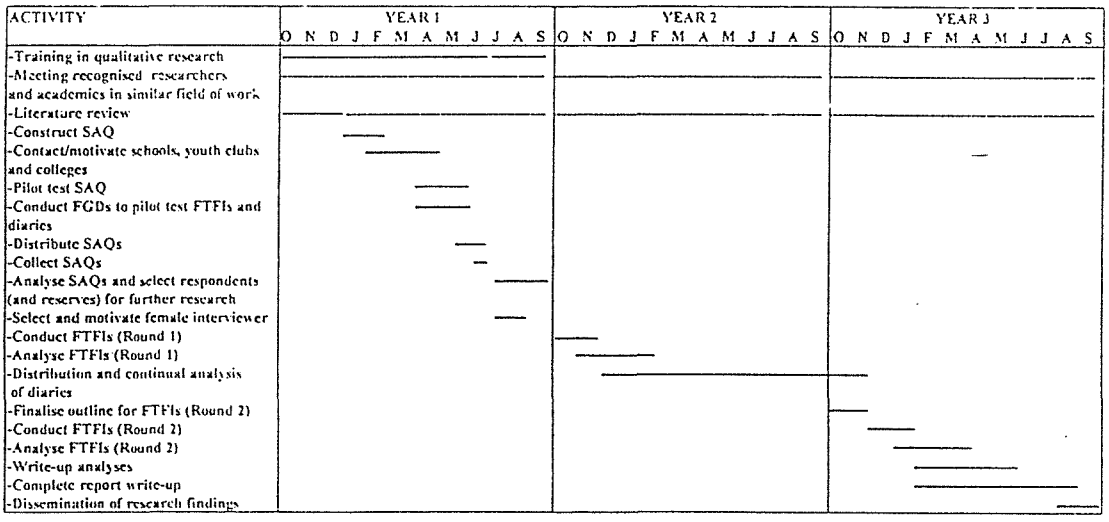
services. By conducting interviews pre and post the 12 month period of diary collection, the project will help to understand the complex dynamics surrounding sexual experiences and relationships in light of the interactional processes and attitudes towards family planning services.

DATA ANALYSIS

Quantitative data analysis will be restricted to the SAQs issued during Stage 1 of the sampling. The coded information will be entered into an SPSS analytical programme available at Southampton University, and basic frequencies and measures of central tendency will be presented for age, sex, relationship status, sexual experience, contraceptive history and experience of pregnancy. The qualitative data extracted from the interviews and diaries will receive most of the attention in this study. The guidelines for these interviews and diaries will be largely reflected in the conceptual framework. Particular attention will be given towards the intention/behaviour relationship and the reasons behind any changes in sexual behaviour, with particular respect to the interactional and attitudinal processes apparent during shorter and more longer-term relationships, the self-esteem and self-efficacy pre and post sexual encounters and the psychological and physical contexts apparent during these sexual encounters. However, it is expected that the issues under research are also likely to evolve throughout the 12 month period of data collection. This is also a reflection upon the flexible and descriptive nature of the study, in that it seeks to induce (as well as deduce) associations between sets of variables. It is assumed, therefore, that some of the issues or relationships that will be analysed are undetermined at present. The basic analytical techniques used will be Content Analysis and Discourse Analysis. In this way, common themes and relationships between variables will be constructed by matching up subject matters most frequently discussed in the focus groups or documented in the personal diaries. Where suitable, support will be in the form of computer packages devised specifically to ease this process such as Ethnograph and NUD*IST. In addition to the formal analyses, information will be presented in the form of the most contrasting case studies.

TIME SCHEDULE

Following Ethics Committee approval, the activities undertaken in the project will follow a logical and progressive order. A basic timetable is presented below for the 3 years duration of the project (October 1996 to September 1999).



RESEARCH BENEFITS

By comprehensively testing the outlined hypotheses, specific recommendations will be presented for health policy makers and planners in targeting the current problem of unintended pregnancy and STD infection amongst teenagers. Essentially, the project will test the suitability of communication and negotiation skills enhancement and assertiveness training as a possible pregnancy and STD intervention strategy. The project will also specify the range of attitudes towards family planning services and also clarify what factors shape such attitudes, with especial reference to the influence of and interaction with partners. The qualitative and partly inductive nature of this project will also undoubtedly create new areas of research interest for health professionals and academics to pursue.

Summary of proposed research project(s) must be contained on these pages. Do not add extra sheets

APPENDIX 2

(ID - - -)

STRICTLY PRIVATE AND CONFIDENTIAL

Please answer the following questions and take your time to answer them carefully. Please be truthful as this research is very important in helping to design the right kind of family planning and sexual health services for young people. The project is being carried out by Southampton University and has been funded by the South and West Regional Health Authority. Please do not hesitate in asking any questions you may have about the project to one of the people handing out the questionnaires.

The green form attached to the questionnaire gives you an opportunity to offer to be interviewed at a later date, so helping us gather more in-depth information about young people's sexual and contraceptive behaviour and how we can offer the right kind of services to suit the needs of young people.

All those respondents who are interviewed at a later date will receive a single payment of £2.00.

All replies are **highly confidential** and you will not be contacted again unless you want to offer more help with this project.

We really value your answers and very much appreciate your help.

1. What is your date of birth? Day-------/Month-------/Year---------

2. Are you male or female? Male [ ]
   Female [ ]

3. What is your postcode? ----------

If you do not know this please can you write down the street or road name where you live ----------

4. Who out of the following have you ever talked to about contraception? (Please tick more than one if appropriate)

Friends of the same sex	[ ]
Friends of the opposite sex	[ ]
School Teacher	[ ]
Mother	[ ]
Father	[ ]
Boyfriend/Girlfriend	[ ]
My Doctor	[ ]
Someone else's doctor	[ ]
A nurse/doctor at the Family Planning Clinic	[ ]
Someone at a youth club	[ ]
Someone at a youth advice centre	[ ]

Anyone else (please say----------)

5. Have you ever had sexual intercourse?

Yes [ ]
No [ ] If no, please tick *'Not Applicable, not yet had sex'* for Questions 6 to 10

If Yes, how many different people have you had sexual intercourse with **in your lifetime**? ----------

If Yes, how many different people have you had sexual intercourse with **in the last 6 months**? ----------
(since December last year)

(Please turn over to the next page)

6. Have you ever had sexual intercourse when **no contraception** has been used?

Yes	[ ]
No	[ ]
Not sure	[ ]
Not applicable, not had sex yet	[ ]

If Yes, how many times has this happened?

Once only	[ ]
A few times	[ ]
Many times	[ ]
Every time	[ ]
Not applicable, not had sex yet	[ ]

7. How often have condoms been used when you have had sexual intercourse?

Always	[ ]
Sometimes	[ ]
Rarely	[ ]
Never	[ ]
Not sure	[ ]
Not applicable, not had sex yet	[ ]

Questions 8, 9 and 10 refer to the last person you had sexual intercourse with - Now try to remember the first time you had sexual intercourse with this partner.....

