MÄLARDALENS HÖGSKOLA
ESKILSTUNA VÄSTERÅS

SEXUAL BEHAVIOR AMONG CHINESE MALE AND FEMALE MEDICAL UNIVERSITY STUDENTS IN CHONGQING, CHINA

THERESE AHL

School of Health, Care and Social Welfare
Examination thesis: Science of Public Health
Level: Advanced
Credits: 30
The master program in Science of Public Health
Course code: FHA005

Supervisors: Lars Cernerud, Sharareh Akhavan
Examiner: Maja Söderbäck
Date: 2012-05-04

ABSTRACT

Sexuality is one of the most fundamental values of life as it affects our behaviors, thoughts and emotions. Young people are an especially essential group for promoting sexual health as it is during adolescents the base for our sexuality is created. The aim of this study was to examine Chinese male and female medical university student's knowledge and ideas of sexual behavior at Chongqing Medical University in Chongqing, China. An explorative quantitative survey study was conducted at place in Chongqing. The survey study's result showed that ideas of sexual behavior were seem to be permissive and love-based, and also bi- and homosexuality to be mainly acceptable. The Internet, books and friends were seemed as important sources for knowledge whereas few believed to have received adequate knowledge from school. It was also seemed to be a major lack of knowledge regarding STD's and how to protect yourself as "safe periods" was believed to be an important contraceptive method. The relationship between contraception and the protection against STD seems to be obscure.

Keywords: China, cross-sectional study, gender, sexual behavior, young people

摘要

性行为是生活中最基本最重要的要素之一，它影响着我们的行为，思想及情感。年轻人是一个特别有必要促进健康性行为的群体。这项研究的目的是为了检测中国的重庆医科大学的男性，女性大学生对于性行为相关知识的认识及看法。于是在重庆进行了这项探索性的定量的调查研究。这项调查研究的结果表明被调查群体的性行为看似是以爱和自由为基础的，当然双性恋及同性恋也是被广泛接受的。性相关知识的大多数来源于网络，书籍以及朋友，而不是来自于学校。被调查的样本中大多数样本提示他们缺少对性病的认识，以及认识到在安全期保护自己是一项非常重要的避孕手段。所以他们对避孕以及保护自己远离性病之间的关系看起来是比较模糊的。

关键词：中国，代表性研究，性别，性行为，年轻人

SAMMANFATTNING

Sexualitet utgör en av de mest grundläggande värden i livet då de påverkar såväl våra beteenden, tankar som känslor. Unga utgör en viktig grupp för främjande av sexuell hälsa då det är under denna tid grunden för vår sexualitet skapas. Studiens syftade till att undersöka manliga och kvinnliga kinesiska medicinstudenters kunskap och idéer om sexuellt beteende vid Chongqing Medical University i Chongqing, Kina. En explorativ enkätstudie genomfördes på plats i Chongqing. Studien visade på att idéer om sexuellt beteende verkar vara tillåtande och kärleksbaserande, med en övervägande acceptans för bi- och homosexualitet. Internet, böcker och vänner verkade utgöra viktiga källor till kunskap gällande sex samt preventivmetoder då få ansåg sig ha fått tillräcklig kunskap från skolan. Det verkade även finnas en stor brist gällande STD kunskap och hur man skyddar sig då ”safe periods” ansågs vara en viktig preventivmetod. Relationen mellan preventivmedel och skydd mot STD's verkar vara otydlig.

Nyckelord: Genus, Kina, sexuellt beteende, tvärsektoriell studie, unga personer

CONTENTS

1. INTRODUCTION

Sexuality is fundamental in human life affecting behaviors, thoughts and emotions. Sexual education for young people and the knowledge, attitudes and behaviors as its outcomes are under intense debate in many countries. The debate is based upon many different perspectives such as a traditional, religious, cultural, and also a health promotive perspective. Young people are an especially essential group for promoting sexual health. It is during this time the base for human sexuality is built by exploring and developing our sexual identities. Young people today are increasingly exposed to misguiding information from the Internet and by watching pornography, which can lead to distorted views of sexuality, lust and gender roles.

Sweden was the first country in the world to introduce mandatory sexual education and is internationally considered to be a role model in many nations. China, the biggest nation of the world, shows a fantastic history. More then 5 000 years ago, when Scandinavia could show primitive stone-age culture, China exhibited a societal development and culture with brilliance, including educational efforts to profound health and survival. Today China is the second richest nation in the world measured by GNP and close to the USA. The Chinese ways to handle future challenges is of Global interest. In the present and forthcoming successful Chinese developmental processes sexual health of young people is a factor of major and important role.

The survey study's author's interest for sexual and reproductive health is developed since many years back. After three months exchange studies at CQMU (Chongqing Medical University) in Chongqing China as it became clear it is in this area the author especially whishes to work further with. One of the taken courses was *Sexual education*. For this course the examination was to present the history of sexual education in Sweden. With this, a curiosity also developed regarding on how the Chinese sexual education is conducted. When told by the professor that there was no organized sexual education and no prevailing laws controlling its content and execution, questions emerged such how it affects the sexual health and wellbeing and this especially for the young people. This lead to the Bachelor Thesis; "*Chinese university students' perceptions of sexual education for adolescents in China*" (Ahl, 2010), which showed experiences of various constructed school based sexual education. Furthermore, China's greater exposure to Western values has been shown to bring a changed sexuality with a growing acceptance of premarital sex. However, at the same time adolescents report a lack of sexual knowledge which can lead to unknowingly increased risk behavior, as also was discussed in the Bachelor Thesis.

With this in mind it was of interest as well as important to examine the sexual behavior of Chinese young persons and what the lack of school based sexual education potentially could have for effects regarding their knowledge and ideas. As the personal sexual behavior is influenced and affected by our thoughts, beliefs, morals and norms the study of experiences and ideas of the sexuality of young people is important. It is also important to know from where young people get their sex-related knowledge, what knowledge they have about STD's (Sexually Transmitted Diseases) and on how they protect themselves, but also what ideas they have regarding contraceptive use and if there are any differences between the young Chinese males and females regarding these subjects.

1.1 Abbreviations and definitions

AIDS	Acquired Immune Deficiency Syndrome
HBT	Homosexuals Bisexuals Transsexuals
HIV	Human Immune deficiency Virus
SRHR	Sexual and Reproductive Health and Rights
STD	Sexually Transmitted Diseases
STI	Sexually Transmitted Infections
WHO	World Health Organization

- Adolescents

In this report adolescents were defined as the age group 10-19 years.

- Young people

In this report young people were defined as the age group 19-21 years.

- Sex

In this study the term sex refers to "sexual activity".

- Sexuality

WHO (2006) describes sexuality as an central aspect of being human throughout life including different factors such as sex, gender identities and roles, sexual orientation, eroticism, pleasure, intimacy and reproduction. Sexuality is experienced and expressed in many different ways. Through thoughts, fantasies, desires, beliefs, attitudes, values, behaviors and relationships which all can interact with each other. Biological, psychological, social, economic, political, cultural, ethical, legal, historical, religious and spiritual factors can all influence and determine sexuality (Foucault, 2002; Nationalencyklopedin, 2012; WHO, 2006).

- Sexual behavior

Sexual behavior refers to how people experience and express their sexuality and is formed by social attitudes, norms, beliefs and expectations (Greene et al., 1995; Marston, C. & King, E., 2006). The behavior is strongly shaped by the society's view of femininity and masculinity, of how men and women should or must behave (Marston, C. & King, E., 2006). Sexual behavior consists of physical and emotional intimacy of individuals by themselves or in interaction with others. The purpose are foremost reproduction, pleasure and to promote or strengthen relationships (Greene et al., 1995).

In this report sexual behavior is defined as behavior formed and expressed by ideas, experiences and knowledge of sexuality and sex.

- Sexual health and Reproductive health

"Sexual health is a state of physical, emotional, mental and social well-being in relation to sexuality; it is not merely the absence of disease, dysfunction or infirmity. Sexual health requires a positive and respectful approach to sexuality and sexual relationships, as well as the possibility of having pleasurable and safe sexual experiences, free of coercion, discrimination and violence. For sexual health to be attained and maintained, the sexual rights of all persons must be respected, protected and fulfilled" (WHO, 2006 p. 5).

"Reproductive health is a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity, in all matters relating to the reproductive system and to its functions and processes. Reproductive health therefore implies that people are able to have a satisfying and safe sex life and that they have the capacity to reproduce and the freedom to decide if, when and how often to do so..." (WHO, 2006 p. 4).

2. BACKGROUND

2.1 Sexuality and Public Health

As sexual and reproductive ill health contribute to a large portion of the burden of disease among young people, it constitutes an important subject for preventive and health promoting work (UNESCO, 2009). WHO has developed a health policy strategy, including 21 goals for work in the European region. Two of these goals include areas regarding sexuality. Goal 11, Healthy lifestyles, includes such as a marked increase in healthier behaviors regarding sexuality among people by the year of 2015. Goal 7, Reduce infectious disease, describes for example work for a decreasing incidence of sexually transmitted diseases before the year of 2020 (WHO, 1998).

Ensuring the sexual and reproductive health of this demographic is important not only for the individuals but also for the community itself. Sexual development occurs throughout life but it's during adolescence as we set the stage for our sexual health in adulthood (Swedish National Institute of Public Health, 2010; UNESCO, 2009; WHO, 2002). Today, many young people lack correct information regarding sexual and reproductive health topics. This could make them vulnerable to many risk factors related to this part of life. Young people aged 15-24 counts for 45 percent of all new HIV infections. At the same time, the *UNAIDS 2008 Global Report on the AIDS Epidemic* showed that only 40 percent of young people (15-24 years old) had accurate knowledge of HIV related matters (UNESCO, 2009).

In order to motivate young people to take responsibility of their own sexuality and reproduction, it's required faith in the future and a confidence that society has faith in them. In the health promotion and prevention work, it is important not only to use information about SRHR and see young people as recipients of care, but also as competent actors' whit the ability to manage and transform information into knowledge (Utrikesdepartimentet, 2006). Fundamental to the individual's ability to safe sexual life and decision making about reproduction are the actual access to information and various types of contraceptives (UNESCO, 2009; Utrikesdepartimentet, 2006). By conducting actions with the purpose to create and open dialogues among young people and those around, increased opportunities are created regarding enabling and maintaining a healthy lifestyle concerning SRHR (Utrikesdepartimentet, 2006).

2.2 China – a changing country

China is the third largest country in the world with a total population of more than 1,3 billion people and over 50 acknowledged ethnical groups (WHO, 2011). The country has a long and rich history and its population has developed alongside a continuous feeling of their inherent, both the mythological and the real. Even though Mandarin is the official language of China both Cantonese and English are spoken in some larger cities such as Shanghai and Beijing (UNESCO, 2011).

During recent years China has been through large economical, social and political changes which have had large effects on the country's health and healthcare. Improved living standard, decreased poverty and sustainable of a strong economic growth resulted in a decreased population growth and an increased life expectancy. During the last 30 years, a proximally 400 million people have been brought out of poverty which stands for over 75 percent of all poverty reduction in the developing countries (WHO, 2011).

2.2.1 Sexuality and sexual behavior over time in China

Chinas quick economic growth together with large social environmental changes that followed have brought conflicts between traditional and modern values. By bringing new sexual attitudes and behaviors, complicated effects has been created concerning young people's sexual health (Chen et al., 2008; Zhang et al., 1999).

The Chinese attitudes towards sexuality have been developing during thousands of years and continuously influenced by ancient China. Sexual behavior was seen as essential to accomplish the goal of reaching harmony with the universe through interaction between the two opposite powers; yin and yang. Sexual activities were accepted within the family but an individual sexuality was seen as unimportant and masturbation was condemned. Homosexuality was tolerated but not advocated (Higgins et al. 2002; Zhang et al., 1999).

The oldest existing literature concerning sexuality was published in China about 200 years before Christ. The literature described thoroughly subjects such as sexual physical and mental reactions and techniques, and how problems with erection could be avoided and prevented. But during the Song dynasty in the 11th century there was a change in attitudes. The government started to control people's sexual life and limit sexual expression which resulted in making sexuality a taboo. This conservative attitude didn't change until the founding of *People's Republic of China* in the year of 1949. During the 1950-ies the government started admitting the importance of sexual education and published several books regarding sexuality for the public (Zhang et al., 1999).

Due to an increased concern regarding the countries large and steady growing population, *the One Child Family* policy was induced during the 1970's. The policy means that married couples was limited to having one child. Underlying it demanded use of effective contraceptives and gave further support to introducing a comprehensive sexual education (Li et al., 2004). During the 1980's the government introduced and implemented *the One Child Family Policy, the Open Door Policy* (to create a more opened business climate to the western world) and also *the economic reform*. These changes helped create more openness to the western world which rapidly affected China (Gil, 1994; Zhang et al., 1999). Simultaneously, *The Ministry of Education* and *the State Family Planning Commission* demanded sexual education as to obligatory and integrated in the curriculum for middle school. Nevertheless, it was first in the year of 2002 the government publicly supported this by introducing *the Population and Family Planning Law of the People's Republic of China* (Li et al., 2004). The law resulted in a national policy for a mandatory youth focused school based sexual education, but the implementation is slow. Even though the government published the sexual education's first course literatures the same year, many teachers are reluctant to use those (Watts, 2004).

Recent years may have brought more open and liberal attitudes towards sexuality among young people but knowledge about reproductive health and STD's are still limited. In today's China; young people under the age of 25 stands for the country's largest demographic age group. At the same time there is an increased incidence of the age group 15-19 years old inducing in premarital sexual activities and many young people view sexual experimentation as an acceptable lifestyle (Gil, 1994; Gao et al., 2001; Watts, 2004; Chen et al., 2008; Wang et al., 2005). This, combined with the lack of fundamental contraceptive knowledge has led to an increase of unwanted pregnancies and an even quicker spread of STD's in China. During the year of 2002, the incidence of STI's measured close to 7 per million with a proximally 900 000 reported cases. Compared to in the year of 1991 the incidence of STI's in the age group 15-19 years old has increased with 80 percent which indicates a rapid development among adolescents during recent years (WHO, 2005). The Chinese reproductive healthcare is not updated towards the attitudes and demands of the youth today and there is a direct need for a more effective and updated healthcare (Gao et al., 2001; Watts, 2004; Chen et al., 2008; Wang et al., 2005).

The modern sexual attitudes in China have been influenced from the industrialization and the exposing of the western worlds cultural norms and values, and although the country's long and rich sexual culture, Chinese people is seen not willingly to talk open about sex (Zhang et al., 1999; Zhang et al., 2007). But even though social changes in the society were slowly ongoing and the adult population maintained a conservative view, the younger population's attitudes changed

rapidly. Today, premarital sex is accepted among Chinese youth and there is an increased tolerance for sex outside of marriage (Qiaoqin et al., 2006; Wang et al., 2007; Zhang et al., 1999). The increased interest among young people has its beginning in the social changes of society and in the traditional expanding family structure. Furthermore this increase of interest depends on a decreased social control and a heavily increased access to information. But this change in attitudes has also brought a change in young people's sexual behavior. Today, more young people get involved in a sexually high risk behavior (Zhang et al., 1999; Li et al., 2004).

A comparative study showed Chinese college students having more conservative attitudes towards dating and sexuality than American college students. Chinese college students dated less frequently, starting at an older age and were also less likely to have sexual relationships. Only 32 percent of the Chinese respondents reported ever having dated and their medium age for the first date were 18 years old. Of the total Chinese college students only 20 percent had experienced intercourse. Among the American college students 65 percent reported to have dated with a medium age for first date as 15 years old and 55 percent of the total of the American college students had experienced intercourse (Zou & Tang, 2000). A study of gender differences in three Asian cities showed males to hold more traditional attitudes toward gender roles than females. The study also indicated males having more permissive attitudes toward premarital sex, and moreover, both male and females were more permissive to males having premarital sex than females (Xiayun et al., (2011).

A cross-sectional study of 22 500 Chinese university students showed that 18 percent of the male- and 9 percent of the female respondents were sexually active. Among those sexually active, the average age for first intercourse was 19 years among the male respondents and 20 years among the females. The majority of the male respondents became aware of sex before high school (59 percent), and the majority of the female respondents became aware during high school. Only 5 respectively 16 percent became aware during their university education (Qiaoqin et al., 2006).

There is greater scientific understanding for the importance of sexual education in today's China, both for young people's healthy upbringing and development and for the upholding of social order and moral norms. Due to this, sexual education is now gradually introduced in schools after decades of exclusion. Sexuality has been given more room in the public life of China and during the last fifteen years; several articles, brochures and books regarding sex-related topics has been published and made public (Evans, 1995; Gao et al., 2001).

2.2.1.1 The Chinese education system

The Chinese education system consists of three categories; *basic-* , *higher-* and *adult education*. Preschool, primary and secondary education constitutes the *basic education*. After passing tests provided by the local education authorities, students are able to continue their education at senior middle school or at a secondary vocational education. *Higher education's* such as bachelor degree's includes two or three years at junior colleges followed by four years of university studies. Master- and post graduate studies are provided through academicals and vocational training programs in universities (UNESCO, 2011).

2.2.2 Gender issues

The Chinese concept of masculinity and femininity differs from western culture. Western masculinity is formed by the image of "the macho-man" defined as tough, courageous and adventurous, with a tendency more towards physical acts then oral expressions of thought. Although there is a "macho tradition" in China, it is counterbalanced by a softer cerebral male tradition defined foremost by the ideal of a talented scholar and a cultural man (Louie; 2002). According to the most commonly invoked Chinese paradigm yin and yang; sexuality is to be seen as the harmony of opposites and thereby masculinity and femininity as part of a dichotomous relationship. The female is represented by yin and the male by yang, both codependents of each

other; without yin there is no yang and vice versa (Evans, 1995; Louie, 2002). The female sexuality was mostly defined in relation to masculinity and did not exist in itself outside the context of the heterosexual relationship. The male's desire was described as sudden and powerful whereas the female's desire as to be responsive and gentle (Evans, 1995).

