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## Worlds Apart?

*Sexual Behaviour, Contraceptive Use,  
and Pornography Consumption  
Among Young Women and Men*

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ACTA  
UNIVERSITATIS  
UPSALIENSIS  
UPPSALA  
2005

ISSN 1651-6206  
ISBN 91-554-6144-1  
urn:nbn:se:uu:diva-4779

Dissertation presented at Uppsala University to be publicly examined in Rosénsalen, Kvinno- och barnkliniken, Uppsala, Friday, March 18, 2005 at 13:15 for the degree of Doctor of Philosophy (Faculty of Medicine). The examination will be conducted in Swedish.

#### **Abstract**

Häggström-Nordin, E. 2005. Worlds Apart? Sexual Behaviour, Contraceptive Use, and Pornography Consumption Among Young Women and Men. Acta Universitatis Upsaliensis. *Digital Comprehensive Summaries of Uppsala Dissertations from the Faculty of Medicine* 6. 74 pp. Uppsala. ISBN 91-554-6144-1

The overall aim of this thesis was to investigate the knowledge of, attitudes toward, and experiences of the emergency contraceptive pill (ECP), sexual behaviour, and pornography consumption among high school students and young people. Data were obtained by questionnaires (studies I, II, and III), and by qualitative in-depth interviews (study IV).

A majority of 16-year old high-school students were aware that ECP existed, and knew where to obtain it. Attitudes toward using ECP were generally positive, but more girls than boys were hesitant as to whether ECP should be available without a prescription. Of those having experienced sexual intercourse, more than one fourth stated that they themselves or their partner had ever used ECP (I).

Almost half of the 16-year old high-school students surveyed (46%) had had sexual intercourse, a number similar in studies conducted 10 and 20 years earlier. Use of contraceptives at first intercourse had increased (to 76%) and use of alcohol had decreased (to 23%). More students in practical rather than theoretical programs smoked, had sexual intercourse at an earlier age, had more partners, and used contraceptives at first intercourse less often (II).

Three out of four 18-year old students had had sexual intercourse, of which almost three quarters reported contraceptive use at first intercourse. Anal intercourse was reported by one sixth, with infrequent condom use. Males who consumed more pornography were more likely than males who consumed less pornography to engage in a variety of sexual activities, as were males with an early age at first sexual intercourse (III).

The core category that emerged in the interviews was "Living with the current sexual norm", pornography created sexual expectations and demands. The interviewees expressed contradictory feelings towards pornography and felt that sexuality was separated from intimacy. In order to deal with the current sexual norm, participants had different individual handling strategies, including liberal-, normalization-, distance-, feminist- and conservative strategies (IV).

Overall, the studies highlight several differences between genders and between students attending practical- and theoretical study programs in questions concerning ECP, sexual behaviour and pornography. These differences should be addressed while planning for counselling and sex education. We suggest that health- and school personnel discuss how sexuality is portrayed in pornographic material with young people.

*Keywords:* Adolescents, attitudes, emergency contraception, gender differences, grounded theory, pornography, sexual behavior, Sweden, youth

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ISSN 1651-6206

ISBN 91-554-6144-1

urn:nbn:se:uu:diva-4779 (<http://urn.kb.se/resolve?urn=urn:nbn:se:uu:diva-4779>)

*To  
Sanna (my late grandmother) – the midwife and  
Sanna (my daughter) – the researcher*



## List of Papers

This thesis is based on the following papers, which are referred to in the text by their Roman numerals:

- I. Häggström-Nordin E, Tydén T. Swedish Teenagers' Attitudes Towards the Emergency Contraceptive Pill. *J Adolesc Health* 2001; 28:313-318.
- II. Häggström-Nordin E, Hanson U, Tydén T. Sex Behavior Among High School Students in Sweden: Improvement in Contraceptive Use Over Time. *J Adolesc Health* 2002; 30:288-295.
- III. Häggström-Nordin E, Hanson U, Tydén T. Association between pornography consumption and sexual practices among adolescents in Sweden. *Int J of STD & AIDS*. 2005; 16:102-107.
- IV. Häggström-Nordin E, Hanson U, Sandberg J, Tydén T. "It's everywhere!" Thoughts and reflections about pornography among young people in Sweden. Submitted.

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## Abbreviations

EC	Emergency Contraception
ECP	The Emergency Contraceptive Pill
OTC	Over the counter, without a prescription
IUD	Intrauterine Contraceptive Device
OC	Oral contraceptive
STI	Sexually Transmitted Infection
STD	Sexually Transmitted Disease
HIV	Human Immunodeficiency virus
AIDS	Acquired Immunodeficiency Syndrome

The meanings of the words - attitude, adolescence, high school students, young people and gender can vary. In this work, these words have the following meaning:

**Attitude** – a settled way of thinking or feeling about someone or something, one typically reflected in a person’s behaviour (The New Oxford Dictionary of English. Oxford University Press, 1998).

**Adolescence** – transitional phase of growth and development between childhood and adulthood encompassing psychological, social and moral terrain as well as the strictly reproductive aspects of maturation (The New Encyclopaedia Britannica 15 ed. Encyclopaedia Britannica, Inc., 1993).

**Gender** – e.g. an individual’s self-conception as being a male or a female, as distinguished from actual biological sex (The New Encyclopaedia Britannica 15 ed. Encyclopaedia Britannica, Inc., 1993). Male and female identities, constructed in social interaction ([canfield.etext.net/glossary.htm](http://canfield.etext.net/glossary.htm)).

**(Senior) High school students** – *Am. Eng.* students attending the Swedish “gymnasieskola”. In Papers I and II, first year high school students were investigated, and in Paper III third year high school students were investigated.

**Teenagers** – the period between 13 and 19 years.

**Young people** – here used as an overall term for adolescents, teenagers and young adults in their early twenties.



# Introduction

## Sexual behaviour among young people

### General introduction

In this thesis, different issues about sexual behaviour, contraception, and pornography consumption among high school students and young people were studied. These include: high school students' knowledge about, experience of and attitudes toward the emergency contraceptive pill (Paper I); sexual behaviour among high school students (Paper II); and sexual behaviour and consumption of pornography, and an exploration of possible associations between pornography and sexual practices among high school students (Paper III). Finally, a contribution to an understanding of thoughts and reflections about pornography consumption and its possible influence on sexual practices among young women and men is presented in Paper IV.

### Adolescence

Adolescence is the period in life between child- and adulthood. The World Health Organization defines an adolescent as a person between 10-19 years of age <sup>(1)</sup>. Adolescence is a life phase encompassing emotional separation from parents, responsibility, and sense of autonomy, occupational interests and requirements and sexual orientation. Starting with the physical process of puberty, the individual goes further through intellectual developments, of which an abstract and moral thinking allows new capabilities. Making choices, being autonomous and taking risks are part of the transition from child to adult, and of the construction of an identity of a person <sup>(2, 3)</sup>. Sexuality is an important part of adolescents' and young people's life. In order to be able to appreciate sexuality it is important that there are contraceptive methods making it possible to avoid sexually transmitted infections and unwanted pregnancies <sup>(4)</sup>.

### Sexual and reproductive health

Sexual and reproductive health and rights issues are important for people from all over the world and form part of the United Nations Health for All-programmes <sup>(5)</sup>. The International Planned Parenthood Federation, IPPF,

working for the sexual and reproductive health, choices and rights of women, men and young people, published a charter on Sexual and Reproductive Rights, grounded in international human rights <sup>(6)</sup>. These rights, also supported by the World Health Organization <sup>(4)</sup>, include the right of all persons, free of coercion, discrimination, and violence to:

- Have the highest attainable standard of health in relation to sexuality, including access to sexual and reproductive health care services
- Seek, receive, and impart information in relation to sexuality
- Sexuality education
- Respect for bodily integrity
- Choice of partner
- Decide to be sexually active or not
- Consensual sexual relations
- Decide whether or not, and when to have children
- Pursue a satisfying, safe and pleasurable sexual life

(World Health Organization, 2002)

The government in Sweden has also set goals for sexual and reproductive health. These goals imply that a healthy sexuality is free from prejudices, discrimination, compulsion, and violence <sup>(7)</sup>.

## Adolescents and sexuality

In Sweden, a liberal view on premarital sex has been common for many decades, including sex education in schools, youth centers in almost every town and subsidized contraceptives for teenagers <sup>(8-11)</sup>.

Gagnon and Simon, American sociologists and researchers, say that sexuality is not only biologically determined but also created in meetings with others; sexuality is created in social interaction between the individual and society, the so-called symbolic interaction perspective <sup>(12)</sup>. In their research, they have shown that sexuality is integrated in the lives of adolescents. Human beings learn that they are sexual beings and how to act as a sexual being through interaction with society. Gagnon and Simon have created the conception scripting theory, which is a manus in society for sexuality and sexual behaviour <sup>(13)</sup>.

Gisela Helmius' thesis <sup>(14-15)</sup> foregrounds the social construction of adolescent sexuality. Two basic questions were asked: how is the social concept "mature for sex" constructed, and when are young people "mature enough" to engage in sexual activity? The author considers that young people learn from their peer group what is missing from the restricting and problem-centred information they receive from the adult world. The "scripts" made up by adolescents are part of the same value system as their adult counterparts – they see love as the legitimating factor of sex and feeling "mature

enough". It is the scripts made up by adolescents that teach young people how to become "mature enough for sex" by a pattern that functions for society as a whole. A. J. Edwards <sup>(16)</sup> developed a theory on adolescent sexual behaviour in 1995. Sixteen teenagers were interviewed twice and a grounded theory approach was used for analysis. Achieving identity was the core category and the teenagers with strong identities tended to be committed to their partner, their relations lasted longer, they had fewer partners, and they were more consistent in their use of contraception. The teenagers with a weak identity had relationships that did not last very long, they tended to have several partners, and in their use of contraception, they did not have the same commitment as those with a strong identity <sup>(16)</sup>.

### **Sexual experiences, practices and attitudes**

The nation-wide study by the National Institute of Public Health entitled "Sex in Sweden" <sup>(17)</sup> and undertaken in 1996, showed that sexual experiences among women and men have approached each other over time, and is explained as women's sexual experiences becoming more extensive than previously. In the last thirty years, women's total number of sexual partners has increased more than for men <sup>(17, 18)</sup>. Adolescent sexuality is a wide area and encompasses many expressions such as romance, partnership, masturbation, kissing, petting, oral sex, and sexual intercourse. There are differences between sexual debut and first sexual intercourse in the meaning that one could have sexual experiences but may not yet have had sexual intercourse. Differences in sexual experiences and practices may also be due to sexual orientation, i.e. if young people are heterosexual or lesbian, gay, or bisexual. Sexual behaviour changes over time and oral sex is an established behaviour among young people today <sup>(17, 19, 20)</sup>. Anal sex is another sexual practice that appears to have increased during the last years <sup>(17, 19-24)</sup>.

In the 1990s, more differences in attitudes rather than experiences became apparent among both young women and men <sup>(17, 25)</sup>. One example of this is that more young women than men are of the opinion that sex only belongs in a steady relationship and that intercourse is only meant for the one you love. During the last decade there has been a shift in attitudes, by the end of the 1990s increasing numbers of young people thought that it was acceptable for sex to occur outside steady relationships <sup>(17, 25-27)</sup>.

### **First sexual intercourse**

The age of sexual consent in Sweden is 15 years. The median age at first sexual intercourse appears to have stabilized at about 17 years of age, which is similar to findings in England <sup>(17, 28-30)</sup>. Among respondents in Sweden, aged 18-24, the median age at first intercourse was 16.5 years for women and 16.8 years for men. It was found that the age at first intercourse decreased by 2.5 years during the last 30 years, from 19 to 16.5 years, which is also similar to findings from England <sup>(17, 29-31)</sup>. In addition, the age at first

sexual intercourse differs less between the genders than before, when males had their first intercourse significantly earlier than women. Reasons for this reduction could be physical (earlier menarche) as well as social and cultural factors. It has been concluded that the age at first sexual intercourse differs between the genders and between students attending practical and theoretical programmes, in that those from theoretical programmes tended to postpone their first intercourse <sup>(19, 31)</sup>. Edgardh <sup>(19)</sup> found that girls attending practical programmes had the earliest experience, and boys attending theoretical programmes had later experiences. When asked about emotional experiences of voluntary intercourse, most of the students responded by choosing positive alternatives among a mixed set of alternatives. Træn showed, in a study among 920 adolescents in Norway <sup>(32)</sup>, that the most common reasons for having had the first sexual intercourse were being in love, curiosity or excitement and sexual arousal. Emotional reasons were more important to girls, whereas boys seemed more practical in sexual matters.

## Sex and relationships education

Sweden has a long tradition of teaching young people about sexuality and relationships. As early as at the end of the nineteenth century, Karolina Widerström, the first female physician in Sweden, taught young women about sexual hygiene. The Swedish Association of Sexuality Education was founded in 1933 with Elise Ottesen-Jensen as the first chair, focusing on sex education, and putting the questions of birth control and prevention of STIs in a broad context of sexuality, equity and social justice <sup>(8)</sup>. In 1942, sex education became a voluntary subject for teachers at school, and in 1955, it became compulsory <sup>(9)</sup>. In 2000, the Swedish Board of Education evaluated this education in primary and secondary school level <sup>(33)</sup>. The evaluation exposed large national, regional, and local differences in quality. In a report on current Swedish research on youth sexuality <sup>(34)</sup>, the National Institute of Public Health concludes that qualitative and quantitative improvements were required. A need for further education for school personnel was identified which should preferably emanate from a positive basic outlook. Other conclusions drawn from the report were that some class-related differences in sexual behaviour should be addressed with directed and supportive efforts for adolescents at risk.

## Youth centres

As an essential part of the preventive health work among young people in Sweden, youth centres (youth clinics) have been established since the 1970s. Today, there are youth centres all over the country, where young people can receive advice, counselling, information, medical examination, treatment and therapy within the field of sex and relationships <sup>(10, 35)</sup>. These centres have a

multi-professional structure, and medical, psychosocial, and educational expertise is available. Health prevention, primary and secondary preventive work are the methods of working at these centres. It has been concluded that the attitudes and skills of the staff are the key to successful healthcare for the adolescent <sup>(36, 37)</sup>. Confidentiality, anonymity, ease of geographic access, appropriate opening times, suitable location and premises are other important factors <sup>(37)</sup>.