8. When you **first had sexual intercourse with them**, how long had you been 'going out' or 'seeing each other'?

First 'got-off' with each other that same day/evening	[ ]
A few days	[ ]
About one week	[ ]
About one month	[ ]
More than one month	[ ]
Not sure	[ ]
Not applicable, not had sex yet	[ ]

9. When you **first had sexual intercourse with them**, what type(s) of contraception did you use?
(Please tick 'None' if you or your partner did not use anything)

Pill	[ ]
Condom	[ ]
Pill **and** condom	[ ]
Withdrawal	[ ]
Emergency contraception	[ ]
None	[ ]

Other (Please say ----------)
Not applicable, not had sex yet [ ]

10. Have you ever talked to each other about contraception?

Yes	[ ]
No	[ ]
Not sure	[ ]
Not applicable, not had sex yet	[ ]

If Yes, when did you first talk to each other about contraception?

Before having sexual intercourse with them for the first time	[ ]
After having sexual intercourse with them for the first time	[ ]
Can't remember	[ ]
Not applicable, not had sex yet	[ ]

If Yes, who first raised the subject of contraception?

You	[ ]
Your partner	[ ]
Can't remember	[ ]
Not applicable, not had sex yet	[ ]

If Yes, when you first talked about contraception, how easy or difficult did you find this?

Very easy	[ ]
Quite easy	[ ]
Neither easy or difficult	[ ]
Quite difficult	[ ]
Very difficult	[ ]
Not applicable, not had sex yet	[ ]

11. Have you currently got a boyfriend or girlfriend?

Yes	[ ]
No	[ ]
Not sure	[ ]

If Yes, how long have you been going out with each other? ------ Years / ------ Months / ------ Weeks

If Yes, have you ever had sexual intercourse with them?

Yes	[ ]
No	[ ]

Would you now please complete the green sheet attached to the questionnaire to tell us whether you would like to be interviewed at a later date. Remember all those respondents who are interviewed at a later date will receive a payment of £2.00.

STRICTLY PRIVATE AND CONFIDENTIAL

Would you like to help with more research by being interviewed at a later date?
(The interview will take no more than one hour and will be in a private room)

Yes [ ] If Yes, please continue
No [ ] If No, you have now finished the questionnaire so please fold it up in the envelope and put it in the post-box provided

If Yes, please write your name here ----------

and where we can contact you, either address ----------

---

or telephone number if you prefer ----------

(We will be discreet when we phone and you can suggest a suitable time to phone if you like)

Would you prefer a male or female interviewer?

Male [ ]
Female [ ]
Don't mind [ ]

Where would you prefer to be interviewed?

At this clinic at a later date [ ] (we will contact you to make a date and time that is suitable for you)
At your home [ ] (we will contact you to make a date and time that is suitable for you)

Somewhere else (please say where ----------

You have now finished the questionnaire so please fold it up in the envelope and put it in the post-box provided.

We are very grateful to you for taking the time to complete this questionnaire.

APPENDIX 3

TOPICS TO BE COVERED IN INTERVIEW SCHEDULE - ROUND 1

Since interviews are designed to be free-flowing and conversational and also that this project a semi-inductive (not testing any particular hypotheses), it is impossible to specify in advance all the issues that will arise - the list indicates the main topics that will be covered.

1. Priorities in life/self-esteem/confidence/health value.
2. Perceptions of relationship norms and relationship priorities.
3. Sexual behaviour and contraceptive use during a steady relationship - introducing the longitudinal element and particular reference to contraceptive use at first intercourse, occasions where contraception has not been used and changing methods of contraception during relationship advancement.
4. Contraceptive use with a not so steady partner (like a one night stand).
5. What influences the partner has on whether contraceptives are used or not (ie communications, negotiations, pressures etc.)
6. What influences the context has on whether contraceptives are used or not (ie location, alcohol, moods etc.)
7. Intentions regarding relationships and contraceptive use in the next 9/10 months.
8. Intentions regarding a hypothetical case of a partner who does not want to use a condom.

INTERVIEW INSTRUCTIONS

IN GENERAL:

1. Words that are **bold and underlined** are not necessarily questions but statements about the following set of questions. For example, **CONTRACEPTIVE NON-USE WITH CURRENT OR MOST RECENT BOYFRIEND/GIRLFRIEND** should be interpreted as "I would like us now to talk about how you've used contraception with your current or most recent boyfriend/girlfriend".

2. Words that are in **bold only** are questions that must be asked or statements that need to be read (as preceding the introduction). The phrases/words that are not in bold (that often follow these questions) are to act as prompts and do not have to be mentioned if they have already been talked about.

3. Please note that some questions are not applicable so follow instructions carefully. These are often shown by words in ***bold italics*** eg. ***If Yes***,...

4. Above all I want respondents to talk about the following key themes:

- Recalling first intercourse within a steady relationship
- Experiences of contraceptive use and non-use in a steady relationship
- Changing contraceptive use within a steady relationship
- Experiences of contraceptive use and non-use in a not so steady relationship (eg. A one night stand)
- Use of implicit language and 'scripts' associated with impending intercourse (eg. Coming in for coffee?)
- Their reasons for both using and not using contraception. In particular partner-related factors (pressures, discussions, responsibilities etc) and contextual factors (moods, location, alcohol etc)
- What their intentions are regarding contraceptive use and relationships. (To be matched up with second round of interviews).
- Views about sexual health services and in particular the timing of advice in terms of first intercourse with most recent partner.
- Responsibilities for contraception within the relationship.
- **The role of the partner is the main focus of this project. Communications and negotiations (in particular what was said, how it was said, who said what and when this was said in terms of intercourse - in club, in taxi, before sex, after sex etc.) and pressures applied to have sex without or with contraception should receive most attention at all times.**

5. Don't forget the interview consent form

6. Remember at end of interview to Mention re-interview in 9 months, incentives, check details for recontacting (address, reminder letter one month beforehand etc. and interview in same location?)

INTRODUCTION TO INTERVIEW

TO BE RECORDED: SEX M/F

ETHNIC GROUP .....

Thanks very much for offering to be interviewed. This interview relates to some of the topics raised in the short questionnaire that you filled in earlier - all the interview hopes to do is to enable us to discuss matters like contraception and relationships in greater depth. Please remember that you don't have to answer any questions that you don't want to. Also, can I assure you that the interview is completely anonymous and that no one else other than myself will listen to what you have got to say. Because I'm really grateful that you've offered to be interviewed and that I really want to hear about everything you've got to say, would you object if the interview is tape-recorded (this saves me time having to make notes about what you are saying and ensures that I don't miss any important things that you've got to say). Have you any questions at this stage? (Turn on tape recorder)

The interview has 2 parts - a short introductory section where your responses are likely to be brief (such as yes or no) and the main section in which we will have the opportunity to discuss things like relationships and contraception in greater depth.

I'd like us to start with some introductory questions.....

1. Who do you live with?

Mum	[ ]
Dad	[ ]
Step Mum	[ ]
Step Dad	[ ]
Foster Parents	[ ]
Brothers	[ ] Write number of brothers
Sisters	[ ] Write number of sisters
Friends	[ ]

2. Do your parents (phrase appropriately eg. "Step dad and mum") have a job?

Male parent:	Y/N
Female parent:	Y/N

3. What types of jobs are they?

Male parent: ---------- FT/PT?

Female parent: ---------- FT/PT?

4. Are you still at school/college? **Y/N**

If Yes:
School or College (circle)

If No:
Do you have a job? Y/N

If Yes, what is your job?