In modern China girls are still encouraged, both by their parents but also by the Chinese society, to be shy and suppressive of their expressions of feelings. A Chinese boy is on the other hand comfortable with expressions of intimate feelings and express characteristics which could be regarded as feminine in the Western culture (Moore & Leung, 2001; Zheng & Zou, 2007). This is shown by differences in the interaction between genders. In China it is common to see two people of the same sex holding hands or walking arm in arm. Often a man will take the hand of another man while walking down the street, or crossing it as a sign of friendship. In west, when standing up and talking to another person, we consider a distance of about an arm's length between us as a comfortable distance apart. For Chinese it's about half that. Interaction between men and women are kept to conversation (Zheng & Zou, 2007).

Many Chinese adolescent's hold conservative attitudes towards romantic and sexual relationships (Mountford, 2010). Adolescents incorporate gender roles formed by the given ideas, both subtle and overt, by friends, the family and the society, and thereby help shape individuals sexual attitudes and believe (Xiayun et al., 2011). As dating is viewed as a distraction due to that the child's foremost responsibility is excelling in academics, romantic feelings are limited by the expectations of the social group, the family, which is seen as the most important in the traditional Chinese society (Moore & Leung, 2001). Having the one-child policy in mind, there still are great pressure on the adolescent marry and have a child to continue the family line. Both the family and the society depend on young people to care for elderly (Mountford, 2010).

2.2.3 Issues of homosexuality

Sexual relations between same-sex persons are legal in China today. In 1992 WHO removed homosexuality from the International Classification of Diseases (ICD-10). However, homosexuality is still viewed as "abnormal" sexual behavior. According to a report from IGLHRC (International Gay and Lesbian Human Rights Commission) homosexual acts were considered as "hooliganism" until 1997 and it was not until 2001 that the Chinese Psychiatric Association removed homosexuality from its list of mental disorder (Mountford, 2010).

But not all aspects of homosexual activity are legal in today's China. Today same-sex couples are not acknowledged in law whether for marriage, partnership, adoption or artificial insemination. Proposals of marriage between same-sex couples have been raised in the People's Congress in 2000 and by a delegate in 2004 but they never reached a vote due to its low support (Mountford, 2010; Steward, 2010). Legal consensual same-sex activity is confined to situations involving less than three people. Therefore all sexual activity involving three or more people is considered a criminal offence under Chinese law, this for both homo- and heterosexuals (Mountford, 2010). The Criminal law of the People's Republic of China states that a person who rapes a women, by violence, coercion or other means, is to be sentenced to prison for at least three and at most ten years. It is also stated that whoever has sexual relations with a girl under the age of 14 is to be seen as guilty to have committed rape and should be given a higher punishment. For the two last described acts of crime it is also stated that "*If the circumstances of a crime mentioned in the preceding two paragraphs are especially serious or a person's serious bodily injury or death has been caused, the offender shall be sentenced to fixed-term imprisonment of not less than ten years, life imprisonment or death*" (Criminal Law Of The People's Republic Of China - article 139, 1979). There is no applicable male rape law within China. The maximum sentence for sexual assault or obscene act against another man is detention in custody for a maximum of 15 days. Discrimination or hate crime based on sexual orientation or gender identity is not prohibited (Mountford, 2010).

During recent years the Chinese government has given an ambiguous picture of their attitude towards homo- and bisexuality. It's not allowed to show movies with gay characters on Chinese television and several books and internet pages have been banned. When Google was established in China it was censured by the government so that it was prohibited to conduct searches at the word homosexuality. In 2010 it was proposed to introduce the Green Dam internet filtering software which blocks all websites containing the word "gay". This poses a huge threat regarding the freedom of expression not only towards the LGBT community but also the entire Chinese population. But at the same time LBTG news are more frequently reported by *China Daily* and the Chinese government recently launched the website *Comrades* which aims to raise awareness and increasing knowledge about HIV and other STD's among LGBT persons. In the year of 2009 the fist Pride celebration was held in Shanghai. The event was widely reported in the English language media, though not in the Chinese language media. Because it could have been seen as a political manifestation and therefore could have upset the government a parade were never conducted. Another Pride celebration was held in Hong Kong where the yearly held film festival *Hong Kong Lesbian and Gay Film Festival* is held (Mountford, 2010).

In a survey study conducted in Hong Kong among nearly 800 Chinese medical university students, a majority expressed themselves to be acceptable towards homosexuals. A majority also believed homosexuals to have equal rights as heterosexuals in terms of marriage and nearly 46 percent in terms of adoption. Close to 40 percent said to have homosexual friends and 20 respectively 16 respondents said to be either bi- or homosexual (Hon et al., 2005).

A study performed by Wu et al. (2008) among secondary school students showed a great uncertainty regarding their sexual orientation and only 4 percent defined themselves as to be homosexual. Also, females were more likely to express uncertainty or certainty of same-sex attraction. A cross-sectional study among 22 500 Chinese university students in Ningbo municipally also showed few viewing themselves as to be homo- or bisexual, 3 percent among both males and females (Qiaoqin et al., 2006).

2.2.4 Issus of contraceptive use, unwanted pregnancy and abortion

Adolescents (10-19 years) account for eleven percent of all births worldwide, and also for 23 percent of the overall burden of disease (disability- adjusted life years) due to pregnancy and childbirth. The proportion of births taken place during adolescence is about two percent (WHO, 2011). In China, 10 million induced abortions are performed annually and about 20-30 percent of these are unmarried young adults (Almanac of China's Health Edit Committee, 2002). During the last ten year teenage pregnancies have rapidly increased in China's big cities. A study performed in Shanghai on teenagers who searched clinical help for abortion showed that almost 50 percent had experienced previously contraceptive failure and almost everyone (99 percent) had conducted unprotected sex in the past. "Backup methods" used were emergency contraceptives (36 percent), urinating (32 percent), showering (15 percent) and jumping up and down (6 percent). The most common reason for the unwanted pregnancy was no use of contraceptives (91 percent) (Xu & Cheng, 2008).

A survey of young women (15-25 years) who searched clinical help for abortion in three large cities in China showed that among 60 percent had used contraceptives before their current pregnancy. However, the main reason for the unwanted pregnancy was no or poorly used contraceptive method. Also failure of the withdrawal and rhythm methods was a common reason for the unwanted pregnancy. The study's result showed that 35 percent of the young women had undergone repeated abortions. 27 percent of them had conducted 2 abortions, 6 percent 3 abortions and 4 percent had undergone more than 3 abortions (Cheng et al., 2008).

A national representative study among Chinese youth showed 22 percent of the respondents to be sexually active and that 20 percent among these hadn't used contraceptives during their latest intercourse (Zheng & Cheng, 2010). Another study, of 22 500 Chinese university students, showed that 18 percent of the male and 9 percent of the female respondents were sexually active, and among these; 35 percent said to never or rarely use condom during intercourse. 10 percent of the female respondents said to have experienced pregnancy, and 10 percent had conducted abortion (Qiaoqin et al., 2006).

A study of unmarried out-of-school youth's sexual behaviors and attitudes in Shanghai showed the majority to be acceptable of premarital sex. However, more than half of the study's respondents were less accepting of premarital pregnancy with males more liberal towards both premarital sex and pregnancy. 18 percent of the respondents was sexually active and the majority among those used contraceptives almost or every time during intercourse (40 percent). 32 percent said to occasionally use and 29 percent to never use any contraceptives. Condom was seen as the most commonly preferred contraceptive method (73 percent) with oral contraceptive pill (38 percent) and withdrawal (36 percent) as the two secondly most common. Nearly 20 percent said to use "safe periods" as a contraceptive method. A third believed that occasional sex couldn't cause pregnancy, 19 percent felt too shy to obtain contraceptives and 17 percent said to have no knowledge of contraceptives. The respondents demonstrated a low level of sexual related knowledge and among those who were sexually active; every forth had experienced pregnancy or had impregnated a sexual partner (Wang et al., 2007).

2.2.5 Issus of Sexual Transmitted Diseases (STD's)

Over the past century infectious diseases have accounted for the largest part of human mortality and remain the leading causes of mortality among children and young adults in poor nations. Potentially unsafe sexual practices and subsequent increased risk for contracting STI's develops before young people enter college. Of the 19 million new STI cases that occur in the world each year, almost half of them is among people aged 15-24 years (Centers for Disease Control and Prevention, 2006; Dehne, K.L. & Riedner, G., 2005).

China is facing a major crisis due to increasing epidemics of STI's and HIV/AIDS (Grusky et al., 2002). Between 1989 and 1998, the incidence of STD's increased significantly among both men and women. For example; the incidence of syphilis increased approximately 20 times at an average annual rate of almost 53 percent, and gonorrhea increased 2.6 times at an average annual rate of 11 percent (Chen et al., 2000). The first patient with AIDS in China was diagnosed in 1985 and by the end of 2000 infected individuals had been identified in all 31 administrative regions (Grusky et al., 2002). In 2003, it was estimated that there were 840,000 people living with HIV/AIDS in China. Since then, the Chinese government has collected more representative data on HIV/AIDS, better estimates of the most at-risk populations have been generated, and improved estimation methods have become available. The latest estimation results indicate that as of the end of 2005, there are approximately 650,000 people currently living with HIV/AIDS in China. Among these there are an estimated 75,000 people living with AIDS. In 2005, there were an estimated 70,000 new HIV infections, and there were an estimated 25,000 AIDS deaths. Injection drug use (44,3 percent) and sexual contact (43,6 percent) are the dominant modes of HIV transmission. In the year of 2005 sexual transmission were associated with almost 50 percent among the estimated new HIV cases. Among those who lives with HIV/AIDS, sex workers and their client's stands for almost 20 percent. Partners of HIV-positive individuals and members of the general population stands for almost 17 percent and homosexual men (MSM) stands for seven percent of the total number of estimated HIV cases in China (Ministry of Health of China; UNAIDS & WHO, 2005).

A study performed by Song and Ji (2010) studied high-risk sexual behaviors (focused on unsafe sex, unintended pregnancy and forced sex) among Chinese urban adolescents. They found that 11

percent of the college students had experienced sexual intercourse. Students who lived in low socioeconomic areas had less, but more forced, sex than those living in higher socioeconomic areas (Song & Ji, 2010). Sexual risk behavior may be more frequent in urban than rural areas, this because anonymity is greater in urban areas when engaging in sexual activities. Due to a greater access to private clinics it's therefore more likely that the number of STD cases is underestimated for urban than rural areas (Gil et al., 1996). At the same time the quality of reporting is relatively better in urban areas, and STD cases are underreported throughout China (Chen et al., 2000).

A study conducted in Beijing and Nanjing showed an inconsistent level of AIDS knowledge among college students in China, with significant gender and grade difference. More than a third of the students perceived themselves as having limited knowledge of AIDS. The study showed that the students could identify transmission modes but were less knowledgeable about symptoms, activities that did not transmit the virus, treatment and preventive measures. The data in the current study revealed a significant gender difference in AIDS knowledge among college students in China, with males being more knowledgeable than females, particularly in the areas concerning HIV/AIDS treatment and prevention. Only five percent of the students felt they knew a lot about AIDS, 66 percent thought they knew some, 28 percent a little and 2 percent knew nothing. AIDS knowledge varied among students regarding living area with the highest knowledge among students from the urban area to the lowest among those from rural areas. Women felt less knowledgeable than males and the student's perceived knowledge increased with grade. Students AIDS awareness level differed significantly by perceived health status, family economic status and level of maternal education (Li et al. 2004).

A study by Zhang et al. (2003) indicated that Chinese students generally perceive a low level of vulnerability to HIV and STD's and a minimum exposure from family to drugs and risky sexual behaviors. Few reported to be sexually experienced but a majority expressed tolerance toward premarital sex and a high level of perceived intrinsic rewards from sexual experience. Students viewed condoms to be efficacious in preventing pregnancy or HIV and STD's, but also as very expensive.

2.3 Sources for Chinese youth to obtain sexual knowledge

A survey preformed by Chen et al. (2008) showed lessons and electable courses as the most wanted sources to reproductive health knowledge. The majority of the respondents preferred to obtain knowledge from doctors, schoolmates and friends. Books, classmates and Internet were seen as other important sources of information regarding sexual and reproductive health. Another study by Zhang et al. (2007) had a different result which showed that the preferred source for sexual knowledge depended on however the young people were sexually active or not. Teachers and mass media were chosen as the two most important sources among both sexually active and inactive students. Sexually inactive students preferred to obtain knowledge of less taboo subjects from teachers, such as sexuality, and more taboo subjects, such as STD's, from mass media. Sexually active students preferred to obtain less taboo knowledge from parents and knowledge of more taboo seen subjects from friends, classmates and mass media. Information on STD's should be given by doctors. Sources for obtaining knowledge about sexuality also vary between genders. Female students obtained knowledge from literature, radio, class hold lessons and parents, while male students said friends, the Internet and personal sexual experiences to be their foremost sources to sexual knowledge (Li et al., 2004a).

A study by Li et al. (2004b) showed that half of its respondents hadn't obtained any form of school based sexual education, but that they have had some sort of class regarding reproductive health during middle school. The respondents also gave expression of needs for a more comprehensive school based sexual education for Chinese youth (Li et al., 2004b). The sexual education of today can't keep up with the development and changes of young people's sexual attitudes and needs. Due

to this; young people's sexual and reproductive health knowledge and their knowledge of STD's are still seen as limited (Chen et al., 2008).

Zhang et al. (2010) conducted a survey that showed a lack of sexual- and reproductive health knowledge among female college students. Knowledge were affected by several social demographic factors such as; age, grade, major, family living, being a single child and mothers occupation. The majority of the participants forth hold different kinds of magazines as there foremost source of knowledge regarding sexual problems and reproductive health. Less than half had discussed the topic with friends and only eight percent said to have gain knowledge from their parents. Few participants had gotten knowledge from school and most of them viewed themselves as self-taught which indicates a lack of or a nonsufficient school based sexual education. In despite of this, almost 90 percent of the study's participants gave expression to see school based sexual education as necessarily and were positive towards a rightfully conducted such.

2.3.1 Parental talk and influence

Sexual values has great influence on sexual behavior and therefore parents deter their adolescents from engaging in potentially risky sex, this by demonstrating their awareness of behavior and adopting a caring attitude with more conservative values. Perceived parental awareness and caring is therefore of great importance in promoting safer sexual practices and reducing STIs (Bay-Cheng 2001). Chinese adolescents hold conservative attitudes towards sexuality and have close relationships with their parents. Romantic love is seen as of less importance and when romantic feelings occur they are bound by the expectations of the family. Due to this, Chinese parents do not encourage their children's early participation in hetero-social activities, since these could draw the children away from the family. This especially for young women as Chinese parents maintain much stricter control of their daughters than their sons (Moore & Leung, 2001; Stevenson & Zusho, 2002).

A study by Gao and others (1997) showed that adolescents who have a close relationship with their parents and communicated on sexual issues and spend time with them were less likely to engage in pre-marital sex. However, discussions concerning sex in public or between people of different generations is still taboo in Chinese culture and in accordance to traditional Chinese social norms parents generally avoid discussing sex-related issues with their children due to that these are considered to be personal, sensitive and embarrassing (Cui et al., 2001). In a study conducted by Cui and others (2001) Chinese parents expressed feeling torn between their Chinese traditional norms and the need to protect of their children's health and well being. Many felt unable to talk with their children regarding sex, safe sex practice and contraceptives. Rural parents were shown as more likely to tolerate premarital sex than urban parents. In rural areas many adolescents live together after getting engaged. Some parents in rural areas expressed it to be beneficial as it could be seen as confirmation of their adolescents being in a stable committed relationship (Cui et al., 2001). A study conducted by Wang et al. (2007) showed parental talk to be rare among male respondents, especially with fathers. It was more common for females to have had parental talk with their mothers (38 percent).

2.3.2 Issues of pornography

Due to the increasingly accessibility of the Internet and the opportunities it provides adolescents seek out more sex-related information by themselves (Bay-Cheng, 2001). In the Chinese society pornographic material is considered as taboo and there are concerns of pornography consumptions possibilities of negativity influencing individual's sexual attitudes and behaviors and to undermine family-taught values against premarital and extramarital sex (Lo et al., 1999).

Studies show that pornographic media effects adolescent's sexual attitudes and behaviors (Lo & Wei, 2005). Pornographic media is a significant predictor of sexually permissive attitudes and

behavior with Internet exposed pornography as its strongest correlate (Lo & Wei, 2005). Adolescents who is often exposed to Internet pornography shows a more opened and positive attitude towards premarital sex and exhibit a more sexually tolerant behavior (Lam & Cham, 2007; Lo & Wei, 2005). A study by Lam and Sham (2002) in Hong Kong showed sexual curiosity and sexually arousal as common reasons for young men to watch Internet pornography. They also fore hold that the respondent's behavior of watching Internet pornography could act as a form of substitute for lacking school based sexual education. Another study showed that the respondents believed that internet consumed pornography has greater impact on others than themselves, with males being more affected than females (Lo & Wei, 2002). Males are also believed by both genders to be more exposed to pornographic media than females (Qiaoqin et al., 2006).

2.4 Problem definition

Sexual and reproductive health of young people is a prerequisite for health promotive development in societies. Therefore, monitoring sexual health should be seen as an important way to underpin the societal health work and to measure its progress.

With an increasingly more opened Chinese society, young people especially, experience a large and rapid social environmental change. Greater exposure to Western values has been shown to have brought a changed sexuality with a growing acceptance of premarital sex among the Chinese youth. However, at the same time young Chinese people report lack of sexual knowledge which in its turn could lead to unknowingly increased sexual risk behavior. Today, young people stands for a large part of the burden of disease among sexual and reproductive ill-health in the world, and thus represent an important population for preventive health work. This particularly in China as a rapidly increasing incidence of STI's is reported.

To promote sexual- and reproductive health among young people in China it is important to study their knowledge and ideas of sexual behavior. English written publications regarding Chinese youth's ideas and knowledge of sexual behavior are hard to find at the international scientific arena. Thereby could a survey study designed, performed and discussed in a Swedish tradition might add values for future Chinese Public Health work. Chinese findings would also deepen and globalize the ongoing Swedish discussions about sexual behaviors of adolescents, not least in a gender perspective.