### The role of the midwife in sexual and reproductive health

The Swedish midwife has a unique and strong position in the work with sexual and reproductive health <sup>(38, 39)</sup>. Since 1976, and in accordance with the new abortion legislation in 1975, nurse-midwives were authorized to prescribe oral contraceptives and to insert intrauterine devices (IUDs) <sup>(40)</sup>. Today, nurse-midwives except working in obstetric wards and antenatal clinics, also practise at family planning as well as gynaecological wards and youth centres.

According to the Swedish Association of Midwives “Vision for the future”, sexuality is seen as a health-promoting factor important for people’s quality of life <sup>(41)</sup>. Preventing undesired pregnancies and preventing the incidence and spread of STIs are some of the most important aims for midwives working with sexual and reproductive health at youth centres <sup>(10)</sup>.

### Risk behaviour and risk factors

The period of adolescence is known for being a period of risk-taking; since young people are trying to form their own identity and to be autonomous, they are conscious of making their own choices and actions <sup>(3)</sup>. Sexual activity has always carried a risk, above all a risk for unwanted pregnancies, and a risk of transmission of infections. Examples of possible factors related to sexual risk taking are smoking, alcohol and other drugs, coitarche before the age of 15 years <sup>(42-46)</sup>, and unstable home and school conditions <sup>(19, 20, 46)</sup>. Furthermore, many students regret intercourse when this has been experienced under the influence of alcohol <sup>(43)</sup>.

It has also been concluded that young age is a risk factor for poor pregnancy outcomes, independent of socio-economic condition <sup>(47)</sup> and that fathers of children born to teenage mothers had a more compromised social situation and more often had their sexual debut before 15 years of age <sup>(48)</sup>.

Wight et al <sup>(49)</sup> conducted a large-scale survey (n=7395) on sexual behaviour in young people less than 15 years of age. One-fifth of the girls reported that they had been under some kind of pressure to have sex both at the first (19.8%) and at the most recent (18%) intercourse, compared with 7% and 9% respectively among the boys. The researchers suggest that efforts should be made to help young people to develop relationship and negotiation skills

in order to increase control and contraceptive use. Communities with different health promotion approaches were compared in 1991 and 1993, and better mental health, health habits, and less risk behaviour among adolescents were found in 'active' compared to 'inactive' communities. The conclusion was that consistent and comprehensive public health activities might have reduced risk taking behaviour and improved health and health habits during mid-adolescence<sup>(50, 51)</sup>.

## Sexually transmitted infections

### Legislation and statistics

Common STIs among young people in Sweden today include Chlamydia trachomatis infection, human papilloma virus (HPV) and genital herpes. Of these, Chlamydia infection is the most common and this infection has been included in legislation (the Infectious Diseases Act) since 1988. The Swedish National Institute of Public Health has a public health policy with starting-points and principles for how to continue the work on HIV and other STIs in Sweden<sup>(53)</sup>. Contact tracing and nation-wide statistics concerning prevalence rates of the infections and their occurrence over time are available for Chlamydia infection, and show that the prevalence of this infection decreased from 38,000 cases per year in 1988 to 14,000 per year in 1994. In the last years, an increase, mainly among teenagers', has been noted and during the first six months of 2004 the biggest increase, 25%, since 1997 occurred<sup>(53)</sup>. The experience of contact tracing has been studied by Tydén and Ramstedt<sup>(54)</sup>, who determined that the majority (68%) was positive about revealing the name(s) and address (es) of their partner or partners. Ninety per cent also had a positive attitude towards legislation stating that named partners can be forced to undergo STI testing. A gender difference in the national statistics is noted, with 57% of the reported cases being female, and 43% being male<sup>(54)</sup>. Other infections covered by the legislation, including Gonorrhoea, Syphilis, and HIV/AIDS, do not commonly occur among young people in Sweden today.

Table 1. *Proportion of reported cases of Chlamydial infection among 15-19 year-olds in Sweden.*

1999	2000	2001	2002	2003
22.6%	21.5%	21.5%	22.8%	27.7%

Source: [www.smittskyddsinstitutet.se](http://www.smittskyddsinstitutet.se)

### **Risk factors and screening**

Two of the risk factors for STIs identified in studies undertaken among university students in Uppsala in the late 1980s and middle of the 1990s were alcohol use, and infrequent use of a condom when having sex with a new partner or having multiple sexual partners<sup>(43,55)</sup>. Only 1% of the target population went for a STD check-up at the local STD clinic. However, Tydén et al show in follow-up studies<sup>(56-58)</sup> that information campaigns do have an effect on the tendency of university students to protect themselves with condoms. In a population-based study, Jonsson et al<sup>(59)</sup> investigated STIs and sexual behaviour among young Swedish women, aged 19-25, and found that risk factors interacting with having had an STI were having had more than four partners, and sexual intercourse on the first occasion of "going-out". Gilbert and Alexander<sup>(60)</sup> suggest that since most college-aged women are sexually active and vulnerable to complications from STIs, educational interventions, in addition to promoting condom use, must focus on the need for pelvic examinations, screenings for STIs, in both women and men, and lower-risk sexual activity. The involvement of men in screening programmes is also suggested in the UK<sup>(61-62)</sup>, where Chlamydia is the most common STI, and a major problem. Christianson et al<sup>(63)</sup> suggest that if males should play an equal part in reproductive health, general screening for Chlamydia of males must take place.

### **HIV/AIDS**

Ten years ago information about HIV/AIDS and safer-sex campaigns were common. Today these campaigns have weakened in Sweden as the feared development did not occur and Sweden has one of the lowest incidences of HIV in Europe<sup>(53)</sup>. In 2003, the number of persons reported infected by HIV was 379, of which few were in the age 15-29. Since 1989, The National Institute of Public Health in Sweden has undertaken national surveys every third year among 16-44 year-olds in order to measure people's knowledge, attitudes, and behaviour toward HIV/AIDS<sup>(26, 27)</sup>. It was shown that condom use was more common among teenagers than among adults, which could be explained by steady partners being more common among older age groups. In the report from 2000, an increase in condom use among 16-17 year-olds was shown, and no significant differences in condom use between cities and rural areas determined. In the latest report from 2003, 52% of 16-17 year-olds and only 44% of 18-19 year-olds had used a condom during the last month. The identified risk-groups for contracting an STI were men and women about 20 years of age<sup>(26, 27)</sup>. New threats are coming from Eastern Europe, Russia and the Baltic countries, where the spread of HIV and syphilis is increasing<sup>(64)</sup>.

## Contraception – The emergency contraceptive pill

### Counselling

Contraceptive counselling in Sweden is free of charge and specially trained registered nurses/midwives have been permitted since 1976 to prescribe oral contraceptives as well as to insert intrauterine contraceptive devices (IUDs) <sup>(40, 65)</sup>. Seventy to eighty per cent of the contraceptive counselling in Sweden is handled by registered nurses/midwives <sup>(66)</sup>, who in addition to prescribing oral contraceptives and inserting IUDs also have the authority to perform gynaecological examinations. Condoms and contraceptive pills are the contraceptives most frequently used by adolescents in Sweden <sup>(17, 19-23, 67)</sup>. Condoms are easily accessible to teenagers, either free of charge or subsidized. Many county councils in Sweden also subsidize oral contraceptives in order to diminish the risk for unwanted pregnancies and teenage abortions <sup>(11)</sup>. In Swedish studies from the late 1970s and 1980s, the frequencies of contraceptive use at first sexual intercourse were found to be 50 and 60%, respectively <sup>(19, 68)</sup>, and in the 1990s the use has increased to 60-76% <sup>(34)</sup>. The use of contraception at the most recent intercourse has also increased <sup>(34)</sup>. The National English Survey of Sexual Attitudes and Lifestyles (NATSAL 2000), undertaken between 1999 and 2001, concluded that only a small minority of teenagers have unprotected first intercourse, but non-use of contraception increased with declining age at first intercourse <sup>(30)</sup>.

### Young peoples' attitudes to and use of contraception

Attitudes towards condom use and concerns about side effects of oral contraceptives (OCs) were investigated among university students' in Uppsala in 1989 <sup>(43)</sup>. After interventions, evaluated in 1994, the attitudes towards condom use had become more positive and usage had increased from 40 to 60% at first intercourse. Concerns about side effects of OCs decreased significantly during the same 5-year period <sup>(57)</sup>. Duerst et al investigated the attitudes of rural young people in the US towards sexual intercourse and contraception in 1997 <sup>(69)</sup>. Abstinence was associated with both positive and negative consequences, and sexual intercourse with a condom was associated with consideration and responsibility. Sexual intercourse without contraception was considered to have mainly negative consequences. Mitchell and Wellings <sup>(70)</sup> were of the opinion that from a health perspective, the first sexual intercourse should be anticipated, wanted, protected, and enjoyed. They conducted semi-structured interviews with young British adolescents, and found that communication, both verbal and non-verbal, was considered to play a central role at first intercourse. Prior communication between the couple about contraception was associated with a higher degree of contraceptive use. Similarly, English studies showed that if partners talked to each

other about contraception before having their first intercourse, this was associated with contraceptive use. If intercourse was delayed beyond four weeks as opposed to over a few days of first “going out” together, this was also associated with a higher use of contraception <sup>(71)</sup>. In Sweden, women (n=794), consecutively visiting a family planning clinic for emergency contraception, were asked whether they had discussed contraceptive use with their partner before sexual intercourse and 37% had not <sup>(72)</sup>. In a US study of 3859 young women aged 18-24 years, Amba et al <sup>(73)</sup> investigated the degree to which first sexual intercourse was wanted and voluntary and how this influenced their use of contraceptives. Nine per cent claimed that their first intercourse was not voluntary. However, no association with contraceptive use was found. Other factors, such as age, were more important.

### Abortion – legislation and statistics

The Swedish abortion legislation, adopted in 1975 <sup>(74)</sup>, gives the woman the right to decide to terminate a pregnancy until the end of the 18<sup>th</sup> week of gestation. In 1975, almost 30 out of 1000 teenage girls (15-19 years) had an abortion <sup>(8)</sup>, a higher proportion compared to other age groups. The overall abortion rate in Sweden has been relatively stable since 1975, with about 30,000-38,000 abortions performed annually (Figure 1). Between 1996 and 2002, there was a 50 % increase in this age group, but in 2003, the abortion rate among teenagers decreased by 3%, for the first time in 7 years. In 2003, the abortion rate was 24.4 per 1000 teenagers aged 15-19 years <sup>(75)</sup>, with the highest abortion rates in metropolitan areas such as Malmö, Stockholm and Göteborg <sup>(76)</sup>.

Countries such as The Netherlands and Finland have lower abortion rates <sup>(3, 76, 77)</sup>. Two factors make the Netherlands so successful in this respect - they are considered to have a liberal societal attitude towards sexuality and high contraceptive use among women with a high degree of women using the pill <sup>(78)</sup>. In England, high abortion and pregnancy rates among teenagers have become a problem <sup>(3, 30, 79-80)</sup>, and in the US the abortion rates among teenagers has been high for a long time,  $\geq 30$  per 1000 women <sup>(3, 77)</sup>. However, in the US between 1995 and 1997, pregnancy and abortion rates among teenagers declined, and appear to be continuing <sup>(81)</sup>. Explanations for this decline include both an increased use of condoms and of hormonal methods.

Table 2. *Abortions per 1000 Swedish women aged -19 years.*

1999	2000	2001	2002	2003
19.0	21.1	22.5	25.1	24.4

Source: [www.socialstyrelsen.se](http://www.socialstyrelsen.se)

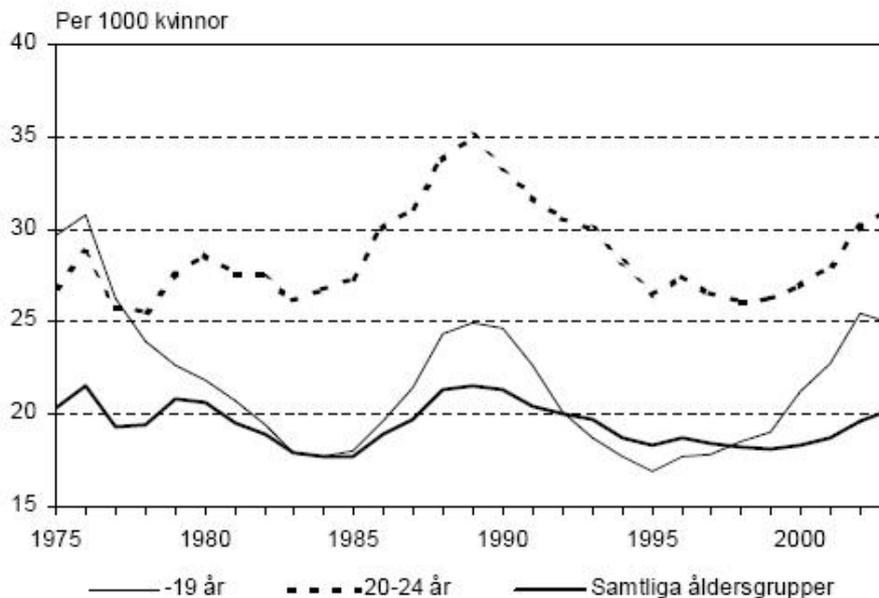


Figure 1. Induced abortion in Swedish women by age 1975-2003. (Source: Socialstyrelsen)

## Prevention of abortions

In 2001 and at the request of the Government, The National Institute for Public Health presented a programme of action for the prevention of unwanted pregnancies<sup>(1)</sup>. The primary focus is on follow up, evaluation and method development, with the purpose of improving future evaluation of preventive work<sup>(1)</sup>. In an international perspective, Sweden is in a relatively good position, as the abortion rate among teenagers is among the lowest in the world<sup>(75)</sup>. Primary prevention, including compulsory sex education in school, is one strategy for preventing abortions. Other approaches are easily accessible contraceptive counselling, subsidized contraceptives, including ECP, and abortion legislation<sup>(82-84)</sup>. These are the probable explanations for the relatively low rate of teenage pregnancies and abortions<sup>(82)</sup>. Teenage motherhood has become unusual and low birth rates mirror the possibilities for young women to plan their future and to wait with childbearing until they are able to unite employment and parenthood<sup>(8, 85)</sup>.

