Play with fire,
play with you sometimes

Social aspects of condom use among young people in Sweden

Veronika Fridlund
To Carlis – the love of my life

If I was the sun way up there
I'd be the love most everywhere
I'll be the moon when the sun goes down
Just to let you know that I'm still around

That's how strong my love is
That's how strong my love is
That's how strong my love is
That's how strong my love is

I'll be the weeping willow drowning in my tears
And we can go swimming when you're here
I'll be the rainbow after the tears are gone
And wrap you in my colors to keep you warm

I'll be the ocean so deep and wide
To catch all the tears that you cried
I'll be the breeze after the storm is gone
Dry your eyes, love you all warm

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Veronika Fridlund, as the first author, has been responsible for the research concept and design, data collection, analysis and interpretation of data and for writing the papers.

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1 Changed my last name from Halvarsson to Fridlund in March, 2013
List of Abbreviations

AIDS Acquired Immunodeficiency Syndrome
CI Confidence Interval
CT Chlamydia Trachomatis
ECP Emergency Contraceptive Pills
HIV Human Immunodeficiency Virus
HPV Human Papillomavirus
LGBT Lesbian, gay, bisexual, and transgender
NBHW National Board of Health and Welfare
NGO Non-governmental organization
OC Oral Contraceptive
OR Odds Ratio
PHAS Public Health Agency of Sweden
RFSU The Swedish Association for Sexuality Education
SHS School Health Service
SRB Sexual Risk Behavior
STI Sexually Transmitted Infection
WHO World Health Organization
YHC Youth Health Clinic
INTRODUCTION

There is an immense interest in sexuality in Western society and sex is a common topic in public debate, popular culture and media. Sexuality is a part of everyone’s life, whether they choose to express it or not, and affects individuals’ thoughts, feelings and actions. Sexual activities usually take place behind closed doors. These activities are generally considered private, between the ones having sex, but at the same time are regulated by society through both norms and law. There are several reasons why Sweden is an interesting country to study when it comes to sexuality. Sweden is a welfare state with universal social policy programs aspiring to equality in opportunities and outcomes as explicit goals for social policies, a large public sector and high employment rates, and taxes to finance these programs [1]. Sweden is often seen not only as one of the world’s most “gender-equal” countries [2] but also as very sexually liberal. Sexual education has been a mandatory component of school education since 1955, and today is incorporated into all subjects in school [3]. There are also youth health clinics (YHCs) specializing in youth sexuality, and the family planning services have been free of charge since 1974. Many contraceptive methods, for instance oral contraceptives (OCs), are subsidized for young people²; in some counties and regions they are free of charge to all under 26 years old. Emergency contraceptive pills (ECPs) can be purchased without a prescription at pharmacies since 2001, and are free of charge at youth clinics and midwifery clinics. Condoms are often available free at the YHCs, STI clinics and prenatal clinics, as well as from school nurses. They also can be purchased at most supermarkets, convenience stores and pharmacies. Sweden invests a great deal of money and effort in, prevention work. In 2013 the Public Health Agency of Sweden³ (PHAS) distributed 115 million SEK [Swedish Crowns] to local gov-

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² There are several definitions for the group “young people”. Some of the most common definitions are adolescents (aged 10-19 years), young adults (aged 20-40) and youth (the age cohort 15-24). In this thesis, “young people” are those aged 15-32 years.

³ The agency was established on January 1, 2014, and is a merger of the Swedish National Institute of Public Health (Folkhälsoinstitutet) and the Swedish Institute for Communicable Disease Control (Smittskyddsinstitutet).
ernments and non-governmental organization (NGOs), and also disbursed several million SEK for research. Action plans have been developed at a national level, and most counties and regions also have their own action plan aiming to increase condom use [4-6]. Yet, despite all efforts, the spread of sexually transmitted infections (STIs) continues to be a problem among young people in Sweden. Chlamydia Trachomatis (CT), Herpes and Human papillomavirus (HPV) are the most common STIs. Although they are not life-threatening *per se*, they can entail serious complications. For instance, Chlamydia can cause infertility in women and reduced fertility in men [7], and HPV can cause cancer [8-10]. In 2013, 35,885 cases of Chlamydia were reported and 85% of those infected were young adults (20 to 29 years old) [11]. In 2012 there was a 16% increase in Gonorrhea compared to 2011 [12]. According to the PHAS, resistance to antibiotics recommended for the treatment of Gonorrhea has increased rapidly over the past five years and continues to rise. If this trend continues, Gonorrhea may be difficult to cure in the future.

The most common contraceptive method used in Sweden is some form of OC [13]. However, these involve several problems. For example, in the past 30 years a number of studies have been carried out on the impact of OCs on STIs and unwanted pregnancies [14-24]. These studies have shown that the use of OCs can lead to decreased condom use, and therefore to an increased spread of Chlamydia and other STIs, but also that inconsistent use of OCs (not taking the pill every day, or not taking it at the same time each day) is a common reason for becoming pregnant. Importantly, in Sweden, the total number of induced abortions each year is between 35,000 and 38,000; in 2011, 37,693 induced abortions were performed in Sweden [25]. Most induced abortions are performed among women aged 20-24 years, followed by 25-29-year-olds. Doubtlessly, a proportion of these are due to either non-use or inadequate use of contraception.

Condom use is an established method for reducing the risk of sexually active individuals being infected by STIs, at the same time as it lowers the likelihood of unwanted pregnancies. Nevertheless, Swedish studies have shown that condom use is low [26-29]. It has been studied from several perspectives, for example frequency of condom use, factors that affect condom use, intention to use a condom, reasons for using a condom, and reasons for non-use [20, 26, 27, 30-58]. Clearly, though, in light of limited use among young
people, more research is needed on factors influencing condom use in these age groups.

**So what’s the problem?**

Research on sexuality is very challenging. One is asking about something that is perceived by many as private and perhaps even embarrassing [59]. Although some European countries seem to be open-minded and tolerant, it often remains difficult to talk about sexuality [60]. Previous research has encountered certain problems, which are important to discuss.

The first problem concerns the method(s) used for asking about the number of sexual partners participants have had. Hence, in many studies, participants are asked only how many sexual partners they have had within a given time frame. Following on, in many cultures it is considered more socially acceptable for men to have more sexual partners than women, and a consequence of this can be over-reporting of sexual partners among men and under-reporting among women [61]. Moreover, in some studies, participants are asked only to report their condom use with their last sexual partner, and it is of course impossible to ascertain whether this is representative of their condom use with previous, different sexual partners.

Another related problem is that the questions asked in studies of sexual behavior and condom use are often not sufficiently specific or detailed. Specificity and detail are important for a number of reasons. First, specificity is required in order to compare responses. Research has shown that people define “sex” differently [62]. Some studies do not define what sex is, or use “intercourse” without specification [30, 51, 63, 64]. If participants do not know exactly what is meant by having had “sex” with a partner, they will respond on the basis of their own interpretation. Consequently, as they may be responding to different meaning of “sex”, their answers will not be comparable.

A second problem is that we need to ask more detailed questions about anal, oral and vaginal sex. Currently, it is common to focus on either vaginal or anal sex and miss getting a full picture. These kinds of sexual practices may well be more risky when it comes to transmitting HIV/STI, but several studies nevertheless show the importance of also focusing on oral sex. In other words, oral sex is not without risk and can allow the transmission of HIV and STI more generally [65-68]. Research has shown that when clinics test
only for urogenital STIs they can miss oropharyngeal cases (samples taken from the throat) [69-71]. Further, as HPV infection can be transmitted through oral sex, infections acquired this way are believed to explain recent increases in oropharyngeal cancer [8-10]. Hence, it is imperative not to exclude oral sex from studies of sexual activities among young people. Another reason for researching different types of sexual practices is that individuals may be inclined to different degrees to use a condom depending on the kind of sex involved. For example, few people use a condom during oral sex [72]. If we do not specify, some may report that they use a condom but be referring to vaginal or anal sex, while others indicate not using a condom but mean this only in relation to oral sex.

Finally, in measures it is common to use only two types of sexual partners (main and casual). The problem is that these dichotomous measures of relationship are not likely to capture the overall meanings young people ascribe to their relationship experience [73]. For instance, it is not uncommon for young people in Sweden to have a so-called “fuck buddy”, someone with whom they have sex on a regular basis without the relationship being based on love [74].
BACKGROUND

The sexual behavior of young people

Sexual behavior is the manner in which people express their sexuality. However, there are many different ways to define sex, and different answers will be provided depending on whom is asked [62]. From all these various views, the concept — the definition of sex and of relationships — is socially constructed. Sex can be something you do by yourself (i.e. include only one person, as with masturbation), or it can be something you do with others (i.e. include two or more people, for instance anal sex). For some people sex can involve role-play, while for others it may be associated with pain (SM\(^4\)). Some individuals may want to use sex toys, and others may abstain from sex entirely. Sex may occur within a stable relationship or with strangers. Some define themselves as asexual, bisexual, heterosexual, homosexual, or pansexual, while others do not wish to define themselves at all. Sex may be consensual or non-consensual. Regarding consent there are gray zones, for example when one person badgers another into having sex, wearing them down mentally to a point at which they stop objecting. In this thesis the focus is on consensual sex, as defined by the study participants, leaving to future research more complex issues of what “consent” actually means.

Sexual practice

Among young people in Sweden, experiences\(^5\) of fingering/hand jobs, oral sex and vaginal sex seem to be the most common sexual practices. Anal sex is much less common than other sexual practices [27, 75-77]. However, the reported experience of anal sex differs between the studies from 13% to 47%. The median age at first sexual intercourse is between 16 and 18 years of age, and this has been stable over time\(^6\) [13, 27, 76, 78].

\(^4\) SM stands for sadomasochism, which means giving and receiving pain in the context of sexuality.

\(^5\) There can be a difference between having an experience and performing the practice often. For instance, one might have had experience of anal sex but rarely or never practice it.