3. AIM

The aim of the study was to examine Chinese male and female medical university student's knowledge and ideas of sexual behavior, at CQMU in Chongqing, China.

3.1 Underlying questions

- What ideas of sexual behavior do they have?
- What are their experiences of sexual behavior?
- How do they obtain knowledge about sex/intercourse?
- What knowledge do they have about STD?
- What ideas of contraceptive use do they have?

4. THE GENDER SYSTEM AS THEORETICAL FRAMEWORK

To be sexual involves so much more than just physiology and sexual activity. It is by understanding and experience who we are; what feelings, thoughts, believes and norms we have; what we desire; and by understanding and experiencing what it means to be a man or a woman. To be sexual can also subsist of understanding how men and women, boys and girls interpret sexuality; what is considered sexual and also the meaning and values ascribed to it. Furthermore, sexuality includes different dimensions of sexual and non-sexual relationships, and what degree of power they may

have over the person's sexuality. Being sexual is also linked to the social, economic and educational opportunities available to males and females and how this availability influences decisions to be sexually active or not, and how information about sexuality and sexual health is interpreted (WHO, 2002). Gender is seen as one of the single most important social categories in people's lives and is therefore of great importance in the search for their own sexual identity. It's during adolescence we do most of our search and exploration to find our identities and gender is perhaps more salient in this stage than ever throughout life. It is during this period we move away from our previous identity based on family structure and start to shape based on peer social order (Eckert, 2003).

Gender is a social constructed division between men and women in two different categories which is based on sexual and reproductive relations, this especially within the social relations in which individuals and groups act. It's a pattern in our social order and daily activities that are controlled by this (Connell, 2002; Eckert, 2003; Hirdman, 2003; Yelland, 1998). Its principle can be seen as elemental in society for many social- political- and economical regimes (Hirdman, 2003).

Yvonne Hirdman (2003) first introduced the concept of gender in Sweden during the 1980's which is commonly used to explain power differences between men and women regarding contexts of equality. Hirdman thought that all people are born into an unavoidable social context with clear patterns of how to be a man or a woman. Therefore it could be argued that the previously used term *social sex/gender* wrongly implied that people can step in and out of their roles and a new term was needed; *gender* (Hirdman, 2003). This is in line with Hammarström (2004), who states that the concept of gender enhance that not all differences between the sexes can be visualized as biological but should also be seen as social. The concept of gender, the social sex, is used to describe collective conceptions of sex and gender roles, but it is also used to explain and understand different patterns and structures within societies (Hammarström, 2004; WHO, 2002). For instance, it can be used to illustrate what it means to be a female student in China in contrast to in Sweden.

However, the concept of gender can differ depending on time and place that leads to the creation of several different concepts in each society changing over time. The constructivist perspective on gender means that sex is seen as a social-, cultural- and historical changeable construction being actively constructed and reconstructed. Gender is not something that *is* but something that *becomes* (Hammarström, 2004). The family, community, culture and society all provides views of appropriate roles, responsibilities and behaviors of men and women. Development of a gender identity can thereby be described as the process of interpreting and accepting (or not accepting) these social given views (Hammarström, 2004; WHO, 2002).

Hirdman (2003) describes the gender system consisting of two logics; segregation and hierarchy. These constitute as a structure of order and are the two bearing beams in other social orders. The segregation logic implies that individuals and organizations consciously or unconsciously strive to keep masculinity and femininity separated due to the ideas of men and women as different, sometimes even as opposites. This segregation is not equal and, as men are given greater access to areas than women, men is seen as the norm making the woman deviant and therefore always in comparison. Thus, the hierarchy logic means that men are valued highest and is seen as the norm, with women subordinate the man. This hierarchy begins at an early age and continues from preschool and continues by patterns and relations shaped by the gender system throughout life (Hirdman, 2003). The gender system is uphold by the sustained through *gender contracts* formed by existing conceptions of how men and women are supposed to interact in several aspects of life. For example how to act when being in love by comply the social given views of masculinity and femininity (Hirdman, 2007).

Connell (2002) on the other hand sees the gender system as a four dimensional model that separates relations based on power, production, emotions and symbolism. Power based relations imply male

domination and female subordination, similar to Hirdman's (2003) hierarchy logic. Connell (2002) also mean that gender perspective integrate as well with class as nationality and social position. Therefore there is not simply one cohesive masculinity and femininity but, depending on prevailing social norms and structures, several different varieties (Connell, 2002).

Relations between men and women in this system describes as the concept of gender contract which is the cultural order in every society and time. It's seen as a contract of different rights and obligations for men and women and can be described based on three interacting levels. Firstly, the abstract gender contract which includes society's archetypical, mystical, religious and scientific conceptions of how men and women are should or must be. A cultural conditioned perception forms how men and women should relate to each other. Secondly, the concrete gender contract that shows how men and women integrates and relates to each other on a structural level through institutions in the society such as in workplaces, politics or culture. Thirdly, a contract on the individual level where gender is expressed in our daily lives. It shows how individuals from an early age are thought to be boys and girls and to have a heterosexual perspective in relations between the sexes (Hirdman, 2003; Ulfsdotter Eriksson, 2006). Sexuality and having a sexual drive is considered inherited and a natural part of life. Sexual relations are shaped by cultural and social factors, not only by physiology. They have a definable social structure by genus; hetero- and homosexuality, and it's by this distinction we define different kind of people, hetero- and homosexuals. *Heteronormativity* is the collective term for all that maintains heterosexuality as the natural, obvious and expected. To be perceived as acceptable male and females acts must be based upon the expected terms of masculinity and femininity within the frame of the expected heterosexuality. Today's society households are expected to be based upon romantic love, a strong individual binding between two persons (of opposite sex). This ideal is forth hold by the media. We have gone from parental arranged marriage to choosing partner based on love and attraction, romantic love (Connell, 2002; Hirdman, 2003).

As previously described, the societies and the individuals' ideas, thoughts, beliefs, morals and norms of gender both greatly affect the shaping and expression of people's sexuality. It is therefore vital to take gender in mind when trying to understand young people's knowledge and ideas of sexual behavior. For this study, the gender thesis was used to analyze the result.

5. METHOD

5.1 Research approach

This study had an explorative cross-sectional approach and was conducted in form of a survey. For answering the study's purpose and its underlying questions, a descriptive quantitative method was applied. Choice of methodology was based on the study's purpose to examine Chinese male and female university student's knowledge and ideas of sexual behavior at a specific time, which is in line with the using of quantitative method. With the aim of exploring gender differences a deductive approach was applied with focus on the gender system during the analyzing process of the collected data (Djurfeldt et al., 2010; Olsen &Sorensen, 2007).

5.2 Settings and participants

5.2.1 Chongqing

This study is preformed in the municipality Chongqing, China. Chongqing is located in South West China in a mountainous area. Since 1997, Chongqing is the youngest and the biggest of the four municipalities which are directly under the jurisdiction of the central government in China which is the highest level of China's administrative divisions. With a population of more than 30 million people it's one of the country's largest and most populous municipalities and includes nine urban districts (the so called city zone with a large commercial and industrial center) and another 31 counties around them (Hu et al., 2007; Li et al., 2008). The average population density is 600 persons/km^2 but in the most urbanized parts the density is 10 000 persons/ km^2 (Wang et al., 2007).

Chongqing is an important part of the economic zone along the Yangtze River as its economy develops rapidly, and is becoming one of the most important economic centers in western China (Li et al., 2008). Even doe the municipally is under a rapid economic development its socio-economic profile is below average (Hu et al., 2007). Ying et al. (2008) forth holds the need of developing and improving the health education to provide better knowledge of unhealthy lifestyle and behavior to meet today's community health needs of the population in Chongqing.

5.2.2 Population and limitations

At the time for the data collection there were a proximally 26 000 enrolled medical students at Chongqing Medical University (CQMU). Due to a time-limit regarding the study's author's stay in Chongqing; the sample was limited to 450 participants (17 percent of the total study population). The questionnaire was distributed among 450 Chinese medical university students with ages between 19-21 years with a gender distribution of a proximal 200 males and 250 females.

The study population was considered by the study author to be relevant due to lack of English published information regarding sexuality and contraceptive use among young Chinese people. Consideration was taken regarding the balance of representation for males and females to obtain such a generalizable result as possible. The study population came to consist of 400 respondents; 176 males and 224 females, 44 respectively 56 percent with a median age of 20 years old. The socio-demographic distribution of the study's population was also considered and the aim was to get such an even distribution of participants as possible; 49 percent of the male participants were born in Chongqing and 51 percent in other provinces. 46 percent of the female participants were born in Chongqing and 54 percent in another province. Among the study's population 68 percent of the males and 59 percent of the females were living in Chongqing at the time of the conducting.

The selection of the study population and the organization of the data collection at the university were conducted with the help of Professors at CQMU. The selection was conducted as a convenience sample and CQMU were contacted for agreement of participation. Then CQMU selected classes which corresponded to defined criteria such as age and gender distribution and the availability on the days the data collection was to be conducted. There were seven classes in total that matched defined criteria's and were available at the specific days.

Table 1. Demographic background information of the participants

% (N)	Males	Females	Overall
Mean age (years)	20	20	20
19 years	24 (43)	34 (76)	30 (119/400)
20 years	47 (82)	42 (93)	44 (175/400)
21 years	29 (51)	25 (55)	27 (106/400)
Chongqing as birth province	49 (86)	46 (104)	48 (190/400)
Other as birth province	51 (90)	54 (120)	53 (210/400)
Living in rural area	68 (120)	59 (133)	63 (253/400)
Living in urban area	32 (56)	41 (91)	37 (147/400)

Source: Survey

5.3 Response rate and non-response

When conducting a quantitative study there are two types of non-response important to consider: internal and external. Internal non-response means that an individual hasn't responded to one or several variables in the questionnaire. External non-response means those individuals that were not part of the study; this depending on several reasons (Andersson, 2006; Eljertsson, 2003; Olsson & Sörensen, 2007). For this study considerations were taken while planning and conducting the survey to minimize the non-response. To minimize the non-response an explanatory letter was constructed. Also, the questionnaire was constructed in a logical way with a logical questioning order and took proximally 20-30 minutes to answer.

The study's external non-response rate was a proximal three percent (10 persons) and the internal non-response rate was 14 percent (60 missing answers of questions). Of these; 18 did not specify their age and 17 were of the wrong age for this study. Regarding the third kind of non-response, so called missing data which is because of technical faults such as missing questionnaires, there were none. The questionnaires were counted for at two separate times by the study's author; firstly in China after the hand in and secondly in Sweden during the data analyze.

Among the 450 questionnaires that were handed out, 440 were received which gave a response-rate of 97,7 percent. The 10 questionnaires that weren't handed in were all kept by those respondents who had left the class room without handing them back to the study's author.

5.4 Data collection

5.4.1 Questionnaire

Data collection was conducted by an English composed questionnaire inspired and partly designed by a longitudinal follow-up study by Häggström-Nordin (2002). The previous conducted study had the purpose of examine the sexual behavior and attitudes toward sexuality among first-year high school students in Sweden. The study was implemented at three separate times and had undergone a validity test in form of pilot surveys and a test/retest (Häggström-Nordin, 2002). To strengthen the survey study's validity and reliability; questions from this study was used after given permission from the author through email. However, questions regarding practiced sexual behavior were considered unsuitable by CQMU and could therefore not be used. 9 questions were directly translated from the Swedish study and 4 were slightly edited (See questions 1, 2, 6, 8, 9, 10, 12, 13, 14, 15, 16, 18, 27 in Appendix I). The changes that were made had the purpose to make them less personal oriented by changing the questions pronoun from *you* to *young people*. To answer the survey study's aim, some self-constructed questions were added. The questionnaire thus consist of 27 questions in total (13 questions from the Swedish study and 14 self-constructed, see Appendix I).

The questionnaire included five parts; background, knowledge about sex/intercourse, sex related to experiences and thoughts, sex related to contraceptives, and experiences of the questionnaire. The questions were mainly multiple-choice options. It was constructed with logical following questions not to take more than 20-30 minutes to respond, which is of great importance for minimizing risks of missings (Andersson, 2006; Eljertsson, 2003). As the study population consisted of medical university students they were considered to have sufficient knowledge to understand and answer the questionnaire in English.

To further strengthen the study's validity the questionnaires content-validity was examined by a well versed person in the subject. Words that could be seen as difficult to understand were identified and bi-translated (English and Chinese). To further minimize risk of missings a clear explainable information letter (Appendix I) were constructed and distributed together with the questionnaire.

5.4.2 Pilot survey

To examine the study's validity, if it measures what it aims to measure, a pilot survey was carried out. The pilot study consisted of four randomly selected Chinese university students, two young males and two young females, which were in the same age group as the study population. After they had answered the questionnaire they were asked privately how they had experienced its internal logic and if there were any questions or words that they found hard to either answer or understand. Based on the pilot survey some changes were made. Instead of having an open answer for question 3; *In which province were you born*, there were a closed for other provinces. In this version we found out how many are local students and how many immigrated. Also; China is such a large country and with so many different provinces it could have made everything unnecessary complicated. The option suburban area was removed as an answer for question 4; *Where are you from*, as it was uncertain if the study population would know what their area is called. More words were identified as difficult to understand and were therefore bi-translated.

5.4.3 Data collection

The data collection took place in Chongqing during two weeks in Mars, 2011. The locations for the survey were provided by CQMU and consisted of seven different lecture rooms at their new campus. All of the lecture rooms looked the same and wore of similar size. They were all quiet and the students were placed in several rows of tables. The lecture rooms were all equipped with microphones which were used during the introduction and presentation of the study.

Information regarding the study and questionnaire were given to the participants in three steps. Firstly, an oral Chinese introduction and description of the study and its questionnaire was given. Instructions were specified on how to mark answers as the Chinese way of answering differs from the Swedish. In China it's most common to answer a questionnaire by marking the "correct" answer with a V but also to mark the "wrong" with an X. They were asked only to answer by marking the "correct" answer. Thereafter, the study's author gave an English self presentation followed by talking shortly about the study with focus on its purpose and aim. Thirdly, written information was given in form of information letters which was given out together with the questionnaires. During all three information stages voluntary participation and confidentiality was emphasized. The participants were also asked only to answer the questions they understood and felt comfortable with. During the data collection the participants were encouraged to ask at any time, in English or Chinese, if they had any questions or if it was something they didn't understand. Due to that some participants could feel difficulties expressing themselves in English it was important to give them the possibility to choose language.

No questions were asked but participants gave good feed back and said the questionnaire to be good and that they liked that it was performed in English. Many also forth hold that it was a very important subject and appropriate to perform the study in China due to the lack of relevant studies about sex-related subject other than diseases in the country.

The participants had approximated 30 minutes to answer the questionnaire, which were collected by hand-raising when finished. 100 of the participants choose to keep the information letter when handing in the answered questionnaires. All questionnaires were directly kept in a closed envelope by the study's author. During the stay in China, the answered questionnaires were kept safely locked in the study's authors hotel.

5.5 Data analysis

The study's author manually transferred and processed the findings in the Statistical Package for Social Sciences (SPSS) 19.0. Descriptive data were used to answer the study's aim and underlying questions. Collected data was organized and presented through frequency distributions demonstrated in histograms and frequency tables. To test different hypothesis regarding possible

differences of frequencies between the male and female respondents, X2 (Chi-square) tests were conducted. By comparing expected and unexpected frequencies differences were identified. A large difference between these meant it to be less likely occurred by chance and more likely to be statistically significant. Also, fisher exact test were used for those cases when the expected count were less than five and no mergers of variables could be performed.

To analyze questions 19 (most associated feelings with sex/intercourse), the ten variables were divided into two separate groups; positive respectively negative associated feelings. Cronbach alpha were calculated to measure their internal consistency, how closely related the positive respectively negative variables were as a group. The positive feelings; were happiness, pleasure, relaxation, togetherness and desire (Cronbach α coefficient=0,582), and the negative feelings were; fear, anxiety, stress, pain and discomfort (Cronbach α coefficient=0,340).

5.6 Ethical principles and considerations

Since sexuality is seen as a sensitive topic and also often considered as taboo in China, great consideration was taken during both planning and execution of the study. When conducting research there are several ethical aspects that need to be considered to minimize the risk of ethical problems. According to Collste (2002) and The Swedish Council for Research in the Humanities and Social Sciences (2002) there are four general principles; information demand, consent demand, confidential demand and demand of use and rights. To uphold these, the study's author kept an objective view during the search of scientific articles which suited the study's aim and underlying questions. In accordance to the information demand, the participants took part of the information about the study both verbally and written. Firstly verbal in both Chinese and English, and secondly written in an information letter (Appendix I) which was handed out together with the questionnaire. The information letter described the participant's part in the study, that their participation was voluntary and that they only should answer the questions they understood and felt comfortable with, this also in accordance to the demand of consent. Information regarding that the participation was voluntary and they also could stop at any given time was emphasized in both of the two information stages. The participants were also able to ask questions in English or Chinese before, during and after their participation. This hopefully helped to minimize the risk of non-response and contributed to make the participants feel secure and confident in their choice of participation.

As none of the respondents names were stated during the data collection, neither written nor spoken, no singular participants could be identified. All participants were assured that the material collected during the field study in Chongqing was used for a master thesis in Science of Public Health and only for this purpose. The demand of use and rights as well as the demand of confidential was considered and the collected data was kept locked at the author's home. The author was the only one who had access to the collected data which were destroyed in relation to the approval of the master thesis (Collste, 2002; The Swedish Council for Research in the Humanities and Social Sciences, 2002).

6. RESULTS

To get a general view of the participant's ideas of and knowledge towards sexuality the study's collected quantitative material were analyzed and statistics were put together. The study sample consisted of 176 male and 224 female medical university students, 44 respectively 56 percent, with the median age of 20 years. In order to see if there were significant differences between the male and female participants answers an x^2 test has been performed.

The study's result is presented in order of its underlying questions; ideas of sexual behavior, experiences of sexual behavior, sources for obtaining knowledge of sex/intercourse, knowledge of STD's and ideas of contraceptive use. The table below shows the study's underlying questions and related survey questions distributed in order of the result presented.