## Emergency contraception

Emergency contraception (ECP) is a term for methods that can be used after unprotected intercourse to avoid an unwanted pregnancy. The methods used today are either hormonal or IUDs. The so-called "Yuzpe method" in which

two tablets containing etinylestradiol (50 mg) and levonorgestrel (250 mg) are taken within 72 hours after unprotected intercourse, followed by another two tablets 12 hours later <sup>(86)</sup>. This method has been used in Sweden since 1994, when it was recommended by the Medical Products Agency <sup>(87)</sup>. The true effectiveness rate has been found to be at least 75% <sup>(88)</sup>. In the spring of 2000, a new drug (NorLevo®) was approved for sale in Sweden. This drug containing only levonorgestrel (750 µg), has been shown to have fewer side effects and to be somewhat more effective than the Yuzpe method <sup>(89-91)</sup>. Since April 2001, NorLevo® has been available as an over-the-counter product. Whether information on and availability of ECP should be increased in societies in an attempt to avoid unwanted pregnancies and abortions has been the focus of an international debate <sup>(92, 93)</sup>. However, there has been concern that an increase in information and availability might lead to improper use and overuse. Kosunen et al found in a study in Finland among 52,700 young female school students' <sup>(94)</sup> that ECP was not a contraceptive choice, replacing conventional methods. Despite widely spread knowledge about the method (97%), only 6.6% had ever used it. Of these, 22% had used it more than once. This was similar to Swedish figures <sup>(72, 95)</sup>.

In a study in the UK in 1993, a cohort of women (n=95,007) aged 14-29 years was selected from the General Research Database and followed for a period of four years <sup>(96)</sup>, with the aim of seeking evidence of use of ECP and regular contraception. It was found that teenagers were more likely than other groups to use ECP, to be repeated users of ECP and to fail to start regular contraception after the first use of ECP. It was concluded that provision of ECP does not result in failure to initiate regular use of contraceptives or abolishing regular use; but rather that women start to use contraceptives regularly after use of ECP. Tydén et al <sup>(72)</sup> carried out a study among 750 women in Uppsala, Sweden, attending a youth or family planning clinic to obtain ECP. The aim of the study was to increase the knowledge of characteristics and background factors of these women in need of ECP. It was determined that a typical user of the method was a young woman, who had never been pregnant (83%). The most common reason for using the method was condom failure, and the conclusion drawn was that ECP is an important back-up method if for some reason a couple have failed to use a condom. Focus group interviews conducted among 16-17 year-old girls in Uppsala indicate that basic awareness of ECP was generally high, although specific knowledge, such as the level of effectiveness and the way in which the regimen work was lacking <sup>(97)</sup>. Since ECP has only been used since 1994 in Sweden, little is known about adolescents' knowledge, experience, and attitudes toward the method.

## Pornography and its influence on sexual behaviour

Society is continuously changing and in the so-called information society there is easy access to detailed descriptions of sexuality through mass media and pornography<sup>(98-100)</sup>. To chat with people online is the most common way of communicating among children and young people today, and it is estimated that 96% of all 12-24-year-olds in Sweden belong to a “community” and spend on average about 45 minutes a day chatting online. Links containing pornography are frequently occurring in these communities. In Sweden, it is estimated that more than 800, 000 people are porn’ surfing on the Internet<sup>(101)</sup>. The adult online industry in the US generates approximately \$ 1 billion dollar and is expected to grow to \$ 5 billion to over \$ 7 billion in the next years<sup>(98)</sup>. The term “pornography” has no well-defined meaning, but originates from the Greek words “porne” (“harlot”) – meaning a low-grade prostitute – and “graphos”, meaning picture. Pornography refers to the writing or description of harlots<sup>(102)</sup>.

Sometimes the term “sexually explicit material” is used, meaning textual, visual, or aural materiel that depicts sexual behaviour or acts, or that exposes the reproductive organs of the human body<sup>(98)</sup>.

A matter of debate has been whether pornography influences attitudes to sexuality and sexual behaviour among young people<sup>(8, 34)</sup>. In 1999, the government in Sweden gave a commission to The National Institute for Public Health to investigate sexual behaviour and attitudes among adolescents to determine if these had changed over time. The background was partly the responsibility of society to support and advise adolescents on issues concerning sexuality and cohabitation, partly a number of reported rapes where youths had been involved. Other reasons for the commission were the increasing use of coarsened sexualised language and sexual harassment in schools, and whether this had a connection to sexualised violence, aimed at young women. The picture of sexuality in the media and in pornography and the expectations and demands that follow, especially on female adolescents were other questions that actualised the commission, as well as professionals working with adolescent health noting that “new” questions and considerations were posed<sup>(34)</sup>.

In an overview article from the US, the same worries concerning young peoples’ exposure to sexualization are expressed<sup>(103)</sup>. The authors are of the opinion that there is a risk of developing a sexual callousness when adolescents are exposed to unrestrained access to erotica.

The national survey “Sex in Sweden”<sup>(17)</sup> revealed that not only men but also women consume pornography. Fifty-one per cent of adult men and 20% of the women had seen a pornographic film during the last year. Seventy-six per cent of the men aged 18-24 had watched a pornographic film during the last year, with a corresponding figure of 35% for women. A significant asso-

ciation between pornography consumption and having had anal intercourse was determined <sup>(17)</sup>.

### New trends in sexual behaviour

Sexual habits change over time and, today, oral sex is an established behaviour among young people <sup>(17, 19)</sup>. Eighty-two per cent of Swedish women and men had experienced oral sex <sup>(17)</sup>. Among 17-year-olds in the SAM 73-90 study, 43% of the boys and 51% of the girls reported having given oral sex and they graded their experiences as mostly positive <sup>(19)</sup>.

Anal sex is another sexual practice that seems to have increased during the last years <sup>(34)</sup>. Among adults, 20% reported that they had ever had anal intercourse, but when questioned about their last intercourse 1% of the women and 3% of the men answered that it had been an anal intercourse <sup>(17)</sup>. In different Swedish studies among young people, the numbers of having had anal intercourse varies between 4-57% among young men and 4-52% among young women <sup>(17, 19, 20-24)</sup>. In England in 1991, the numbers ever having had anal intercourse among 18-24 year-olds were 11% for men, and 14% for women <sup>(28, 29)</sup>. According to NATSAL 2000, compared to 1991 the numbers for all respondents' had increased from 7-12% for men and from 7-11% for women <sup>(104)</sup>. In a study comparing randomised samples of Swedish and US students it was found that 8% of Swedish male students and 12% of US male students had experience of anal intercourse. The corresponding figures for female students were 15% and 11 % <sup>(105)</sup>.

### Influence of pornography

The role that consumption of pornography plays in peoples' thoughts, feelings, attitudes, and behaviour has been a subject for debate and contradictory opinions. At youth and student clinics personnel have noticed that young women ask different kinds of questions and have different ideas compared to some years ago <sup>(34)</sup>, which might be due to the increased availability of pornography in society, although it is uncertain how pornography influences human behaviour <sup>(103)</sup>. Exposure to violent pornography might lead to changes in persons' attitudes and behaviour regarding sexual activity and violence, especially against women <sup>(106, 107)</sup>. There is a lack of knowledge and uncertainty whether young peoples' access to sexual pictures on the Internet could develop a compulsive sexual behaviour when they are engaged in adult-oriented web sites <sup>(108)</sup>. In a Swedish study, where 15-year-old females were interviewed, it was concluded that their attitude toward pornography was contradictory: on the one hand, they considered it disgusting, on the other hand it sometimes made them feel sexually aroused. Cultural norms do not make it easy, if they enjoy and demand pornography they risk falling

into disrepute and if they hate and resist pornography, they run the risk of being ridiculed and verbally abused<sup>(109, 110)</sup>.

### A source of knowledge

Pornography can also be a source of knowledge. In studies among US university students, it was concluded that pornography plays a role in the sex education of the public<sup>(111-113)</sup>. Among a group of US university students, pornography was ranked 3, 5 out of six choices as a source of sexuality knowledge. There was a difference between males and females regarding their exposure to and perceptions of pornography. Men generally report gaining a greater amount of their sex knowledge from pornography than women, but substantial numbers of women reported that pornography was a source of information regarding certain topics, especially oral and anal sex<sup>(114)</sup>. In a recent study<sup>(115)</sup> investigating how university students obtained their sexual knowledge of sexual matters and whether pornography functioned as an important source, it was concluded that peers played the most important role.

### Risk behaviour

Anal intercourse has been reported to be associated with anal cancer<sup>(116, 117)</sup> and a risk factor for heterosexual HIV transmission, as reported rates of condom use have been lower for anal rather than for vaginal intercourse<sup>(118, 119)</sup>. Condoms are occasionally used at anal intercourse. In Swedish studies among young men and women seeking outpatient clinics for family planning and STD testing, 17-30% of men, and 33-40 % of women, of those having had anal intercourse, reported using a condom, sometimes or always, at that occasion<sup>(21-23)</sup>.

### Theories on pornography

Different theoretical standpoints and explanatory models have been described in the literature. Linz and Malamuth<sup>(120)</sup> describe three different perspectives on pornography and their contribution of each approach to scientific research and social policy. The conservative-moralist theory relies on principles of legal moralism and sees pornography as obscenity that creates sexual arousal and societal decay. The heteronormative traditional societies' values are defended. The liberal theory, including liberal feminists, relies on the liberty of the individual and the free word. The radical feminist theory relies on the harm principle, where pornography is specified as harmful to women<sup>(121)</sup>. Pornography is founded on the gender principle in society with men in power and women as subordinates. Feminist anti-pornographers consider two kinds of sexually explicit depictions or descriptions – erotica and

thanatica. Erotica shows sexual relationships between fully consenting equal partners who identify emotionally with each other, whereas in thanatica sexual relationships in full consent, real equality, and emotions are lacking <sup>(121)</sup>. In Sweden, a documentary film, "Shocking Truth" <sup>(122)</sup>, caused a debate, in the media as well as among Members of Parliament, concerning pornography and its influence on young people. The filmmaker had a feminist point of view, and a book was later written by liberals, not sharing her approach toward this issue <sup>(123)</sup>.

In summary: Studies on sexual behaviour among high school students were performed in Uppsala in 1979 and 1989 <sup>(31, 67-68)</sup>. Since then there have been many changes in society: the introduction of a new contraceptive method (ECP); information campaigns about HIV/AIDS and STIs have weakened and an increase in Chlamydia infection and abortions has occurred among young people; the influence of pornography on young peoples' attitudes and sexual behaviour has been debated.

## Aims of the thesis

The overall aim of the thesis was to contribute to the knowledge and understanding of sexual behaviour, contraceptive use, and pornography consumption as experienced by high school students and young people.

Specific aims were:

- to investigate the knowledge and experience of the emergency contraceptive pill among first-year high school students, and their attitudes towards this method (Paper I)
- to investigate sexual behaviour and attitudes among first-year high school students in 1999 and to relate the findings to gender and education programmes, and also to compare the sexual behaviour with that reported from similar studies in 1979 and 1989 (Paper II)
- to investigate sexual behaviour and consumption of pornography and to explore possible associations between sexual practices and pornography among a randomly selected sample of third-year high school classes (Paper III)
- to gain an understanding of thoughts and reflections about pornography consumption, and its possible influence on sexual practices, among young men and women (Paper IV).

# Methods

## Design

An overview of the studies is presented in Table 3.

Table 3. *Design, methods and participants of the studies included in the thesis.*

Paper	Design	Data collection	Study group	Response rate
I and II	Cross sectional surveys; Descriptive, explorative, comparative	Classroom questionnaires	20 randomly selected first-year high school classes in Västerås and Uppsala. (n=408)	82%
III	Cross sectional survey; Descriptive, explorative, comparative	Classroom questionnaire	47 randomly selected third-year high school classes in Västerås. (n=718)	77%
IV	Qualitative interview study, analysed by Grounded Theory	Theoretical sampling	18 young men and women recruited via a youth centre	

## Papers I, II and III

### Paper I and II

Studies I and II were performed in the spring of 1999 on a randomly selected sample of first-year high schools classes in Västerås and Uppsala, two medium-sized cities in the middle of Sweden. Uppsala is a university town with 180,000 inhabitants and Västerås is a former industrial town with 130,000 inhabitants.

In 1990, Sweden's 500 high schools were organised at a national level, under the National Board of Education. The study lines comprise 16 national programmes; both theoretical and practical and all comprise three years of studies. Some programmes are strongly sex-segregated. For study purposes, e.g. to be able to compare with the study undertaken in 1989, the social science and the natural science programmes were categorised as theoretical and

the other programmes were categorised as practical, as they often include subjects directly related to a profession. The classes were numbered and randomly selected into the study.

These two studies were comparative and descriptive in approach. Differences in responses between students in the two cities, between boys and girls, theoretical and practical classes and native Swedish and immigrant students were evaluated. In Study II, comparisons also were made with the findings from two earlier studies conducted 10 and 20 years previously<sup>(31, 68)</sup>. Firstly, in 1979, Weiner et al<sup>(68)</sup> undertook a study on 181 students. The sample was obtained by a cluster-sampling procedure in which all high schools in Uppsala participated. Second, in 1989, Klanger et al<sup>(31)</sup> performed a study on a random sample of classes (n=383) in Uppsala, with all schools participating.

### Paper III

Study III was performed in the winter and early spring of 2002 and 2003 on a randomly selected sample of third-year high schools classes in Västerås. The study had an explorative, descriptive and comparative design.

### Study setting

#### **Papers I and II**

Studies I and II were conducted in classrooms from 20 first-year high school classes in Västerås and Uppsala. Five of the high schools were situated in Västerås and seven in Uppsala.

#### **Paper III**

Study III was conducted in the classrooms of 47 third-year high school classes in Västerås. All (n=5) high schools participated.

### Population and sample

#### **Paper I and II**

The total population of first-year high school students in the cities studied in 1999 was 4021, of which 1510 were in Västerås and 2511 in Uppsala. More girls than boys attended the 16 national programmes. Sixty per cent of the students in Uppsala were in theoretical programmes compared to fully 50% in Västerås. Girls were slightly over-represented in the theoretical as well as in the practical programmes. Twenty classes with a total of 492 students (280 girls and 212 boys) were randomly selected. The external non-response was 84 students (18%) resulting in a total of 408 students (249 girls and 159 boys), median age 16 years, who answered the questionnaires, see Table 4.

A difference of 10% between groups could be demonstrated with  $\alpha=0.05$  and  $\beta=0.20$  (power =100-20=80%) if  $n_1 + n_2 = 400$ .

Table 4. *Participants in Paper I and II.*

	%	(n = 408)
Females	61	249
Males	39	159
Students from Västerås	41	166
Students from Uppsala	59	241
Practical students	41	167
Theoretical students	59	241

All students present in the classes when the questionnaires were delivered participated and they answered the questions very carefully, illustrated by the low internal dropout. In the different questions in the questionnaire it varied between 0-4 %. Since the questionnaires were unmarked in order to make the study anonymous, there was no reminder and the reasons for the dropout were not possible to analyse.