\(^6\) The first sexual study in Sweden was conducted in 1967.
Sexual relationships

There are a number of different types of sexual relationships, beginning with the notion of main partners and casual partners. Individuals define their sexual relationships in different ways, and a relationship one person might define as a main partner might well be defined by another as a “fuck buddy”\(^7\). People can also have different views about the same type of relationship. For example, some may think one should be faithful, i.e. not have sex with others, when in a relationship with a “main partner” in a stable relationship. Others, on the other hand, might think it is acceptable to have sex with others even if one is in a stable relationship. For some it can be considered unacceptable to have sex with an unknown partner on a casual basis, while others may be of the opinion that sex and friendship should not be mixed as this could jeopardize the friendship. Still others might believe it is perfectly acceptable to have sex with friends, with the partners of friends, and so on, provided this is agreeable to all and some cases not publicized.

Despite the range of views about sexual relationships and the acceptability of sex with different kinds of partners, human sexuality in Western societies has often been regarded by many to be closely connected to concepts of love\[^7\]. This means that our standards and values relating to sexuality are based on the idea that sexual relations belong within marriage or a solid love relationship. In Sweden, research shows that it has become more accepted to have casual partners\[^26, 27\]. Thus, it is important to remember that although it may be considered more tolerable to have casual partners, sex within a stable relationship may still be evaluated by many as better and desirable.

Sexual risk behavior

Sexual risk behavior (SRB) is usually defined as sexual activity that increases the risk of contracting a STI or becoming pregnant unintentionally\[^80\]. Examples of known risk factors include early age at first intercourse, unprotected sexual activity, high number of partners, sex in exchange for money and use of other methods of birth control than a condom\[^14, 27, 32, 77, 81-88\]. Several studies have also indicated that alcohol increases sexual risk behavior\[^27, 89, 90\]. However, it is important to study several factors together to improve the understanding of young people’s sexual risk-taking\[^88\]. For instance, one study identified that sexual risk-takers were young

\(^7\) Someone you have sex with regularly without being in love.
people with a high number of sexual partners’, had higher frequencies of sex, and had relatively low condom use [88]. Other research has suggested that SRB is influenced by the drive to “go steady”, whereby lust and trust are factors that affect whether or not the individuals will engage in sex [32].

Some Swedish studies have shown that SRBs have increased over time [26, 77]. For example, a repeated cross-sectional study (between 1999 and 2009) in Sweden of female university students’ sexual and contraceptive behavior has indicated that there was a trend towards more risky sexual behavior with more sexual partners (increased from 7.4 to 11.0), more unprotected first-date intercourse (increased from 37% to 65%), and more self-reported STIs (increased from 14% to 29%) [77]. Another study has shown that SRBs increased significantly within the 16-24-year age group between 1989 and 2007 [26]. The odds ratio for more than two sexual partners and casual sexual intercourse without using a condom during the preceding 12 months increased significantly in the younger age group, particularly for young women.

**The spread of sexually transmitted infections**

Many STIs have few visible symptoms, if any, making these infections difficult to detect. They are spread through direct contact, and can be caused by either a virus or a bacterium [91]. Chlamydia, Gonorrhea and Syphilis are caused by bacteria, while Genital warts, Herpes, Hepatitis B and HIV are caused by a virus. The risk for transmission of an STI differs significantly with sexual practice. The risk for transmission of HIV has been estimated to be 18 times higher through anal sex compared with vaginal sex [92, 93]. Although anal sex is more risky for HIV transmission, all three practices (anal, vaginal and oral sex) are important in the spread of STIs [8-10, 65-71].

Also relevant to epidemiological research on STIs are networks of sexual contacts [94-96]. This is because an individual’s risk of infection is not only influenced by a person’s own behavior but also by that of his or her partner, and in turn, that person’s partner’s behavior and so on. People’s sexual contacts are not random, which many other social contacts are. There is variation in people’s number of sexual partners [94], but also in how often they have sex with their partners [97].
**Abortions**

In Swedish law, a woman has the right to an abortion until the 18th week of pregnancy, after which she must seek permission from the National Board of Health and Welfare (NBHW). During the past decade, the number of abortions in Sweden has decreased for adolescents and increased for young adults. However, repeated abortions among adolescents have increased [25].

![Figure 1. Number of induced abortions per 1,000 women by age 1983-2011. Source: National Board of Health and Welfare [25]](image)

**Prevention of STIs and abortions**

**The Swedish model**

In 2003, the Swedish Government formulated 11 public health goals in order to promote public health [98]. Of these, the seventh (“Protection against the spread of infection”) and eighth (“Safe sexuality and good reproductive health”) guide the prevention work in Sweden.

In Sweden the prevention of STIs, including HIV, is coordinated in different arenas and in collaboration with various actors on national, regional and local levels. The PHAS is responsible for the STI/HIV prevention on a national level. This agency is responsible for planning, coordinating, evaluating and monitoring the preventive efforts against STI/HIV. The relevant
Preventive work is based on the national strategy developed by the Government [99]. In 2009 a national action plan for Chlamydia prevention, with a focus on adolescents and young adults for the period 2009-2014, was published [4]. According to the HIV and AIDS report entitled “Society’s efforts against HIV/STI - to meet changes”, the Swedish approach to preventing HIV and STI entails a combination of sex education in schools and disease prevention in health care contexts [100].

Counties and municipalities have the regional and local responsibility for, among other things, health care (for instance, youth health clinics (YHCs)). Prevention work is also carried out by NGOs such as RFSL (the Swedish Federation for Lesbian, Gay, Bisexual and Transgender Rights), RFSL ungdom (the Swedish Youth Federation for Lesbian, Gay, Bisexual, Transgender & Queer (LGBTQ) Rights) and RFSU (the Swedish Association for Sexuality Education).

Prevention efforts can be divided into two categories: primary and secondary. Primary prevention aims to prevent people from becoming infected with an STI, while secondary prevention aspires to prevent people who are infected from infecting others or becoming re-infected. Preventive efforts are conducted primarily in two arenas: schools (through sex education and school health services) and general population health care settings.

Sexual education in schools and school health services

Sexual education in schools started at the beginning of the 20th century, and has been compulsory since 1955. Its focus has changed over time from biological reproduction to a broader view. Today, sex education includes material on sexuality, relationships, gender, norms, identity and other related concepts. It is integrated into all subjects in school which. Earlier research has shown that young people had sexual education in school, but that the quality of this education varied across schools and many young people felt it was not adequate [101, 102]. Gaps in teacher education programs have also been identified [103].

There is also a third category, tertiary prevention, which refers to measures taken to reduce the negative/challenging effects, and slow the progression, of the illness to maximize quality of life.
According to the Swedish school law (1985:1100), all municipalities are responsible for offering school health services (SHS) for pupils from preschool to high school [104]. The main objective of SHS is to follow, maintain and – if necessary – attempt to restore school children’s physical and mental health [105]. An additional aim is to encourage the development of healthy habits among students. According to the regulations, SHS should include a visit to the school nurse in the seventh and eighth years of compulsory school and the first year of upper secondary school, during which issues regarding sexuality, contraceptives and safer sex should be addressed [106].

Health care in Sweden

In Sweden, the counties are responsible for the medical aspects of STIs. There are many different categories of clinics that work with STIs, including care centers, gynecology clinics and prenatal clinics, but YHCs and STI clinics are the ones that regularly deal with STI diagnosis and treatment. The first YHC was started 1970, and today there are over 200 YHCs in Sweden. The overall objective of YHCs is to promote physical and mental health, in order to support young people in the development of their identities so that they can deal with issues of sexuality, risks of STIs as well as unwanted pregnancies [107]. Staff members include midwives and physicians (gynecologists and venereologists), as well as social workers and psychologists. These YHCs cater to young people approximately 12 to 25 years old. STI clinics are open for everyone, and staff members often include the same occupational categories as at the YHCs.

Identifying, diagnosing, and treating STI-positive individuals are important aims of secondary prevention. In carrying out these functions, staff members are able to provide counseling to patients. However, studies indicate that clinics in Sweden do not always take the opportunity to offer counseling [27, 108]. For example, it has been reported that 30% of females and 41% of males were not offered any counselling in connection with their last STI test [27].

The 1919 Swedish statute entitled Lex Veneris required physicians to report cases of infectious venereal diseases and to conduct contact tracing [86]. Today, according to the Swedish Law for Communicable Disease Control,

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9 No specific lower age limit, but an upper age limit of 25 (differs locally between 20 and 25).
10 In 1985 this became obligatory for HIV and AIDS, and in 1988 for Chlamydia.
clinics have to report and carry out contact tracing whenever a patient tests positive for Chlamydia, Gonorrhea, Syphilis, HIV, or Hepatitis. Contact tracing is the process of identifying people who may have been in sexual contact with an infected person [109-111]. Staff members are obligated to ask infected patients about the people with whom they have had sex. Each patient is required to provide all the information he or she may have about relevant previous sexual contacts to facilitate contacting them. The staff then has to contact these people and inform them that they need to be tested. The clinics must also ensure that each traceable contact actually takes the relevant test(s).

As implied, contact tracing is considered an important public health measure in Sweden, an integral part of prevention in the fight against infectious diseases [111]. In terms of actual practice at present, contact tracing focusses on the six months prior to the estimated date of infection. However, one Swedish study [112] suggested that it might be worthwhile, in terms of additional potential sources of infection identified, to focus on the whole year prior to putative infection date. This study found that at least 30% of the contacts Chlamydia-positive individuals had had seven to 12 months prior to diagnosis were also Chlamydia-positive. The obvious implication here is that infected individuals may have been infected outside the six-month window currently used in contact tracing.

In 2007, the NBHW published a handbook on contact tracing, addressed to staff members in the health care system involved in STI contact tracing [111]. This handbook covers the relevant existing legislation and regulations, interviewing technique, tracing methodologies more generally, and known facts about different STIs. In addition to the manual, information on contact tracing can also be found in the Swedish law for communicable disease control [110].