---------- FT/PT TEMP/PERM

5. Have you taken any GCSE's? Y/N

If Yes, how many did you pass? ----------

Have you any other qualifications? Y/N

If Yes, what are these qualifications? ----------

The next couple of questions refer to the more personal issues of sex and the relationships that you may have had (and will tell me which questions I'll ask you in the next part of the interview)

6. Are you at the moment going out with anyone as a steady boyfriend or girlfriend? Y/N

If Yes, how long have you been seeing them? ----------(Weeks, Months, Years)

If Yes, have you had sex with them? Y/N

If No, have you ever gone out with anyone as a steady boyfriend or girlfriend? Y/N

(If No, then Q.3 is not relevant)

And, how long did you see them for? ---------- (Weeks, Months, Years)

And, did you ever have sex with them? Y/N

7. Have you ever had sex with someone who you weren't really going out with at the time? (Perhaps someone who you only had sex with for a couple of times or someone you were less serious with like a one-night stand?) Y/N

(If No, then Q.4 is not relevant)

Now we've finished the introductory questions, I'd like us to talk about some more issues in greater depth.....

(1) CAN YOU TELL ME A BIT ABOUT YOURSELF?

What sort of things do you do in your spare time?
Any hobbies?
Like "going out"?
Like clubs, pubs, parties?

Who do you hang around with?
Have friends mostly of same or opposite sex? Same or different age?
Who did you have **close friendships** with (people you confided in, trusted etc) at an earlier age (eg. 11, 12, 13)? With mainly girls or boys?

What sort of things are **important in your life**? (Education, **health**, friendships, relationships etc.)

On the following 5-point scale, how **confident** would you describe yourself?
-Very confident?
-Fairly confident?
-Neither confident or unconfident?
-Fairly unconfident?
-Very unconfident?
Why did you chose this point?

(2) RELATIONSHIPS WITH BOYS/GIRLS

(2.1) IN GENERAL, WHO DO YOU THINK HAS MOST CONTROL IN A RELATIONSHIP?

Who usually gets what they want in a relationship?
Is this the case in the relationships you've had?

(2.2) CAN YOU TELL ME A BIT MORE ABOUT THE RELATIONSHIPS YOU'VE HAD?

What sort of things are **important to you in a relationship**?
Who had most **control** in these relationships? (You or your partner)
(This could flow into the next Q)...

** *IF NEVER HAD BOYFRIEND/GIRLFRIEND MOVE ON TO Q.4* **

(3) I WOULD LIKE US TO TALK ABOUT A RELATIONSHIP YOU'VE HAD WITH A STEADY BOYFRIEND OR GIRLFRIEND. PLEASE REFER TO YOUR CURRENT OR MOST RECENT STEADY BOYFRIEND OR GIRLFRIEND THAT YOU WENT OUT WITH.

(3.1) CAN YOU TELL ME A BIT ABOUT YOUR BOYFRIEND OR GIRLFRIEND?

What's their name? (To focus their responses later on)
Where did you meet them?
Same age as you?
How long have you known them?
Was it obvious when you actually started 'going out with each other' rather than just being friends?
Are you still going out with each other?
How long have you (or did you) go out with each other?

(3.2) COULD YOU TELL ME A BIT ABOUT WHEN YOU FIRST HAD SEX WITH HIM/HER? (Was this the first person you had ever had sex with?)

Earlier on that day did you know you'd be having sex with this person or was it a bit of a surprise?
If expected, how did you know? was it something you or your partner said? (sexual scripts? coming in for coffee? etc.)
If unexpected, at what point did you know you were going to have sex?

Did you use contraception on this occasion? *(If No, go straight to 3.3)*
If Yes, who took most responsibility?
Did you **talk** about contraception? What was said? How was this said? And By who? Who brought up the subject first? When was this - after having sex with them? Was talking about contraception difficult or easy?
Did one of you have to **persuade** the other to use contraception and if so how?

(3.3) (HAVE YOU EVER NOT USED CONTRACEPTION WITH THIS PERSON?)
CAN YOU TELL ME A BIT MORE ABOUT AN OCCASION WHERE YOU DIDN'T USE CONTRACEPTION, IN PARTICULAR WHAT MADE IT SO DIFFICULT?

Looking back, who do you think was less bothered/concerned at the time about using having sex without contraception? (Partner related)
Did either of you try to **talk about contraception** before having sex? What was said? How was this said? And by who?
Any **pressure**?

Was it anything to do with how you were feeling at the time? Or where you were? (Context-related?)
Drunk or stoned?
Very aroused/just couldn't stop?
Where were you at the time?
Were contraceptives available?
How were you feeling at the time? Happy? Depressed?
How was the relationship going?

(3.4) LOOKING BACK, WHAT WERE THE MAIN REASONS THAT YOU HAD SEX WITH THIS PERSON(ON THE FIRST OCCASION)?
- Mainly physical, highly aroused, lust etc.
- Mainly emotional, very strong feelings, love etc.

(3.5) HAVE YOU (OR HAD YOU) CHANGED FROM ONE METHOD TO ANOTHER SINCE YOU HAVE BEEN GOING OUT WITH EACH OTHER?
Which methods? When did you change methods (how long had you been going out with each other)? **Why** did you change methods?
Did you **talk to each other about this** before you changed methods?

(4) I WOULD LIKE US TO TALK ABOUT AN OCCASION WHEN YOU'VE HAD SEX WITH SOMEONE WHO YOU WEREN'T REALLY GOING OUT WITH (FOR EXAMPLE A ONE NIGHT STAND, SOMEONE WHO YOU ONLY HAD SEX WITH A COUPLE OF TIMES OR SOMEONE WHO YOU WEREN'T REALLY SERIOUS WITH).

(4.1) CAN YOU TELL ME A BIT MORE ABOUT YOUR PARTNER, LIKE....
What's their name? (To focus their responses later on)
Where did you meet them?
Same age as you?
How long did you known them for before you had sex with them?
Was this a one night stand or did you see them for a bit longer?

I WOULD LIKE YOU TO CAST YOUR MIND BACK TO WHEN YOU FIRST HAD SEX WITH THIS PERSON....

(4.2) EARLIER ON THAT DAY DID YOU KNOW YOU'D BE HAVING SEX WITH THIS PERSON OR WAS IT A BIT OF A SURPRISE?
If expected, how did you know? Was it something you or your partner said? (Sexual scripts? Coming in for coffee? Etc.)
If unexpected, at what point did you know you were going to have sex?

(4.3) AROUND THE TIME WHEN YOU FIRST HAD SEX WITH THEM, WHAT WERE YOUR FEELINGS TOWARDS THIS PERSON?
Did you know at the time it would be a one night stand/brief relationship?
Were you very keen to have sex with them at the time?
Did you want something more serious - perhaps like to 'go out' with them?
Did you think at the time that you loved or could fall in love with them?
How do you feel about them now?

(4.4) WHEN YOU HAD SEX WITH EACH OTHER FOR THE FIRST TIME, DID YOU USE ANY CONTRACEPTION?

EITHER *If Yes...*

Can you tell me a bit more about this situation and in particular how you or your partner made sure that contraception was used?

Looking back, who do you think really made sure that you didn't forget to use any contraception? (Partner related)
Did either of you **talk about contraception** before having sex? What was said? How was this said? And by who?
Did one of you have to **persuade** the other to use contraception and if so how?