### **Paper III**

The total population of third-year students in the city studied in 2002 was 1389 (727 men and 662 women). Forty-seven randomly selected classes with a total of 924 students (448 men and 476 women) were selected. At the time of the data collection 724 of the students were available, and finally 718 questionnaires (387 from men and 331 from women) were analysed, see Table 5. A difference of 5% between groups can be demonstrated with  $\alpha=0.05$  and  $\beta=0.20$  (power =100-20=80%) if  $n_1 + n_2 = 800$ .

Table 5. *Participants in Paper III.*

	%	(n = 718)
Females	47	331
Males	53	387
Practical students	43	310
Theoretical students	57	408

## Measurement instruments

### **The questionnaire (Paper I)**

A questionnaire was constructed for Study I. Some of the questions had been used in former studies<sup>(72, 124)</sup> and some of them were new.

The questionnaire contained 23 questions, most of two to six closed-ended alternatives concerning the following items:

*Demographics* (5 questions): sex; age; study programme; country of origin; years in Sweden if not born in Sweden;

*Knowledge* (6 questions): knowledge of ECP; the source of this information; how ECP works; how long after an intercourse ECP can be taken; knowledge of where to turn to if in need of ECP; and when in the menstrual cycle the greatest risk/chance of pregnancy occurs;

*Experience* (3 questions): have had sexual intercourse; ever used ECP (self or partner); and side effects of ECP;

*Attitudes* (8 questions): if having missed contraception – would you take (or recommend) ECP; what do you think friends would do; does worry about side-effects mean that many won't take ECP; is a prescription-free status desirable or not; how a prescription-free status would influence the use of ECP; risk of negligence with contraceptives when ECP is available; and whether condom use will decrease. One question concerned where the student would prefer to turn if in need of ECP.

### **The questionnaire (Paper II)**

The questionnaire used in Study II consisted of 47 questions (and 10 attitude statements, not shown in Paper II). Some of the questions from the Uppsala studies in 1979<sup>(68)</sup> and 1989<sup>(31)</sup> were included in this new study for comparison. The topics for comparison between 1979, 1989 and 1999 were: experience of sexual intercourse, age at first coital experience, number of sexual partners, contraceptive use at first and latest sexual intercourse, and alcohol use at first sexual intercourse. Other questions compared between 1989 and 1999 were: smoking habits, having had an STI, influence of HIV/AIDS debate on attitude to sex, and whether parents had talked about sex. The students were asked about their self-confidence and the answers were rated on a scale from 1 (“very poor”) to 7 (“very good”). Sources of information about sex were also asked for. The questions were closed, but some provided opportunity for free comments, concerning for instance sex education at school and how the HIV/AIDS debate had influenced the students' attitudes towards sex. The questionnaires in Papers I and II were tested in a pilot project in another Swedish town among 53 high school students.

### **The questionnaire (Paper III)**

The construction of the questionnaire was preceded by meetings and discussions with professionals and adolescents<sup>(125)</sup>. The questionnaire consisted of

74 multiple-choice questions on demography, relationships with parents, experiences of pornography and sexual behaviour (and 15 attitude statements, not shown in Paper III). The majority of questions had been used in previous research in Sweden <sup>(19, 21-23, 31, 126)</sup>.

Self-graded experience of sexual intercourse, oral and anal sex was ranked with five alternatives (very positive, rather positive, neither/nor, rather negative, very negative). The alternative “not relevant for me” was available for those who lacked personal experience of the subject in question. A pilot test and test/ retest of the questionnaire were performed in a group (n=22) similar to the study group but in another city, and a high degree of correlation was determined (Spearman 0.90 was used for ordinal scale variables and Kappa 0.86 was used for nominally scale variables) <sup>(127, 128)</sup>.

## Data collection

### **Paper I and II**

An explanatory letter about the background, aim and procedure of the studies was sent to the heads of the high schools, asking for their permission to conduct the studies, and was followed up by telephone calls two weeks later. All heads approved of the studies.

During a three-month period in the spring of 1999 the project leader (EHN), visited the classes and gave oral and written information about the studies. The attendance in the practical and theoretical classes on these occasions was 76% (n=167 out of 218) and 88% (n=241 out of 274). The students were informed that answering the anonymous questionnaires was voluntary and confidential. After this information had been given, the students were asked if they would participate in the study and questionnaires distributed. The students' desks were separated for 30 minutes during completion of the questionnaires, and the completed forms were left in a closed box, which was collected by the project leader. Pocket-sized cards from the local youth centre were given out in case somebody wanted personal counselling.

### **Paper III**

A meeting was held with the heads of the high schools, explaining the aim of the study. All of them approved, and an explanatory letter was sent to the teachers of the selected classes. The letter was followed up by telephone calls.

One of the authors (EHN), and eight specially trained study assistants visited the classes and gave oral and written information about the study. The students were told that participation was voluntary and anonymous. To maintain privacy while filling in the form, which took 15-20 minutes, the desks were separated. The students put the form in a sealed envelope, which was collected by the study assistant. Cards from the local youth centre were offered, in case anybody wanted personal counselling.

## Data analysis and statistical methods

### **Paper I**

The significance of differences in responses between the teenagers in the two cities, between boys and girls, between theoretical and practical classes and between native Swedish and immigrant teenagers was calculated by the Chi-square test. In the knowledge questions, the correct versus the incorrect answers were tested, including the “don’t know” answers. In the attitude questions, the opposite answers among those who reported having a particular attitude were tested; the “don’t know” answers were excluded as these indicated that the student did not hold an opinion.

### **Paper II**

Differences between the two cities, the genders, the theoretical and practical classes as well as between native Swedish and immigrant teenagers were evaluated with the Chi-square test for nominally scaled variables and by *t*-tests for interval-scaled variables.

The Mann-Whitney test was used when the distribution was skewed. In studies I and II, a *p*-value of  $\leq 0.05$  was adopted as statistically significant and the material was transferred into the Statistical Package of the Social Sciences (SPSS).

### **Paper III**

The data were transferred into Statistical Package of the Social Sciences, (SPSS 11.5). Differences in responses between male and female students regarding experience of pornography and sexual behaviour were analysed with the Chi-square test for nominally scaled variables and by Student’s *t*-tests for interval scaled variables. The Mann-Whitney *U*-test was used when the distribution was skewed. A *p*-value  $\leq 0.05$  was considered statistically significant.

Students reporting pornography consumption every day or every week were categorised as “high consumers”, whereas those reporting consumption a few times a month, a couple of times a year, once in a while, or never, were categorised as “low consumers”.

The parents’ occupational status was given a score from 0 to 2 (0: both parents were unemployed; 1: one parent was unemployed; or 2: both parents were gainfully employed). Six questions concerned the adolescents’ relationship to their parents. A score from 0-12 points was given in order to form an index, a higher score indicating a better relationship. The occupational score and the relationship to parents’ index were used when testing differences in background factors between high- and low consumers of pornography, and in logistic regression analysis<sup>(129)</sup>.

Logistic regression analysis was used to predict the odds of sexual activities in relation to high and low pornography consumption among males.

## Paper IV

In order to obtain an in-depth comprehension of young men's and women's perceptions about pornography and its possible influence on sexual practices a qualitative approach – grounded theory was chosen<sup>(130, 131)</sup>. Grounded theory allows investigation of central processes concerning individuals, groups, and social processes in the social environment. These fundamentals of the method are a constant comparison of raw data with theoretical constructs, theoretical sampling, data-collection and analysis, theoretical memo-writing and analytical techniques that progressively lead to more abstract analytical levels. The method is mainly inductive and is not a testing of a hypothesis<sup>(132, 133)</sup>.

### Sample and data collection

The setting for this study was Västerås, a medium-sized city in Sweden. Young men and women were invited to participate via the Youth centre from spring 2004. Eighteen young men and women, aged 16-23 years, participated. In line with grounded theory methodology, the informants were theoretically selected, meaning that the interviewer collected, coded and analysed the data and then decided what data to collect next and from whom, in order to develop the emerging model. To achieve variation in data collection informants from different high school programmes, employment, ethnic background, as well as active Christian and radical feminist were included, and their experience with pornography varied<sup>(130)</sup>.

Interviews with open-ended questions were used in order to achieve a deeper insight into how young men and women think and argue about pornography and sexuality. Staff at the local youth centre was informed about the study and assisted the project leader (EHN) in recruiting informants. The interviews took place in a "quiet room". Informed consent was obtained, and the interviews were tape-recorded with permission of the informants. According to Charmaz<sup>(131)</sup>, it is important to have a relationship with respondents, to listen to their stories with openness to feeling and experience. An interview guide was constructed and contained open-ended questions covering the following themes related to pornography and sexuality:

- *Reflections about pornography* (e.g. "Describe thoughts and associations to pornography?", "Describe positive and/or negative things or consequences associated with pornography?")
- *Common sources of pornography*
- *Influence of pornography* ("Can you give me examples if and how pornography influenced your/others sexual behaviour and feelings?")

- *Feelings* that arise (“Describe your feelings in connection to pornography?”)
- *Gender aspects* (“Does pornography influence how people look upon men and women? In what way?”)
- *Sexual practices* (“Common sexual practices in pornography? Describe your thoughts about; anal intercourse; having a sexual relationship with a friend”).

After each interview the tape was transcribed verbatim. During the last interviews, nothing new arose and no further interviews were conducted.

### Data analysis

Using grounded theory means following a systematic process of coding and comparison of raw data and to use theoretical memos and ideas<sup>(130-133)</sup>. Data were collected and coded step-by-step. After every interview, the tape was listened through and transcribed verbatim. The first step was to make the data comprehensible; transcripts were examined line-by-line to examine participants’ thoughts, considerations and experiences related to the themes from the interview guide. Substantive codes generated from the data were formulated in words used by the informants, in order to stay as close as possible to the respondent’s vocabulary<sup>(131)</sup>. To create credibility, data were analysed by two research colleagues independently. Theoretical memos were used to link, and verify, analytical interpretations with the empirical data. Similarities and differences in the data were identified and systematically compared and emerging themes were discussed until agreement between the researchers was reached. Closely related concepts were fitted together to form categories and these were labelled, summarising the content. Each category was then analysed to search for and define qualities and dimensions that could form subcategories or possible variations within categories. The core category, answering the question: “What is this all about?” was identified and the other categories were related to the core category<sup>(130)</sup>. As the last step in our analysis, we constructed a preliminary model (Figure 5, p. 44).

### Ethical considerations

The local Medical Ethics Committee at Uppsala University approved of all studies (registration number Ups. 98-508 and 02-367). The heads of the schools gave their permission to perform the classroom studies I, II or III respectively.

All participants were given both oral and written information and were informed that participation in the study was voluntary and anonymous and that

they could withdraw at any time. The questionnaires had no identifying labels and the participants themselves put the forms in an unmarked envelope and sealed it before dropping it into a box. The students were informed that if they did not want to participate they could leave the classroom or they could choose to stay and pretend to fill in the form, or just sit and read. Questions concerning sexuality are intimate and delicate and in order not to highlight students with little or none sexual experience, the alternative “not relevant for me” was included in the questionnaire in paper IV, so that these students did not have to pass over a whole set of questions. Teachers were recommended to leave the classroom while the forms were filled in, in order not to embarrass the students. To maintain privacy while filling in the form, students’ desks were separated. Afterwards, there was time for the students to get information, ask questions and to discuss matters related to the topic. In case anybody wanted personal counselling, the students were offered cards from the local youth centre.

The informants were asked if they could consider participating in an interview or they took contact themselves. A respectful approach and an open climate were important in order to obtain valid data and the interviewer posed open questions in order to make the informants feel comfortable and willing to talk.

## Results

The results are presented as summaries of the papers, also including some additional results to Paper I, II and III.

### Paper I

The mean age was 16.5 years. Almost half (45.4%) of the students had had sexual intercourse, and of those 28.3% stated that they themselves or their partner had used ECP. More students attending practical (n=31, 36%) than theoretical programmes (n=22, 22%) reported former use of ECP, although this was not statistically significant.

Four out of five teenagers knew about ECP and where to obtain ECP if necessary. Many students (67.3%) also knew that ECP prevented implantation. The main sources of information about ECP were youth clinics (n=179) and friends (n=159). When comparing students with and without coital experience, in 4 of 5 cases, more students with coital experience knew the right answers.

The attitude towards using ECP in an emergency was positive, but the teenagers and especially girls were restrictive as to whether ECP should be available without a prescription. The girls believed ECP could be used much more and two-thirds of both sexes thought it could lead to negligence with ongoing contraception, and if in need of ECP, 71.1% of teenagers preferred turning to a youth clinic. One out of four believed that concerns for side effects could deter them from using ECP.

### Paper II

The questionnaire was answered by 408 students (249 girls and 159 boys), median age 16 years. Almost one-half of the students (46%) had had intercourse, showing that the age of coitarche had not decreased when comparing the three studies. The median age at intercourse of those who had had intercourse was 15 years for both genders. More students in practical programmes (60%) than in theoretical ones (37%) had had sexual intercourse. More teenagers in theoretical (90%) than in practical programmes (64%), had used contraceptives at their first intercourse, an increase from 65% in

1979 to 76% in 1999. One-fourth of the teenagers' were under the influence of alcohol at the first intercourse, a decrease compared to 1979 (52%).

Few differences within programmes were found: comparisons of sexual and risk behaviour within study programmes and between male and female students are shown in Table 6. More differences were determined between genders attending different study programmes (Table 7).

Differences were also determined between students using and not using contraceptives at their first sexual intercourse with respect to being less than 15 years at first intercourse, study programme, alcohol use at first intercourse, and gender. No significant differences between groups were found concerning parents who had talked about sex, smoking or considering oneself as an immigrant or self-confidence. A logistic regression analysis was performed to predict the odds of independent associated variables in relation to non-use of contraceptives at first sexual intercourse among sexually experienced students (Table 8). Adjusted odds ratios showed that having used alcohol at first intercourse, attending a practical programme, being less than 15 years at first intercourse, were significantly associated with non-use of contraceptives at first intercourse, predicted 28% non use of contraceptives at first intercourse.