**Contraceptives**

It is well known that there are a number of different approaches to contraception. These include oral contraceptives (OCs), emergency contraceptive pills (ECPs), intrauterine devices (IUDs), birth control implants, vaginal birth control rings, and condoms. The survey Sex in Sweden (1996) showed that, at last intercourse, 20% of the women had used an OC, 15% had used a condom and 24% had used other methods, while 21% had used no protection
at all [13]. However, UngKAB (the largest Swedish survey of sexual behavior among young people) showed that the most common contraceptive used during last intercourse was a condom, followed by OCs [27].

No contraceptive method is entirely safe, but according to the Pearl index\(^\text{11}\) OCs are among the safest. Nevertheless, there are a number of factors that affect the risk of becoming pregnant while using OCs, such as age (younger women are often more fertile than older women) and awareness that the instructions for use must be followed (e.g., taking the pill every day and at the same time each day), that affect the risk of becoming pregnant during OC use [21-24, 110]. Importantly, these contraceptive methods are intended to protect against unwanted pregnancies; none of them protects against STIs.

**Condom use**

The condom is the oldest form of barrier contraception used by males [113], and has been used to both prevent unwanted pregnancies and protect against STIs. It is the most effective method for reducing the risk of becoming infected with STIs, including HIV [38, 114, 115]. There are both female and male condoms, but in Sweden – as well as many other Western countries – the female condom is highly uncommon\(^\text{12}\).

In view of the role the condom can play in preventing the spread of STIs, it is important to study its use or non-use. A problem here is that sex is usually, for most people, considered private and is accordingly not a behavior we observe directly. Hence, the best way to obtain the most information about condom use (and non-use) is to ask people – to study self-reported use.

**Behavioral expectation to use a condom**

The intention/behavioral expectation to use a condom has been shown to be one of the most important factors predicting condom-use behavior [47, 116, 117]. The difference between an intention and a behavioral expectation is that an intention is what one says one plans to do (e.g., “I plan to use a condom the next time I have sexual intercourse.”), while behavioral expectation is a self-prediction about what one is likely to do (e.g., “How likely is it that I will use a condom the next time I have sexual intercourse?”) [118].

\(^{11}\) The Pearl Index, also called the Pearl rate, is the most common technique used in clinical trials for reporting the effectiveness of a birth control method.

\(^{12}\) Because of this, the focus in this thesis will be on male condoms.
portantly, people who have behaved in a certain way at one point are likely to behave this way again [119].

Earlier research has demonstrated that people tend to make decisions about protection, about reducing risk in sexual encounters, partly based on partner type. For example, the intention to use a condom tends to be higher with a casual sexual partner than with a main partner [31, 34, 46, 48, 51, 53]. Another relevant factor is gender. However, here there is little consistency in results. One study has shown that although intention was significantly associated with condom use among men, it was not significantly associated with use among women [120]. Another study found no difference between men and women when it came to the intention to use a condom [118]. Age is another relevant factor. Younger people appear to be less able to follow through on their intentions than older people [118, 121].

**Actual condom use**

Several studies have revealed that condom use is quite low. In one study, only 30% of boys and 21% of girls reported having used a condom to protect against STIs during previous intercourse [28]. In another, half the women and 40% of the men, aged 18-30 years, reported seldom or never using a condom with temporary partners [29]. In the Swedish national study UngKAB, 50% reported condom use with a casual partner [27].

Previous research has also shown that there are several factors that affect condom use. Factors connected to reasons for not using a condom can be divided into two categories: those related to an individual, for example alcohol use or attitudes about condoms; and those pertaining to a relationship or partner, such as relationship type or imbalances in relationship power.

**Individual factors**

There are several factors at the individual level that affect condom use. Number of partners has in some studies shown to have a negative effect on condom use [29, 56]. Yet, another study found that condom use was not connected to number of sexual partners [28]. Research has shown that the use of OCs can be associated with decreased condom use, and thus also with an increased risk of the spread of Chlamydia and other STIs [14, 16-18, 20, 27, 28, 122]. Alcohol use can affect condom use negatively: the greater the amount of alcohol consumed, the less likely it is that a condom will be used
According to one study, alcohol affects sexual behavior on different levels and can function either positively or negatively [130]. The results of this study show that the impact of alcohol on risky sexual behavior operated along a continuum of influence illustrating the different effects of alcohol in a sexual behavior context. The different levels were: (1) alcohol affecting young people’s assessment of a person’s sexual attractiveness; (2) alcohol used as an “excuse” for socially unacceptable behavior; (3) increased confidence and reduced inhibitions; (4) impaired judgment in accurately recognizing and controlling a potentially risky situation; and (5) complete loss of control, memory loss, and “blackout”. Impaired judgment (Level 4) and complete loss of control (Level 5) arguably represented the most significant adverse effects of drinking alcohol on risky sexual behavior.

Whether individuals want to protect themselves against STIs or unwanted pregnancies or both differs between individuals, and may also affect their condom use. Sexually active young people—regardless of race, age, gender, or relationship status—are more likely to use a condom to prevent pregnancy than to protect against disease [33]. Although pregnancy/STI prevention was the most frequently cited reason for condom use at the last sexual encounter with a casual partner, pregnancy prevention was the most frequently cited reason for condom use with serious partners [44].

Motivations for engaging in sexual activities can also affect condom use. Those who are more motivated to have sex or who have high “sexual lust” have been found less likely to use a condom, or used a condom inconsistently [28, 41, 131]. Other issues are connected to problems with the use of the condom. Sometimes its application is seen as a “moment killer” and perceived to interrupt the flow of sexual activities [132]. For men, perceptions of problems with a condom are often associated with fit and feel, for instance that there is less sensitivity while wearing a condom or that it may cause problems with one’s erection [37, 43, 54, 58, 133-135].

Relational factors

Studies have shown that many people believe they can evaluate a prospective (or stable) partner’s level of STI risk based on personal characteristics (such as physical appearance, dress and education), how socially and psychologically similar they believe they are to someone, and the type of relationship they have with the partner (e.g., whether they trust the partner or

\[^{13}\text{Putting a condom on after sex has begun, or removing it before sex is over.}\]
whether they or their friends know the partner) [39, 50, 132, 134, 136, 137]. A systematic review of 268 qualitative studies of young people and sexuality found that young people tend to assess potential sexual partners as “clean” or “unclean” [138]. Knowledge of a prospective partner’s sexual history, e.g., number of sexual partners and STI history, can motivate people to protect themselves to a higher degree [117, 139]. Unexpectedly, among adolescents whose partners had increased “context risk” (i.e., age discordance, alcohol use, and having met in public), condom use was less likely [127]. This was more pronounced among adolescent girls than adolescent boys. However, individuals may not use a condom if they perceive their casual partner to be safe [140]. Several studies have suggested a common perception among young people that there is low risk or – indeed – no risk in having unprotected sex with someone they know [141-144]. By the same token, research has indicated that communication between partners about condoms or contraception increases condom and contraceptive use [145-147]. Earlier research has also shown that individuals are more likely to use a condom with a casual partner than with a main partner [34, 35, 39, 40, 44, 46, 48, 49, 52, 127, 132, 148]. For instance, adolescents were twice as likely to use a condom with partners they considered casual or unexpected [127].

Although Sweden is often regarded as one of the world’s most gender-equal countries [2], studies have demonstrated that in practice the responsibility for prevention often falls on the woman [32, 129]. Power imbalances in heterosexual sexual relationships can decrease women’s ability to suggest condom use. As women need to negotiate the condom use with a male partner, (male) partner resistance is a major barrier to condom use among women [128, 149-152]. Studies have shown that increased conflict scores are associated with lower odds of consistent condom use among females but not among males [49], and that women feeling forced into sex was associated with condom non-use [28]. Ironically, in a Swedish study, more men than women stated that the reason why they did not use a condom was that their partner did not want to [27]. This finding illustrates the challenges faced by studies of sexual behavior in general and of condom use in particular: partners, depending on gender, may perceive an encounter, a discussion, or a “decision” (to use or not use a condom) quite differently.

14 Women need to negotiate because the condom is placed on the man’s genitals. If the man wants to use a condom, he can put it on himself.
Sexuality – a research topic late to arrive on the sociological agenda

Sociology has traditionally left questions about sexuality to other disciplines. Before the 1960s only a few sociologists, for example Kingsley Davis (1937) [153], W.I. Thomas (1907 and 1923) [154, 155] and William Foote Whyte (1943) [156], had examined aspects of human sexuality. During the earlier period, Sociology was focused on macro-sociological questions relating to social structures, class, institutions and power [157]. It was not until the late 1960s that sociological theorizing about sexuality commenced in earnest [158]. One reason for this is probably that the study of sexuality had its roots in biology and medicine\(^\text{15}\). That is, from the late 19\(^{th}\) century onward, views of sexuality started to shift from a theological (e.g., sin) focus to a medical one [159, 160]. Among the most important actors in this development was Alfred Kinsey [161, 162]; although he was a biologist, his work was sociological.

Yet, sexuality is clearly a proper subject for sociological theory and research for a number of reasons. First, sexual activities are socially meaningful (meanings created by interacting individuals). Second, sex is socially organized. Third, because sexuality is socially meaningful and socially structured, it connects with many other aspects of modern life. Indeed, if it did not connect with other aspects of society from the early days of human societies, it is unlikely that most religions would have attempted to regulate sexual behavior, e.g., early proscriptions against onanism (masturbation) and adultery (“Thou shalt not commit adultery”). Hence, an overwhelming challenge for sociological work – theoretical and empirical – on human sexuality has been to dispel the naïve and/or entrenched beliefs that human sexuality is simply a biological and or psychological activity that have dominated commonsense and scientific thinking on gender and sexuality [163].

\(^{15}\) For instance, Carl von Linné (1707-1778) created Systema Sexualis, a sexual system. He was the first professor in Sweden to hold lectures on sexuality.
To be sure, the individualistic approaches of biological and psychological work can explain some aspects of sexuality, but unlike the sexual behavior of some animal species, human sexuality is influenced by non-individual social factors [164]. Hence, importantly, sexual behavior needs to be explained at multiple levels: a micro level (e.g., individual characteristics), a meso level (e.g., relationships between or among individuals), and a macro level (social structures in which individuals are embedded, and the norms that influence their activities).