Was it anything to do with how you were feeling at the time? Or where you were? (Context-related?)
Drunk or stoned?
Where were you at the time?
Were contraceptives available?
How were you feeling at the time? Happy? Depressed?

If Yes....
Have there been any similar situations with 'one night stands' where you **didn't** use contraception? Can you tell me more about this partner (age, where you met them etc.)?

Can you tell me a bit more about what made it more difficult to use contraception on this occasion?

Looking back, who do you think was less bothered/concerned at the time about using having sex without contraception? (Partner related)
Did either of you try to **talk about contraception** before having sex? What was said? How was this said? And by who?
Any **pressure**?

Was it anything to do with how you were feeling at the time? Or where you were? (Context-related?)
Drunk or stoned?
Very aroused/just couldn't stop?
Where were you at the time?
Were contraceptives available?
How were you feeling at the time? Happy? Depressed? (Were you hurt or on the rebound?)

)R *(If No, did you want to use contraception on this occasion?)....*

Can you tell me a bit more about what made it difficult to use contraception on this occasion?

Looking back, who do you think was less bothered/concerned at the time about using having sex without contraception? (Partner related)
Did either of you try to **talk about contraception** before having sex? What was said? How was this said? And by who?
Any **pressure**?

Was it anything to do with how you were feeling at the time? Or where you were? (Context-related?)
Drunk or stoned?
Very aroused/just couldn't stop?
Where were you at the time?
Were contraceptives available?
How were you feeling at the time? Happy? Depressed? (Were you hurt or on the rebound?)

If No.....

Have there been any similar situations with 'one night stands' where you **did** manage to use contraception? Can you tell me more about this partner (age, where you met them etc.)?

Can you tell me more about why it was easier to use contraception on this occasion?

Looking back, who do you think really made sure that you didn't forget to use any contraception? (Partner related)
Did either of you **talk about contraception** before having sex? What was said? How was this said? And by who?
Did one of you have to **persuade** the other to use contraception and if so how?

Was it anything to do with how you were feeling at the time? Or where you were? (Context-related?)
Drunk or stoned?
Where were you at the time?
Were contraceptives available?
How were you feeling at the time? Happy? Depressed?

(4.5) LOOKING BACK, WHAT WERE THE MAIN REASONS THAT YOU HAD SEX WITH THIS PERSON(ON THE FIRST OCCASION)?
- Mainly physical, highly aroused, lust etc.
- Mainly emotional, very strong feelings, love etc.

(5) I WOULD LIKE YOU TO REALLY COMPARE THESE SITUATIONS WHERE YOU HAVE AND HAVE NOT USED ANY CONTRACEPTION.

(5.1) IN GENERAL, WHAT ARE THE MAIN REASONS WHY YOU'VE MANAGED TO USE CONTRACEPTION ON SOME OCCASIONS BUT NOT ON OTHERS?
Does it depend on what your partner thinks about contraception?
Whether they take any responsibility?
Whether they bring the subject up?
Does it depend on who your partner is?
How you feel about them? Strong feelings? Love?
Do you think it's easier to use contraception with a steady partner or on a one night stand?
Does it depend on how you are feeling at the time? Or where you are?

(6) WE'VE BEEN TALKING ABOUT YOUR EXPERIENCES FROM THE PAST. NOW I WOULD LIKE YOU TO THINK ABOUT THE NEXT 9 MONTHS WHEN YOU ANSWER THE FOLLOWING QUESTIONS.

(6.1) YOUR RELATIONSHIPS.....

EITHER *IF THEY HAVE A REGULAR BOYFRIEND/GIRLFRIEND AT PRESENT (REFER TO Q.6 OF INTRO)*

IN THE NEXT 9 MONTHS, HOW OFTEN DO YOU SEE YOURSELF USING CONTRACEPTION WITH YOUR BOYFRIEND/GIRLFRIEND?

ARE YOU HAPPY WITH THE METHOD OR METHODS OF CONTRACEPTION THAT YOU ARE CURRENTLY USING OR ARE YOU WANTING TO CHANGE TO ANOTHER METHOD?
If yes, which are the methods concerned?

ARE YOU QUITE CONTENT ABOUT STAYING IN A STEADY RELATIONSHIP AT THE MOMENT?

OR *IF THEY DO NOT HAVE A REGULAR BOYFRIEND/GIRLFRIEND AT PRESENT(REFER TO Q.6 OF INTRO)*

HOW OFTEN DO YOU SEE YOURSELF USING CONTRACEPTION WITH ANY NEW PARTNER OR PARTNERS THAT YOU MIGHT HAVE SEX WITH IN THE NEXT 9 MONTHS?

FOR THE NEXT 9 MONTHS, WHAT SORT OF RELATIONSHIPS WOULD YOU SAY THAT YOU'RE LOOKING FOR?
More of a steady relationship?
More one night stands?

(6.2) (ALL INTERVIEWEES):

(FEMALES ONLY)

I WOULD LIKE YOU TO IMAGINE THE FOLLOWING SITUATION: YOU'VE MET THIS BOY AND ITS QUITE OBVIOUS THAT YOU'RE ABOUT TO HAVE SEX WITH THEM FOR THE FIRST TIME.

THIS COULD BE EITHER SOMEONE YOU INTEND TO GO STEADY WITH OR SOMEONE YOU MAY WANT TO HAVE A ONE NIGHT STAND WITH.

(I) HOW DETERMINED WOULD YOU SAY YOU ARE ABOUT USING A CONDOM WITH THIS PERSON?

Try and relate to the following scenarios:
- Not bothered/wouldn't think about it
- Would definitely try my hardest not to use one
- Would want to use a condom but may end up having sex without one
- Would wait for my partner to say something/take responsibility
- Would only use one if my partner insisted
- I would bring the subject up if my partner didn't before we had sex (but still might not use one). What would you say?
- Would definitely try my hardest to use one - "no condom, no sex"

(II) WHAT IF HE SAID HE REALLY DIDN'T WANT TO USE A CONDOM. HOW WOULD YOU REACT?

Would you try and persuade him to use a condom? How? Would you say something?
What if he said that he would only have sex without using a condom?

What if he said: **"It's OK I'll use the withdrawal method?"**
"Don't you trust me or something?"
"It'll feel better without using a condom"
"I really love you....."

DO YOU THINK YOU'D ALWAYS REACT IN THIS WAY?

Is this likely to depend on how drunk you are? Or where you are? (On holiday?) Or how you are feeling at the time? (Whether you're happy or depressed? How much you want to have sex with them? Or how aroused you are?) Or whether it's likely to be a one night stand or something more steady?

(MALES ONLY)

I WOULD LIKE YOU TO IMAGINE THE FOLLOWING SITUATION: YOU'VE MET THIS GIRL AND ITS QUITE OBVIOUS THAT YOU'RE ABOUT TO HAVE SEX WITH THEM FOR THE FIRST TIME.

THIS COULD BE EITHER SOMEONE YOU INTEND TO GO STEADY WITH OR SOMEONE YOU MAY WANT TO HAVE A ONE NIGHT STAND WITH.

(I) HOW DETERMINED WOULD YOU SAY YOU ARE ABOUT USING A CONDOM WITH THIS PERSON? (*MALES: EVEN IF THE GIRL IS ON THE PILL)*?