Table 6. *Crude and adjusted odds ratios (OR) and confidence intervals (CI) for predicting the odds of independent associated variables in relation to non-use of contraceptives at first intercourse among first-year high school students.*

<b>Independent variables</b>	<b>Crude OR</b>	<b>±95% CI</b>	<b>Adjusted OR</b>	<b>±95% CI</b>
Alcohol use at first intercourse	4.00	1.92-8.33	4.97	2.19-11.31
Practical programme	5.00	2.24-11.14	4.74	2.04-11.00
<15 years at first	2.19	1.04-4.31	2.42	1.09-5.40
Female gender	2.57	1.18-5.59	–	
Smoking	1.36	1.02-1.82	–	
Self-graded self-confidence	1.01	0.65-1.57		

Attitudes toward sexuality and pornography were measured by 10 statements (included in the questionnaire, but not in Paper II). All statements were given a score and negatively formulated statements were reversed so that high scores consistently indicated a positive attitude toward different aspects of sexuality and pornography. Factor analysis was performed in order to reduce the variables into a smaller set with common characteristics or underlying dimensions<sup>(127)</sup>. Two components emerged from the attitude items; one related to sexuality and pornography and one to media influence and expectations worrying the respondent. The Mann-Whitney U-test was used to test median scores between genders within practical and theoretical programmes.

Table 7. *Sexual behaviour and risk factors among male and female students in theoretical versus practical first-year high school. (Numbers are in per cent.)*

	Theoretical (n=241)			Practical (n=167)		
	Males (n = 98)	Females (n = 143)	<i>p</i> -value**	Males (n = 63)	Females (n = 104)	<i>p</i> -value**
	%	%		%	%	
Ever intercourse	40	35	ns	51	65	ns
Median number of sexual partners*	2.0	1.0	ns	2.0	2.0	ns
Steady relationship	15	22	ns	29	33	ns
Contraceptive use at first intercourse*	95	84	ns	75	59	ns
Ever sexually transmitted disease*	5	10	ns	3	8	ns
Alcohol use at first intercourse*	18	20	ns	22	29	ns
Daily cigarette use	5	9	ns	19	27	ns
Parents have talked about sex	34	59	< 0.001	51	64	< 0.001
AIDS debate has influenced my own attitude about sex	39	47	ns	34	40	ns
AIDS debate has influenced others attitude about sex	55	55	ns	71	53	0.016

\* The numbers are calculated among those who had had sexual intercourse (n=189; theoretical male students, n=39, theoretical female students, n=50. Practical male students, n= 32, practical female students, n=68).

\*\* *p*-values were calculated with Chi-Square unless expected numbers were too small; then Fisher's Exact Test were used.

Table 8. *Sexual behaviour and risk factors among female students in theoretical and practical first-year high school and male students in theoretical and practical first-year high school. (Numbers are in per cent.)*

	Females (n = 247)			Males (n = 161)		
	Theoretical (n = 143)	Practical (n = 104)	<i>p</i> -value**	Theoretical (n = 98)	Practical (n = 63)	<i>p</i> -value**
	%	%		%	%	
Ever intercourse	35	65	< 0.001	40	51	ns
Median number of sexual partners*	1.0	2.0	0.041	2.0	2.0	ns
Steady relationship	22	33	0.047	15	29	0.027
Contraceptive use at first intercourse*	84	59	<0.01	95	75	0.05
Ever sexually transmitted disease*	10	8	ns	5	3	ns
Alcohol use at first intercourse*	20	29	0.289	18	22	ns
Daily cigarette use	9	27	<0.001	5	19	0.007
Parents have talked about sex	59	64	ns	35	47	ns
AIDS debate has influenced my own attitude about sex	47	40	ns	39	34	ns
AIDS debate has influenced others attitude about sex	55	53	ns	55	71	0.038

\* The numbers are calculated among those who had had sexual intercourse (n=189; theoretical male students, n=39, theoretical female students, n=50. Practical male students, n= 32, practical female students, n=68).

\*\* *p*-values were calculated with Chi-Square unless expected numbers were too small; then Fisher's Exact Test were used.

(Figure 2). Figure 2 shows significant differences in the two attitude components, between female and male students in first-year high school ( $p<0.001$ , and  $p=0.037$ ). Differences also appeared between theoretical and practical female students ( $p=0.004$ ;  $p=0.042$ ).

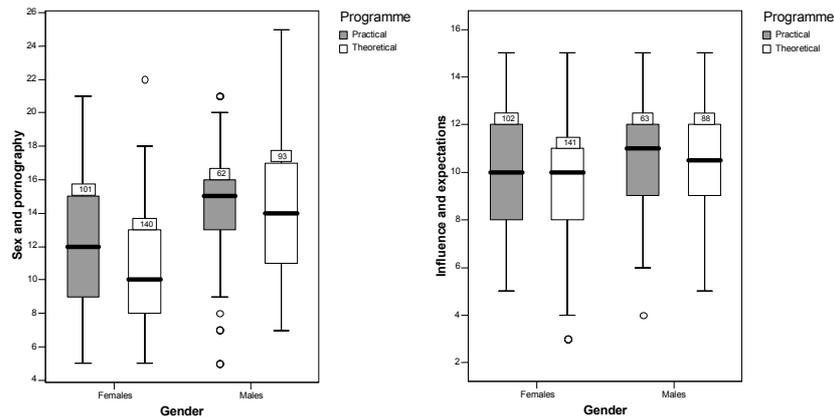


Figure 2. Attitudes toward sexuality and pornography among female students in practical and theoretical first-year high school, and male students in practical and theoretical first-year high school.

### Paper III

In Paper III 94% (n=662) defined themselves as heterosexual, 0.5% (n=3) as homosexual, and 3% (n= 20) as bisexual, and 2.5% (n=17) were uncertain of their sexual disposition. More males (98%), than females (72%), had consumed pornography. Students reporting pornography consumption every day or every week were categorised as “high consumers”, whereas those reporting consumption a few times a month, a couple of times a year, once in a while, or never, were categorised as “low consumers”. More male high consumers than low consumers or females were sexually aroused by, fantasised about, or tried to perform acts seen in a pornographic film ( $p<0.001$ ). Three-quarters of the sample had had sexual intercourse, of which 71% reported contraceptive use at first intercourse. Anal intercourse was reported by 16%, with infrequent condom use (39%). Intercourse with a friend (adjusted OR 2.29; 95% CI 1.27-4.12) was significantly associated with high consumption of pornography among males, whereas anal intercourse (adj. OR 1.99; 95% CI 0.95-4.16) and group sex (adj. OR 1.95; 95% CI 0.70-5.47) tended to be associated. A significant confounder was early age of sexual debut (adj. OR 1.49; 95% CI 1.18-1.88).

Fifteen attitude statements (included in the questionnaire, but not in Paper III) toward pornography were analysed in order to form a scale. The statements were formulated as a Likert-scale. All statements were given a score and negatively formulated statements were reversed so that high scores consistently indicated a positive attitude toward different aspects of pornography<sup>(127)</sup>. The Mann Whitney U-test was used to test median scores between genders and high- and low-consumers of pornography. Factor analysis was performed in order to reduce the variables into a smaller set with common characteristics or underlying dimensions<sup>(127)</sup>. Two components emerged from the attitude items; one component more related to general attitudes (i.e. attitudes about pornography as one perceived it to be related to people in general) and one personal component (i.e. attitudes about pornography as one perceived it to be related to oneself). Differences between groups were evaluated with ANOVA, showing differences in both components ( $p=0.001$ ). Post hoc test (Tukey) showed differences between all three groups (General attitude; mean value for female low pornography consumers=9, male low pornography consumers=11, and male high pornography consumers=12. Personal attitude; mean value for female low pornography consumers=20, male low pornography consumers=27, and male high pornography consumers=32). In Figure 3, the attitudes toward pornography among male and female students can be seen, showing that there was a significant difference between all three groups.

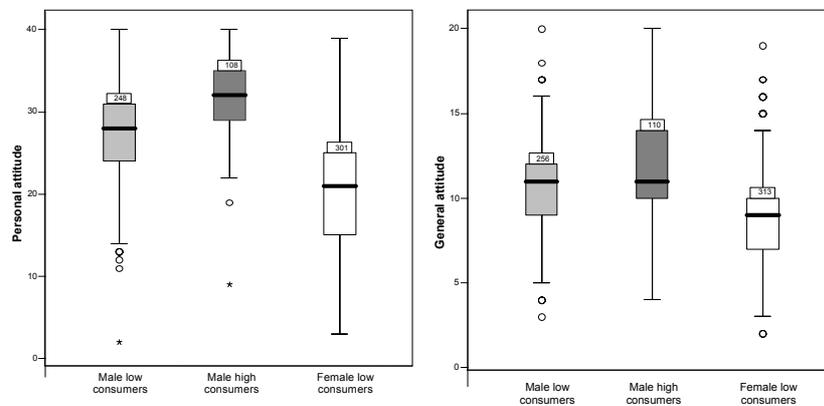


Figure 3. Attitudes toward pornography among male low- and high pornography consumers compared to female low consumers.

In connection with the questions: “Do you consider yourself becoming influenced in your sexual behaviour by pornography?” and “Do you consider others becoming influenced in their sexual behaviour by pornography?” the respondents who gave affirmative answers were asked to give examples of how they and others were influenced in free text. The answers were catego-

rized separately for men and women and the categories with examples are shown in Figure 4.

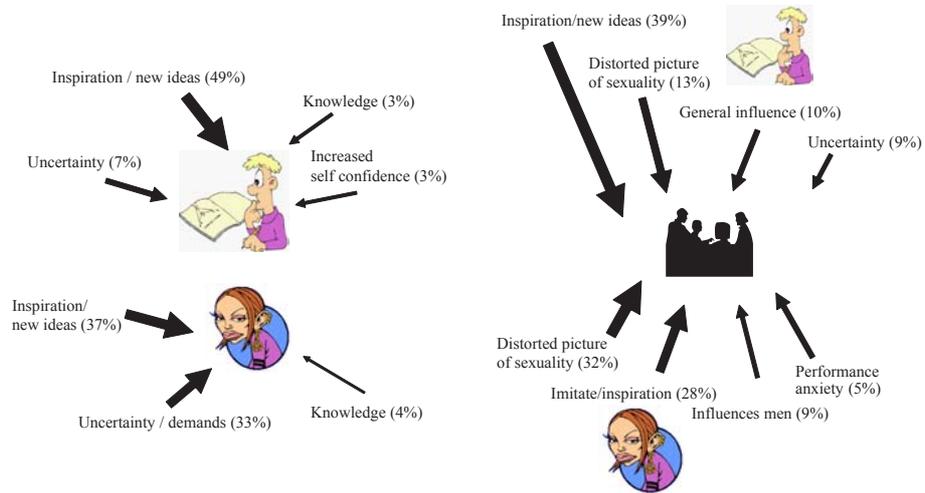


Figure 4. Categorized free-text answers to questions “Do you consider yourself becoming influenced in your sexual behaviour by pornography?” and “Do you consider others becoming influenced in their sexual behaviour by pornography?” among women and men.

Differences in sexual behaviour and pornographic consumption between students attending theoretical and practical study programmes are shown in Table 9, indicating that more practical- than theoretical students had experienced different sexual activities and pornography consumption.

Table 9. Sexual behaviour and pornography consumption among theoretical and practical third-year high school students (percentages and numbers).

	<b>Theoretical students (n = 404)</b>	<b>Practical students (n = 314)</b>	<b>p-value</b>
Oral sex; given	52 (208)	61 (189)	0.023
Oral sex; received	58 (228)	70 (217)	0.001
Ever intercourse	70 (228)	80 (245)	0.002
Intercourse with friend*	21 (80)	46 (137)	<0.001
Group sex*	5 (18)	10 (31)	0.004
Anal intercourse	13 (48)	20 (57)	0.016
Number of sexual partners (median)**	2.0	3.0	<0.001
Contraceptive use at first intercourse	73 (196)	70 (166)	ns
Contraceptive use at latest intercourse	75 (197)	63 (150)	<0.01
Condom use at oral sex	8 (19)	37 (21)	ns
Condom use at anal inter- course	39 (18)	37 (21)	ns
Ever STI*	3 (13)	5 (14)	ns
Ever abortion (self or part- ner)*	5 (13)	13 (33)	<0.001
Consumed pornography	81 (320)	91 (283)	<0.001

\* Numbers are calculated among those having had sexual intercourse

\*\* Mann-Whitney

## Paper IV

The core category, labelled “Living with the current sexual norm” included a description of the social process of pornography consumption and its influence on young people. This core category included three categories; expectations and demands created by pornography and other media with a sexual content, feelings and experiences that emerged from consuming pornography, and handling strategies, as a way of dealing with pornographic influence. These three categories had variations or subcategories related to them, all integrated in the preliminary model (Figure 5).

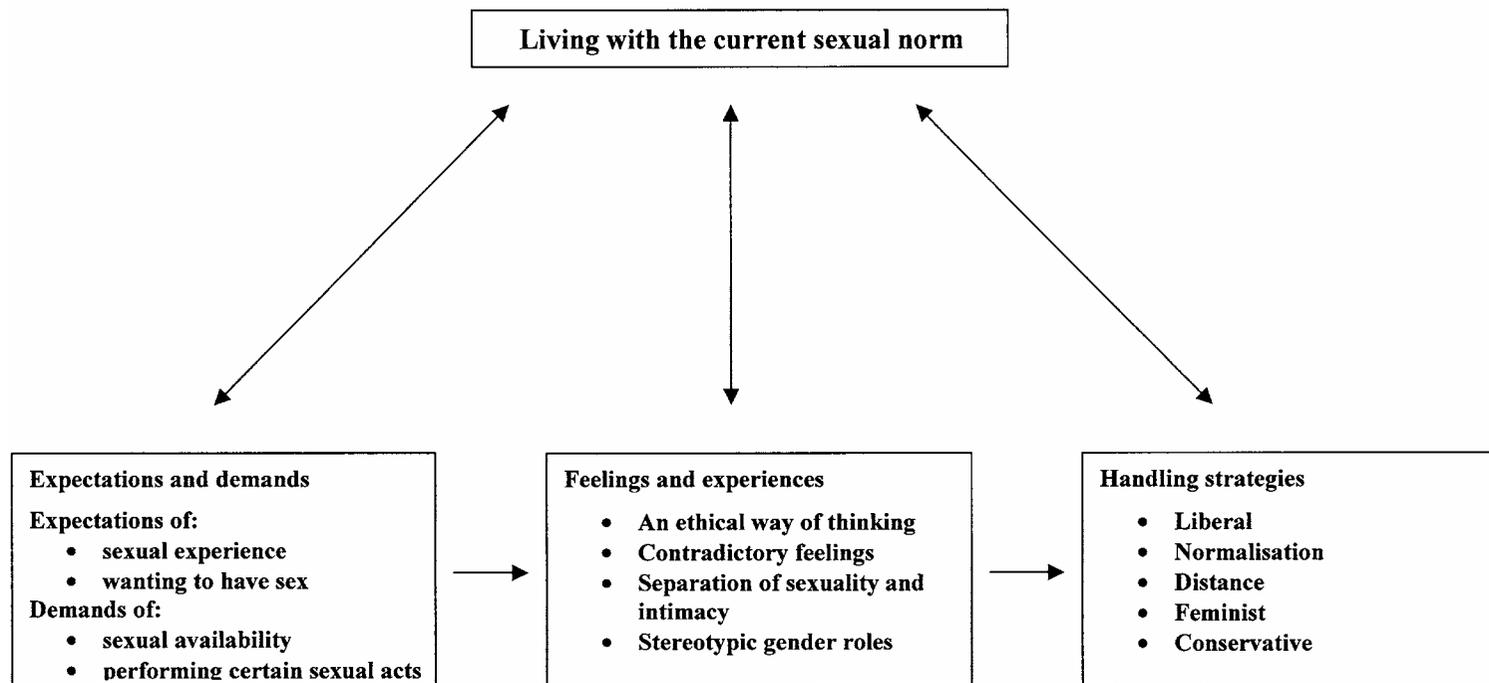


Figure 5. The process of pornography consumption among young women and men.