Doing sex

Sociological theories of sexuality are often based on the assumption that sexual behavior is socially learned (social constructivism) rather than based on biological forces (essentialism). Social constructionism derives from two distinct theoretical sources: the North American tradition of pragmatist philosophy and its sociological elaboration as symbolic interactionism; and the European tradition of social phenomenology associated with the work of Alfred Schutz [158]. During the 1970s, sociologists Simon and Gagnon developed a “scripting theory” which provided the first coherent challenge to biological and essentialist accounts of sexuality [163]. They argued that there are socially learned sexual scripts which guide people in terms of whom to have sex with, when and where it is appropriate to have sex, and what acts are appropriate once sexual activities are initiated [164]. These scripts, the parameters of acceptable and non-acceptable sexual activities, change over time and vary by society. Sexual scripts are considered to exist at three analytically distinct levels: cultural scenarios (social norms), interpersonal scripts (where social norms and individual desire meet), and intrapsychic scripts (individual desire) [165]. Cultural scenarios are the instructional guides that exist at the level of collective lives, and provide an understanding of role entry, performance and/or exit plausible for both oneself and others. Cultural scenarios are derived from diverse social and institutional sources (media, peers, family, schools, religion), and are the norms that guide sexual behavior at the societal level, helping to determine the who, what, where, when, why, and how of sexual interactions [152]. Interpersonal scripts transform a social actor from being exclusively an actor trained in his or her role(s). These accomplish the tasks of being partial scriptwriters or adaptors as actors become involved in shaping the materials of relevant cultural scenarios into scripts for context-specific behavior. Individual sexual behaviors are shaped through the individual interpretation of the cultural scenarios. In brief, an intrapsychic script is part of the self process. It is de-
fined as the individual motivational drivers that produce commitment to a particular sequence of events. These also include personal desires and fantasies [152].

The respective pertinence of the three levels is not identical in all social settings, or for all individuals in any given setting [165]. Social actors can have different scripts to use for interaction with different partners (e.g., new, casual and main) as well as in different situations [164]. If actors in a sexual encounter are following complementary scripts, each will know more or less what to expect of the other and only a minimal amount of explicit communication or negotiation will be required. If the relevant scripts are not complementary, there is likely to be spoken or unspoken conflict. Sexual scripts must solve two problems: 1) gaining permission from the self to engage in desired forms of sexual activity; and 2) acquiring access to the experiences the desired behavior is expected to generate [165].

The norm system (cultural scenarios) shapes and organizes human sexual relations. According to Gayle Rubin [166], there is a hierarchical system, according to which sexual acts are estimated to varying degrees depending on where on the scale they are located. The model’s inner circle shows forms of sexuality that are considered good, natural and normal, while the outer circle shows bad, unnatural and abnormal sexuality. For instance, for many people in modern societies, living a heterosexual life (even without any sexual activities) is perceived as finer, better and more natural. However, all heterosexuality is not necessarily perceived as “good” and can vary to different degrees. Thus, even heterosexuals can fall outside the normative framework [167]. Locations in this hierarchy can be important for the social life of actors. Anyone who is high up in the hierarchy is rewarded by society, with certified mental health, respectability, social and physical mobility, and support from social institutions. But the further down the scale the individual is, the more the risk that he or she will be exposed to being considered both mentally ill and a criminal, and the more the risk he or she will have restricted social and physical mobility, and a loss of institutional support and economic sanctions. For example, research has shown that LGBT (Lesbian, gay, bisexual, and transgender) individuals are increasingly exposed to insults, threats, violence and harassment, but also that they have poorer physical and...
mental health [168-170]. Another example is that, according to Swedish law, people who are polygamous\textsuperscript{16} cannot get married [171].

The condom game

Scripting theory can give us a better understanding of what type of social behavior is considered “proper” for different individuals. However, this theory does not explain why social actors choose to behave in one way with a particular partner and another way with a different partner. That is, condom use is a joint social behavior rather than an individual behavior, which means that the agreement and cooperation of both individuals are necessary for a condom to be used in a particular social/sexual setting. To understand these joint social decisions better, we can use game theory.

Game theory is based on the assumption that an individual’s decision is based on that individual’s knowledge that an outcome is dependent not only on his or her own decision but also on that of the other party involved (here, the prospective or actual sex partner) [172, 173]. The assumption is that individuals strive to maximize their own “payoffs”. Hence, each individual can make an “offer” and then – if it is not accepted – accept or reject the other person’s counter-offer. This process may go through a number of (back-and-forth) interactions. For example, if a person prefers to have unprotected sex, he or she will try to convince the prospective partner in this encounter to have unprotected sex. If the prospective sexual partner rejects this, the person will have to decide whether he or she wants to try to convince the prospective partner, or accept their decision and decide to either have sex with a condom or not have sex (at least not penetrative sex, or sex with any likely risk). If both individuals want condom use they will probably use a condom, and if both individuals object to condom use, they will probably have sex without it. The conflict arises when one individual wants to use a condom and the other does not (see Figure 2, wherein the squares with question marks indicate where conflict/negotiation is most likely).

\textsuperscript{16} A relationship that includes more than two partners.
Figure 2. What the condom game would look like according to game theory

Considered from a feminist perspective, however, the decision about condom use is not a simple, practical matter of dealing rationally with risk. Instead, it is rather the outcome of negotiation between potentially unequal partners [45]. Hence, the issue of differential gender power needs to be examined.

Sexuality and power structures

To understand condom use we need to look at power, at both the individual and the societal level. Sexuality is not disconnected from the society we live in, and — as implied earlier — likely all cultures, no matter where in the world and at what point in history, have established rules about sexuality as they tried to control it in different ways. The rulers of societies have seen sexuality as something that must be defined and delimited. Despite the fact that Swedish society has become increasingly secularized, religion still has an impact on norms concerning gender and sexuality. The reason for this is that religion has formed the base for these types of norms for centuries [163].

There are many structures that affect sexuality, and intersectionality means that it is necessary to be aware that different social divisions (for example, gender, social class, disability status, sexuality, age, nationality, immigration status, geography, etc.) are constructed and intermeshed with each other [174]:

...gender should be understood not as a “real” social difference between men and women, but as a mode of discourse that relates to groups of subjects whose social roles are defined by their sexual/biological difference while sexuality is yet another related discourse, relating to constructions of the body, sexual pleasure and sexual intercourse. [174]
Heteronormativity – the intimate relationship between gender and sexuality

Sexual behavior is strongly shaped by social forces, and these forces are similar in different settings. For example, women’s sexual freedom is much more restricted in almost all societies compared with the freedom generally afforded men [138]. Gender and sexuality are intimately intertwined, and one cannot be understood without considering the other [163]. Gender norms affect how we see ourselves, how we behave, how we see others and how we interact with them [175]. According to Butler, we cannot decouple sex from sexuality, as the cultural production of femininity and masculinity is linked to what she describes as “the heterosexual matrix” [176]. A synonym for this concept is “heteronormativity”. Heteronormativity refers to the social institutions, laws, structures, relationships and actions that maintain heterosexuality as something uniform, natural and inclusive [177]. Hence, involved in the notion of heteronormativity is a generalized assumption that everyone is heterosexual and the natural way to live is heterosexually. Thus, a person who is biologically categorized as a woman is expected to fall in love with a person who is biologically categorized as a man:

At the level of meaning we can see how gender and sexuality constantly intersect, where the construction of gender difference is bound up with the assumption of gender complementarity, the idea that woman and man are “made for each other”. [178]

Gender is therefore at least an important constituent of heteronormativity as sexuality [167]. Heteronormativity operates by maintaining boundaries, but also by creating an implicit hierarchy. That is, people who are heterosexual are at the top of this hierarchy and any “deviants” are below them. Heteronormativity is maintained through strategies such as division, hierarchy, pathologization, demonization and stereotyping [167]. The order of a heteronormative society requires a distinction between man and woman for it to be maintained and justified. It is also based on the notion that an individual with biologically male sex should have a masculine gender, and that an individual with biologically female sex should have a feminine gender. In a heteronormative society, the heterosexual life of togetherness is seen as the most desirable and proper way to live.

In Sweden, like in many other societies, there is a “heterosexual penetration norm” (a sexual script) that can be linked to heteronormativity. This norm means that it is considered natural to have intercourse with the man on top of the woman and the penis penetrating the vagina [179]. Sexology and medical
science, inspired by Freud, have promoted a version of sex focused exclusively on the penetration of the vagina, with the inability to reach vaginal orgasm seen as a psychologically disturbed frigidity [180], despite the actual knowledge that clitoral stimulation is important for women in order to achieve orgasm [181, 182]. The penetration norm is also reflected in beliefs about who is considered the active partner and who the passive one: men penetrate (active); women are penetrated (passive). Technically it would be just as accurate to say that the woman (actively) encloses the man, but this would challenge common beliefs about the active man and the passive woman. Men are also considered to be more sexual than women, and men have been perceived as needing a diverse sex life to enhance or maintain their physical health [160]. In this scenario, men are expected to initiate sexual contact and women to restrict their sexuality (so as not get a bad reputation) [42]. For instance, when one-night stands are a possibility, women are expected to be less “forward” than men [32]. Additionally, in society there remains a dichotomy between “good girls” and “bad girls”; between “whores” and “Madonnas”. These views carry forward to beliefs about how a woman should behave with respect to alcohol use. Women who drink are considered bad, both because they violate the norms of feminine appearance and because they either want sex too much or have, through intoxication, incapacitated themselves [183]. Femininity is constructed in terms of control, responsibility and caring, while masculinity is constructed in terms of fearlessness, the breaking of boundaries, and loss of control [184].