Try and relate to the following scenarios:
- Not bothered/wouldn't think about it
- Would definitely try my hardest not to use one
- Would want to use a condom but may end up having sex without one
- Would wait for my partner to say something/take responsibility
- Would only use one if my partner insisted
- I would bring the subject up if my partner didn't before we had sex (but still might not use one). What would you say?
- Would definitely try my hardest to use one - "no condom, no sex"

(II) WHAT IF SHE SAID SHE REALLY DIDN'T WANT TO USE A CONDOM. HOW WOULD YOU REACT?

Would you try and persuade her to use a condom? How? Would you say something?
Would you consider alternative contraceptive methods? (Withdrawal etc.?)
What if she said that he would only have sex without using a condom?

What if she said: **"It's OK I'm on the pill?"**
"Don't you trust me or something?"
"It'll feel better without using a condom"
"I really love you....."

DO YOU THINK YOU'D ALWAYS REACT IN THIS WAY?

Is this likely to depend on how drunk you are? Or where you are? (On holiday?) Or how you are feeling at the time? (Whether you're happy or depressed? How much you want to have sex with them? Or how aroused you are?) Or whether it's likely to be a one night stand or something more steady?

(7) FINAL QUESTION: RELATES TO THE CONTRACEPTIVE ADVICE SERVICES ON OFFER TO YOUNG PEOPLE.

(7.1) VIEWS ABOUT THIS CLINIC

How long have you been visiting this clinic?

How did you find out about it?

What do you like about this clinic?

What things do you think could improve this clinic?
Additional services? Relationship advice etc.
Opening hours?

(7.2) TIMING OF FIRST VISIT

When you first visited this clinic, were you already going out with someone?

If Yes,

Did you or your partner talk to each other about where to get contraceptives from?
When was this? Before or after you had sex with them for the first time?
Who brought the subject up first? How did you or your partner do this?

(7.3) OTHER SOURCES OF ADVICE

Have you ever been anywhere else for contraceptive advice?
GPs? Other clinics?
What were these services like? Why do you not go there now?

ANY FURTHER QUESTIONS OR COMMENTS?
(Close interview)

Re-interview in 9 months time?????????????

INTERVIEW AMENDMENTS (AFTER 15 INTERVIEWS RETURNED)

I. QUESTIONS/PROMPTS OMITTED:

Interview Section	Omissions
1	Who did you have **close friendships** with (people you confided in, trusted etc) at an earlier age (eg. 11, 12, 13)? With mainly girls or boys?
2	What sort of things are **important to you in a relationship**?
6	**(I) HOW DETERMINED WOULD YOU SAY YOU ARE ABOUT USING A CONDOM WITH THIS PERSON?** **Try and relate to the following scenarios:** **- Not bothered/wouldn't think about it** **- Would definitely try my hardest not to use one** **- Would want to use a condom but may end up having sex without one** **- Would wait for my partner to say something/take responsibility** **- Would only use one if my partner insisted** **- I would bring the subject up if my partner didn't before we had sex (but still might not use one). What would you say?** **- Would definitely try my hardest to use one - "no condom, no sex"**

2. QUESTIONS/PROMPTS ADDED:

Interview Section	Additions
1	**Are you happy in yourself? Ever get depressed?** **What are your views on pregnancy? Is it something you are looking to happen or avoid in the near future?** **How confident are you in everyday life? What about with members of the opposite sex?**
3	**How long had you been going-out before you first had intercourse?** **When did you first talk to each other about contraception? Before or after your first intercourse together?**

Continued.....

Interview Section	Additions
5	**Have you ever had to persuade someone (or been persuaded) to use or not use contraception? If so how?** **What are your priorities regarding contraception? Pregnancy or STI prevention? Why?** **Do you ever think about STIs?**
6	**Would you intend to or want to use a condom with the next person you have intercourse with?** **Do you think you'd always manage to use a condom?** **What would you think about people who said these things? (Relating to scenarios of conversation eg "I hate condoms" etc)** **Would you want this partner to talk to you about contraception before having intercourse with them for first time? If so when precisely?** **Would you prefer this partner to take responsibility for contraception without talking about it?** **What if this partner said nothing to you about contraception? Would you raise the subject? How? When?**
7	**When you first visited the clinic, had you already had sexual intercourse?**

APPENDIX 4

RECEPTIONIST/CLINIC STAFF GUIDE SHEET

Thanks very much for your help with this project.

To help the project run efficiently please could I ask you to consider the following points:

- Can you inform the clients as you give them the questionnaires and envelopes that the survey relates to personal issues. Can you also stress that their views are very important in helping design the right kind of services for young people.

- Please could you check if they have filled in the same questionnaire before - if they have then there is no need for them to do so again.

- Please could you ask them, if at all possible, to complete and return the questionnaire to reception today.

- Please could you offer each person who visits the clinic the opportunity to fill in a questionnaire. Please could you also record the number of people who did not want to fill in a questionnaire (so we can calculate response rates). This can be done by putting crosses in the boxes provided in the attached sheet. Please do not put a cross for those who have previously completed a questionnaire.