In the category “Expectations and demands”, the informants underscored how sexual messages created expectations and demands concerning sexuality and sexual behaviour, for instance to perform certain sexual activities, for example anal sex. Variations in the category were expectations of sexual experience and willingness to have sex, demands of sexual availability and the performance of certain sexual activities.

The category “Feelings and experiences” contained four subcategories; the informants expressed contradictory feelings towards pornography and felt that sexuality was separated from intimacy. A moral attitude was described and examples of stereotypic gender roles were given.

The category “Handling strategies” described how the participants had different individual handling strategies, labelled: liberal-, normalization-, distance-, feminist- or conservative strategy, in order to deal with the current sexual norm. These strategies were variations within the category and were not necessarily conscious to all respondents. Some informants were unaware of how they responded to pornographic material, whereas others were critical and analytical.

# Discussion

## Methodological considerations

### Paper I, II and III

#### **Population, sample and non-respondents**

The classes were randomly selected, a procedure strongly recommended for surveys <sup>(127)</sup> in order to avoid selection bias and to make generalisations possible, and nearly all in-school students from both sexes and different study programmes participated.

The classroom setting for Paper II was chosen in order to be comparable to the data collection situation in 1979 and 1989. The response rate with this type of procedure is often high and the students have no relationship with the project leader, which was an advantage, as this meant that there was no personal relationship, which might have created a possible bias, and there was no disruption as everybody carefully filled in the questionnaire. However, with classroom settings there is a possibility that group pressure might prevent some students from denying participation. Negative aspects of the setting chosen could be lack of privacy, and that some respondents may have felt group pressure to participate or they could feel stressed by not finishing as quickly as their peers did. In order to create some privacy, the students' desks were separated: to guarantee anonymity and to reduce the number of non-respondents, the questionnaires were unmarked, as were the envelopes, sealed by the students themselves before being put in a box. Thus, participation rate was high, because almost all in-school students were willing to complete the questionnaires; however, it was not possible to analyse non-responders, except for gender and high school programme. The response rate among in school students on the day of the studies was almost 100%, but the absence rate in the classrooms was 18-24%, with a higher absent rate in the practical classes in Studies I and II, and in the theoretical classes in Study III. Response rate in classroom questionnaire studies varies between 67-90% <sup>(19, 20, 24, 134)</sup>. From national surveys concerning alcohol and narcotics among 16-year-olds in nine-year compulsory school in Sweden it is known that about 15% absenteeism is normal <sup>(135)</sup>, and among 17-year-old high school students drop-outs vary between 23-24% in class-room studies <sup>(129, 136)</sup>. School dropouts are at increased risk of sexual health problems <sup>(19, 20, 50, 51)</sup>, however, in order to avoid any systematic absenteeism among non-

responders teachers were asked not to inform the students in advance. One limitation was that the opportunity to participate in Studies I and II was not repeated for those who were absent, whereas in Study III absent students were given a second possibility to participate, although none of them used that option.

In Papers I and II, the studies were undertaken in two different kinds of cities – a university area and an industrial area. Students attending high school programmes could be coming from cities, but there are also students coming from rural areas outside the cities. However, no significant differences were determined in the answers between the students in the two cities in Papers I and II. Herlitz<sup>(26)</sup> also determined no difference in the way adolescents in rural or urban areas answer questions considering sexuality. In Edgardh's national study on adolescent sexuality, there was no difference between urban and rural residence, or to immigrant background, in reported rates of consensual vaginal sexual intercourse<sup>(19,20)</sup>.

External validity means degree to which the results of a study can be generalized to settings or samples other than the ones studied<sup>(127)</sup> and a comparison of the results in Paper II with other Swedish studies determined a high degree of agreement<sup>(17, 19, 26, 45, 137)</sup>. In Paper III, the study was conducted in a medium-sized city in Sweden, but the results were in accordance with earlier Swedish studies in larger cities and in national samples<sup>(8, 17, 19, 21, 22, 26, 31, 126)</sup>. We therefore believe that the results, with some caution, can be generalized to other in-school high school students in Sweden.

### **The questionnaires**

The questionnaires used were non-standardised, study-specific and constructed by the authors<sup>(125)</sup>. Questions concerning sexuality are delicate and intimate and in Paper III the alternative “not relevant for me” was available for those who lacked personal experience of the subject in question<sup>(19)</sup>. This alternative was also used in order to reduce internal dropout rate, which was found to be low for all questionnaires, varying between 1-4%.

Self-reported instruments might be subject to reporting bias, and it is important that the questions asked are easy to understand<sup>(138-139)</sup>. It has been concluded that self-report of condom use with the last two partners is associated with the absence of an acute STI, and that self-report of condom use can therefore be considered valid<sup>(140)</sup>. Self-reported honesty in completing a sexual and other risk behaviour questionnaire among 3144 middle and high school students in USA was determined<sup>(141)</sup>. It was concluded that younger males tended to overestimate and younger females tended to underestimate their sexual-related experiences, but this did not invalidate interpretation of the overall survey findings<sup>(141)</sup>.

Some questions in Paper I were used in previous studies<sup>(72, 124)</sup>. The questions compared in Paper II were also used in previous studies in 1979 and 1989, and in pilot studies as well as other studies<sup>(31, 56, 68, 142)</sup> and were pilot-

tested in a population (n=53) similar to the proposed study population. In order to increase the content and construct validity the questionnaire for Paper III was devised in collaboration with experts within the field, using questions based on earlier Swedish studies on sexual behaviour<sup>(19, 21-23, 31, 126)</sup>. Together with male and female adolescent groups, the questionnaire was also discussed and commented upon before the reliability was finally tested and retested with a high degree of correlation (Spearman 0.90 and Kappa 0.86)<sup>(127, 128)</sup>.

Attitudes toward sexuality and pornography in Studies II and III were measured with Likert scales in order to summarize scores of a set of items or statements to which respondents were asked to indicate their degree of agreement or disagreement<sup>(127)</sup>. Different opinions concerning the number of alternatives existed, but the participants were not “forced” to take a standpoint, and so five alternatives were available: two positive and two negative and one “neutral” in the middle. Statistical significance is a term indicating that the results obtained in an analysis of sample data are unlikely to have been caused by chance, at some specified level of probability<sup>(127)</sup>. When comparing different groups in Papers I, II and III the differences were presented as statistically significant if they had a p-value  $\leq 0.05$ .

The logistic regression analysis in Paper III was used to determine the estimation for analysing associations, although not cause and effect, between multiple independent variables (sexual activities) and categorical dependent variable (high or low pornography consumption)<sup>(127)</sup>. A confounding variable is a variable other than the independent that can affect the dependent variable and the result of the study. In Paper III, an early age of sexual debut (<15 years) was a confounder, associated with high pornography consumption among men.

## Paper IV

Credibility, transferability, dependability, conformability and trustworthiness are the conceptions used instead of validity and reliability in qualitative studies<sup>(143-145)</sup>. Credibility or trustworthiness concerns validity and corresponds with objectivity, whereas transferability corresponds with generalization. Reliability or “adequacy of evidence” is reached when similar relationships between phenomena frequently emerge from the data. Credibility or trustworthiness means that the phenomena under study are validated based on constant comparison among different aspects of the data throughout the entire analytical process. This means that a theoretical model is valid when identified concepts and categories repeatedly emerge and are saturated and validated in the data<sup>(131, 145)</sup>.

The motive for undertaking a qualitative interview study was to achieve a deeper understanding of young women’s and men’s thoughts and reflections on pornography and sexuality in order to complement the quantitative study

(Paper III). A qualitative method enabled an insider perspective on informants' points of view. Grounded theory allows investigation of social interaction among individuals and between individuals and society. It is important to select informants strategically, to compare narratives from people with different views, social situations, age, gender and education. The following theoretical sampling aimed at refining emerging theoretical ideas and saturating emerging categories<sup>(131)</sup>.

As a confirmation of the validity of the content, two researchers (EHN and JS) independently analysed the data<sup>(130, 131)</sup>. The participation of an experienced researcher (JS) was recommended by Lincoln & Guba<sup>(143)</sup>. Results from a single qualitative research study cannot be generalized. The results presented formulated a model, a "substantive theory", that was dependent on context. To become a formal theory the results must be supported by further studies, such as a quantitative study or several qualitative studies on different contexts, especially for "handling strategies". Although grounded theory has sometimes been criticized for presenting common sense results, we believe that this study contributed material focused on thoughts and reflections of young people. As Kathy Charmaz wrote in 2000<sup>(131)</sup>:

"The grounded theorist's analysis tells a story about people, social processes, and situations. The researcher composes the story; it does not simply unfold before the eyes of an objective viewer".

## Reflections on results

### Sexual behaviour among young people

The age of coitarche among the high school students in Paper II remained unchanged over the 20-year period, in comparison with studies from 1979 and 1989<sup>(31, 69)</sup>. Almost three out of four had their second intercourse with the same partner from the first encounter, and the median number of sexual partners was 2.0 in both genders.

In Paper III, 75% of the sample, with a mean age of 18 years, had experienced sexual intercourse, which was in accordance with earlier Swedish studies<sup>(17, 19, 20, 31, 134)</sup>. In England, Johnson and Wellings<sup>(28-30)</sup> found a decreasing age at coitarche and this has also been noted in earlier Swedish studies, comparing sexual behaviour from 1967 to 1996<sup>(17)</sup>. Reasons for stagnation could be that the age at coitarche is already low in Sweden and that there are natural limitations, such as menarche and cognitive immaturity. The age of coitarche among 18-24 year-olds in Sweden was 16.5 years among females and 16.8 years among men in the national study "Sex in Sweden", undertaken in 1996<sup>(17)</sup>. The authors concluded that Swedes seemed to have their first sexual intercourse at an earlier age than Finish, Norwegian and British women and men<sup>(17)</sup>.

Experiences with oral- and anal sex was considered in Paper III, and the answers indicated that oral sex was a common sexual activity among 18-year-olds, in accordance with other Swedish studies <sup>(17, 19, 20, 22)</sup>, whereas anal sex was experienced by less than one fifth, also supported by others work <sup>(17, 19, 20, 21-24)</sup>.

Having “sex with a friend” has become a household word among young people today, meaning to have a sexual relationship with a person with whom you are not having a loving relationship. In Paper III, half of the sexually experienced young men and one third of the young women reported having that experience. Helmius concluded in her thesis in 1990 <sup>(14)</sup>, that love was the legitimising factor for sex among adolescents, but according to longitudinal surveys about knowledge, attitudes and behaviour toward sexuality related to HIV/AIDS in Sweden, Herlitz reports attitude changes. From 1989 to 2003, having intercourse on the first night of going out together became increasingly common, especially among 16-24 year olds. The numbers of respondents answering yes to the question: “Intercourse should only occur in steady relationships” has decreased over the same period <sup>(26, 27)</sup>, but among 16-year olds in Paper II, 62% agreed, more girls than boys. Edgardh also discussed about seemingly new attitudes towards sexuality and relationships among young people in Sweden today, and questioned if “love for fun” has become a substitute for love as the legitimizing factor for sexuality <sup>(146)</sup>.

Four-fifths of the students in Paper II answered that they felt mature enough at their first intercourse. In a large-scale Scottish study of 14-year-olds <sup>(147)</sup>, two-fifths of all respondents said that the first intercourse “was at about the right time”, but 32% of the female and 27% of the male adolescents reported that it had happened too early. Thirteen per cent of the females and 5% of the males stated that it should not have happened at all.

A majority of the students in Paper III were pleased (answered “very positive” or “rather positive” to questions) with their sexual experiences, although more males than females were content with their first sexual intercourse and with latest anal intercourse. One-half of the females reported anal intercourse to be mostly negative compared to only 6% of the males. When asked if they would consider doing it again, four fifths of the males, but less than half of the females, answered yes, indicating that most women do not appreciate this sexual activity, contrary to the idea that is spread through pornographic films. This result was in accordance with former studies <sup>(21-23)</sup>.

Fewer students in Paper II reported alcohol use at first intercourse compared to students in studies from 1979 and 1989. However, this only reflects one occasion. Alcohol use among adolescents varies over time and longitudinal studies among Swedish high school students’ report an increased use by the end of the 90s <sup>(135, 148)</sup>. The use of contraceptives was higher among those who had not been drinking alcohol at their first intercourse, compared with use among those who had been drinking, and a higher proportion of

smokers than of non-smokers had had intercourse. This also reflects differences between high school programmes.

Differences between students attending different educational programmes was one of the most striking findings in Paper II, implying that the students in practical programmes were at higher health risk concerning smoking, earlier onset of sexual intercourse, contraceptive use at first intercourse, and number of sexual partners. This is in line with earlier findings<sup>(19, 31, 46)</sup>, social background reflects the choice of study program<sup>(19)</sup>. In a recent Swedish thesis about the construction of gender among Swedish adolescent girls<sup>(149)</sup>, girls attending practical programmes were more sexually experienced compared to girls attending theoretical programmes. Moreover, adolescents with an early coitarche, before the age of 15 years, often report risky sexual behaviour<sup>(19, 31, 46, 47)</sup>. Male high pornography consumers in Paper III were more likely to engage in several sexual activities than male low consumers were, as were males with an early age at first sexual intercourse. Edwards showed that there were differences in sexual experiences and sexual risk taking between teenagers with strong and weak identities<sup>(16)</sup>. More attention should be paid to students attending different study programs, in order to strengthen self-confidence and to lower risk taking.