A woman known to be sexually active risks being labeled a whore, a slut, unrestrained, or the like, while a man who is sexually active is considered virile, a player, often with positive connotations and often cheered on by his friends. If a woman contracts a sexually transmitted infection, she is to feel ashamed and guilty [32, 42]. Men, however, focus on “the source” of contamination, i.e. a woman [32]. Following on, in Sweden there is a lower testing rate for Chlamydia among men as compared to women [11], and women visit youth clinics more often than men do [107].
METHODOLOGY

Methodological approach

As a scientist one is often in a situation in which there is not enough data and one has insufficient resources to collect the data needed. Especially when the research focus is on sexual activities, data can be hard – sometimes even impossible – to collect. Sexual behavior and condom use are complex topics. They concern not only individual behavior but also interaction between individuals. Sexual activities are also affected by the norms in society, and in some cases the social actors involved in the sexual encounters may be influenced by different norms. To obtain a more comprehensive picture of condom use, this thesis project has employed a mixed methods approach.

The aim of mixed methods research is not to replace either qualitative or quantitative approaches, but rather to draw on the strengths and minimize the weaknesses of each in research demanding the use of one approach only [185]. By combining quantitative data (register and survey data) and qualitative data (in-depth interviews), one obtains different insights and information. Data collection can be carried out using each method concurrently (at the same time) or sequentially (first using one method and then another). In this thesis, the data were collected sequentially. The first study was quantitative, and used register data on numbers of abortions, reported Chlamydia cases and prescription of yearly doses of OCs. However, data at the individual level can be essential for studying condom use among individuals, and necessary for trying to understand attitudes about condom use. One common way to study condom use is to focus on a participant’s most recent sexual partner. But with this approach, it is not possible to guarantee that the research captures the breadth of actual behavior, as social actors may practice one form of sexual behavior with one partner (e.g., a main partner) and a different form with another (e.g., a casual partner). To obtain a more accurate picture it is essential to ask questions that allow participants to answer about more than one sexual partner, for instance, all sexual partners within the past 12 months. One strength of this approach is that it covers potential seasonality in sexual activities and behavior. That is, it has been suggested
that there is seasonality in social behavior [186], including the assertion that people tend to have more sexual partners during the summer months\(^\text{17}\).

In 1988 Swedish researchers collected data on 768 individuals aged 16 to 31 years on Gotland, a Swedish island in the Baltic Sea [187]. Participants were invited to different schools or similar institutions to complete an anonymous self-administered questionnaire. Included were questions on their age at first intercourse, age at intercourse with second partner, number of lifetime partners, and sexual behavior in the past 12 months. A unique aspect of this study was that the participants were asked to indicate not only the number of partners they had had during the previous year but also the time of the year when each relationship had taken place, the duration of each relationship, and the approximate number of sexual encounters involving intercourse with each partner.

Following on, then, attempting to collect more detailed information about the sexual behavior of social actors, including number of partners over a longer time period, can help us better understand sexual behavior and condom use. However, the questionnaire (from the Gotland study) needed further development to function in today’s context, and more questions about each partner were needed to get a more complete picture. In the Gotland study the participants were asked only four questions about each partner, i.e. age of partner, the approximate number of sexual encounters involving intercourse, whether the partner lived on Gotland, and whether a condom was used for intercourse. In this thesis, the participants were asked about condom use for anal, oral and vaginal sex, type of relationship and how they had met their partner, to mention a few of the enhancements that were made.

In Study II an improved timeline was used to answer the questions about when people used a condom and when they did not. The focus was on type of sexual practice and type of partner, and condom use was surprisingly low independent of these factors. Study III was then added to answer the questions raised in Study II. Would one not expect young people to be more likely to use a condom with casual partners compared with main partners? This study examined people’s behavioral expectations regarding condom use in relation to actual reported condom use. As anticipated there was a discrepancy between behavioral expectations regarding condom use and reported con-

\(^{17}\) More chlamydia cases are diagnosed after the summer.
dom use. The final study (IV) focused on reasons for both condom use and non-use with a focus on casual partners. This was a qualitative study with thematic in-depth interviews. Interviews were used, as they are useful when a researcher wishes to gain insight into the opinions, perceptions, feelings and experiences of study participants [188]. Moreover, it is a valuable method for dealing with sensitive issues that require the development of a level of trust and confidence in order to obtain the most valid and reliable responses from participants [189]. Different types of interviews are possible. These can vary in degree of structure (structured, semi-structured, thematic or open interviews), duration, and situation [190, 191]. The choice of interview method depends on various factors, for example the purpose. Thematic interviews assume that a researcher has in mind a number of themes of particular interest, based on theory. To avoid many potential problems in an interview situation, “open” thematic interviews can be more suitable as these are based on conversational logic rather than established theory [190]. They also provide more freedom to follow up on unanticipated responses, and at the same time allow control [192]. In short, open thematic interviews can increase the chances of obtaining pertinent and unexpected responses from participants [193].

Materials, participants and procedure

Register data
For Study I, register data were used. The most detailed available data level was information about each age group (15-29 years [Chlamydia and OC], 16-29 years [abortions]) for each calendar year (1997-2005) in each of the 21 counties. The data came from four different sources: the Swedish Institute for Infectious Disease Control (information about number of positive Chlamydia tests), the Swedish National Board of Health and Welfare (number of abortions), Statistics Sweden (number of individuals), and the Swedish state pharmacy (prescription of yearly doses of oral contraceptives).

Survey data
The data for Studies II and III were collected in Sweden from nine youth clinics between February 2010 and March 2011 in the Västra Götaland county and from one STI Clinic in Stockholm between June 2012 and February 2013.

Youth clinics
Nine of a total of 54 youth clinics in the region participated, representing rural areas as well as the City of Gothenburg. The sample consisted of 673 participants aged 15-26 years. Of these, 428 (63.4%) were women, 243 (36.1%) were men and two (0.3%) were transgender. All individuals older than 15 years who visited one of the nine youth clinics for STI testing in Västra Götaland County between February 2010 and March 2011 were eligible for the study. Participants were recruited either through staff at the youth clinics asking individuals requesting an STI test if they wished to participate, or through individuals who had read the information about the study in the waiting room indicating to a staff member that they wanted to participate. After participants had read and signed an informed consent form, they completed a self-administrated questionnaire. They also received an envelope to put the questionnaire in, which they then gave to a staff member. The participants received two movie tickets (valued at approximately 180 SEK) as compensation if they participated in the whole study. The study consisted of two visits to the youth clinic and the completion of two follow-up questionnaires.

**STI clinic**
A total of 437 individuals, aged 19-31 years, participated in the study. Overall, 33% (143) were male and 67% (294) were female. No one reported being transgendered. The recruiting took place at an STI clinic in Stockholm between June 2012 and February 2013. Patients who were at the clinic to take an STI test were asked by either a receptionist or a midwife if they wished to participate in the study. If they did, they filled in a self-administered questionnaire. The questionnaire was then put in a secure box at the reception counter. The participants received a lottery scratch card (valued at 25 SEK) as compensation.

**Questionnaires**
The questionnaires used at the youth clinics and the STI clinic consisted mostly of the same questions. Both contained questions about sociodemographic characteristics (age, gender, education and employment), Chlamydia history (both lifetime and the previous 12 months) and behavioral expectations regarding condom use (for anal, oral and vaginal sex). In the last section of the questionnaires, participants were asked to list on a timeline their sexual partners during the previous 12 months (see Figure 3) and then to answer detailed questions about each partner.
Mark the sexual partners in the following way:

- = Main partner (girlfriend, boyfriend, wife, husband) or Regular sexual partner (someone you regularly have sex with but who is not your main partner)
- = Casual known or unknown partner (someone who you do not regularly have sex with)

In the example the participant has had four sexual partners during the previous 12 months. The participant has marked each sexual partner with a number.

Person 1

- X

Person 2

X

X

Person 3

X

X

Person 4

X

Figure 3. Picture of the timeline (translated into English by the author)
There were also some differences between the questionnaires at the youth clinics and the STI clinic. In those used at the youth clinics sex was defined as anal, oral or vaginal sex, while the definition employed at the STI clinic was enhanced to also include “rubbing” (rubbing genitals against genitals) and “hand job”/“fingering” (using the fingers around and in the genitals/anus). At the youth clinics the participants were asked what they had chosen to do if they, at any instance during the past 12 months, had wanted to have sex but no condom was available. The participants at the STI clinics were asked questions about their attitudes about condoms and reasons why they do and do not use them, and were also asked to provide information about their most recent sexual partner (if they had had one in the previous month, this partner’s information would not have been included on the timeline).

Both questionnaires were reviewed by different types of experts in the area (RFSL, RFSL ungdom, RFSU and the Swedish Institute for Communicable Disease Control) and were also pre-tested (Youth clinics: 25 young people in Stockholm and Gothenburg; STI clinic: 10 young people in Stockholm). Some small changes were made to make the questions more clear.

**In-depth Interviews**

For Study IV, participants were recruited at an STI clinic in Stockholm (the same one as in Study III) between November 2012 and November 2013. Twenty-nine people (14 women, 14 men and one transgendered person) aged 21-32 years participated in this study. All participants lived in Stockholm during the time of the interview. Twelve worked, 14 were studying and three were unemployed. Of these participants, 25 were born in Sweden (three of whom had parents born outside Sweden), while four were born abroad four were born abroad. Seven of the participants had previously had Chlamydia, four of whom had had it during the past 12 months. Three of the participants, all men, did not know whether they had had Chlamydia. Nine participants had been in a contact tracing, and of these, six had experienced this in the past 12 months. Number of sexual partners during the past 12 months varied between one and 70, the overall median being four.