Table 2. The surveys questions in relation to the study's underlying questions

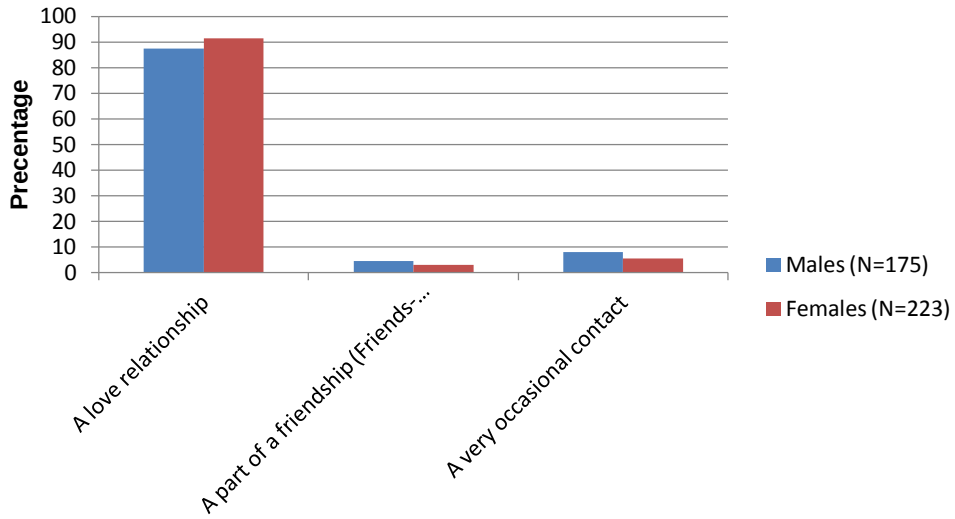
Underlying question	Question
1. What ideas of sexual behavior do young people have?	13, 14, 19, 20
2. What are their experiences of sexual behavior?	12, 15, 16, 17, 18
3. How do they obtain knowledge about sex/intercourse?	6, 8, 10, 9, 11
4. What knowledge do they have about STD?	27, 25, 26
5. What ideas of contraceptive use have young people?	22, 23, 21, 24

Source: Survey study

Almost all respondents answered the questions sincerely, 95 percent. Also, the vast majority of the respondents thought the questions to be easily understandable and the most common answer for both males and females were "Very easy". Only 7 percent felt it to be very difficult to understand. Furthermore, the majority of the respondents also believed the questions to be very important or important. 17 percent thought they were neither, merely 7 percent them to be unimportant. 59 percent thought the questions were comfortable to answer, 19 percent uncomfortable and 22 percent neither comfortable nor uncomfortable.

6.1 Ideas of sexual behavior

A vast majority of the respondents choose "A love relationship" as the most common kind of sexual relationship among young people, which didn't differs between the gender; males 87 percent and females 92 percent. Both "A very occasional contact" and "A part of a friendship (Friends-with-benefits)" got very low numbers among both genders. For this question there was no statistically significant difference between the genders (x2=1,743, df 2, p=0,418).



The most common kind of sexual relationship among young people

Diagram 1. Frequency of the most commonly kind of sexual relationship (N=398).

The three most overall associated feelings with sex/intercourse were togetherness, pleasure and desire. Among the male respondents positive feelings, primarily pleasure and desire, were most common, and very few associated sex/intercourse with negative feelings. The female respondent's two most common associated feelings were togetherness and fear. There were a statistically significant difference between the genders regarding negative associations to sex/intercourse as female respondents were more likely than the male respondents to associate sex/intercourse negatively (x2=71,289, df 5, p=0,000). There were also a statistically significant difference between

the genders regarding the males to be more likely to associate sex/intercourse with positive feelings (x2=77,641, df 5, p=0,000).

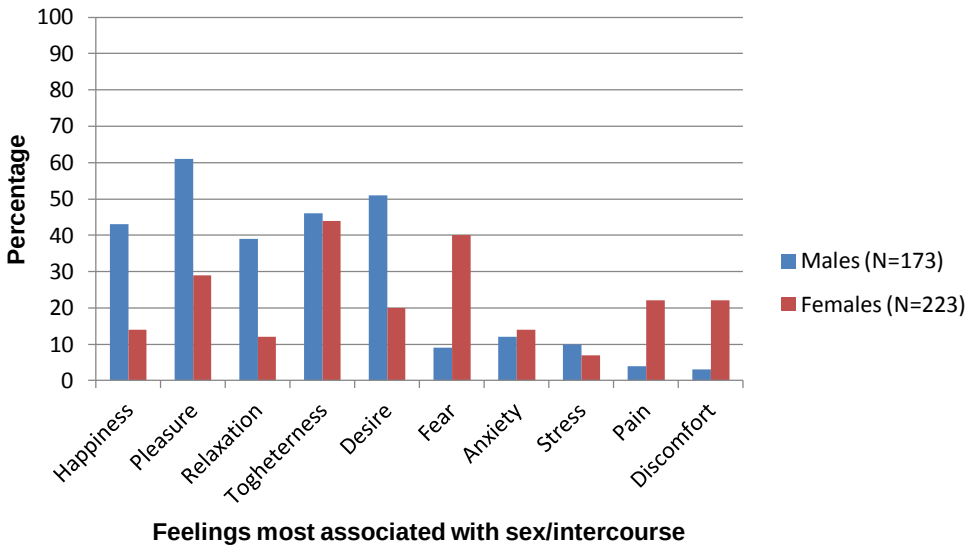


Diagram 2. Frequency of the feelings most associated with sex/intercourse (N=396).

Views of premarital sex were vastly divided among the respondents. 44 percent felt it acceptable, 31 percent unacceptable and 25 percent was uncertain. Among males over 60 percent thought it to be acceptable, but only 29 percent of the females concurred with them. 42 percent of the females thought it to be unacceptable. There was a great uncertainty concerning the subject among males and females both; 19 and 29 percent respectively. Also, male respondents were more likely to view premarital sex as acceptable (x2 = 46,699, df 2, p=0,000).

The majority of the respondents thought pornography affected their views of sex/intercourse; males 77 percent, females 56 percent, total 66 percent. The most common respond were "Yes, a little" with 60 percent among males and 43 percent among females. There were very few who thought their view to be affected a lot, 7 percent. 30 percent thought it not to be affected. There were a statistic significant difference between the genders as males were more likely to believe their view of sex/intercourse to be affected by pornography (x2=33,739, df 3, p=0,000).

6.2 Experiences of love and sexual behavior

Close to half of the survey's respondents had experienced being in love, 48 percent for both males and females, no statistically significant difference (x2=0,023, df 1, p=0,880). Among those who had been in love a majority thought it to be a positive experience, 59 percent. 34 percent believed it to be neither positive nor negative and very few, only 7 percent, thought it to be negative.

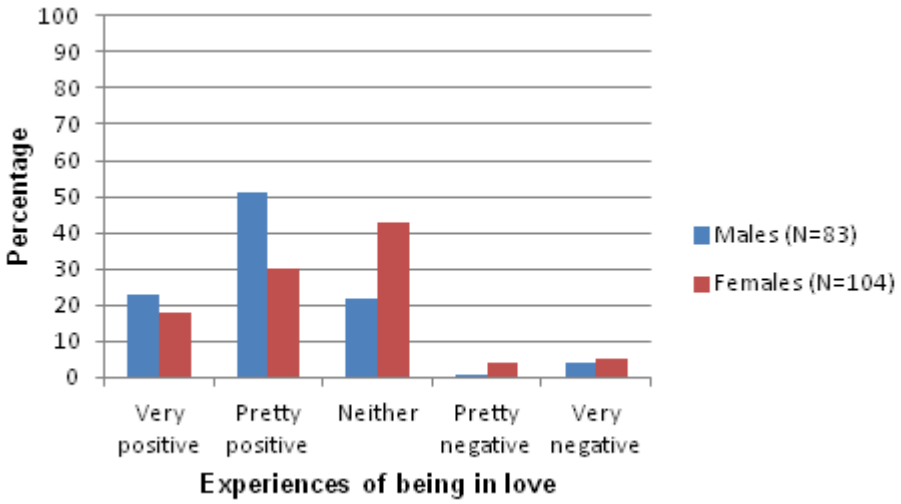


Diagram 3. Frequency of the experiences of being in love among (N=187).

The majority of the respondents said themselves to be either hetero- or bisexual. 63 percent of the male respondents and 38 percent of females said to be attracted to the opposite sex. 28 percent of the male- and 46 percent of female respondents said to be bi-sexual. Only 1 male and 4 females defined themselves as homosexuals. The result shows a statistic significant difference between the genders views of their sexual orientation (x2=205,857, df 4, p =0,000). The males were more likely to define themselves as heterosexuals than the female respondents. Definition as bisexual was more likely among the female respondents than the male respondents.

The results show senior high school as the most common time for the respondents to have become aware of sex/intercourse, 45 percent. Second most common were junior high school, 31 percent. Only 16 percent of the respondents said College to be the time of becoming aware, and less than 9 percent at elementary school. There were a statistically significant difference between the genders regarding when they become aware of sex/intercourse (x2=15,482, df 3, p =0,001).

There were very few respondents who claimed to have had sex/intercourse, only 15 percent of the males and 6 percent of the females (x2=9,961, df 1, p=0,02). The average age of losing virginity was 18 years. The most common age for males was 19 years (43 percent) and for females 18 years (50 percent) and there were no statistically significant difference between the genders regarding this question (x2=4,420, df 5, p=0,491).

Slightly more than half of the respondents had sometime read or watched pornography on TV or the Internet, 55 percent. There was however a statistically significant difference among the genders regarding having watched pornography as it was considerably more common among the male respondents; 91 percent respectively 26 percent (x2=165,866, df 1, p=0,000). Among the respondents who said to have read or watched pornography it was most common to have watched sometimes per year, 50 percent. The second most common answer for males were sometimes per month (37 percent) and it was most common for females to have watched at single occasions (24 percent). There were statistically significant differences between the male and female respondents regarding watching pornography; every week (x2=5,198, df 1, p=0,022), sometimes per month (x2=9,428, df 1, p=0,002), single occasions (x2=7,413, df 1, p=0,006) and I don't watch porn (x2=4,399, df 1, p=0,005). There were no statistically significant differences between the genders regarding watching pornography; every day (x2=0,378, df 1, p=1,000) and sometimes per year (x2=1,158, df 1, p=0,282).

6.3 Sources for obtaining knowledge of sex/intercourse

As seen is diagram 4, the study's respondents believed friends, magazines and the Internet to be the best sources for young people to obtaining knowledge regarding sex/intercourse. The most common chosen sources among the male respondents were the Internet (65 percent), friends (61 percent), magazine (50 percent) and TV/DVD (47 percent). Among the female respondent's magazines (60 percent), friends (54 percent), teacher (44 percent) and the Internet (44 percent) were most commonly chosen.

There were several statistically significant differences between male and female respondents view of the best sources for knowledge regarding sex/intercourse. 37 percent of the females choose mother as the best source, at the same time only 7 percent of the male for which viewed mothers to be the best source (x2=49,754, df 1, p=0,000). Statistical differences could also be seen for the choice of teacher (x2=4,203, df 1, p=0,040), sibling (x2=5,421, df 1, p=0,020), read in magazine (x2=4,212, df 1, p=0,040), the Internet (x2=17,487, df 1, p=0,000) and TV/DVD (x2=12,402, df 1, p=0,000). There was no statistically significant difference for the options; father (x2=0,081, df 1, p =0,775), a youth health care center (x2=0,497, df 1, p=0,481), friend (x2=2,173, df 1, p=0,140) and doctor (x2=0,485, df 1, p=0,486). Furthermore, other sources (4 percent of all respondents) reported for obtaining knowledge about sex/intercourse were; *adult video, biology class, books, parents, girlfriend, grandparents, class, roommate, school, self studies, survey* and *watch card*. There was no statistically significant difference between the genders regarding other sources as the best source for knowledge regarding sex/intercourse (x2=16,302, df 14, p=0,295).

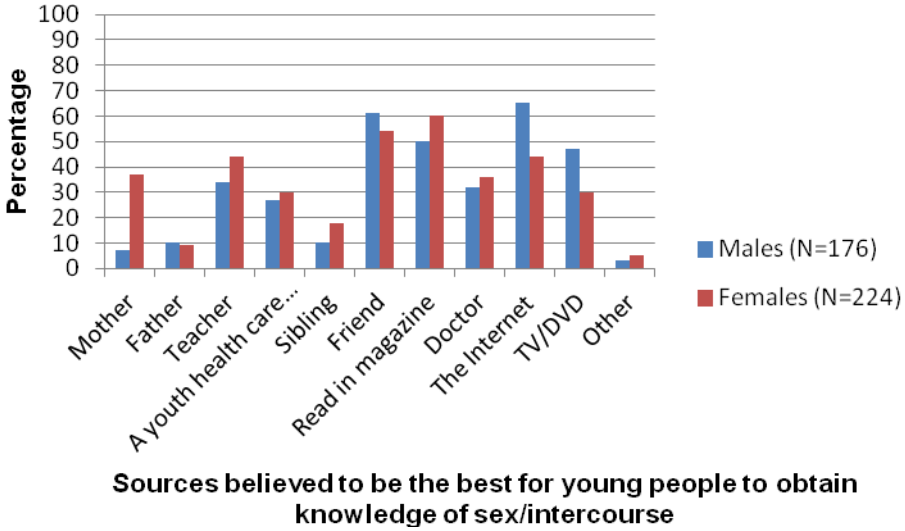


Diagram 4. Frequency of the best source for young people to obtain knowledge regarding sex/intercourse (N=400).

Diagram 5 shows that the survey's respondents thought friends, magazines and the Internet to be the best source for young people to obtain contraceptive knowledge. The Internet (61 percent), a doctor (56 percent) and magazines (48 percent) was the most common choice among the male respondents. The female respondents had the same most commonly chosen sources; a doctor (54,5 percent), magazines (51 percent) and the Internet (49 percent).

There were few statistically significant differences between male and female respondents view of the best sources for contraceptive knowledge. Statistically significant differences could be seen for three categories; mother (x2=37,579, df 1, p=0,000), sibling (x2=8,973, df 1, p=0,003) and the Internet (x2=5,971, df 1, p=0,015). No statistically significant differences were for the sources; father (x2=1,270, df 1, p=0,260), teacher (x2=0,379, df 1, p=0,538), a youth health care clinic (x2=0,006, df 1, p=0,938), friend (x2=1,378, df 1, p=0,241), magazine (x2=0,365, df 1, p=0,546),

doctor (x2=0,059, df 1, p=0,808) and TV/DVD (x2=2,281, df 1, p=0,131). “Other sources” (10 percent of all respondents) for obtaining contraceptive knowledge were; *biology class, books, computer, lecture, lover, minister in college, roommate, school* and *films*. There were no statistically significant differences between the genders regarding views of other sources as the best source of contraceptive knowledge (x2=6,435, df 1, p=0,696).

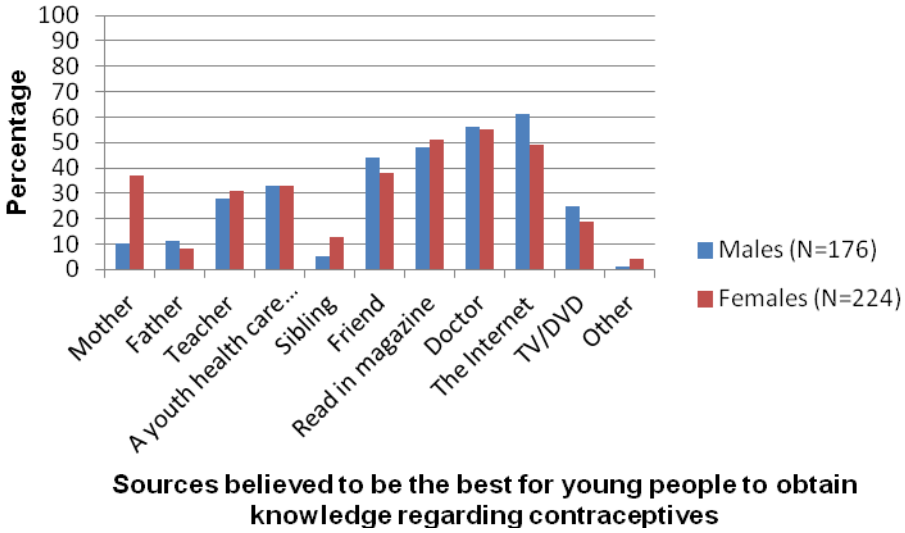


Diagram 5. Frequency of the best source for young people to obtain knowledge regarding contraceptives (N=400).

A majority of the survey’s respondents believed that young people don’t receive enough information regarding sex/intercourse (81 percent), 79 percent of the males and 83 percent of the females. There were no statistically significant difference between the genders regarding the view of sex/intercourse-related information provided by the school (x2=1,066, df 1, p=0,302). The most commonly chosen subjects whom they wanted to know more about among the males were relationships (70 percent), love (58 percent), sex/intercourse (57 percent) and contraceptives (53 percent). The females wanted mostly to know more about feelings (72 percent), relations (71 percent), sexually transmitted diseases (57 percent) and contraceptives (55 percent).

There were 4 separate statistically significant differences between the genders regarding which subjects they wanted to know more about; love (x2=9,608, df 1, p=0,002), feelings (x2=10,648, df 1, p=0,001), sex/intercourse (x2=13,377, df 1, p=0,000) and pornography (x2=16,994, df 1, p=0,000). There were no statistically significant difference between the genders for the subjects; anatomy (x2=0,018, df 1, p=0,893), puberty (x2=0,028, df 1, p=0,866), relationships (x2=0,065, df 1, p=0,799), contraceptives (x2=0,154, df 1, p=0,694), sexually transmitted diseases (x2=2,091, df 1, p=0,148) and pregnancy (x2=0,748, df 1, p=0,387).

Only 16 percent of all respondents had talked to their parents about sex/intercourse. Among these 3 percent of the males and 17 percent of the females had talked to their mother, 5 percent of the males and 1 percent of the females with their father, and finally 5 percent of the males and 0,5 percent of the females with both parents. There were a statistically significant difference between the genders regarding parental talk (x2=31,350, df 1, p=0,000).