The most common STI among young people is genital Chlamydia infection, with a continuous increase since 1994<sup>(54)</sup>: this increase in STIs has been a matter of debate in Sweden as well as in the UK<sup>(146, 150)</sup>. The National Institute of Public Health, Sweden, has undertaken studies concerning Swedish people's attitudes toward HIV from the 1980s to 2003, and in 2000, it was reported that condom use among 16- to 17-year-olds increased over time<sup>(26)</sup>. However, in the latest report from 2003, only a little more than 50% had used a condom during the last month. It was concluded that many teenagers do not act in accordance with their actual knowledge, irrespective of authorities' endeavour<sup>(27)</sup>. The finding from Paper III, that condom use at oral sex and anal intercourse was infrequent is therefore discouraging, but in line with earlier studies<sup>(21-23)</sup>. Risks connected to unprotected oral and anal sex is earlier documented<sup>(118-121, 151)</sup>. This fact and its possible negative consequences must be brought up when informing adolescents about contraception and STIs, including HIV/AIDS<sup>(152)</sup>. More young women compared to men reported having had an STI in Paper III, a gender difference in accordance with national numbers<sup>(54)</sup>. Reasons for this could be that males do not have STI tests performed as often as women do, and general tests for Chlamydia infection, in order to contribute to a more equal part in reproductive health is discussed by Christianson et al<sup>(64)</sup>.

Fewer respondents in Paper II, compared with respondents in studies from 1989, thought that the AIDS debate had influenced their own attitudes toward sex. Since the end of the 1980s and the middle of the 1990s, the AIDS debate in society and schools, as well as campaigns in Sweden has weakened because Sweden has had one of the lowest incidences of HIV in Europe<sup>(54)</sup>.

However, as numbers are now slowly rising, it is important that this fact should be considered when planning for counselling and sex education, a fact observed in Sweden by for instance Barnombudsmannen <sup>(153)</sup>, and in Denmark <sup>(154)</sup>.

Practical programme students in Paper II were not as satisfied with the amount of sex education received at school as their fellow theoretical programme students were. Differences in sex education exist, locally, regionally, and nationally as has been shown in a national evaluation made by the Swedish Board of Education in 2000. Conclusions were drawn from the report that some class-related differences in sexual behaviour should be addressed with directed and supportive efforts for adolescents at risk <sup>(34)</sup>. Wight et al. <sup>(147)</sup> suggest that for school sex education, alternative ways of learning and negotiating skills training should be included. In an American randomised controlled study among junior high school students <sup>(155)</sup>, the authors conclude that gender differences suggest a possible need for gender-specific intervention activities that adequately address the social and cognitive needs of both sexes. This is something to be considered in efforts to maximize promotion of adolescent reproductive health when planning for sex education in schools and personal counselling. An intervention among Swedish vocational (practical) high school students aimed at improving knowledge, attitudes and practices of condoms and ECP resulted in improved knowledge and positive attitudes toward ECP and the use of condoms, and as a result, condom use increased. The authors concluded that peer educators, skill rehearsal and improved access to condoms might be important elements in sexual education <sup>(134)</sup>.

In Paper II the best sources of information about sex was asked for. Magazines, friends, teachers and youth centres were sources mentioned by most of the 16-year-olds. Mothers, siblings and fathers seemed to be less important, as were TV and videos. In a Danish study among 13-25 year olds, sexual matters were not discussed at home, but the majority had received sexual education at school <sup>(156)</sup>. However, studies have shown that parents are important as a complement to other sources <sup>(157, 158)</sup> and that their opinions are very important for decisions made by young people about sexuality. It was therefore disappointing that only 50% of the students reported parents having discussed sex with them. Parents are not always, however, the most optimal partners to discuss sex with, and other grown-ups such as personnel at youth centres and schools can be alternative resources.

Pornography and media with a sexualised content do seem to have an influence on young people and their sexual behaviour, as reported by young men and women in Papers III and IV, as well as in other studies <sup>(17, 21-24)</sup>.

## Contraception – the emergency contraceptive pill

Since 1999, more knowledge about the mechanism of action of ECP is available, showing that the inhibition of implantation of a fertilized egg is not the primary mechanism of action, but rather the delaying or inhibiting of ovulation<sup>(159, 160)</sup>. In Paper I, the participants were aware of the existence of ECP, but lacked detailed knowledge, especially among males. Similar high awareness of this method has previously been reported from other European countries, such as Finland<sup>(94)</sup> and the UK<sup>(161, 162)</sup>. In order to minimize misconceptions, ECP educational materials should therefore contain both basic and detailed information<sup>(124, 160)</sup>. However, the main source of information for teenagers about ECP was youth clinics and many preferred to turn to youth clinics if in need of ECP. The network of youth clinics all over the country in Sweden provides information and education about different kinds of contraception<sup>(10)</sup>.

Of those who had had sexual intercourse, more than 25% stated that they themselves or their partner had ever used ECP, which corresponded well with other findings in Sweden<sup>(72, 134, 163, 164)</sup> and Scotland<sup>(161)</sup>, and the young age groups appear to be well informed about this kind of contraception.

Attitudes towards using or recommending ECP were positive among respondents in Paper I. However, concerns regarding side effects were expressed, implying lack of knowledge. More boys than girls were of the opinion that ECP should be sold without a prescription (OTC), a fact now realized. Midwives, physicians and pharmacists are professional groups providing ECP to the public, and have been found to have favourable attitudes towards ECP. Midwives especially can give complete information about the method<sup>(165)</sup>, which is advantageous for young people in need of this method. Contraceptive non-compliance, especially among young people, is something that counsellors need to remember; it is therefore positive with an assailable back-up method, as advocated by others<sup>(72, 97, 166, 167)</sup>. ECP as well as condoms are free of charge at youth clinics; it is therefore likely that many teenagers will continue to choose to visit a youth clinic when in need of ECP, despite the OTC status of ECP at pharmacies.

Since 2001 ECP has had prescription free status. Expectations for decreasing abortions rates with this method have been unrealised<sup>(168)</sup>. In spite of increased sales statistics<sup>(169)</sup>, abortion rates are still constant, although fluctuating among teenagers<sup>(75)</sup>, showing that this is a complex and multifactor question. The current norm for teenagers in Sweden is not to become parents, but to use contraception, and if a pregnancy occurs, to have an abortion<sup>(8, 84, 85)</sup>.

## Pornography and its influence

The high numbers of reported exposition to pornography in Paper III verifies its spread among 18-year-olds in school students, a spread also indicated in other studies<sup>(17, 21-24, 34, 98-101, 103, 170)</sup>. The most frequently mentioned sources of pornography are the Internet and cable-TV, and these are easily available for anyone at home, and many adolescents can view almost anything in the privacy of their own room, which is unlike years past.

Adolescents, and especially females, thought that pornography influenced others sexual behaviour to a higher extent than their own, a phenomena earlier demonstrated<sup>(21-23)</sup>. In the categorized answers to free-text-question of how the respondents' considered pornography influenced their own sexual behaviour, half of the men and one-third of women answered that they were inspired and got new ideas. However, one-third of the women thought that uncertainty and demands followed with the influence, whereas only seven per cent of the men thought the same. The gender gap widened as more male high- consumers, rather than low consumers and females, reported that they felt sexually aroused, had fantasized and tried to perform acts they had seen on pornographic films. Male high pornography consumers were more likely to engage in several sexual activities than male low- consumers were, as were males with an early age at first sexual intercourse. Significant gender differences also emerged in a study among the Norwegian population<sup>(171)</sup>. Sexual activities, such as oral, anal and group sex, are reoccurring topics in pornographic materials, and give the consumer ideas about what to try in reality. According to Simon and Gagnon<sup>(12)</sup> human beings learn that they are sexual beings and how to act as a sexual being through interaction with society, which our study participants illustrated.

Hammarén and Johansson<sup>(172)</sup> discusses, in their study about sexuality and pornography among 15- 18-year-olds, and how on one hand, young men and women are closer to each other on many levels, whereas, on the other hand, the traditional gender roles are maintained. Pornography seems to be such an issue, where a prejudiced view on sexuality with traditional gender roles often is presented, as exemplified by others<sup>(98, 99, 101, 103, 109, 170-173)</sup> as well as by the informants in Paper IV. This could easily jeopardize goals for sexual and reproductive health in society, defining a healthy sexuality as free from prejudices, discrimination, compulsion and violence<sup>(6, 7)</sup>. A media debate has been going on in Sweden whether pornography and sexualized media content is contributing to a less equal society, and whether equality laws should be restricted in order to try to correct this matter<sup>(174)</sup>. It is therefore clearly a need for parents, teachers and personnel working with young people to inform, communicate and discuss this issue in order to contribute to a more analytical and critical awareness.

The model in Paper IV was an attempt to contribute to the understanding of young peoples' thoughts and reflections about pornography including

media with a sexualised content. The core category summarized, on a societal level, the meaning of the 'stories' told by all informants "To live with the current sexual norm". A norm means the guiding rule, telling people about what is normal in society, and human beings learn how to act like a sexual being in interaction with society <sup>(12, 13)</sup>. The current labelled sexual norm in society was something that these young people lived by and confronted, through pornography but also via media with a sexualised content. According to Månsson and Söderlind <sup>(101)</sup>, the norm considering sexuality in pornography is constantly drawn out, aiming at keeping the viewers' attention. Today, pornographic material is becoming more house-trained and spreading out in society via advertisements, TV, magazines and even evening newspapers, with the exception of child-, violent-, and bestiality- genres <sup>(175-177)</sup>.

In common categories for the informants in Paper IV were "Expectations and demands" and "Experiences and feelings", with its variations and sub-categories. Sexual expectations were created and spread to individuals and peer groups, such as through group pressure, a phenomena demonstrated earlier <sup>(22, 23)</sup>, and according to the informants' in this study, media conveyed expectations and demands telling them what to do. The informants had an ethical way of thinking, expressed both as concerns with consequences for children and adolescents when looking at different kinds of pornography, the same concerns also expressed by researchers <sup>(98-99, 103, 108-110, 170)</sup>, as well as for the actors in the films.

It is difficult to fully define pornography, partly as it is a controversial issue, and partly as there are as many very different genres as opinions about them. In Paper III it was for the students themselves to define whether they had consumed pornography or not, but we posed questions about what genre they had experienced. The term "sexually explicit material" is often used, meaning textual, visual, or aural material that depicts sexual behaviour or acts, or exposes human reproductive organs, intending to create sexual arousal or desire <sup>(98)</sup>. Our informants in paper IV meant that pornography was recognised by its separation of sexuality and intimacy, something technical without emotions, whereas they described erotica as depictions of sexual relationships between equal partners who interacted emotionally with each other. This is similar to descriptions in radical feminist literature <sup>(121)</sup>. As falling in love is considered part of the search for identity or self-definition, in adolescence <sup>(2)</sup>, pictures of sexuality as something separate from feelings might have consequences for future emotional life <sup>(103)</sup>. Descriptions of mixed feelings, both of sexual excitement and of disgust and guilt, were given by the informants in paper IV, something that might contribute to insecurity when young people are forming their own sexual identity. Dual feelings toward pornography among females are previously described in interview studies <sup>(110, 178)</sup>.

The category "Handling strategies", described in Paper IV, was on an individual level, containing personal labelled variations for the informants.

These young people had different individual handling strategies, conscious or unconscious, in order to cope with the current sexual norm, depending on who they were and where they come from.

## Implications for the future

Sexual and reproductive health among young people is a complex issue and a demanding task for the professionals involved. Some differences have been pointed out in this thesis; differences in sexual experiences and risk taking between students attending theoretical and practical study high school programmes; differences between genders concerning pornography consumption; and individuals' different ways of handling pornographic material and other media with a sexualised content.

In order to listen to, inform, teach and counsel young people about sexuality and possible risks, midwives and gynaecologists need to be well informed about facts concerning sexual behaviour, contraception, STIs and abortions. They should also be aware about how young people think and act, since growing numbers of STIs and abortions among young people have become a health care problem <sup>(11, 52 53, 75, 146)</sup>.

Compulsory sex- and relationships education in Swedish schools has had a long tradition, but in the past years, some shortcomings concerning both quantity and quality have been revealed <sup>(33)</sup>. A good start would be to include this subject field into the curriculum of teachers' education something also supported by RFSU <sup>(179)</sup>. This would raise awareness of the importance and increase the status of the subject. Sex and relationships education should rest upon a common base for all pupils; however, it is important to have the opportunity to tailor the education for different groups needs in order to reach important goals. Equality and equity related to sexuality are important concepts for young people to discuss in sex- and relationships education, and to relate to, in order to contribute to mutual respect and dialogue between genders, as well as young people from different cultural-, religious-, and social backgrounds <sup>(1, 4, 6, 7, 10)</sup>.

The importance of discussing how sexuality is portrayed in pornographic material must not be underestimated, in order to develop a more analytical and critical awareness toward pornography. The ministers of equality in the Nordic countries have together with Nordisk institutt for kvinne- og kjonnforskning (NIKK) initiated a research project called "Youth, gender and pornography in the Nordic countries" in order to gain more knowledge about how young people are influenced by pornography and increased media sexualisation <sup>(180)</sup>. The question is how young men and women with different consumption patterns, attitudes and experiences of sexuality and pornography should be able to meet in an equal way? It would certainly be beneficial for young people to be equipped with tools, such as media analysis and criti-

cism of the sources, in order to better handle increased sexualisation in media and pornography.

### Future research

Sexual and reproductive health is a wide field that touches many different questions concerning for example media influence and gender issues. As it is a wide field, the questions in this field need to be addressed in a multidisciplinary way, with a mix of medicine, caring sciences, public health and sociological approach.

Research where young people themselves are part of both posing the questions, planning and carrying out the study, so called “action research”, appears an appropriate route for obtaining more meaningful answers.

### Grants

This thesis has been financially supported by the Council of Västmanland, the Swedish National Institute for Public Health, the Faculty of Medicine and the Department of Women’s and Children’s Health, Uppsala University, the Family Planning found, Uppsala University, Wyeth Lederle Nordiska AB, Schering Nordiska AB, Organon AB and Majblomman.