Those who agreed to participate after reading the information about the study in the waiting room were asked to provide contact information (name and phone number or email) on a piece of paper and put this in a secure box. Thereafter, we contacted them to make appointments.
Before an interview each participant filled in a questionnaire, the same one as for the participants in Study III (STI clinic). All interviews took place at the RFSU head office, which is in the same building as the clinic. Additionally, the participants were given the opportunity to choose a different location for their interviews if they wished. Before the interview the participants were briefed about the purpose of the study and told they could stop the interview whenever they wanted, and were asked permission to record the interview. We chose to focus on only a few themes in order to limit the length of the interviews. The following themes were used:

- Background of the informant
- Reason for STI test
- Reasons for condom use
- Reasons for condom non-use
- Their definition of sex

In thematic interviews, the questions are often not asked in the same order or receive the same proportion of attention in each interview [194]. Hence, the follow-up questions in the interviews differed from interview to interview depending on what the participant told the interviewer. The themes were used as a supporting guide in the interview. In some interviews the focus was on reasons for condom non-use while in others it was on reasons for condom use, with the amount of time spent varying according to the level of elaboration a participant appeared able to provide for their reasons (for use or non-use). However, all themes were canvassed in all interviews.

Each interview lasted about 40-50 minutes. We asked the participants if we could contact them again and if they wanted to read their interview. No participant declined the recording of the interview, so all interviews were recorded and thereafter transcribed. To save time, the transcription was performed by two research assistants. However, the interviewers read the transcripts, and had both research assistants transcribe one of the interviews to provide quality control.

Analyses
The statistical analyses were performed using the statistical packages SPSS (versions 16 and 21) and R.
Ordinary least squares (Paper I)

In Paper I we aimed to analyze the linear association between continuous dependent variables and several independent variables. An ordinary least squares (OLS) fit of a linear model is known to be one of the most robust models for analyzing a linear relationship between a continuous dependent variable and several independent variables. Moreover, OLS allows us to interpret the estimates as expected increases in Chlamydia and abortion cases per increase in the prescription of doses of OC per year. In addition, the use of population (rather than sample) data means that interpretations of standard errors of the estimates are sometimes viewed as bounds around which an estimate might vary if the population in question was in fact a “sample” of some “super population”.

Multinomial logistic regression (Papers II and III)

In Papers II and III we wanted to compare three different groups (Paper II: used a condom always, sometimes, and never; Paper III: used a condom more frequently than expected, used a condom as frequently as expected, and used a condom less often than expected). Multinomial logistic regression (MLR) allows for logistic regression tools when an outcome variable has more than two categories [195]. The results were presented as odds ratio (OR) with 95% confidence interval (CI).

Applied thematic analysis (Paper IV)

Thematic analysis moves beyond counting explicit words or phrases and focuses on identifying and describing both implicit and explicit ideas within the data; that is, themes [196]. This method identifies key themes in text, which are then transformed into codes. Thematic analysis began with the first interviews. The interviewers had several meetings during the interview period to discuss the interviews they had completed. These discussions contributed to identifying new, relevant issues on which to focus, and when all interviews were completed we read each one to identify additional themes and issues of relevance. The two interviewers coded each interview independently to increase inter-coder reliability. We highlighted three categories of interest: condom use, condom non-use, and responses not related to condoms but relevant in understanding sexual activities among young people. Then, we discussed the main themes that had emerged and were able to list 13 common reasons for using a condom or not: Feeling, Degree of similarity between partners, Partner evaluation, Location, Type of partner, Powerless-
ness, Alcohol use, Fit and feel (of the condom), Partner’s willingness, Level of arousal, Level of care for partner, Accessibility, and Level of care for yourself (if a person feels it is important to use a condom for his or her own sake). The analytic purpose was to identify reasons for both condom use and non-use. We also categorized the participants based on their condom attitudes, views of sex, main reason(s) for protection (pregnancy/STI) and why they wanted to take an STI test at the clinic. We read the interviews again and marked the text with the reasons above. This was done independently, and we then reconvened for discussion. We compared notes to determine whether we had understood the material in the same way. We also discussed whether the participants had internal contradictions; for example, if a participant indicated in one part of the interview that alcohol had no effect at all or was of little importance, but in another part stated that alcohol was of great importance. In cases in which our agreement was low or discrepancies were found, we obtained consensus through deliberation and re-evaluation of our coding and themes.

We created a picture of each participant with special focus on personality and attitudes about sex and condoms. We searched for themes in the stories and examined how these themes were related to what the individual expressed otherwise. We did not separate the men’s and women’s interviews; instead, we analyzed all interviews together. The reason for this was to avoid creating differences between the groups that did not exist. However, we bore in mind that there appeared to be different sexual norms for men and for women, and that in a heterosexual context there is a potential inequality in power between men and women. During the process we could see similarities, differences and contradictions both between and within the male and female groups.

**Methodological considerations**

*My role as a scientist*

Reflexivity involves reflecting on the understanding of one’s role as a scientist, how this role affects the participants, and the consequences this can have on the research being carried out [190, 192]. I believe that a scientist’s prior understanding and attitudes regarding his or her research topic affect social research. I therefore hold it important to reflect on this, not only myself but also in discussions with others, to expand my views of the subject matter here. I developed my scientific interest in issues surrounding sexuality when
I became a feminist and realized that there are social structures that affect people’s sexual behavior. I have been a member of RFSU since 2004, and this experience has given me a broader view of sexuality and an understanding of how power structures impact sexuality. This has not only affected my research but has also given me the opportunity to talk with people who have a great deal of knowledge about sexual behavior. In all my studies I have included reference groups consisting of people with different backgrounds and knowledge. I have also talked to a number of scientists in the field to get their opinions on the subject.

In the interview study it felt extra necessary to ventilate problems and musings during the process. My research assistant (who is normally employed by RFSU, but during periods of the study was also employed by Stockholm University) and I talked a great deal about our interpretation of the results based on our different gender positions, and also discussed how these results may have been affected by our own views about sex, as well as our understandings of how power structures affected people’s sexuality. We also discussed dilemmas that arose during the interviews. How should you act when someone tells you she has been raped, or when you realize that a participant has erroneous knowledge about something and that this could lead to this person becoming ill or infected? In most cases I talked to such participants after the interview and gave them information about who to turn to with any questions. I also told them they could contact me if they needed to talk and that I could help them get into contact with a relevant person in health care.

For me it was important to ask questions in a way that encouraged participants to feel included. I believe it is important not to assume beforehand that people are, for instance, heterosexual or monogamous. However, it was not always an easy task to encourage participants to feel included. One example of this involves gender. How should we ask questions about people’s gender? What is important? The genitals? The gender identity? The gender expression? Another example is sexual orientation. If a man has had sex with other men, is he homosexual? Not necessarily. Some people want to define their sexual orientation while others do not. I chose not to ask about the participants’ sexual orientation, and instead asked what type of sex they had had and the gender of their partner(s). In my studies it has not been important whether a person defines him- or herself as a bisexual, pansexual, heterosexual, etc. I am aware that there are likely problems with the formulation of
some of the questions. But for every study I conduct, I learn from my mistakes and then try to formulate my questions better in future studies.

Many questions can seem simple at first sight, but turn out to be complicated if you start to analyze them. As a scientist you also have to adapt to the academic norms, which are often unspoken. For example, in most papers the results are divided by gender. Not to say that this is wrong, but sometimes we need to be critical and discuss why we do the things we do.

**Mixed methods**

The use of mixed methods is extra challenging, because quantitative and qualitative methods demand different sets of skills. You need to master not one but two method approaches, as well as different methods within each approach. To minimize limitations I have consulted experts in each field; but I have also realized that there are always going to be limitations in research, because you cannot control everything. Hence, below I present some of the limitations in this thesis.

**Register data**

Register data have the limitation that any assumptions made about individuals must be based on aggregate data. An observation at the aggregate level is not obviously translatable to the individual level. This is usually referred to as the ecological fallacy, and thus implies that the observed relationship may be spurious [197]. For example, if the prescription of an OC is combined with Chlamydia testing (for example, if a woman is offered to be tested for Chlamydia when renewing an OC prescription), a high prescription rate might seemingly increase the number of Chlamydia cases simply because more cases are detected. In other words, there may not be an association between OC prescription at the individual level and the risk of an individual being infected by Chlamydia. In addition, individuals living in areas with high rates of OC prescription may also be more likely to be sexually active. If this is the case, they are also subject to higher risks of both pregnancy and Chlamydia.

**The questionnaires**

Questionnaires invariably have limitations. First, there is a recall bias. Here, participants were asked to report their sexual partners for the previous 12 months and the nature of the sexual activities involved with each of them. Due to recall bias, some participants may not have been able to report their
condom use in a totally accurate manner. The reference period for condom use can vary greatly, between the last sexual encounter and one’s lifetime. Asking people about condom use over their lifetime is not very reliable, as most people have trouble remembering in detail what they did a long time ago. Therefore, asking about condom use for a period of the preceding 12 months may have helped reduce the recall bias. Another problem is social desirability bias, which means that people tend to reply with what they perceive to be a socially desirable response. The consequence of this can be an overestimation of condom use. However, using anonymous questionnaires can reduce this. In both Studies II and III, anonymous questionnaires were used. A third limitation is the different time aspects for actual condom use and the behavioral expectations to use a condom (Study III). The behavioral expectations about condom use entail an estimation of what participants believe they would do now, while actual condom use concerns the past, i.e. what they have done in the previous 12 months. Yet, some research has shown that people who have behaved in a certain way at one point in time are likely to do so again [119]. The last limitation discussed here concerns consistent condom use. This means that one uses a condom as it is intended to be used; e.g. it is put on before any penetration regardless of the type of sex (anal, oral or vaginal). Misunderstanding here can cause participants to overestimate their condom use.

Interviews

One problem with interviewing relates to what people say during an interview. Sexuality is sensitive, and it may not be easy for participants to talk about why they have chosen not to use a condom. In particular, it can be especially hard to talk about erection problems related to condom use. Therefore, before each interview it is important to be prepared in order to reduce discomfort [190]. There are different techniques for getting people to talk, such as being quiet, repeating a question or repeating a word [190]. Thus, it is also important to be a good listener [198, 199]. Sometimes participants may also feel they have said too much, or that the interview has evoked bad memories. We made it clear that the participants could contact us if they wanted to talk about the interview at a later date, and also recommended that they contact the clinic if they wanted to talk with someone about anything that was bothering them.
The participants and the procedure

The data were collected at youth clinics and STI clinics in response to our requests for study participation, so this was not a random sample. However, our aim was to conduct research on young people who were sexually active and at risk of STIs, rather than “average” young people (however this may be defined). Additionally, there are other health clinics that deal with sexual issues, such as midwifery clinics, gynecological clinics and health centers; thus not all sexually active young people visit YHCs or STI clinics. In some counties in Sweden you can also order a test online. Nevertheless, the most established health facilities in Sweden for sexually active young people are the YHCs and STI clinics. In any research, one has to start somewhere. Therefore, we chose to collect data at these particular places.