6.4 Knowledge of STD’s

The majority believed their sexual behavior to be affected by fear of HIV/AIDS (67 percent). Every third respondent (34 percent) thought their sexual behavior was affected a lot, and only 17 percent believed their sexual behavior to be unaffected. There were statistically significant difference between the genders regarding believing their sexual behavior to be affected by fear of HIV/AIDS

(x2=15,806, df 3, p=0,001). 42 percent of the males believed their behavior to be affected a little by fear, but only 28 percent of the females.

As seen in diagram 6, AIDS was the disease most likely believed to be sexually transferrable, 96 percent answered it correctly. However, just nearly every third of the respondent's (30 percent) could identify Chlamydia and Herpes as STD's. Even lower were the respondents identifications of the STD's; Condyloma and cervical cancer, 23 respectively 14 percent. There were 3 statistically significant differences between the genders regarding their beliefs of which STD's that can be transferred by sexual contact; Herpes (x2=9,053, df 1, p=0,003), Condyloma (x2=4,271, df 1, p=0,039) and cervical cancer (x2=8,137, df 1, p=0,004). Females were slightly more likely to identify Condyloma and cervical cancer as an STD, whereas males were more likely to identify Herpes to be an STD.

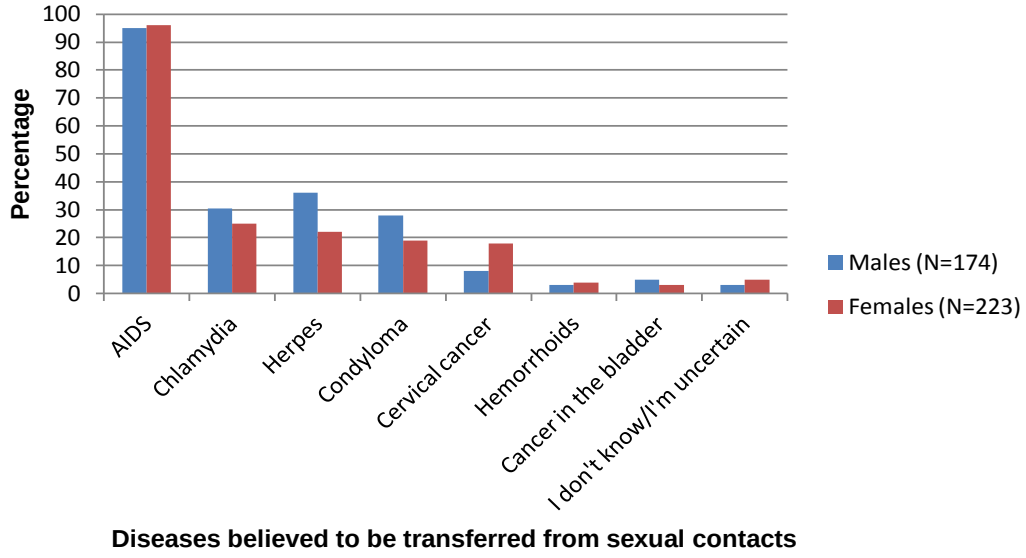


Diagram 6. Frequency of what diseases that were believed to be transferrable from sexual contacts (N=397).

Among the STD's which are caused by viruses; AIDS was most identified (90 percent). Very few respondents identified Herpes (19,5 percent) and Condyloma (16,5 percent). 44 respectively 20 percent incorrectly identified Gonorrhea and Chlamydia as STD's caused by virus. There was a statistically significant difference between the genders as male respondents were more likely to believe Herpes as a disease caused by virus (x2=4,615, df 1, p=0,032).

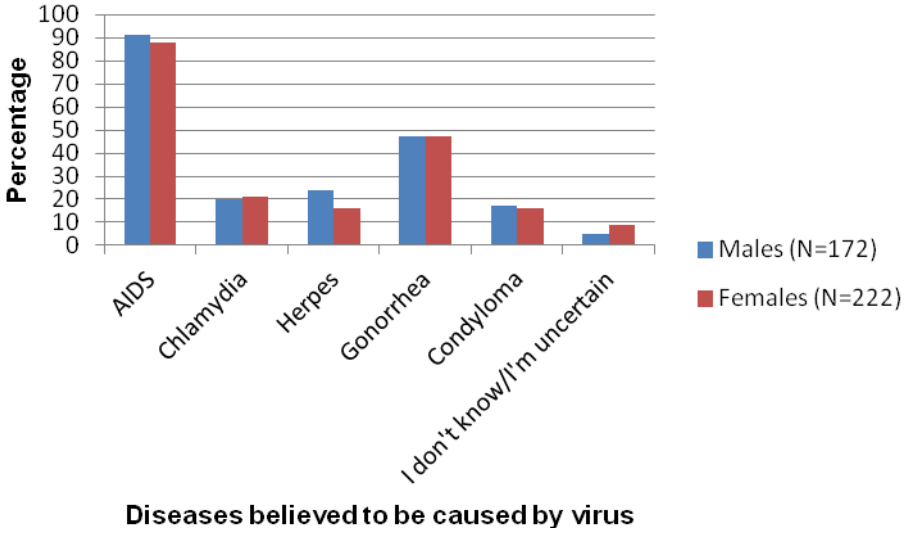


Diagram 7. Frequency of what STD's that were believed to be caused by virus (N=394).

6.5 Ideas of contraceptive use

The most common believed reasons for young people choosing to use contraceptives was protection for unwanted pregnancy; 82 percent of the male respondents and 91,5 percent of the female respondents. There was a statistically significant difference between the genders regarding views of the most common believed reason for young people to use contraceptives (x2=7,264, df 1, p=0,007). The majority of those who chose the answer "other" (16 percent of all the respondents) believed both of the reasons; protection for unwanted pregnancy and for STD's to be the most common reason for using contraceptives. Other answers were; *can't afford a kids life, learning from others, safety/health, the man of taking responsibility* and *they aren't married*. There were none statistically significant difference in this question between the genders regarding other reasons for young people choosing to use contraceptives (x2=7,889, df 9, p=0,545).

The 4 most commonly believed reasons for young people not choosing to use contraceptives among the survey's respondents was; unplanned intercourse (45 percent), feeling contraceptives inconvenient (31 percent), feel too shy to buy or obtain contraceptives (29 percent) and having no or poor knowledge about contraceptives (29 percent). For the male respondents the most common reasons were; unplanned intercourse (42 percent) and feeling contraceptives inconvenient (40 percent). Unplanned intercourse (47,5 percent) and having no or poor knowledge about contraceptives (36 percent) was the 2 most common believed reasons among the female respondents. There were 3 different statistically significant differences between the genders views regarding reasons why not to use contraceptives; having no or poor knowledge (x2=16,024, df 1, p=0,000), feeling contraceptives to be inconvenient (x2=12,198, df 1, p=0,000) and worried about the side effects of pills (x2=3,820, df 1, p=0,051). Other reasons (1,5 percent of all respondents) to why young people choose to not using contraceptives believed to be; *don't have the consciousness of using it, don't know, financial problem, plan to have a child* and *to feel more exiting*. There were no statistically significant difference, regarding other reasons, between the genders(x2=5,693, df 6, p=0,458).

The most commonly preferred contraceptive methods were; to use condom during all the time of the intercourse (66 percent) and "safe periods" (37,5 percent). There were a statistically significant difference between the genders; condom that were put on right before ejaculation were more commonly preferred among the males than the females (x2=6,173, df 1, p=0,013). One male respondent chose oral sex as other preferred contraceptive methods (x2=1,276, df 1, p=0,440).

The majority of the survey's respondents believed the responsibility for using contraceptives to be either both partners (54 percent) or the man's (34 percent). Very few believed the responsibility to be the woman's (9,5 percent) or none's (1,5 percent). There were no statistically significant difference between the genders regarding the views of who's responsibility it is for using contraceptives (x2=2,652, df 3, p=0,448).

7. DISCUSSION

7.1 Methodological discussion

In this explorative survey study knowledge and ideas of sexual behavior among 19-21 year old Chinese students at CQMU were described and analyzed. A long period of planning and a gradual build-up of confidence between the study's Swedish author and the University administration and several Professors preceded the decision to get access to the Chinese students at the University. This planning included the translation of the questionnaire, getting access to the students during lecture time and helping the author to present her and the aim of the study and the handling of the results and the confidentiality. Thereby the Chinese ethical considerations was also said to be fulfilled.

As sexuality is considered to be a controversial and privet subject it has to be seen as quite unique to let a foreign student to get in contact with Chinese students for asking about such deeply personal aspects of their lives. The very detailed planning in advance was probably facilitated by the fact that the study's author previously had been the very first exchange student from Sweden at CQMU. During the exchange period the study's author was given a special task to review the program for Swedish sexual education of young persons, a presentation that were well received and gave rise to a good reputation. Due to this she had a foot inside the CQMU organization already when she arrived to perform the present study's survey. The strict confidentiality for each student and the use of the findings solely at the population level were made very clear and the study's author could feel herself to be trusted by the Chinese students.

To answer the study's aim of examining Chinese male and female medical student's knowledge and ideas of sexual behavior at CQMU, a descriptive quantitative method such as a cross-sectional survey was considered to be the best choice. A questionnaire can be seen as less personal and more anonymous, than for example interviews, and thereby create a more safe and comfortable situation for the participants. Furthermore, conducting a survey is considered to by a relatively rapid method of collecting a large amount of data which was of great importance for this study due to the existing time limit (Andersson, 2006; Djurfeldt et al., 2010). Cross-sectional surveys are used to study possible associations between the between multiple variables. However, cross-sectional surveys can't explain the cause; only generate possible associations and relations. For this study it was considered important to get a first impression and generating ideas. To get deeper understanding and secure possible associations and relations qualitative interviews or possibly qualitative focus group discussions would be considered as good choices of methods (Eljertsson; 2003). This would on the other hand, necessitate conversations in Chinese and have required the involvement of an interpreter. The involvement of a third person would have created problems regarding the confidentiality. With both time limitations and language barriers mind, observation studies would neither have been possible methodology.

The design of the questionnaire was based on a previous Swedish study and the separate questions were revised to make them easier to understand for Chinese students. It was also verified by the students, both in the pilot survey and the actual survey, that they had no problem understanding the questions neither to answer them. All this planning and measures taken to create confidence contributed to the achievement of the highest possible degree of validity of the findings. By this probably also the reliability of the findings were put at the highest possible level.

As previously stated in the study's background, China is the third largest country in the world, consisting of 31 provinces and more than 1,3 billion people. With this in mind and also the different standard of quality regarding sexual education in China's different provinces sexual knowledge and ideas may differ vastly in different parts of the country. The province of Chongqing is one of China's largest and most populous municipally which the study's author believes makes it a good place for generating a first insight. Furthermore, the findings in this study should by no means be generalized to Chinese aged 19-21 years old, not even to students in Chongqing. They just reflect the perceptions of 19-21 year old medical students at CQMU. The major value of the findings is embedded in the fact that they have as high validity and reliability as possible and accessible for a Swedish researcher.

In that the survey wasn't conducted in the population's first language it contributed to an increased risk of non-response. If the respondents felt uncertain and not able to understand there were possible risks that they either chose not to participate or answer certain questions (Eljertsson, 2003; Olsson & Sörensen, 2007). The external non-response for the survey was three percent, far less than the study's author's expectations. The high response-rate could be due to the respect of authorities by the Chinese adolescents but also because they found it to be interesting and important. After handed in their questionnaires, many approached and wished to express their feelings of the subject's importance and the need for more studies regarding sexual behavior and sex related topics. This could also be seen as an indicator to the study's low external non-response. If the population sample believes the study to be relevant and of importance for them it could create feelings of interest and thereby maybe also of responsibility for participate (Eljertsson, 2003). Furthermore, information was given both oral during presentation and written in an information letter. The questionnaire was constructed as partly bi-lingual and possibilities for asking questions were given both in English and Chinese. This could have contributed to the minimized risk for misunderstandings and thereby non-response, both internal- and external. Among the survey study's internal non-response of 14 percent, the majorly was due to not specified or incorrect age of the respondents. This could be explained by the survey to be carried out to full classes and even though the age requirements were specified both oral and written this could have been missed by the respondents. Other internal-non response could have been because it is such a sensitive and private topic, not everyone feels comfortable talking about sexual behavior, ideas and experiences.

There were limitations regarding the choice of respondents due to prior understanding of the language limitations regarding English knowledge to be found mostly among the academics. This especially among medical students as their studies requires English knowledge. For this reason and also because the sexual debut among Chinese adolescents is most commonly at the ages of 18-20 years old, the respondents were defined as medical university students between the ages 19-21 years. Due to the survey study's authors existing knowledge and connection with CQMU it was considered to be the best place for conducting the survey. Another study population could have entailed a higher non-response as their English knowledge is to be seen as limited.

The limited amount of time made a multi translation process impossible in this case. If the survey were to be carried out in Chinese, translation had been required on several occasions. First from English into Chinese, and then back into English by an independent party to reduce the risk of mistranslation. Furthermore, answers of those questions which had the option; *Other, what?* would also needed translation which in " the time limited perspective" would have been impossible if many chose to write in Chinese. Another language-related problem could have been that due to China's large size; different dialects of Chinese are spoken in different provinces. People from the northern parts of China cannot easily understand Chinese spoken in the south and vice versa, the risk of misunderstanding could have been vast. Thereby the study's author believes the pilot survey, the discussions with Chinese professors and the semi bi-lingual

translation of the questionnaire made it as easily understandable as possible. As no questions were asked by the respondents it could verify this belief.

For this survey study the two questions regarding the respondent's birth province and area (rural or urban) were used only to ensure the population sample to be as representative as possible. As the independent variable, regarding the area they derived from, was not problematized it constitutes a limitation. The respondent's background might have influenced their answers of sexual behavior. It could therefore been interesting to examine possible differences in sexual related knowledge and behavior by these variables. But with regards to time limits it would not have been possible in this study.

As the selection of the study sample was conducted as a convenience sample, and also not solely by the study's author, there was a risk of sampling bias (Andersson, 2006; Eljertsson, 2003). However, the selection was made according to specific defined criteria's by the help of professors at CQMU with knowledge and experiences of the field but also of the university. By choosing several different classes and majors among the university's medical students the risk was to be seen as small. Another bias that could have occurred is the observer bias. It occurs when the result is measured or interpreted wrongly, in this case by the study author (Andersson, 2006). There are always difficulties and problems when trying to interpret and understand people from different cultures. The study author's experiences and knowledge of the Chinese culture, social values and norms were to be seen as limited and could for example affected the analyze of the result by her restricted knowledge. Due to this, professors at CQMU were consulted to ensure the questionnaire to be easily understood and suited the Chinese conditions. Still, the study author strived to apply an objective view during all stages of the process to give an as correct view as possible given the circumstances.

An important aim of the survey study was to examine possible associations between male and female respondents. To test presumed hypothesis of possible gender differences regarding the surveys questions the method chi-square was chosen. This analyze method was chosen as the variables was mostly nominal and ordinal. It also allows more variables at the same time which was needed for the study. To examine the probability that emerged differences were accurate the p value was decided as 0,05. In other words; if the groups were found to be statistically different the probability that they occurred by chance alone was 5 percent. As there were no questions with a big internal non-responses, other than the age-related question, the results statistically significant differences was considered accurate.

7.2 Discussion of the result

In the following discussion the most remarkable findings will be emphasized. The gender thesis was used to clarify how the social gender could affect knowledge and ideas of sexual behavior. Relations and power was analyzed with support foremost of Hirdman's gender thesis but also by Connell's (2002) view of power in relation to gender and the social structure formed by heteronormativity.

7.2.1 Ideas of sexual behavior

Although the results of this study showed sex/intercourse to be foremost associated with positive feelings, there were differences between male and female respondents. As the male respondents almost exclusively associated sex/intercourse with positive feelings, female respondents were more likely to express negative feelings. This gender difference could be due to the traditional values. As described by both Evans (1995) and Louie (2002), Chinese males are encouraged to hold more permissive attitudes regarding their sexually than females. Whereas males were raised to be dominant and active, females were to be shy and passive creating uncertainty regarding sexual intercourse. This coincidence with the gender thesis and Hirdman's (2003) logic of segregation, a

conscious, or unconscious, separation of the sexes based on social constructed ideas. Men and women are seen as opposites as they are raised to hold an active respectively passive behavior. Femininity defines as soft, emotional and innocent, therefore women are raised and expected to associate sex with feelings such as togetherness and love. Female sexuality "should" only exist in relation to the male sexuality (Evans, 1995). But as the Chinese youth is being more exposed to sexual permissive media it could mean they, especially young women, are struggling with the conflicts between traditional conservative and modern allowing norms and values. This creates uncertainness in the process of defining their both their gender identity. The hierarchy logic implies male as the norm and women's behavior are supposed to be the opposite or somewhat differ (Hirdman, 2003). If young women accept and define femininity by modern values, how does it affect their social role as a woman? An active and exploitative sexuality is defined to be a masculine behavior fear could be deviate. As previous mentioned, adolescents is the time to explore and define itself as an individual but also to find ones place in the social life. To deviate from given social norms is a risk and could therefore be an element of fear.

Ideas of premarital sex were shown to be vastly divided among the survey study's respondents. Close to 45 percent expressed themselves to be acceptable towards premarital sex, but at the same time 31 percent thought it to be unacceptable. Also, every forth respondent expressed themselves to be uncertain. This somewhat differ from findings of previous studies showing today's Chinese youth overall to accept premarital sex (Zhang et al., 1999; Zhang et al., 2003). However, in line with Xiayun et al. (2011), the survey study's results showed males to be more acceptable than females which can be related to males holding more traditionally attitudes towards gender roles than females. In traditional China, female virginity and chastity were of great importance. Characteristics such as modesty and shyness were advocated. Relationships and marriage were based strictly upon the family's decision of an appropriate partner. Today's modern values emphasizes romantic love and the Chinese society has gone from arranged marriages towards love based relationships and sexual freeness. Also, occurring social changes with tension between traditional and modern has brought confusion regarding the new roles of men, women and relationships. This might explain why so many respondents expressed uncertainty regarding their views of premarital sex.