## Conclusions

*Paper I:* Awareness about ECP and where to turn to if in need for the method was good among the students; they had good general-, although limited detailed knowledge about the method.

Youth clinics and friends were the main sources of information about ECP among the students.

Attitudes towards using or recommending ECP were mainly positive, but concerns about side effects were expressed. The girls were more hesitant about whether ECP should be available without a prescription than the boys were.

More than one fourth of the sexually experienced students, or their partner, had ever used ECP, and the most common side effects were nausea and vomiting.

The importance of personal counselling for female adolescents in need of ECP is emphasised.

*Paper II:* Almost half of the students had had sexual intercourse, a number similar in studies conducted 10 and 20 years earlier, but the use of contraceptives at the time of first intercourse had increased and the use of alcohol had decreased.

Males attending practical programmes had most favourable attitudes toward sexuality and pornography, and females attending theoretical programmes had the least favourable attitudes.

More females than males reported parents having talked to them about sex.

The AIDS debate influenced fewer students in their attitude towards sex, compared over a ten-year period.

More students attending theoretical, rather than practical, programmes thought that sex education in schools was sufficient.

The tendency, first observed ten years ago, that students attending practical programmes put themselves at greater sexual health risk than students in theoretical programmes has continued.

Contraceptive use was higher among those who had not been drinking alcohol at their first intercourse, compared with the use among those who had been drinking: a higher proportion of smokers as opposed to non-smokers had had intercourse.

Comparisons of sexual and risk behaviour showed more differences between genders attending different study programmes, than between male and female students within the same study programmes.

Differences between students attending theoretical- and practical study programs should be addressed during planning for counselling and sex education, to try and target each group in a more individualistic manner.

*Paper III:* Three quarters of the third-year high school students had had sexual intercourse, of which more than two thirds reported contraceptive use at both first intercourse and latest intercourse, more women than men. Median numbers of sexual partners were three for men, and two for women.

Differences in contraceptive use at different sexual activities were determined. More than half of the students, and more women than men, had experienced oral sex. Anal intercourse was experienced by less than one in five, with no gender differences. Condoms were not frequently used at oral and anal sex, a fact that could have implications for the spread of STIs.

Intercourse with a friend, meaning having had sex without having a loving relationship, was reported by two in five, more males than females had this experience.

A majority of the students were pleased with their sexual experiences, but more males than females were content with their first sexual intercourse and with latest anal intercourse. One-half of the females with experience of anal intercourse reported it to be mostly negative.

Almost all males compared to almost three quarters of the females had ever consumed pornography. The Internet and cable TV were the most commonly reported sources, and to watch at home was the most common place.

More male high consumers than low consumers or females were sexually aroused by, fantasised about, or tried to perform acts seen in a pornographic film. Male high consumers had more favourable attitudes towards pornogra-

phy than male low consumers and females had. Male high pornography consumers were more likely to engage in several sexual activities than male low consumers were, as were males with an early age at first sexual intercourse.

*Paper IV:* The core category “*Living with the current sexual norm*” describes how pornography created sexual *expectations and demands*, for instance to perform certain sexual acts. In the category *feelings and experiences* the informants expressed contradictory feelings towards pornography and felt that sexuality was separated from intimacy. A moral attitude was described and examples of stereotypic gender roles were given.

In order to deal with the current sexual norm, participants had different individual *handling strategies*, labelled: liberal-, normalization-, distance-, feminist- or conservative strategy.

The results contribute to an understanding of how pornographic material can influence young peoples’ thoughts, reflections and sexual behaviour. This indicates the importance of discussing how sexuality is portrayed in pornographic material with young people, in order to develop a more analytical and critical awareness toward pornography.

# Acknowledgements

This thesis was carried out at the Department of Women's and Children's Health, Uppsala University and at the Centre of Clinical Research, Central Hospital Västerås, Uppsala University.

First, I wish to express my gratitude to **all you young women and men** who willingly participated in these studies and shared your experiences with me. Without your participation there would have been no thesis. Thanks also to you **heads** and **teachers** for showing interest and kindness.

I also wish to thank all the people who supported me during my research education:

**Tanja Tydén**, my supervisor, you introduced me into the academic world, my co-writer and friend, who believed in me, pushed me, and encouraged me when I felt "low", with your never failing enthusiasm. I admire your enterprise, your competence for the "third task" and for always being present.

**Ulf Hanson**, my co-supervisor, for sharing your great scientific experience and giving wise comments and advises in spite of your heavy workload.

**Ove Axelsson** for giving me access to doctoral studies.

**Torsten Tuvemo** for support and for being the link to Centre for Clinical Research.

To **all the personnel at Centre for Clinical Research** for kind and respectful treatment, especially to:

**Jerzy Leppert**, for generous support and making the scientific environment a possibility and to

**Petra Wahlén**, for being patient and helpful with data analysis and for always being so nice and available.

**Gun Nyberg**, for great help with making posters to scientific congresses.

**Stefan Sörensen**, my friend and statistical advisor, for sharing your wisdom and humour and for guidance and discussions in the scientific field.

**Jonas Sandberg**, my methods supervisor and co-author in study IV. You guided me in to the qualitative world, which I know would be exiting, and we had interesting and fruitful discussions.

To all **midwife and nurse students** who kindly and flexibly assisted me with the data collection in Study III; **Romina, Ann, Maria, Elisabeth, Caroline and Maria, Johanna, Sofia, Malin**. It would have been impossible to do all this work on my own.

To **all personnel at the youth centre**, especially to **Markus Erosson**, for showing interest in my work and for being so helpful in assisting me in recruiting informants to study IV.

To all you **midwives** for friendship and encouragement, especially to the seminar group:

**Gunilla Aneblom** and **Margareta Larsson**, for friendship, co-operation and good discussions and for sharing interesting experiences in Washington.

**Agneta Skoog-Svanberg**, for friendship and interesting discussions.

**Christina Stenson, Pia Olsson, Christine Rubertsson** and **Karin Gottvall** for stimulating discussions and for sharing your ideas with me.

**Christina Rogala**, for friendship and good co-operation, for sharing your professional knowledge in sexual and reproductive health with me.

To personnel at Mälardalens Högskola: **Roland Svensson, Birgitta Svall** and **Claes Ågren** – thank you for giving me the opportunity to share my time between lecturing at midwifery education and being a research student.

To you colleagues at the midwifery education who showed interest and supported me in my work: **Ingela Rådestad, Ingegerd Hildingsson, Inga Ragnar, Karin Weman, Helena Fabian** and **Helena Lindgren**. To **Peter Hedberg** for supporting me with relevant literature.

To my parents, **Gittan and Holger**, for never ending support and love.

To my family; **Kent**, my husband, you are a generous and humorous man, thanks for patience and loving support, in spite of my being absent and discussions of household matters. To my beloved children, **Marcus, Sanna** and **David** for reminding me of the greatest value in life.

## Summary in Swedish Svensk sammanfattning

### Skilda världar? Ungdomars sexualvanor, preventivmedelsanvändning och pornografikonsumtion

#### Bakgrund

I slutet av 1970- och -80-talen genomfördes i Uppsala studier av gymnasie- ungdomars och studenters sexualvanor <sup>(31, 67, 68)</sup>. Sedan dess har mycket förändrats i samhället. Introduktion av det nya s.k. ”akut p-pillret” (APP), debatt om pornografins inflytande på ungdomars sexualvanor, en avmattning av informationskampanjer om sexuellt överförbara infektioner (STI) och HIV/AIDS samt en ökning av både STI och aborter bland unga, är några exempel.

Pornografi är ett av de mest efterfrågade ämnesområdena på Internet och är dessutom lättillgängligt för alla, inklusive barn och ungdomar <sup>(100 - 102, 103)</sup>. Olika sexuella handlingsmönster såsom oral-, anal- och gruppsex är vanliga inslag i pornografin. På ungdoms- och studentmottagningar har man märkt att unga idag har andra frågeställningar och andra attityder jämfört med för några år sedan. Farhågor har uttryckts att ungdomar inte i egen takt får möjlighet att utvecklas och utforska sin sexualitet <sup>(34)</sup>, samt att ungdomar löper en risk att utveckla en känslomässig kyla när de ständigt exponeras för sexualiserade och pornografiska budskap <sup>(103)</sup>.

Avhandlingens övergripande syften var att undersöka ungdomars sexualvanor; deras kunskaper, erfarenheter och attityder till akut p-pillret; unga kvinnors och mäns erfarenhet av konsumtion av pornografi och eventuellt samband mellan sexualvanor och pornografikonsumtion; samt hur unga kvinnor och män tänker och resonerar om pornografi och sexualitet. Avhandlingen består av fyra delarbeten och studierna är genomförda mellan 1999-2004.

## Ingående delarbeten

### **Tonåringars attityder till akut p-piller**

Syftet med delstudie 1 var att undersöka gymnasieungdomars kunskaper om, erfarenheter av samt attityder till akut p-piller (APP). Ett slumpmässigt urval av 20 gymnasieklasser besvarade 1999 en klassrumsenkät i Uppsala och Västerås. Fyrahundraåtta ungdomar besvarade enkäten och svarsfrekvensen var 82 %. Medelåldern var 16.5 år.

Nästan hälften (45.4%) av ungdomarna hade samlagsdebuterat. Av dessa rapporterade 28 % att de själva eller deras partner hade använt APP någon gång. Fyra av fem ungdomar kände till att APP fanns. Många ungdomar (67 %) hade också kännedom om att APP förhindrade graviditet. De huvudsakliga informationskällorna om APP var ungdomsmottagningar (n=179) och vänner (n=159). Ungdomarna hade en positiv attityd till att använda APP i en nödsituation. Fler flickor än pojkar var tveksamma till att APP skulle säljas receptfritt. Om APP skulle bli receptfritt trodde flickorna att APP skulle användas mer och två tredjedelar av eleverna menade att det kunde leda till en nonchalans med ordinarie preventivmetod. Majoriteten, 71 % av ungdomarna föredrog att vända sig till en ungdomsmottagning om de fick behov av APP. En av fyra ansåg att oro för biverkningar kunde avhålla många från att använda APP.

### **Sexualvanor bland gymnasieelever – förbättrad preventivmedelsanvändning över tid**

Syftet med delstudie II var att undersöka sexualvanor och attityder till sexualitet bland gymnasieelever 1999 och att jämföra resultatet med studier genomförda 1979 och 1989. Studien baseras på samma urval som delstudie I.

Nästan hälften av ungdomarna hade haft samlag, vilket visade att debutåldern för samlag inte förändrats vid en jämförelse med de andra två studierna. Medelåldern för dem som haft samlag var 15 år för båda könen. Fler ungdomar på yrkesförberedande (60 %) än på studieförberedande program (37 %) hade haft samlag. Fler ungdomar på studieförberedande (90 %) än på yrkesförberedande program (64 %), hade använt preventivmedel vid sitt första samlag, vilket var en ökning från 65 % 1979 till 76 % 1999. En fjärdedel av ungdomarna hade druckit alkohol vid sitt första samlag, vilket var en minskning jämfört med 1979.

### **Samband mellan pornografikonsumtion och sexuella praktiker bland ungdomar**

Syftet med delstudiestudie III var att undersöka sexualvanor och pornografikonsumtion samt eventuella samband. Fyrtiosju slumpmässigt utvalda klasser i gymnasiet år 3 i Västerås besvarade år 2003 en klassrumsenkät. Det var 718 ungdomar som besvarade enkäten och svarsfrekvensen var 77 %.

Fler unga män (98 %) än unga kvinnor (72 %), hade konsumerat pornografi. De som läst eller sett pornografi varje dag eller varje vecka kategoriserades som "högkonsumenter" och de som rapporterade konsumtion några gånger per månad, några gånger per år, enstaka tillfälle eller aldrig kategoriserades som "lågkonsumenter". Alla kvinnor utom 5 var lågkonsumenter. Fler manliga "hög"- än "lågkonsumenter" och kvinnor uppgav att de blev sexuellt upphetsade, fantiserade om, eller hade provat att genomföra sådant de sett på pornografisk film. Tre fjärdedelar av ungdomarna hade haft samlag, och 71 % hade använt preventivmedel vid sitt första samlag. Sexton procent hade haft analt samlag men endast 39 % hade använt kondom i samband med det. "Kompissex" hade ett samband med hög pornografikonsumtion bland männen, medan analt samlag och gruppsex visade en tendens till samband. En viktig bakgrundsfaktor var tidig samlagsdebutålder.

### **"Det finns ju överallt!" Ungdomars tankar och reflektioner om pornografi**

Delstudie IV genomfördes för att få en djupare förståelse för hur unga kvinnor och män tänker och reflekterar om pornografikonsumtion och dess eventuella påverkan på sexualvanor. Arton ungdomar mellan 16 och 23 år intervjuades. Öppna frågor om pornografi och sexualitet ställdes och intervjuerna spelades in på band, skrevs ut ordagrant och analyserades med hjälp av Grounded Theory-metoden <sup>(130-131)</sup>.

Kärnkategorin "Att leva med den rådande sexuella normen" beskriver hur pornografi, men även andra media med ett sexualiserat innehåll, skapar sexuella förväntningar och krav. Informanterna uttryckte motsägelsefulla känslor gentemot pornografin och de kände att sexualiteten var skild från intimitet och relationer. Ett moraliskt tänkande uttrycktes och exempel på stereotypa könsroller gavs. För att hantera och förhålla sig till den rådande sexuella normen hade informanterna olika individuella hanteringsstrategier såsom; liberal-, normaliserings-, distans-, feminist- eller konservativ strategi.

### **Slutsatser**

Dessa studier belyser skillnader mellan elever på teoretiska och praktiska gymnasieprogram, mellan unga kvinnor och män beträffande akut p-piller, sexualvanor och erfarenhet av och attityder till pornografi och sexualitet. I intervjustudien framkom dessutom skillnader mellan olika individers sätt att hantera pornografi och sexualiserad media. Med tanke på resultaten betonas vikten av information och rådgivning om akut preventivmedel och sexuellt överförbara infektioner. Vid planering av rådgivning och sex- och samlevnadsundervisning rekommenderas att hänsyn tas till skillnader i sexuellt risktagande mellan ungdomar på olika gymnasieinriktningar. Hälsovårds- och skolpersonal bör föra diskussioner med ungdomar om hur sexualitet porträtteras i pornografi och annan sexualiserad media, i syfte att utveckla ett mer jämställt, analytiskt och kritiskt förhållningsätt.

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