Another problem is that we cannot be certain as to how high the response rate actually was for Studies II and III. The reason for this is that we deemed it most feasible to let the clinics themselves determine how to recruit participants. Some asked the patients by phone, others at the clinics, and still others hung a poster in their waiting room describing the research and asking for patients willing to participate. We did this to make it easier for the clinics to participate, as most of them had very heavy workloads.

More women than men participated in Studies II and III. Recruiting men is a common problem in studies of sexuality, especially if the recruiting is not carried out on a personal basis (which our resources did not permit) [200]. Another reason for this male/female disparity was that more women than men visit these clinics. Additionally, the participants in the different studies ranged in age between 15 and 32 years. This age difference seems quite large, so one might expect notable variations between the two ends of this range. However, the results of our quantitative studies showed few age differences. Although there may be more significant differences if one were to look at the population of all 15- and 32-year-olds in Sweden, the absence of differences in our data may be an indication that the younger (e.g., 15-year-old) and the older (e.g., 32-year-old) groups were coming to the clinics for the same reasons, as a result of similar social behaviors. Here, as elsewhere, we can only call attention to the need for more, and larger, studies of sexuality and condom use among young people.
Ethical considerations

All participants received oral and written information about the project. We emphasized that participation was voluntary and that it was possible to withdraw from the study at any point, and that this would not affect the care provided at the clinics. The participants in the interview study were told that they only had to answer the questions they did not feel uncomfortable with. If they felt a question was too private or sensitive, they simply did not have to answer it. However, no participants refused to answer any of the questions asked. We also informed those who completed the questionnaires that no one could be identified and that the results would be reported only on a group level. The interview participants were asked if they wanted to read their interview, and had to approve the audio recording of their interview. The material made available to participants also contained information on how to contact the researchers involved. The studies (II, III and IV) were approved by the Regional Ethics Review Board in Gothenburg (file number 637-09) and in Stockholm (file number 2012/277-31).
THE STUDIES

STUDY I
The aim of the first study was to examine the association between the prescription of yearly doses of oral contraceptives and the incidence of Chlamydia, and between the prescription of yearly doses of oral contraceptives and the number of abortions in a population-based ecological study. We used register data from the Swedish Institute for Infectious Disease Control (Chlamydia incidence), the Swedish National Board of Health and Welfare (number of abortions), Statistics Sweden (population data) and Apoteket (the Swedish state pharmacy) (prescription of yearly doses of oral contraceptives). We conducted ordinary least squares (OLS) regression analysis on the association between prescription of oral contraceptives and Chlamydia or abortion. The prescription of oral contraceptives was found to have a positive association with both the incidence of Chlamydia and the number of abortions. Our best model predicted that, on average, for every 100 yearly doses of oral contraceptives prescribed, abortions increased by 3.3 cases among 16-year-old women and by 0.7 among 29-year-old women. Regarding Chlamydia, for similar increases in the number of OC prescriptions, cases of Chlamydia increased by 6.7 cases among 16-year-old women and by 1.5 among 29-year-old women. Our findings indicated that the use of oral contraceptives among young people was – at the population level – positively associated with the abortion rate and with Chlamydia incidence in Sweden.

STUDY II
The aim of this study was to examine individual sexual actors together with their types of sexual practices and partners in relation to condom use. Questionnaires about participants’ sexual behavior during the past 12 months were collected at nine youth clinics in Sweden. The participants were sexually active men and women between 15 and 26 years of age who had visited the clinics for an STI test. Condom use was low, irrespective of type of partner and type of sex, and one of five participants reported never having used a condom during the 12 months preceding their completion of the question-
naire. The results showed that – on average – if a participant had a main or regular partner, he or she was more likely to use a condom “sometimes” instead of “never” compared to if he or she had had a casual unknown partner. All sexual practices followed this pattern. However, for oral and vaginal sex, respondents were less likely to “always” use a condom with a main partner compared to those with a casual unknown partner. For vaginal sex, respondents was more likely to “always” use a condom with a casual known partner compared to a casual unknown partner. There were few age and sex differences. This study indicated that it is important to appreciate that young people visiting youth clinics have oral and vaginal (as well as anal) sex with all types of partners, and that condom use is low regardless of the type of sex or partner.

**STUDY III**

As in the other studies, the focus of this study was on young people. Its overall aim was to examine their behavioral expectations regarding condom use for different types of sexual practices (anal, oral and vaginal sex) and for different types of sexual partners (main, regular, casual known and casual unknown). At the same time, the intention was to compare their expectations with their actual condom use. Data were collected at nine youth clinics and at one STI clinic in Sweden. Participants were required to meet the study’s inclusion criteria of having been sexually active during the previous 12 months and visiting a clinic for an STI test. A total of 999 participants between 15 and 31 years old were included. Discrepancies between expectations and behaviors were analyzed separately for the different types of sexual practices and sexual partners. Our results demonstrated, first, that there was a discrepancy between a behavioral expectation to use a condom and the actual use of a condom. The participants used a condom most consistently for oral sex, especially with a main partner, and least consistently for vaginal sex with a casual partner (both known and unknown). Our results implied that study participants had behavioral expectations to use a condom to a greater extent than they actually used one. Importantly, there appeared to be a lack of knowledge about STI risks associated with oral sex, which seemed to be reflected in participants’ behavioral expectations to use a condom.

Beyond this, multinomial logistic regression was used to analyze these data, with age and gender differences as the posited predictor variables for observed discrepancies. It was found that the behavioral expectation to use a
condom differed depending on type of sexual practice and type of partner. For all types of sex, the overall patterns indicated that participants were most likely to use a condom with casual unknown partners, followed by casual known partners, regular partners and, lastly, main partners.

**STUDY IV**

The overall aim of this study was to examine common factors that affect condom use for sex (anal, oral and vaginal) with casual partners both known and unknown. Data were collected through thematic in-depth interviews at one STI clinic in Stockholm, Sweden, with 29 people (14 men, 14 women and one transgendered person) participating in the study, aged between 21 and 32 years. Open-ended questions were asked about each participant’s background, reason(s) for seeking STI testing, reasons for using a condom and reasons for not using a condom, as well as their definition of “sex”. The interviews were audio recorded and transcribed. Data were analyzed using a thematic analysis approach. Overall, several reasons were given for not using a condom. Women reported encountering resistance from men when they suggest a condom, and they described strategies for avoiding threatening or unpleasant situations. For men, alcohol was a reason given for non-use. This appeared to be mostly (or was rationalized as) being connected to perceived effects of alcohol on their penile sensitivity and maintaining their erection. The participants’ view of sex affected how often they had unprotected intercourse. People who had a more relaxed view of sex (for example, did not associate sex with love, had open relationships or had a broad definition of sex) more often chose to abstain from intercourse or chose another sexual practice. Those with a traditional view of sex (for example, defined sex as vaginal sex and connected sex with love) thought it was more difficult to abstain from sex or choose another sexual practice when they did not have a condom available. These findings suggested that condom use is a complex issue and that there are often underlying reasons – or rationalizations – for why young people do not use a condom as often as those trying to deal with STIs and prevent unwanted pregnancies might like them to. Here, too, is where more research is needed to identify underlying reasons for condom use and non-use and to help young people make sensible choices.
CONCLUSIONS

Sexual behavior is an important but difficult subject to study. Sexuality means different things to different people, and asking detailed questions about people’s sexual behavior can be sensitive. Study I indicated that the use of oral contraceptives among young people is positively associated with the chlamydia incidence and the abortion rate. However the conclusion was that individual data are needed to understand the mechanism behind sexual risk behavior. Further, the findings in this thesis, were that young people, aged 15 to 32 years old and visiting clinics, have behavioral expectations to use a condom, especially for anal and vaginal sex with a casual partner, but at the same time reported low condom use. Condom use was low regardless of the type of sexual practice or partner, i.e., the participants had unprotected oral, vaginal and anal sex with both known and unknown partners. Twenty % had not used a condom at all during the 12 months preceding their visits to the clinics. Decision-making was based on several factors. Firstly, most people seemed to do a partner evaluation; i.e. they appeared to evaluate their partner’s level of STI risk, which earlier research has shown affects condom use [36, 39, 50, 117, 127, 134, 136-141, 144]. However, there are other factors than this that are important. Earlier research has shown that alcohol affects both sexual behavior and condom use [27, 84, 90, 123-129]. Depending on the amount of alcohol, it may facilitate sex but also increase risk-taking [130]. That alcohol use had both positive and negative effects was evident to the participants in this research. They often met their sex partners in arenas where alcohol consumption was common, and said the alcohol relaxed them, reduced their inhibitions and stimulated them to be more sexually aroused. Ironically, at the same time alcohol was perceived to decrease the sexual sensation for both men and women. For some men a condom reportedly made sex less pleasurable, and some even suggested that sex became pointless if they were drunk and used a condom because they would not achieve an orgasm. This may be an important factor behind the resistance of many men to condom use, a commonly reported reason stated by men for not wanting to use a condom, according to our female participants. It is not an easy task to solve this problem. On the one hand, one can understand that the
positive effects of alcohol are important to some people for sexual activity to take place at all; on the other hand, alcohol – perhaps especially when consumed in excess – can make sex feel less pleasurable at the same time as the risk (for STIs and unwanted pregnancies) is increased. It is likely difficult to ask people to abstain from drinking altogether. The suggestion is rather to encourage people to wait until the day after to have sex if they have been drinking. This might seem strange to some, as most people have not thought of this possibility. However, one might think that it is stranger to have sex with decreased sensation (sometimes even ‘bad’) and at the same time expose oneself to the risk of getting a sexually transmitted infection and/or unwanted pregnancy. Some people might think this idea is suitable for them, while others might find it unsuitable. It is up to each person to decide what he or she wants to do. The problem is that condom use is a joint social behavior rather than an individual behavior, which means that the agreement and cooperation of both individuals are necessary for a condom to be used in a particular social/sexual setting.