7.2.2 Experiences of sexual behavior, bi- and homosexuality

Similar to previous studies, few consider themselves as being homosexual. However, even though heterosexuality was the most common sexual orientation among the male respondents, close to every third defined as bisexual. Also, almost a half of the female respondents defined themselves as bi-sexual. This somewhat differs from the segregation of relations by the gender system described by both Connell (2002) and Hirdman (2003). In accordance to the gender system sexual relations defines by social structure in forms of either homo- or heterosexuality (imdb). Heterosexuality is seen as the norm which was similar to the survey study's result regarding the male respondents. An explanation to why female respondents were more likely to define themselves as bisexuals could be that it is more social acceptable for women than for males.

The result also differs from previous studies where that indicated the majority of their respondents, both male and females, to be heterosexual (Hon et al., 2005; Qiaoqin et al., 2006; Wu et al., 2005). Wu et al. (2008)'s result showed females to be more uncertain regarding their sexual orientation then males and more likely to be certain regarding same-sex attraction. The survey study's results showed a different picture than Mountford et al. (2010)'s regarding homosexuality still being seen as an abnormal sexual behavior in the modern Chinese society. During the last 15 years homosexuality has been decriminalized and removed from the list of mental illness (Mountford et al., 2010). These recent changes in the Chinese society's attitudes towards homosexuality may have helped young people to feel more comfortable with exploring and defining their sexual orientation. Even though there are restrictions in the Chinese media, increased access to the Internet provides a

more open medium for exploration of sexual topics and offers opportunities to talk about questions and feelings with others.

7.2.3 Obtaining knowledge of sex/intercourse

In line with Li et al. (2004b) and Zhang et al. (2010) the survey study's result showed the majority of the respondents thought that school was inadequate in conveying sexual related knowledge to young people. The four most commonly chosen subjects they wanted to receive more information about were foremost relationships, feelings, contraceptives and STI's. According to Moore and Leung (2001) the Chinese adolescent's most important focus is academic achievements and romantic relations is given little room and, as previous mentioned, the present survey study's result showed only half of the respondents to have experienced love which could explain why so many want to know more about relations and feelings.

No previous studies were found regarding the specific sexual subjects Chinese young people want to receive more information on. The existing studies mainly focus on sources for obtaining sexual knowledge and the lack of it (Chen et al., 2008; Li et al., 2004b; Zhang et al., 2007; Zhang et al., 2010). This kind of lacking information is essential in the development and practice of sexual education as it implicates what students feel to be important and have less knowledge about.

Risks with Internet based knowledge is that the information could be inaccurate and potentially lead to unknowingly sexual risk behavior. A previous study by Lam and Sham (2002) discussed the possibility that young Chinese males use Internet pornography as a substitute for their lack of sexual education. Pornographic media is shown to affect sexual attitudes and behaviors (Lo & Wei, 2005; Tydén et al., 2001). In combination with that few believes it to affect their own sexual behavior, school based sexual education should be seen as important for inform youth about the potential risks related with the Internet and pornographic medias as sources for sexual knowledge.

7.2.4 Knowledge of STD

The majority of the respondents believed their sexual behavior to be affected by fear of HIV/AIDS and more than every third as to be affected a lot. Females were more likely to believe their sexual behavior to be affected a lot, and males were more likely to feel their behavior to be affected a little. No previous studies regarding fear affecting the sexual behavior among young people were found. However, as the survey study's respondents showed limited knowledge of STD's and contraceptive use it could affect perceived vulnerabilities. The gender difference may be due to traditional and current views of males and females. In society males are seen as more sexual promiscuous and could therefore be perceived as more likely to have an STD. In contrast, females are perceived as less sexual active as the female virginity is still highly valued in the Chinese society (Evans, 1995; Moore & Leung, 2001; Zheng & Zou, 2007). This could affect the views of vulnerability with sexual activity with a female partner as they could be considered less likely to have HIV/AIDS. Lack of sexual education in China has affected the STD knowledge among young people (Chen et al., 2008: Zhang et al., 2010). As the respondents expressed the school based education to be insufficient and wanted to know more about STD's and contraceptives it could indicate that they feel to have limited knowledge. Feelings of having limited knowledge could create uncertainty making them feel more vulnerable and thereby affect their behavior. A previous study showed that the AIDS knowledge was inconsistent among Chinese college students and that more than a third of these felt to have limited knowledge (Li et al. 2004). If the present survey study's respondents is similar to this; experiences of limited knowledge could have influenced believes of perceived fear to have affected their sexual behavior.

In line with previous studies (Chen et al., 2008; Zhang et al., 2010) the result showed low levels of STD knowledge among the respondents as only a third correctly identified Chlamydia and Herpes, and not even every forth correctly identified Condyloma. There was also little awareness regarding

what STD's caused by bacteria respectively by virus. This contrary to expected result, the survey study's author believed the respondents to be significant more knowledgeable as they are studying firstly at university level and secondly are medical students. The lack of STD knowledge among the respondents is probable due to lacking school based sexual education. As many experienced to not received enough school based knowledge and also reported to search for information on their own with the Internet as a commonly viewed good source. This is consistent with previous studies (Bay-Cheng, 2001; Chen et al., 2008; Li et al., 2004b; Zhang et al., 2010).

7.2.5 Ideas of contraceptive use

Almost all respondents believed the most common reason for young people to use contraceptives was to avoid unwanted pregnancy. This could explain why "safe periods" was perceived as the second most preferred contraceptive method. However this somewhat contradicts their expressions of HIV/AIDS fear affecting their sexual behavior. If they are afraid of contracting HIV/AIDS; why did so many chose a method that doesn't protect? It indicates a contrast to previous discussion regarding feelings of vulnerability. Furthermore, "safe periods" is neither a proper nor safe contraceptive method for avoiding pregnancy. This also implies that the lack of accurate sexual knowledge certainly could affect their sexual health negatively which is in line with previous studies (Li et al., 2004; Wang et al., 2007).

Both male and female respondents believed the responsibility for using contraceptives foremost to be shared between the sexual partners or mainly the man's. Only ten percent viewed women to hold the responsibility. Seen through a heteronormative view, it relates to Hirdman's (2003) logic of hierarchy with male as the dominant sex. Thereby making the woman, and her will, subordinated the man. According to Connell (2002) sexual relation is partly based on power also making the woman second the man. Hard drawn; the man holds the power and decides whether or not to use contraceptives and if so; what type that will be used.

7.3 Utility and needs for further research

The survey study result complies with previous research and indicates that many young Chinese do not have access to information, proper guidance and supportive services, neither from teachers nor parents. Sex and sexuality are seen as personal, uncomfortable and in many cases even as a taboo. It can therefore be difficult to dare asking and seeking accurate information regarding sexual and reproductive health. This especially in China whereas old traditional values still lives and many older people turn a blind eye to the topic. It was not until the beginning of 2000's as sexual education was decided to be mandatory in Chinese schools. Due to this, students have received little or none school based information regarding sexual related matters. In combination with a more increasingly opened and explorative sexuality this could lead to increased sexual risk behavior among adolescents. Also, today's rapidly increased incidence of STD's and high abortion rates indicates that many don't possess accurate contraceptive knowledge. Despite the fact that the survey study's result cannot be generalized for all young students or people it's result was in many aspects consistent of previous studies and may thus give an indication of possible risks.

Since men and women's different living conditions are affected by the society's formal and informal structures questions of equality must be integrated in the sexual and reproductive public health work. Adolescence is the time for acquiring lifelong habits and attitudes, and part of growing up is risk taking. In combination with unawareness of the degree of risk involved risk taking could result in severe health problems. The survey study's result showed that the most common believed reason for young people to use contraceptives were to protect themselves against unwanted pregnancy and the knowledge of the respondents were low. In turn this confirm the urgent need further develop and implement sexual education to provide the Chinese youth with more knowledge as many seeks information on their own by the Internet which can be both good or bad depending on the accuracy of the information they find. The survey study's result also indicated that many

prefers to use “safe periods”, in combination with the increasing unwanted pregnancies and STD’s it is alarming.

Social determinants of health involve living conditions shaped by economic, social policies and politics. It affects people’s lives and behaviors which differ among socioeconomic groups meaning low socioeconomic position increases the risk of ill health. The respondent’s socioeconomic background could affected their ideas and knowledge of sexual behavior and thereby their answers. It could therefore be of future interest to conduct further studies of possible differences in sexual related knowledge and behavior by social position.

To prevent health risks associated with sexual behavior is in addition to strengthening the individuals own identity and self-esteem also on sex education and an increased ability to manage relations to other people. As the survey study’s result showed a vast majority believed they had received insufficient information from school. It also implied the respondents lacked accurate knowledge as, for example, many could not identify STD’s nor which ones caused by virus. Both male and female respondents wanted to know more about subjects related to relations such as love, relationships, feelings which could indicate a need for a positive and emotions related sex education. At the same time as Chinese young people more increasingly are engaging in premarital sexual relations they also lack accurate knowledge which implies severe complications for the future public health development in China. Due to this it is of urgent importance for the Chinese government to promote and create good sexual and reproductive health. However the focus should not only be on preventing unwanted pregnancies and STD’s but also to provide young people the knowledge and confidence they need and want in their journey to adulthood. Thus, the preventive public health work should not neglect the health risks related to sexual behavior but needs to focus and integrate the healthy and positive factors complementary.

Sex education is to be seen as important in the preventive and promoting public health work. Sexual education contributes to the learning and understanding of salutogenic knowledge, of what makes people healthy. It is therefore to be seen as an important health factor as the school is an important arena for health promotion and prevention as many young people can be reached. Thereby sexual education constitute a good source for developing and provide many people good sexual knowledge and the means to develop a good sexuality.

Self-studies through the Internet regarding sexual related matters could be of interest to research as many Chinese youth, shown both in this and also previously studies, considers it to be one of the best and most commonly used sources. However, there Internet provides both “good” and “bad” information and its accuracy is in many cases not reliable. The studies doesn’t show the kind of information they uses and it is therefore necessary to know what and how they affect views of sexual behaviors as well as knowledge.

In the forthcoming globalized world young person share and compare ideas and influence changes of attitudes. Old sacred values will be thrown overboard and equalizations of behaviors will gradually be seen around the world. China is the biggest nation in the world and its economic impact will soon lead to increasing global influence of those who are young in China today.

Learning from others' experiences is important for a good and safe development. The author hopes that this study can contribute valuable knowledge regarding this complex and in many ways unexplored area of concern. Increased knowledge in this area provides good foundation for improvement and implementation of sexual education and for policy decisions and actions.

The final and overriding remark from a public health perspective will be to focus the role of schools in sexual education. It should be emphasized more distinctly world widely. In a global perspective school is a major health promotive arena.

7.4 Ethical discussion

One possible ethical dilemma was whether or not to state the exact municipally and university of the survey study regarding possible identification of the respondents. It was found necessary to state the municipally as due to the fact that China is such a large country many differences can be found between all provinces. Also, together with Beijing, Hong Kong and Shanghai; Chongqing is considered one of the most important in China. The survey study's result can therefore not be generalized for any other municipally and thereby comes the need to state the name. At the present time of the conduction there were over 26 000 medical students enrolled at CQMU and as no majors were stated the risk of participants being identified were seem to be unlikely.

During the survey study's planning and conduction, considerations were taken to the earlier presented ethical principles; the information demand, the consent demand, the confidential demand and the demand of use and rights. The ethical principles were carefully followed and no other ethical dilemma emerged during the survey study's process. None of the respondents questioned any part of the study and several respondents expressed positive feelings towards the conduction of the study and its survey.

8. CONCLUSIONS

Sexuality is one of the most fundamental values of life and the understanding of knowledge and ideas of sexual behavior of young Chinese persons will help to foresee and understand forthcoming changes. This survey is to be seen as idea generating and should not to be generalized to all young Chinese people.

The main conclusions from this study was:

- Ideas of sexual behavior seem to be permissive and love-based. Gender differences were foremost related to acceptance of premarital sex, pornography affecting sexual behavior and associated feelings related to sex/intercourse.

- Bi- and homosexuality seem to be mainly acceptable.

- The best viewed sources for knowledge of sex/intercourse and also for contraceptives were the Internet, books and friends. Few believed to have received enough school based sexual education. There was a desire to know more about social subjects such as love, relations and feelings.

- There seems to be a major lack of knowledge of STD and how to protect yourself.

- Safe periods were thought to be an important contraceptive. The relationship between contraception and the protection against STD seems to be obscure.

ACKNOWLEDGEMENT

It would not have been possible to write this thesis without the help and support of the kind people around me, in Sweden and China. Two of them I want to mention particularly.

I am most grateful to Professor Xu Xiaoyang, professor and researcher in sexual and reproductive health, and Professor Tang Xiaojun, professor and researcher in epidemiology, at Chongqing Medical University (CQMU) in Chongqing, China. Their kindness, friendship and support have been invaluable.

REFERENCES

Ahl, T., (2010). *Kinesiska universitetsstudenters uppfattningar om sexualundervisning för ungdomar i Kina.* Kandidatuppsats, Mälardalens högskola, Hälsa, Vård och Välfärd.

Almanac of China's Health Edit Committee, (2002). Almanac of China's Health 2001. People Health Publishing House: Beijing. In: Cheng, Y., Li S., Arzhuc, Q., Zhou, Y., Wang, J., Zhang, J., Qu, Y., Wang, X., Jia, A., P.U Lif, P. U. & Wang, S. (2002). Sexual coercion among adolescent women seeking abortion in China. *Journal of Adolescent Health.* vol. 31(6). pp. 482-486. doi: 10.1016/S1054-139X(02)00449-4.

Andersson, I., (2006). *Epidemiologi för hälsovetare – en introduktion.* Lund: Studentlitteratur.

Bay-Cheng, L. Y., (2001). SexEd.com: Values and norms in web-based sexuality education. *Journal of Sex Research.* vol. 38(3). pp. 241–251. doi:10.1080/00224490109552093.

Campbell, M. J., Machin, D. & Walters, S.J., (2007*). Medical Statistics - A textbook for the health sciences.* Chichester: John Wiley & Sons.

Chen, B., Lu, Y-N., Wang, H-X., Ma, Q-L., Zhao, X-M., Guo, J-H., Hu, K., Wang, Y-X., Huang, Y-R. & Chen, P., (2008). Sexual and reproductive health service needs of university college students: updates from a survey in Shanghai, China. *Asian Journal of Andrology.* vol. 10(4). pp. 607-615. doi: 10.1111/j.1745-7262.2008.00413.

Chen, X., Gong, X. D., Liang, G. J., & Zhang, G. C., (2000). Epidemiologic trends of sexually transmitted diseases in China. *Sexually Transmitted Diseases*. vol. 27. pp. 138–142. Extracted from: PubMed.

Cheng, Y., Xu, X., Xu, J., Wuillaume, F., Zhu, J., Gibson, D. & Temmerman, M., (2008). The need for integrating family planning and postabortion care in China. *International Journal of Gynecology & Obstetrics*. vol.103(2). pp. 140-143. doi: 10.1016/j.ijgo.2008.06.013.

Collste, G., (2002). *Inledning till etiken* (2:a uppl.). Lund: Studentlitteratur.

Connell, R., (2002). *Gender.* Cambridge: Polity.

Criminal law of the People's Republic of China., (1979). Chapter IV Crimes of infringing upon the rights of the person and the democratic rights of citizens. Extracted from: http://www.novexcn.com/criminal_law.html.

Cui, N., Li, M. & Gao, E., (2001) Views of Chinese parents on the provision of contraception to unmarried youth. *Reprod Health Matters*. vol. 9. pp. 137–45. doi: 10.1016/S0968-8080(01)90017-5.

Dehne, K. L. & Riedner, G., (2005). *Sexually transmitted infections among adolescents: the need for adequate health services*. Geneva: WHO.

Djurfeldt, G., Larsson, R. & Stjärnhagen, O., (2010). *Statistisk verktygslåda - samhällsvetenskaplig orsaksanalys med kvantitativa metoder* (2:d edition.). Lund: Studentlitteratur.

Eckert, P., (2003). Language and gender in adolescents. In Holmes, J. & Meyerhoff, M. (2003). *The handbook of language and gender*. Oxford: Blackwell Publishing.

Eljertsson, G., (2003). *Statistik för hälsovetenskaperna*. Lund: Studentlitteratur.

Evans, H., (1995). Defining difference: the ”Scientific” construction of sexuality and gender in the People’s Republic of China. *Signs: Journal of Women in Culture and Society*. vol. 16(2). pp. 357-394. doi: 0097-9740/95/2002-0001501.00.

Foucault, M., (2002). *Sexualitetens historia. Band 1. Viljan att veta.* Göteborg: Daidalos AB.

Gao, G., Bao, S. D. & He, S. T., (1997). Teenage sexual attitudes in China. Population Research. vol. 21(4). pp. 24-29. In Cui, N., Li, M. & Gao, E. (2001) Views of Chinese parents on the provision of contraception to unmarried youth. *Reprod Health Matters*. vol. 9. pp. 137–145. doi: 10.1016/S0968-8080(01)90017-5.

Gao, Y., Lu, Z., Shi, R., Sun, X.Y. & Cai, Y., (2001). AIDS and sex education for young people in China. *Reproduction, Fertility and Development*. vol. 13(8). pp. 729-737. doi:10.1071/RD01082.

Gil, V. E., (1994). Sinic conundrum: A history of HIV/AIDS in the People’s Republic of China. *Journal of Sex Research*. vol. 31. pp. 211–217. Extracted from: PubMed.

Gil, V. E.,Wang, M. S., Anderson, A. F., Lin, G. M. & Wu, Z. O., (1996). Prostitutes, prostitution and STD/HIV transmission in mainland China. *Social Science and Medicine*. vol. 42. pp. 141–152. doi:10.1016/0277-9536(95)00064-X.

Greene, K., Rubin, D. & Hale, J., (1995). Egocentrism, message explicitness, and AIDS messages directed toward adolescents: an application of the theory of reasoned action. *Journal of Social Behavior and Personality.* vol. 10. pp. 547-570. Extracted from: http://comminfo.rutgers.edu/~kgreene/research/pdf/JSBP-ego.95.pdf.