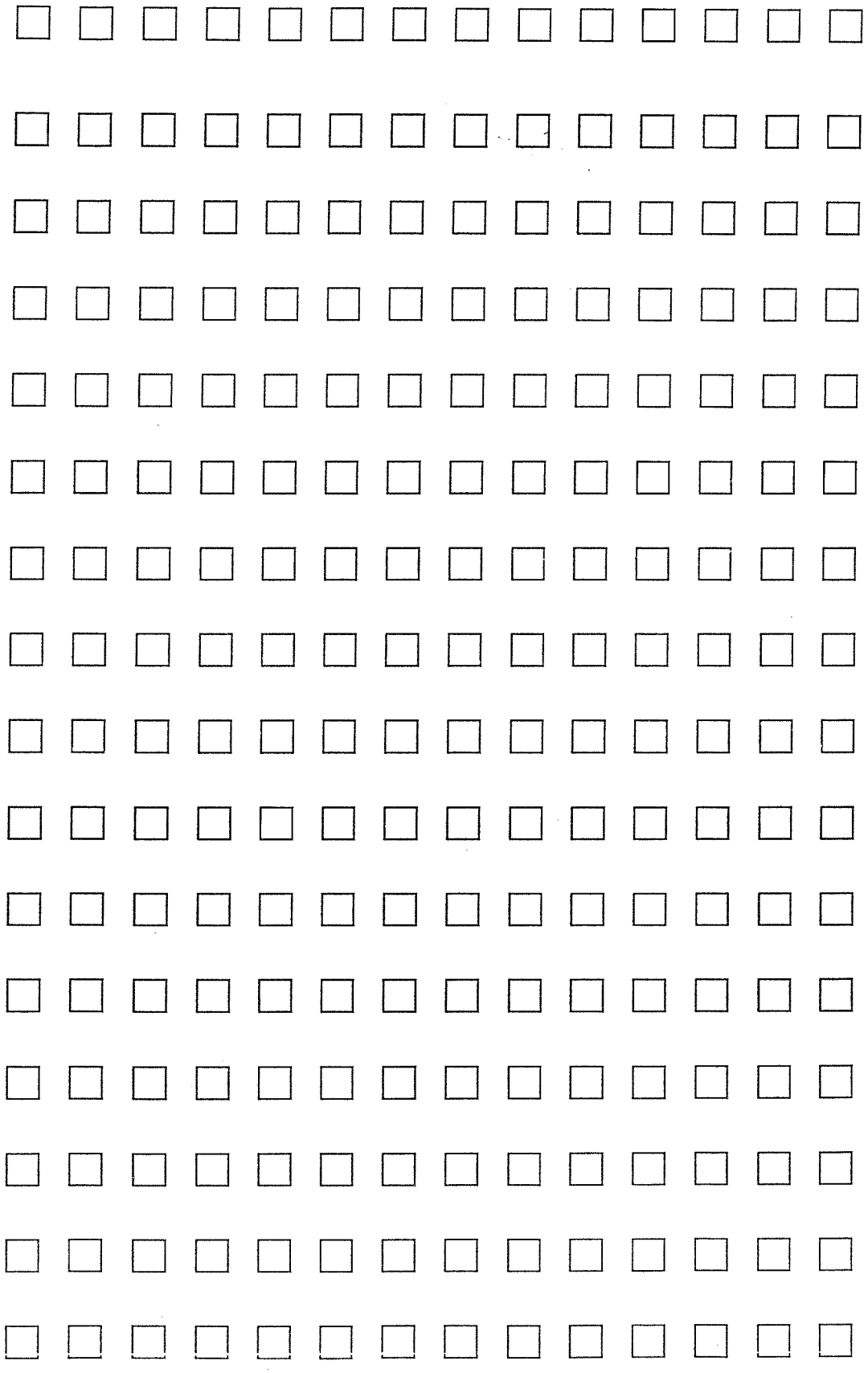
Thanks very much for your help

If there are any queries or if you need any more questionnaires or envelopes then please call Lester Coleman at the Centre for Sexual Health Research, Department of Psychology, University of Southampton on 01703 - 592917.

I will collect the returns from your clinic (in person) as arranged.

CLINIC: _____

CLIENTS PREFERRING NOT TO COMPLETE A QUESTIONNAIRE



APPENDIX 5

CODING FRAME FOR ROUND ONE INTERVIEWS

A) SOCIO-DEMOGRAPHIC/INTRODUCTORY

VARIABLE NAME	VARIABLE LABEL	CODING	FREQUENCIES (base[1])
case	Case number	code as stated	56 (56)
sex	Male or female	1=male, 2=female	1=23%, 2=77% (56)
age	Age	age as given	16=36%, 17=27%, 18=25%, 19=13% (56)
site type	Site type	1=clinic, 2=youth club, 3=youth advisory	1=34%, 2=28%, 3=9% (56)
urban	Urban or rural	1=urban, 2=suburban, 3=rural	1=11%, 2=38%, 3=7% (56)
sitename	Name of site	1=Hend, 2=CHC, 3=Ham, 4=Romsey, 5=Newm, 6=Grip, 7=Oak, 8=Weston, 9=NL, 10=Red, 11=Rain, 12=Unem	1=9%, 2=2%, 3=11%, 4=5%, 5=7%, 6=9%, 7=14%, 8=18%, 9=4%, 10=9%, 11=9%, 12=4% (56)
dep	Deprivation based on Jarman index	1=high (>=14.60), 2=Medium (-3.24 to +14.59), 3=Low (<=-3.25)	1=63%, 2=32%, 3=4% (56)
reln	In a relationship at interview	1=yes, 2 =no	1=48%, 2=52% (56)
conf	Level of confidence	1=average, 2=low	1=89%, 2=11% (56)

B) INTERCOURSE-SPECIFIC

VARIABLE NAME	VARIABLE LABEL	CODING	FREQUENCIES (base)
rtype[2]	Relationship type	1=steady, 2=ons[3] known, 3=ons not known,	1=53%, 2=36%, 3=10% (113)
rcontus	Contraceptive use	1=yes, 2=no	1=74%, 2=26% (113)
rcondus	Condom use	1=yes, 2=no	1=63%, 2=37% (113)
rcert	Certainty of the relationship progression	1=clear, 2=not clear, 3=not stated, .=missing (all ONS)	1=36%, 2=9%, 3=8%, 4=47% (113)
ronset	Onset of 1st intercourse	1=long delay (>2 weeks), 2=some delay (1-14 days inclusive), 3=same day - including all ONS)	1=37%, 2=13%, 3=50% (113)
rcommin	Communication (include implicit) about intercourse before	1=yes, 2=no	1=48%, 2=52% (113)
rcommco	Communication (include implicit) about contraception before	1=yes, 2=no	1=54%, 2=46% (113)
rexpect	Expected intercourse	1=yes, 2=no	1=20%, 2=81% (113)
rreason	Reason for intercourse	1=strong emotions/love for partner, 2=more physical than emotional	1=44%, 2=56% (113)
rparres	Partner took responsibility	1=yes, 2=no	1=26%, 2=74% (113)
rpressi	Pressure for intercourse, include persuasions, image etc.	1=yes, 2=no	1=9%, 2=92% (113)
rpressc	Pressure for **no** contraceptive or condom use	1=yes, 2=no	1=4%, 2=97% (113)

[1] Percentages calculated from appropriate base - either 113 instances of intercourse or 56 respondents. These are valid % i.e. exclude missing cases and are calculated only from all those who expressed a preference (where applicable). Totals do not always add up to 100% as percentages are rounded.

[2] Within each case, instances intercourse were distinguished by using codes r1type, r2type, etc.

[3] ONS = one night stand

rphys	Physical context	1=stable, 2=unstable	1=86%, 2=14% (113)
ralco	Alcohol consumption immediately before intercourse	1=yes, 2=no	1=42%, 2=58% (113)

C) TYPOLOGIES/GENERAL CHARACTERISTICS

VARIABLE NAME	VARIABLE LABEL	CODING	FREQUENCIES (base)
contuse	Overall use of contraception (not just 1st intercourse)	1=consistent, 2=inconsistent	1=46%, 2=54% (56)
conduse	Overall use of condoms (not just 1st intercourse)	1=consistent, 2=inconsistent	1=41%, 2=59% (56)
condpers	Has been persuaded by partner to use condoms	1=yes, 2=no	1=37%, 2=63% (56)
condnotb	Shown not to be bothered about not using condoms	1=yes, 2=no	1=48%, 2=52% (56)
condnota	Has wanted to use condoms but cannot raise subject	1=yes, 2=no	1=25%, 2=75% (56)
condfait	Has talked about condoms with a partner but still ended up not using them	1=yes, 2=no	1=26%, 2=84% (56)
periodp	First went on pill for periods	1=yes, 2=no, 3=Don't know, .=missing or male	1=28%, 2=47%, 3=25% (43)
sti	Sti always perceived as a threat/issue?	1=yes, 2=no	1=32%, 2=68% (56)
concep	Conception always perceived as a threat/issue?	1=yes, 2=no	1=84%, 2=16% (56)
talkdiff	Talking about contraception is difficult	1=yes, 2=no	1=38%, 2=63% (56)
negcond	Negative associations with condoms	1=yes, 2=no	1=5%, 2=95% (56)
probcond	Problems with using condoms	1=yes, 2=no	1=21%, 2=79% (56)
habit	Evidence of habit or routine of contraceptive use or non-use	1=yes, 2=no	1=4%, 2=96% (56)