Both men and women pointed out that there is a mutual responsibility for the prevention of both STIs and unwanted pregnancies. Yet, the results found in the research here, as well as in earlier research, show that male sexual partners in heterosexual encounters are not doing their part in prevention efforts [201-203]. One conclusion is that men – young men at least – interpret sex space as lust space, while their female partners – women in roughly the same age groups – are expected to take the responsibility for prevention. Sometimes this responsibility will be at the expense of enjoying the sexual encounter or, for example, cause the woman to feel pressured to have sex without a condom and find herself not focusing on enjoying a sexual encounter but rather thinking about its potential consequences. Some may well say that this is nothing new, but the relevant and important point is that few actions have been taken to change this situation for the mutual benefit of both female and male partners. We need to stop just talking about this problem and instead start doing something about it. We should focus on men and male self-awareness, trying to influence them to feel responsible for their own lives; if one does not care about oneself, it is hard to care about others. It is not an easy task to change this, however, and we need to start from an early age. One could imagine that a simple solution would be to increase women’s responsibility, i.e. empower women to tell their male partners that they will not have sex without a condom. However, the problem then is that women are given even more responsibility than they already have. Right now we
should focus on allocating the responsibility more equally, i.e. increase men’s sense of responsibility.

People have sexual scripts that guide them in how to behave sexually [165]. One of the most interesting findings is that the participants who had a relaxed view of sex had fewer occasions of unprotected vaginal intercourse compared with those who had a more traditional view of sex. In other words, those who had, for example, open relationships, did not automatically associate sex with love, and had a broad view of what sex was were better at abstaining or choosing other sexual practices when they did not have a condom. Those who had a traditional view of sex, associating it with heteronormativity and seeing it mainly as vaginal sex, often chose to have vaginal sex even if a condom was not available. One suggestion for decreasing unprotected intercourse is to expand people’s views about hetero sexual sex. If individuals were better educated about repertoires of possible heterosexual sexual activities, they might more easily choose a form of sex that is less risky in particular situations, such as hand jobs/fingering. If this approach proved to be effective, societies might reduce cases of unwanted pregnancies and STIs. The work with this should be done within sex education in the school years, in safer sex campaigns and at health care clinics. One way to move the understanding forward is to do more research on the reasons people engage in sexual activity. Although the reasons for sex may seem patently obvious in our present-day hyper-sexualized societies, it may be that for some – or for many – the reasons could have less to do with physical pleasure and more to do with issues of sexual identity, peer acceptance, and so on. The way to begin such research would be simply to ask people why they have sex, conducting broad-ranging in-depth interviews as a starting point. Most people will argue that there are several reasons but that one important factor is the sensation, i.e. reaching orgasm. People can reach orgasm through different types of sexual practices. For some women it can also be difficult, if not impossible, to reach orgasm only through vaginal penetration [181]. Yet, we have a penetration norm in our society that makes vaginal sex a central part of sexual behavior [179, 180]. To broaden the views about sexual activities, we can both decrease sexual risk behavior as well as give female pleasure a larger space.

The almost total absence of condom use and the low behavioral expectations to use a condom for oral sex are noteworthy, especially since research has shown that oral sex can lead to HPV infection, which is believed to be asso-
associated with the recent increase in oropharyngeal cancer [8-10]. A conclusion that follows is that there is widespread lack of knowledge about the risk associated with oral sex. This was confirmed in Study IV. The participants in the interview study had only superficial knowledge about how STIs were spread and about the most common infections in Sweden. Many were unaware that oral sex in the absence of a condom can be risky, and considered condom use relevant only for anal and vaginal sex.
One significant problem is that men, at least among the young people in our studies, did not seem to feel a sense of responsibility for themselves or others. Hence, an important step forward would be to increase men’s sense of responsibility and involve them in prevention work. To have any significant and long-term effect, this would need to start at an early age. Our research also suggests that it could be quite useful for prevention efforts to broaden conceptions of appropriate and pleasurable sexual practices. This is important for several reasons. Firstly, as noted, the results of the research outlined in this thesis indicated that individuals with a more relaxed view of sex expressed that it was easier to choose from a variety of types of low-risk sex, or to abstain from sex, when they did not have a condom. Those who had a more traditional view of sex often chose to have sex without a condom. Secondly, it seems surprising to hear that people have chosen to have sex even if it turns out to be “bad”, for example when they have been drinking a great deal of alcohol. We need to discuss strategies people can use to decrease the sexual risk behavior, for example encourage people to choose another sexual practice or, in the case of alcohol use, wait until the next morning to have sex. This would also help in the case of erection problems, which seem to be common when men drink alcohol and especially when they use a condom.

We need to understand that there are many reasons for condom use, but also many reasons for non-use. It is not enough to simply talk about condom use in general; instead, we need to relate it to sexual practices and partner types. Although some reasons can be difficult for many young people to talk about, for example erection problems for men, if we are to understand the underlying problem it is important to keep asking questions. We also need to learn how to individualize counseling, how to protect against STIs, and how to prevent unwanted pregnancies.
SAMMANFATTNING PÅ SVENSKA


Sociologiska teorier om sexualitet utgår oftast från ett socialkonstruktivistiskt perspektiv. Detta innebär att man ser sexualiteten som något som är socialt skapat snarare än biologiskt bestämt. Av detta följer att sexualiteten

Avhandlingen har en 'mixed method approach' och bygger på fyra studier, tre kvantitativa och en kvalitativ, som tillsammans kompletterar varandra för att kunna förklara komplexiteten kring kondomanvändningen. Den första studien undersöker hur förskrivningen av årsdoser av orala preventivmedel samvarierar med klamydia och aborter. I denna studie så användes registerdata från Apoteket (förskrivning årsdoser av orala preventivmedel), Smittskyddsinstitutet (Klamydia) och Socialstyrelsen (aborter). Resultatet visar att det finns ett positiv samband både mellan förskrivning av orala preventivmedel och klamydia samt förskrivning av förskrivning av orala preventivmedel och aborter. Enligt våra skattningar kan vi förvänta oss att observera genomsnitt 3,3 fler aborter och 6,7 fler klamydiafall bland 16-åriga kvinnor i ett län om förskrivning av årsförbrukningar av förskrivning av orala preventivmedel skulle vara 100 fler i motsvarande län, åldersgrupp och år. Vi kan, trots att vi tagit hänsyn till lokala variationer och förändringar över tid, inte vara fullständigt säkra på huruvida de observerade effekterna helt kan förklaras av förskrivning av orala preventivmedel eftersom vi använder oss av aggregerat data. En del av ökningen skulle t ex kunna förklaras av en ökat förskrivning av orala preventivmedel till kvinnor som gjort abort.

Syftet med studie 2 var att undersöka hur typ av sexuell praktik och typ av relation interagerar med varandra och påverkar kondomanvändningen. Insamlingen av data skedde på nio ungdomsmottagningar i Västra Götaland. 592 sexuellt aktiva individer mellan 15 och 26 år deltog i studien. Resultatet visar att kondomanvändningen generellt sätt är låg oavsett typ av sex och typ av partner. 20 % av deltagarna hade inte använt kondom överhuvudtaget de senaste 12 månaderna. För vaginalsex med tillfällig känd partner var deltagarna mer benägna att alltid använda kondom istället för aldrig jämfört med en tillfällig okänd partner. Om deltagarna hade en fast eller regelbunden partner var de mer benägna att använda kondom ibland, istället för aldrig, jämfört med en tillfällig okänd partner. Alla sexuella praktiker (anal-, oral- och vaginalsex) följer detta mönster.
Studie 3 fokuserar på sannolikheten av att använda kondom och undersöker om det finns en diskrepans mellan faktiskt kondomanvändning och sannolikheten att använda kondom. Resultatet visar att deltagarna anger en högre sannolikhet för att använda kondom än den faktiska kondomanvändningen, vilket innebär att det finns en diskrepans mellan hur man tänker att man ska göra och hur man faktiskt gör. Högst diskrepans var det för vaginal- och analsex med tillfälliga kontakter (både med känd och okänd) och lägst diskrepans var det för oralsex. Den låga diskrepansen för oralsex kommer av att många unga vet att de inte kommer att använda kondom vid oralsex och att okunskapen kring smittriskerna vid oralsex är hög.


Kvinnorna är också de som i första hand ansvarar för att kondomanvändningen ska bli av. För att förändra detta behöver vi involvera männen i preventionsarbetet. För att få män att ta mer ansvar måste vi förstå orsakerna till mäns motstånd mot kondom. En orsak, enligt resultatet, kan vara att män får problem med erektionen på grund av kondomen. Särskilt påtagligt blir detta när män dricker alkohol. För att inte riskera att tappa ståndet är det lättare för vissa män att strunta i kondomen. För att kunna öka kondomanvändningen behöver sjukvården anpassa kondområdgivningen till individen, dvs. göra den individuellt snarare än generell som den i många fall är idag. Vi behöver också ge människor strategier för hur de ska hantera situationen om de till exempel inte har en kondom tillgänglig eller om de har druckit alkohol. Det kan röra sig om att försöka vidga sex-begreppet till att inkludera andra sexuella praktiker än penetration. Ett annat förslag är att väcka tanken att vänta med sex till dagen efter hos individer som träffar sina sexuella partners när de dricker alkohol. Att vänta med sex handlar både om att öka möjligheter att ha ”bättre” sex (eftersom många påpekade att sex sällan är bra när man är full) men också att minska det sexuella riskbeteendet eftersom alkohol oftast är en orsak till att man av olika orsaker inte använder kondom.
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