Grusky, O., Liu, H. J., and Johnston, M., (2002). HIV/AIDS in China 1990–2001. *AIDS and Behavior*. vol. 6(4). pp. 381–393. doi: 10.1023/A:1021109031521.

Hammarström, A., (2004). (second edition). *Genusperspektiv på medicinen – två decenniers utveckling av medvetenheten om kön och genus inom medicinsk forskning och praktik.* Högskoleverket: Stockholm.

Higgins, L. T., Zheng, M., Liu, Y. & Sun, C. H., (2002). Attitudes to marriage and sexual behaviors: a survey of gender and culture differences in China and United Kingdom. *Sex Roles.* vol. 46. pp.75–89. doi: 10.1023/A:1016565426011.

Hirdman, Y., (2003). (Second edition) *Genus – om det stabilas föränderliga former*. Malmö: Liber.

Hirdman, Y., (2007). *Gösta och genusordningen.* Stockholm: Ordfront förlag.

Hu, D., Liu, X., Chen, J., Wang, Y., Wang, T., Zeng, W., Smith, H. & Garner, P., (2007). Direct observation and adherence to tuberculosis treatment in Chongqing, China: a descriptive study. *Health Policy and Planning.* vol. 23. pp. 43–5. doi: 10.1093/heapol/czm03.

Hon, K-L. E., Leung T-F., Yau P-Y., Wu, S-M., Wan, M., Chan, H-Y., Yip, W-K., Fok, T-F., (2005). A Survey of Attitudes Toward Homosexuality in Hong Kong Chinese Medical Students. *Teaching & Learning in Medicine*. vol. 17(4). pp. 344-348. doi: 10.1207/s15328015tlm1704_6.

Häggström-Nordin, E., Hansson, U. & Tydén, T., (2002). Sex behavior among high school students in Sweden: Improvement in contraceptive use over time. *Journal of Adolescent health.* vol. 30. pp. 288-295. doi:10.1016/S1054-139X(01)00401-3.

Lam, C. B., & Chan, D. K.-S., (2006). The Use of Cyber pornography by Young Men in Hong Kong: Some Psychosocial Correlates. *Archives of Sexual Behavior*. vol. 36(4). pp. 588-598. doi: 10.1007/s10508-006-9124-5.

Li, X., Lin, C., Gao, Z., Stanton, B., Fang, X., Yin, Q., & Wu, Y., (2004a). HIV/AIDS knowledge and the implications for health promotion programs among Chinese college students: Geographic, gender and age differences. *Health Promotion International*. vol. 19, pp. 345-356. doi: 10.1093/heapro/dah308.

Li, Y., R. Cottrell, R., I. Wagner, D. & Ban, M., (2004b). Needs for Preferences Regarding Sex Education Among Chinese College Students: A Preliminary Study. *International Family Planning Perspectives*. 30(3), 128-133. Extracted from: http://www.guttmacher.org/pubs/journals/3012804.pdf.

Lo, V.-H., Neilan, E., Sun, M.-P. & Chiang, S.-I., (1999). Exposure of Taiwanese adolescents to pornographic media and impact on sexual attitudes and behavior. *Asian Journal of* Communication. vol. 9(1). pp. 50–71. doi:10.1080/01292989909359614.

Lo, V.-H. & Wei, R., (2005). Exposure to Internet pornography and Taiwanese adolescents' sexual attitudes and behavior. *Journal of Broadcasting & Electronic Media*. vol. 49(2). pp. 221–237. doi: 10.1207/s15506878jobem4902_5.

Lo, V.-H. & Wei, R., (2002). Third-person effect, gender, and pornography on the Internet. *Journal of Broadcasting & Electronic Media*. vol. 46(1). pp. 13-33. doi: 10.1207/s15506878jobem4601_2.

Louie, K., (2002). *Theorizing Chinese masculinity: society and gender in China.* Cambridge: Cambridge university press.

Marston, C. & King, E., (2006). Factors that shape young people's sexual behaviour: a systematic review. *The Lancet*. vol. 368(9547). pp. 1581-1586. doi:10.1016/S0140-6736(06)69662-1.

Ministry of Health of China, UNAIDS & WHO., (*2006). 2005 Update on the HIV/AIDS epidemic and response in China*. Beijing: Ministry of Health.

Moore, S.M., & Leung, C., (2001). Romantic beliefs, styles, and relationships among young people from Chinese, Southern European, and Anglo-Australian backgrounds. *Asian Journal of Social Psychology*. vol. 4. pp. 53–68. doi: 10.1111/1467-839X.00075.

Mountford, T., (2010). *The Legal Status and Position of Lesbian, Gay, Bisexual and Transgender People in the People's Republic of China.* International Gay and Lesbian Human Rights Commission.

Murstein, B. I., (1980). Mate Selection in the 1970s. In: Shengming, T. & Jiping, Z. (2000). Dating Attitudes and Behaviors of American and Chinese College Students. *The Social Science Journal*. Vol. 37:1. pp. 67-78. doi: 10.1016/S0362-3319(99)00066-X.

Olsson, H. & Sörensen S., (2007). *Forskningsprocessen – Kvalitativa och kvantitativa perspektiv* (2:a uppl.). Stockholm: Liber.

Patel, R. & Davidson, B., (2003) *Forskningsmetodikens grunder – att planera, genomföra och rapportera en undersökning.* Lund: Studentlitteratur.

Qiaoqin, M., Masako, O-K., Liming, C., Guozhang, X., Saman, Z., Shahrzad Mortazavi, R., & Masahiro, K., (2006). Sexual behavior and awareness of Chinese university students in transition with implied risk of sexually transmitted diseases and HIV infection: A cross-sectional study. *BMC Public Health.* vol. 6. pp. 232-11. doi: 10.1186/1471-2458-6-232.

Shengming, T. & Jiping, Z., (2000). Dating attitudes and behaviors of American and Chinese college students. *The Social Science Journal*. vol. 37:1. pp. 67-78. doi: doi:10.1016/S0362-3319(99)00066-X.

Stevenson, H.W., & Zusho, A., (2002). Adolescence in China and Japan: Adapting to a changing environment. In Brown, B. B., Larson, L. R. & Saraswathi, T. S. (Eds.) (2002). *The World's Youth: Adolescence in eight regions of the globe*. New York: Cambridge University Press.

Steward, C., (2010). *The Greenwood Encyclopedia of LGBT issues worldwide – Volume 1.* Greenwood Press: California.

Song, Y. & Ji, C-Y., (2010). Sexual intercourse and high-risk sexual behaviours among a national sample of urban adolescents in China. *Journal of Public Health.* vol. 32(3). pp. 312-321. doi:10.1093/pubmed/fdp123.

Swedish National Institute of Public Health, (2010). *Samtal om sexualitet – STI (sexuellt överförda infektioner) och oönskad graviditet – förebyggande insatser och behov.* Östersund: Swedish National Institute of Public Health.

The Swedish Council for Research in the Humanities and Social Sciences (HSFR), (2002). *Forskningsetiska principer inom humanistisk - samhällsvetenskaplig forskning.* Stockholm: Vetenskapsrådet.

Ulfsdotter Eriksson, Y., (2006). *Yrke, status och genus. En sociologisk studie om yrken på en segregerad arbetsmarknad.* Göteborgs universitet: Sociologiska institutionen.

UNESCO, (the United Nations Educational, Scientific and Cultural Organization). (2009). *International Technical Guidance on Sexuality Education - An evidence-informed approach for schools, teachers and health educators*. Paris: UNESCO.

UNESCO, (the United Nations Educational, Scientific and Cultural Organization). (2011). *World Data on Education. 7th edition 2010/11*. Paris: UNESCO.

Wang, B., Hertog, S., Meier, A., Lou, C. & Gao, E. (2005). The Potential of Comprehensive Sex Education in China: Findings from Suburban Shanghai. *International Family Planning Perspectives.* 31(2), 63-72. Extracted from: http://www.guttmacher.org/pubs/journals/3106305.pdf.

Wang, B., Xiaoming, L., Stanton, B., Kamali, V., Naar-King, S., Shah, I. & Thomas, R., (2007). Sexual attitudes, pattern of communication, and sexual behavior among unmarried out-of-school youth in China. *BMC Public Health.* vol. 7. pp. 189-10. doi: 10.1186/1471-2458-7-189.

Watts, J., (2004). China sex education lags behind sexual activity. *The Lancet.* vol. 363(10). pp. 1208. doi:10.1016/S0140-6736(04)15994-1.

WHO, (the World Health Organization). (2005). *Sexual and reproductive health of adolescents and youths in China: a review of literature and projects 1995-2002*. Geneva: WHO.

WHO, (the World Health Organization). (2006). *Defining sexual health- report of a technical consultation on sexual health 28-31 January 2002, Geneva.* Geneva: WHO.

WHO, (the World Health Organization). (2011). *Making pregnancy safer – Adolescent pregnancy*. Geneva: WHO.

Wu, K.K., Leung, E.Y. & Leung, A.Y., (2008). A Survey on Same-sex Attraction in Secondary School Adolescents: Prevalence and Psychosocial Factors. *Hong Kong J Psychiatry.* vol. 18(1). pp. 15-22. MEDLINE: NLM UID: 9891883.

Xiayun, Z., Chaohua, L., Ersheng, G., Yan, C., Hongfeng, N., & Zabin, L.S., (2011). Gender Differences in Adolescent Premarital Sexual Permissiveness in Three Asian Cities: Effects of Gender-Role Attitudes. *Journal of Adolescent Health.* vol. 50. pp.18-25. doi: 10.1016/j.jadohealth.2011.12.001.

Xu, J. & Cheng, L., (2008). Awareness and usage of emergency contraception among teenagers seeking abortion: A Shanghai survey. *European Journal of Obstetrics & Gynecology and Reproductive Biology*. vol. 141(2). pp. 143-146. doi: 10.1016/j.ejogrb.2008.08.002.

Yelland, N. (red.) (1998). *Gender in early childhood*. London: Routledge.

Ying, L., Daikun, L., Jia, H., HongHong, L. & Hu, Z., (2008). Assessment of community health needs of Chongqing residents: a qualitative study. *Journal of Medical Colleges of PLA*. vol. 23(5). pp. 289-299. doi:10.1016/S 1000-1948(08)60056-8.

Zhang, K., Li, H. & Beck, E., (1999). Changing sexual attitudes and behavior in China: implications for the spread of HIV and other sexually transmitted diseases. *AIDS Care.* vol. 11(5). pp. 581-589. Extracted from: PubMed.

Zhang, L., Li, X. & Shah, I.H., (2007). Where do Chinese adolescents obtain knowledge of sex? Implications for sex education in China. *Health education*. vol. 107(4). pp. 351-363. doi:10.1108/09654280710759269.

Zeng, X. & Zou, J., (2007). *Enjoy China to its fullest.* Beijing: World publishing corporation corp.

Zheng, X.Y. & Cheng, C., (2010). Survey of youth access to reproductive health in China. In Xiayun, Z., Chaohua, L., Ersheng, G., Yan, C., Hongfeng, N., & Zabin, L.S., (2011). Gender Differences in Adolescent Premarital Sexual Permissiveness in Three Asian Cities: Effects of Gender-Role Attitudes. *Journal of Adolescent Health.* vol. 50. pp.18-25. doi: 10.1016/j.jadohealth.2011.12.001.

Internet sources

UNESCO, (2011). www.unesco.org, webpage for the United Nations Educational, Scientific and Cultural Organization, 13 January 2011.

Nationalencyklopedin, (2012). The Swedish national encyclopedia. www.ne.se.

MÄLARDALENS HÖGSKOLA
ESKILSTUNA VÄSTERÅS

Box 883, 721 23 Västerås **Tfn:** 021-10 13 00
Box 325, 631 05 Eskilstuna **Tfn:** 016-15 36 00
E-post: info@mdh.se **Webb:** www.mdh.se

APPENDIX 1.

Hi.

My name is Therese and a master student in Science of Public Health at Mälardalens University in Sweden. I have previously been an exchange student in Public Health at Chongqing Medical University. Now I have been given the opportunity to return to Chongqing to perform a study. The aim of this study is to examine the knowledge of and attitudes toward sex among Chinese college students in Chongqing, China.

I would be very happy if you would like to participate with your knowledge and experience. The questionnaire is voluntary but your participation is highly valued and very helpful for me to understand young people's attitudes towards sex and how they think about relationships and contraceptive use.

The questionnaire and report will be treated with full confidentiality so that there can be no identifications made of the participations. All the information you write down is strictly confidential and anonymously. You should only answer those questions that you understand and feel comfortable with. The questionnaire takes approximately less than 30 minutes to answer. Please answer the questions in English.

If you have any questions don't hesitate to contact us.

I'm grateful for your participation!

Kind Regards

Therese Ahl

My email: tal07001@student.mdh.se
Professor Tang Xiaojun email: Tangxiaoj0726@qq.com

I. Some opening questions about you.

1. In what year were you born?

19 __ __(YY)____(m)

2. Are you a man or a woman?

- Man
- Woman

3. In which province were you born?

- Chongqing
- The other province

4. Where are you from?

- Rural area (农村)
- Urban area (城市)

II. Now some questions regarding where to obtain (获得) knowledge about sex/intercourse (性行为).

5. Do you think it is important to obtain (获得) knowledge about sex/intercourse (性行为)?

- No
- Yes
- I don't know/ I'm uncertain

6. From where do you think young people obtain (获得) the best knowledge regarding sex/intercourse (性行为)?
(You may choose more than one option)

- Mother
- Father
- Teacher
- A youth health care center (青少年咨询中心)
- Sibling (兄弟姐妹)
- Friend
- Read in magazine
- Doctor
- Internet
- TV/DVD
- Other, what? _____

7. Do you think it is important to obtain (获得) knowledge about contraceptives (避孕措施)?

- No
- Yes
- I don't know/ I'm uncertain

8. From where do you think young people obtain (获得) the best knowledge regarding contraceptives (避孕措施)?
(You may choose more than one option)

- Mother
- Father
- Teacher
- A youth health care center (青少年咨询中心)
- Sibling (兄弟姐妹)
- Friend
- Read in magazine
- Doctor
- Internet
- TV/DVD
- Other, what? _____

9. Have your parents talked to you about sex/intercourse (性行为)?

- No
- Yes, mother
- Yes, father
- Yes, both

10. Do you think young people obtain (获得) enough information regarding sex/intercourse (性行为) from school?

- No
- Yes

If no, what do you want to know more about?
(You may choose more than one option)

- Anatomy (两性解剖知识)
- Puberty (青春期表现)
- Love
- Feelings (青春期性心理知识)
- Relationships (两性间的交往、相处)
- Sex/intercourse (性行为)
- Contraception's (避孕知识)
- Sexual transmitted diseases (性传播疾病)
- Pregnancy (怀孕过程)
- Pornography (色情)

11. Do you seek information about sex/intercourse (性行为) on your own initiative (主动)?

- No
- Yes, sometimes
- Yes, often

12. Have you ever read or watched pornography (色情) on TV or the Internet?

- □ No
- □ Yes

If yes, how often do you watch pornography (色情)?

- □ Every day
- □ Every week
- □ Sometimes per month
- □ Sometimes per year
- □ Single occasions (一次)
- □ I don't watch porn

13. Do you think your view of sex/intercourse (性行为) is influenced by pornography (色情)? (Magazines, videos, TV, Internet etc.)

- □ No
- □ Yes, a little
- □ Yes, a lot
- □ I don't know/ I'm uncertain

III. Here follows some questions regarding your experiences of love, relationships and sex/intercourse (性行为).

14. What do you think is the most common kind of sexual relationship among young people (你认为青少年中最常见的会发生性关系的交往类型是)?

- □ A love relationship
- □ A part of a friendship (Friends-with-benefits)
- □ A very occasional contact (偶然的性行为，如一夜情)

15. Have you been in love?

- □ No
- □ Yes

If yes, how did you experience it to be in love?

- □ Very (非常)positive
- □ Pretty (很)positive
- □ Neither positive or negative
- □ Pretty negative
- □ Very negative

16. People can be attracted and turned on by persons of the opposite or the same gender (人们会被同性或异性的人所吸引).
I'm turned on by:

- □ Only boys
- □ Only girls
- □ Both boys and girls
- □ I'm not certain
- □ I'm not turned on by either boys or girls

17. When did you become aware of sex/intercourse (性行为)?

- □ Elementary school (小学)
- □ Junior high school (初中)
- □ Senior high school (高中)
- □ College(大学)

18. Have you had sex/ intercourse (性行为)?

- □ No
- □ Yes

If yes, how old were you the first time you had sex/intercourse with someone?

___ year

19. What feelings do you most associate with (联想) sex/intercourse (性行为)?
(You may choose more than one option)

- □ Happiness (高兴)
- □ Pleasure (愉悦)
- □ Relaxation (轻松)
- □ Togetherness (亲近感)
- □ Desire (渴望)
- □ Fear (害怕)
- □ Anxiety (焦虑)
- □ Stress (压抑)
- □ Pain (疼痛)
- □ Discomfort (不舒服)

20. What do you think of having sex/intercourse (性行为) before marriage?

- □ Acceptable
- □ Unacceptable
- □ I don't know/ I'm uncertain

IV. Here follows some questions regarding your knowledge of contraceptive (避孕的) use and sexual transmitted diseases.

21. What type of contraceptives (避孕措施) would you prefer to use during sex/intercourse (性行为)?

- □ Condom (安全套) that were used during all the time of intercourse(性行为过程中全程使用安全套)
- □ Condom that were put on right before ejaculation (在射精前使用安全套)
- □ Contraceptive pill (避孕药)
- □ Inter-uterine contraceptive device (子宫内避孕器)
- □ Emergency Contraceptive pill (紧急避孕药)
- □ "Safe periods" (安全期)
- □ None
- □ I don't know/I'm uncertain

□ Other, what?

_____

22. What do you think is the most common (常见的) reason to why young people choose to use contraceptives (避孕措施)?

□ Protection for unwanted pregnancy (怀孕)
□ Protection for sexually transmitted diseases (性传播疾病)
□ Other, what?