D) NON-INTERCOURSE SPECIFIC

VARIABLE NAME	VARIABLE LABEL	CODING	FREQUENCIES (base)
prepcond	Carry condoms	1=yes, 2=no, 3=not stated	1=49%, 2=31%, 3=80% (56)
continpi	Continual use of pill between relationships	1=yes, 2=no, 3=Don't know, .=missing or male	1=49%, 2=43%, 3=8% (43)
servuse	Ever used services	1=yes, 2=no	1=76%, 2=24% (56)
usedgp	Ever used GP	1=yes, 2=no	1=27%, 2=73% (56)
usedclin	Ever used clinic	1=yes, 2=no	1=69%, 2=31% (56)
usersebe	Used services before 1st ever intercourse	1=yes, 2=no, .=missing (never been to service)	1=27%, 2=50%, .=23% (56)
mfresp	Male or female responsibility for use of services (in past)	1=mainly male, 2=mainly female, 3=both equal, 4=not stated, .=missing (never been to service)	1=2%, 2=39%, 3=5%, 4=30%, .=23% (56)
mfresp1	Male or female responsibility for obtaining condoms (in past)	1=mainly male, 2=mainly female, 3=both equal, 4=not stated, .=missing (never used condoms)	1=16%, 2=7%, 3=18%, 4=45%, .=14% (56)

E)INTENTIONS/SELF-PREDICTIONS

VARIABLE NAME	VARIABLE LABEL	CODING	FREQUENCIES (base)
intcont	100% intention to use contraception	1=yes, 2=no	1=96%, 2=4% (56)
intcond	100% intention to use condoms	1=yes, 2=no	1=84%, 2=16% (56)
selfprco	Self-predictions of condom use	1=yes always, 2=possibly not	1=41%, 2=59% (56)
spalco	Alcohol attributed to self predictions	1=yes, 2=no	1=16%, 2=84% (56)
sppart	Partner's attitude to condoms attributed to self predictions	1=yes, 2=no	1=11%, 2=89% (56)
spknow	Knowing partner attributed to self predictions	1=yes, 2=no	1=29%, 2=71% (56)
splike	Liking partner attributed to self predictions	1=yes, 2=no	1=20%, 2=80% (56)

APPENDIX 6

INTERVIEWER NOTES

Prior to this 2nd interview, the interviewer should be aware of the behaviours reported at 1st interview by each case (i.e. general consistency of contraceptive and condom use and in particular their ability in instigating or communicating such use) and their intentions and self-predictions towards future behaviours. Also their implementation of the intentions e.g. note whether they said they would talk to their boyfriend/girlfriend, would raise the issue of condoms before their boyfriend/girlfriend did so etc.

Whilst newly generated information relating to experiences of use and non use of contraception are important, the aim of this 2nd interview is not purely to replicate information already generated in the 1st interview.

In contrast, the main aims of this 2nd interview are as follows:

1. Observe how the intentions, self-predictions and implementations of the interviewees are related to behaviours reported between the two interviews (be sure to know the difference between intentions, self-predictions and implementations - see page 2 of schedule for details).
2. To follow-up the most important themes derived from the 1st interview.
3. To investigate the dynamics of reported changes in beliefs and behaviour (contraceptive use, communication ability, utilisation of services etc.) that may have occurred either within the time interval between the two interviews or sometime prior to this.

These aims will be reflected in the first 3 sections of the interview schedule.

Finally, it is important to clarify various ways in which the interview questions and prompts are to be delivered:

1. In *General* terms: Interviewees invited to respond to what other people (possibly including themselves) have said and to what extent they agree or disagree with such statements. For example, "some people have said that it's easier to talk to your boyfriend/girlfriend about contraception prior to your first intercourse together in a ONS scenario rather than in a steady relationship - do you agree or disagree with this? If so, why?"

2. In *Personal* terms: Relating to their own experiences. For example, "have you ever found it difficult talking to someone about contraception prior to intercourse in a ONS scenario?"

3. In *Hypothetical* terms: Noting people's responses in a variety of imaginary scenarios, aiming to find out what people's assumptions, attitudes and prejudices are regarding contraceptive use and responsibility. For example, "how would you feel if a (future) boyfriend/girlfriend asked you to use a condom prior to having intercourse with them for the first time?"

SECTION A - COMPARING INTENTIONS, SELF-PREDICTIONS AND BEHAVIOURS

FOR THIS SECTION ONLY, EITHER CHOSE SCHEDULE TYPE 1, 2 OR 3 ACCORDING TO WHAT HAS HAPPENED SINCE 1ST INTERVIEW

SCHEDULE TYPE 1 - If not had intercourse at all since 1st interview

1. Have you deliberately chosen not to have intercourse with anyone?

2. Have you had the opportunity to have intercourse with someone but chosen not to?

3. Do you still believe in what you said at the end of the last interview (i.e. recount what they stated in terms of their intentions, self-predictions and implementations).

Can you tell me more? Can you tell me why this has changed (if applicable)?

SCHEDULE TYPE 2 - If had intercourse since 1st interview, but with the same person with whom their first intercourse was recorded in the 1st interview e.g. in a long standing relationship

I assume you have had intercourse with your steady boyfriend/girlfriend who you were already going out with when you were first interviewed.

1. During this time period, have you ever not used contraception with him or her?
Tell me more.....Why was using contraception difficult (if applicable)? Context, situation, communication, pressure etc. (Themes from 1st interviews)

2. Do you still believe in what you said at the end of the last interview (i.e. recount what they stated in terms of their intentions, self-predictions and implementations).
Can you tell me more? Can you tell me why this has changed (if applicable)?

SCHEDULE TYPE 3 - If had intercourse with someone new since 1st interview

1. On this occasion of first intercourse (choose most recent if more than one, but eventually recount up to 3 instances if applicable), were condoms used?

2. Can you tell me more about the time leading up to intercourse? Was this a steady boyfriend/girlfriend or a ONS?

Boyfriend/girlfriend characteristics, time known, location, delay/onset of intercourse, communication, unexpected or less unexpected, reasons for intercourse, feelings towards boyfriend/girlfriend at the time etc.?

3. Can you tell me how you managed to use condoms? Or why using condoms was so difficult?

Difficulty? Responsibility? Planning or preparation? Communication? Reaction - feelings about this?

Make sure at this stage you know whether the subsequent behaviours were consistent or inconsistent with their intentions, self-predictions and implementations.

4. Remind them of what they said in the first interview in terms of their intentions (e.g. I want or don't want to use a condom) and self-predictions (e.g. although I may want to, in reality I might not if.....) Also their implementations i.e. how they said they would ensure a condom would be used (e.g. whether in the 1st interview they said they would carry condoms or talk to their boyfriend/girlfriend before intercourse etc.)

If inconsistent with subsequent behaviours.....

(For example, in the last interview you said you would, at all costs, use a condom and you wouldn't have intercourse without one - how do you feel about what you said, given that you did not manage to use a condom? You said you would talk to your boyfriend/girlfriend about this, why was this difficult?)

What made the difference here - e.g. why was using a condom so difficult, even though you wanted to use one?

How do you feel about what you said compared to what actually happened? Were you being unrealistic?

If consistent relationship with subsequent behaviour.....

Ask them more about this i.e. Was it easy or difficult.....? Tell me more.....

(For example, you said in the 1st interview, that although you wanted to use a condom, you might end up not using one - what made it difficult to use a condom? Tell me more.....)

5. Given what we've been talking about, would you want to use a condom with someone new in the future (intention)? Do you think you'd always manage to use one (self-prediction)? How would you make sure that a condom is used (implementation)?

SECTION B - FOLLOW-UP OF THE IMPORTANT THEMES DERIVED FROM ROUND 1 (ALL RESPONDENTS)

1. Some people have said that talking to someone about contraception before having intercourse for the first time with someone new (perhaps saying "can we use a condom?" or "have you got a condom?") is difficult?

IN GENERAL TERMS.....

- **Do you agree or disagree with this.....?**
- **Why?**
- **Can you tell me more.....?**

When is it easier or harder to talk in such a way? Before or after this first intercourse together?

Does this depend on - Partner factors (Who your partner is? How much you like him or her? How long you've known him or her? How old they are? Whether they are likely to tell other friends about what happened? Whether it's a ONS or a steady relationship? How cool they are as a person? Whether you feel any pressure from your partner?)

Individual factors (Where you are at the time? How drunk you are? How aroused you are? How mush you like them? Whether you want to have a deeper or emotional relationship with them?)

IN PERSONAL TERMS.....(not necessarily since the 1st interview).

- **Have you ever found it particularly easy or difficult to talk to someone about contraception before having intercourse together for the first time?**
- **Why?**
- **Can you tell me more.....?**

IN HYPOTHETICAL TERMS.....

How would you feel if a (future) boyfriend/girlfriend talked to you in this way, before having intercourse together for the first time? (For example, "can we use a condom?" or "have you got a condom?")

- **Why?**
- **Can you tell me more.....?**

Embarrassment? Boyfriend/girlfriend being too forward? Boyfriend/girlfriend being just interested in sex? Boyfriend/girlfriend being caring? Boyfriend/girlfriend saying they don't trust you?

When would you prefer someone to say this? Just before intercourse or sometime earlier, for example earlier on that day (for example by showing you they have bought some condoms)?

- **Why?**
- **Can you tell me more.....?**

How would you feel if your boyfriend/girlfriend took responsibility for using a condom without saying anything (for example by just putting one on in front of you or giving one to you, but not saying anything)?

- **Why?**
- **Can you tell me more.....?**

Is this easier because you don't have to talk about this?

Would you like all (future) boyfriend/girlfriends to do this?

Of the next 2 options/scenarios, which would you prefer and why?

1. To have a discussion about condom use prior to intercourse e.g. "Shall I use a condom?"

2. For your partner to take responsibility without saying anything e.g. Just putting a condom on

2. Some people have said they think it's better to always carry a condom (e.g. in their purse or wallet), just in case they might have intercourse with someone.

IN GENERAL TERMS.....

- **Do you agree or disagree with this.....?**
- **Why?**
- **Can you tell me more.....?**

IN PERSONAL TERMS..... (not necessarily since the 1st interview).

- **Do you carry condoms? Why or why not?**
- **When did you first carry a condom (before or after first having intercourse)**
- **Have you ever carried a condom? When was this? Why not all the time? What made you first carry a condom?**
- **Have you ever had intercourse with someone who carries a condom? How did you feel about them carrying a condom?**

IN HYPOTHETICAL TERMS.....

- **How would you feel if someone you were about to have intercourse with for the first time (either steady boyfriend/girlfriend or a ONS) told you that they had a condom with them (in their wallet or purse)?**
- **What do you think your partner think of you if you carried condoms? How would you cope/deal with this?**

Trustworthy? Caring?

Or means they might have AIDS? Means they might have slept with loads of people? Means they don't trust you and think you might have slept with many people?

NEXT QUESTIONS REFER TO WHAT BOYS AND GIRLS THINK ABOUT CONTRACEPTION AND CONDOMS (STRESS THEY ARE NOT YOUR PERSONAL VIEWS)

3. Who should take most responsibility for making sure a condom is used when two people have intercourse together for the first time?

- **Why?**
- **Have you any experience of this?**

4. Some boys have said they reckon most girls (before they've had intercourse with them) are already on the pill (so the boys don't have to think about contraception).

- **Agree or disagree with this?**
- **Why?**
- **Have you any experience of this?**

5. Some people have said they hate using condoms because they interrupt the build-up to intercourse.

- **Agree or disagree with this?**
- **Why?**
- **Have you any experience of this?**

6. Some people reckon most people would prefer not to use a condom?

- **Agree or disagree with this?**
- **Why?**
- **Have you any experience of this?**
- **Who do you think hates using condoms the most out of girls and boys?**

7. Some boys have said that girls sometimes say they are on the pill even if they're not, perhaps because they want to be pregnant and maybe trap them.

- **Agree or disagree with this?**
- **Why?**
- **Have you any experience of this?**

8. Some people say that it doesn't matter sometimes if you have intercourse without contraception, because there is always the emergency contraception to fall back on.

- **Agree or disagree with this?**
- **Why?**
- **Have you any experience of this?**

NEXT FEW QUESTIONS REFER TO FAMILY PLANNING SERVICES

9. ***If they have ever been somewhere for family planning advice.....to get pills or condoms etc.*** **Can you tell me more about your experiences in using Family Planning services (either family planning clinics or doctors) in terms of when you first went somewhere and what role your boyfriend/girlfriend at the time played in this?**

- **Did you first go there before or after you first ever had intercourse?**
- **Did you know where to go before you first ever had intercourse?**
- **What led to you going to the service? What triggered this off? (If a gap between having intercourse for the first time and attending the service)**
- **Have you ever talked to a boyfriend/girlfriend about FP services before you have had intercourse with them?**
- **What would you think if your boyfriend/girlfriend ever talked to you about FP services before you'd had intercourse together for the first time? Is this your responsibility or a shared responsibility? Why?**

If they haven't ever been to a FP clinic or doctors for advice about contraception

- **Do you know about these services?**
- **Do you feel it's more the responsibility of your boyfriend/girlfriend to go to such places? Why?**
- **How would you feel if your boyfriend/girlfriend asked you to go with them to the clinic or doctors? Before you'd ever had intercourse with them? After you'd had intercourse?**

SECTION D - CONCLUDING SECTION

(ALL RESPONDENTS)

1. Think of your ideal picture of ensuring condom use - in other words what would you want to happen about using condoms in a future example of intercourse for the first time with a new partner? Tell me what you would want to happen?

- **Would you like to know in advance about when you would be having intercourse? (In other words for it to be less unexpected by perhaps your partner saying "do you want to have sex?") If so how could this happen?**
- **Who would you want to take responsibility for using a condom?**
- **Would you want to talk about this or use one without talking?**
- **When would you want to talk about this? Immediately before intercourse? Or Before this?**

2. What do you think we can do to help young people in the future use contraception more often?

- **Do we need to tell people the facts more?**
- **Do most young people know what to do about avoiding being pregnant?**
- **How can we help people feel more confident in talking to their boyfriend/girlfriend about contraception?**

POSSIBILITY OF BEING RE-INTERVIEWED?

TRY TO TAKE PHONE NUMBER IF BEING RE-INTERVIEWED