_____

23. What do you think is the most common (常见的) reason for young people not to use contraceptives (避孕措施)?

□ Unplanned intercourse (性行为)
□ Feel too shy to buy or obtain contraceptives
□ Don't know where to buy or obtain (获得) contraceptives
□ Having no or poor knowledge about contraceptives
□ Feel that it has a negative effect on pleasure
□ Worried about the side effects of pills
□ Unsure of contraceptives ability to protect
□ Partner disagrees to use
□ Feel that contraception is not convenient (方便)
□ Feel that contraception is too expensive
□ Other, what?

_____

24. Who do you think is most responsible for using contraceptives (避孕措施)?

□ Man
□ Women
□ Both
□ None

25. Which following diseases do you believe can be transferred from sexual contacts (性接触)?
(You may choose more than one option

□ AIDS (艾滋病)
□ Chlamydia (衣原体感染疾病)
□ Herpes (疱疹)
□ Condyloma (尖锐湿疣)
□ Cervical cancer (宫颈癌)
□ Hemorrhoids (痔疮)
□ Cancer in the bladder (膀胱癌)
□ I don't know/ I'm uncertain

26. Which following diseases do you believe are caused by virus (病毒)?
(You may choose more than one option)

□ AIDS (艾滋病)
□ Chlamydia (衣原体感染疾病)
□ Herpes (疱疹)
□ Gonorrhea (淋病)
□ Condyloma (尖锐湿疣)
□ I don't know/ I'm uncertain

27. Has fear of HIV/AIDS affected (影响) your sexual behavior?

□ No
□ Yes, a little
□ Yes, a lot
□ I don't know/ I'm uncertain

_____

How was it to answer these questions?

The questions were easy to understand (1 = Very easy 5 = Not easy)
1. ☐ **2.** ☐ **3.** ☐ **4.** ☐ **5.** ☐
The questions were important (1 = Very important 5 = Not important)
1. ☐ **2.** ☐ **3.** ☐ **4.** ☐ **5.** ☐
The questions were uncomfortable to answer (1 = Not uncomfortable 5 = Very uncomfortable)
1. ☐ **2.** ☐ **3.** ☐ **4.** ☐ **5.** ☐
I answered the questions sincerely (真实的) (1 = Very sincerely 5 = Not sincerely)
1. ☐ **2.** ☐ **3.** ☐ **4.** ☐ **5** ☐

Thank you for your participation!

APPENDIX 2.

1. In what year were you born?

	Males (N=176)	Females (N=224)	Total (N=400)
Birth year (age at time)	% (N)	% (N)	% (N)
1990 (21)	29 (51)	25 (55)	26 (106)
1991 (20)	47 (82)	41 (93)	44 (175)
1992 (19)	24 (43)	34 (76)	30 (119)

2. Are you a man or a woman?

	N (%)
Man	176 (44)
Woman	224 (56)
Total	400 (100)

3. In which province were you born?

	Males (N=176)	Females (N=224)	Total (N=400)
	% (N)	% (N)	% (N)
Chongqing	49 (86)	46 (104)	47,5 (190)
Other province	51 (90)	54 (120)	52,5 (210)

4. Where are you from?

	Males (N=176)	Females (N=224)	Total (N=400)
	% (N)	% (N)	% (N)
Rural area	68 (120)	59 (133)	63 (253)
Urban area	32 (56)	41 (91)	37 (147)

5. Do you think it is important to obtain knowledge about sex/intercourse?

	Males (N=176)	Females (N=224)	Total (N=400)
	% (N)	% (N)	% (N)
No	2 (4)	3 (7)	3 (11)
Yes	97 (170)	84 (189)	90 (359)
I don’t know/I’m uncertain	1 (2)	13 (28)	7 (30)

p Value = 0,000

6. From where do you think young people obtain the best knowledge regarding sex/intercourse?

	Males (N=176)	Females (N=224)		Total (N=400)
	% (N)	% (N)	p Value	% (N)
Mother	7 (12)	37 (83)	0,000	24 (95)
Father	10 (18)	9 (21)	NS	10 (39)
Teacher	34 (60)	44 (99)	0,040	40 (159)
A youth health care center	27 (47)	30 (67)	NS	28,5 (114)
Sibling	10 (17)	18 (40)	0,020	14 (57)
Friend	61 (108)	54 (121)	NS	60 (135)
Read in Magazine	50 (88)	60 (135)	0,040	56 (223)
Doctor	32 (57)	36 (80)	NS	34 (137)
Internet	65 (114)	44 (98)	0,000	29,5 (66)
TV/DVD	47 (82)	29,5 (66)	0,000	37 (148)
Other	3 (6)	5 (11)	NS	4 (17)

6.1 Other sources

	Males (N=6)	Females (N=11)	Total (N=17)
	(N)	(N)	(N)
Adult video	2	0	2
Biology class	0	2	2
Book/Novel	0	3	3
Boys from father, girls from mother	0	1	1
Girlfriend	1	0	1
Grandparents	1	0	1
Our class	0	1	1
Roommate	0	1	1
School	0	2	2
Study by myself/lecture	0	1	1
Survey	1	0	1
Watch card	1	0	1

7. Do you think it is important to obtain knowledge about contraceptives?

	Males (N=176)	Females (N=224)	Total (N=400)
	% (N)	% (N)	% (N)
No	1 (2)	2 (5)	2 (7)
Yes	96 (169)	93 (209)	5 (10)
I don’t know/I’m uncertain	3 (5)	5 (10)	4 (15)

p Value = NS

8. From where do you think young people obtain the best knowledge regarding contraceptives?

	Males (N=176)	Females (N=224)		Total (N=400)
	% (N)	% (N)	p Value	% (N)
Mother	10 (18)	37 (83)	0,000	25 (101)
Father	11 (20)	8 (18)	NS	9,5 (38)
Teacher	28 (50)	31 (70)	NS	30 (120)
A youth health care center	33 (58)	33 (73)	NS	33 (131)
Sibling	4,5 (8)	13 (30)	0,003	9,5 (38)
Friend	44 (77)	38 (85)	NS	40,5 (162)
Read in Magazine	48 (85)	51 (115)	NS	50 (200)
Doctor	56 (98)	54,5 (122)	NS	55 (220)
Internet	31 (108)	49 (110)	0,015	54,5 (218)
TV/DVD	25 (44)	19 (42)	NS	21,5 (86)
Other	0,5 (1)	4 (10)	NS	3 (11)

8.1 Other sources

	Males (N=1)	Females (N=10)	Total (N=11)
	(N)	(N)	(N)
Biology class	0	1	2
Books	0	1	2
Computer	0	1	3
Lecture	0	1	1
Lover	0	1	1
Ministor in college	0	1	1
Roommate	0	1	1
School	1	1	2
Some film about this	0	1	1

9. Have your parents talked to you about sex/intercourse?

	Males (N=175*)	Females (N=224)	Total (N=399)
	% (N)	% (N)	% (N)
No	87 (152)	81 (182)	84 (334)
Yes, mother	3 (6)	17 (31)	11 (45)
Yes, father	5 (8)	1 (2)**	2,5 (10)
Yes, both	5 (9)	0,5 (1)**	2,5 (10)

*1 missing
**Cells have expected count less than 5
p Value = 0,000

10. Do you think young people obtain enough information regarding sex/intercourse?

	Males (N=176)	Females (N=224)	Total (N=400)
	% (N)	% (N)	% (N)
No	79 (139)	83 (186)	81 (325)
Yes	21 (37)	17 (38)	19 (75)

p Value = NS

10.1 If no, what do you want to know more about?

	Males (N=141*)	Females (N=186)		Total (N=327)
	% (N)	% (N)	p Value	% (N)
Anatomy	33 (46)	33 (62)	NS	33 (108)
Puberty	46 (65)	45 (84)	NS	46 (149)
Love	58 (82)	41 (76)	0,002	48 (158)
Feelings	55 (77)	72 (134)	0,001	64,5 (211)
Relationships	70 (99)	71,5 (133)	NS	71 (232)
Sex/intercourse	81 (57)	37 (69)	0,000	46 (150)
Contraceptives	53 (75)	55 (103)	NS	54 (178)
Sexually Transmitted Diseases	49 (69)	57 (106)	NS	53,5 (175)
Pregnancy	23 (32)	27 (50)	NS	25 (82)
Pornography	33 (46)	33 (62)	NS	33 (108)

*2 additional males

11. Do you seek information about sex/intercourse on your own initiative?

	Males (N=176)	Females (N=223*)	Total (N=399)
	% (N)	% (N)	% (N)
No	15 (27)	52,5 (117)	36 (144)
Yes, sometimes	75 (132)	46 (102)	59 (234)
Yes, often	10 (17)	2 (4)	5 (21)

*1 missing
p Value = 0,000

12. Have you ever read or watched pornography on TV or the Internet?

	Males (N=176)	Females (N=224)	Total (N=400)
	% (N)	% (N)	% (N)
No	15 (27)	52,5 (117)	36 (144)
Yes	75 (132)	46 (102)	59 (234)

p Value = 0,000

12.1 If yes, how often do you watch pornography?

	Males (N=157*)	Females (N=59)		Total (N=219)
	% (N)	% (N)	p Value	% (N)
Every day**	1 (1)	0 (0)	NS	1 (0,5)
Every week**	8 (13)	0 (0)	0,023	6 (13)
Sometimes per month	37 (58)	15 (9)	0,002	31 (67)
Sometimes per year	43 (67)	51 (30)	NS	45 (97)
Single occasions	10 (15)	24 (14)	0,006	13 (29)
I don't watch pornography**	2 (3)	12 (7)***	0,005	5 (10)

*3 missings
**Cells have expected count less than 5
***1 additional female

13. Do you think your view of sex/intercourse is influenced by pornography?

	Males (N=176)	Females (N=224)	Total (N=400)
	% (N)	% (N)	% (N)
No	22 (39)	37 (82)	30 (121)
Yes, a little	60 (106)	43 (97)	51 (203)
Yes, a lot	12 (21)	3 (7)	7 (28)
I don't know/I'm uncertain	6 (10)	17 (38)	12 (48)

p Value = 0,000

14. What do you think is the most common kind of sexual relationship among young people?

	Males (N=175*)	Females (N=223*)	Total (N=398)
	% (N)	% (N)	% (N)
A love relationship	87 (153)	91,5 (204)	90 (357)
A part of a friendship (Friends-with-benefits)	5 (8)	3 (7)	4 (15)
A very occasional contact	8 (14)	5 (12)	6,5 (26)

*1 missing
p Value = NS

15. Have you been in love?

	Males (N=176)	Females (N=223*)	Total (N=399)
	% (N)	% (N)	% (N)
No	52 (91)	52,5 (117)	52 (208)
Yes	48 (85)	47,5 (106)	48 (191)

*1 missing
p Value = NS

15.1 If yes, how did you experience it to be in love?

	Males (N=83*)	Females (N=104*)		Total (N=187)
	% (N)	% (N)	p Value	% (N)
Very positive	23 (19)	18 (19)	NS	20 (38)
Pretty positive	51 (42)	30 (31)	0,004	39 (73)
Neither positive nor negative	22 (18)	43 (45)	0,002	34 (63)
Pretty negative**	1 (1)	4 (4)	NS	3 (5)
Very negative**	4 (3)	5 (5)	NS	4 (8)

*2 missings
**Cells have expected count less than 5

16. People can be attracted and turned on by persons of the opposite or the same gender. I'm turned on by:

	Males (N=174*)	Females (N=224)	Total (N=398)
	% (N)	% (N)	% (N)
Only boys**	0,5 (1)	38 (86)	22 (87)
Only girls	63 (110)	2 (4)	29 (114)
Both boys and girls	28 (48)	46 (103)	38 (151)
I'm not certain	7 (12)	13 (29)	10 (41)
I'm not turned on by either boys or girls**	2 (3)	1 (2)	1 (5)

*2 missings

**Cells have expected count less than 5
p Value = 0,000

17. When did you become aware of sex/intercourse?

	Males (N=175*)	Females (N=224)	Total (N=399)
	% (N)	% (N)	% (N)
Elementary school	11 (20)	6 (14)	8,5 (34)
Junior high school	38 (67)	25 (57)	31 (124)
Senior high school	40 (70)	49 (109)	45 (179)
College	10 (18)	20 (44)	15,5 (62)

*1 missing
p Value = 0,001

18. Have you had sex/intercourse?

	Males (N=176)	Females (N=224)	Total (N=400)
	% (N)	% (N)	% (N)
No	85 (149)	94 (211)	90 (360)
Yes	15 (27)	6 (13)	10 (40)

p Value = 0,002

18.1 If yes, how old were you the first time you had sex/intercourse with someone?

	Males (N=21*)	Females (N=12**)	Total (N=33)
(Years)***	% (N)	% (N)	% (N)
15	5 (1)	8 (1)	6 (2)
16	5 (1)	0 (0)	3 (1)
17	14 (3)	8 (1)	12 (4)
18	24 (5)	50 (6)	33 (11)
19	43 (9)	17 (2)	33 (11)
20	9,5 (2)	17 (2)	12 (4)

*6 missings
**1 missing
***Cells have expected count less than 5
p Value = NS

19. What feelings do you most associate with sex/intercourse?

	Males (N=173*)	Females (N=223**)		Total (N=396)
	% (N)	% (N)	p Value	% (N)
Happiness	43 (75)	14 (32)	0,000	27 (107)
Pleasure	61 (105)	29 (64)	0,000	43 (169)
Relaxation	39 (68)	12 (27)	0,000	24 (95)
Togetherness	46 (79)	44 (98)	NS	45 (177)
Desire	51 (89)	20 (45)	0,000	34 (134)
Fear	9 (15)	40 (90)	0,000	26,5 (105)
Anxiety	12 (20)	14 (31)	NS	13 (51)
Stress	10 (18)	7 (15)	NS	8 (33)
Pain	4 (7)	22 (49)	0,000	14 (56)
Discomfort	3 (5)	21,5 (48)	0,000	13 (53)

*3 missing
**1 missing

20. What do you think of having sex/intercourse before marriage?

	Males (N=176)	Females (N=224)	Total (N=400)
	% (N)	% (N)	% (N)
Acceptable	62,5 (110)	29 (65)	44 (175)
Unacceptable	18 (32)	42 (94)	31,5 (126)
I don't know/I'm uncertain	19 (34)	29 (65)	25 (99)

p Value = 0,000

21. What type of contraceptives would you prefer to use during sex/intercourse?

	Males (N=176)	Females (N=224)		Total (N=400)
	% (N)	% (N)	p Value	% (N)
Condom during all the time of the intercourse	65 (114)	67 (151)	NS	66 (265)
Condom right before ejaculation	14 (25)	7 (15)	0,013	10 (40)
Contraceptive pill	16 (28)	20 (45)	NS	18 (73)
Inter-uterine contraceptive device	4 (7)	3 (7)	NS	3,5 (14)
Emergency contraceptive pill	7 (12)	3 (7)	NS	5 (19)
"Safe periods"	42 (74)	34 (76)	NS	37,5 (150)
None*	0,5 (1)	1 (3)	NS	1 (4)
I don't know/I'm uncertain	7 (12)	10 (22)	NS	8,5 (34)
Other, (oral sex)*	0,5 (1)	0 (0)	NS	0,5 (1)

*Cells have expected count less than 5

22. What do you think is the most common reason to why young people choose to use contraceptives?

	Males (N=176)	Females (N=224)	Total (N=400)
	% (N)	% (N)	% (N)
Protection for unwanted pregnancy	82 (120)	91,5 (173)	87 (293)
Protection for STD's	18 (27)	8,5 (16)	13 (43)
Other	15 (26)	16 (37)	16 (63)

p Value = 0,007

22.1 Other reasons

	Males (N=26)	Females (N=37)	Total (N=63)
	% (N)	% (N)	% (N)
Both reasons	14 (25)	14 (32)	14 (57)
Can't afford a kids life	0 (0)	0,5 (2)	0,5 (2)
Learning from others	0 (0)	0,5 (1)	0,5 (1)
Safety/health	0 (0)	0,5 (1)	0,5 (1)
The man of taking responsibility	0 (0)	0,5 (1)	0,5 (1)
They aren't married	0,5 (1)	0 (0)	0,5 (1)

p Value = NS

23. What do you think is the most common reason for young people not to use contraceptives?

	Males (N=176)	Females (N=224)		Total (N=400)
	% (N)	% (N)	p Value	% (N)
Unplanned intercourse	42 (72)	47,5 (105)	NS	45 (177)
Feel too shy to buy or obtain contraceptives	29,5 (51)	29 (65)	NS	29 (116)
Don't know where to buy or obtain contraceptives	13 (22)	10 (22)	NS	11 (44)
Having no or poor knowledge about contraceptives	18 (31)	36 (80)	0,000	28 (111)
Feel that it has a negative effect on pleasure	23 (40)	16 (35)	NS	19 (75)
Worried about the side effects of pills	12 (21)	19,5 (43)	0,051	16 (64)
Unsure of contraceptives ability to protect*	3,5 (6)	2 (5)	NS	3 (11)
Partner disagrees to use	3 (5)	5 (12)	NS	4 (17)
Feel that contraception is not convenient	40 (69)	23,5 (52)	0,000	31 (121)
Feel that contraception is too expensive*	2 (4)	1 (2)	NS	1,5 (6)
Other*	1 (2)	2 (4)	NS	1,5 (6)

*Cells have expected count less than 5
p Value = NS

23.1 Other reasons*

	Males (N=2)	Females (N=4)	Total (N=6)
	% (N)	% (N)	% (N)
Don't have the consciousness of using it	0 (0)	0,25 (1)	17 (1)
I don't know/I'm uncertain	0 (0)	0,5 (2)	33 (2)
Financial problem	0,5 (1)	0 (0)	17 (1)
Plan to have a child	0 (0)	0,25 (1)	17 (1)
To feel more exiting	0,5 (1)	0 (0)	17 (1)

*Cells have expected count less than 5
p Value = NS

24. Who do you think is most responsible for using contraceptives?

	Males (N=174*)	Females (N=223**)	Total (N=397)
	% (N)	% (N)	% (N)
Man	38 (66)	32 (71)	34,5 (137)
Woman	8 (14)	11 (24)	10 (38)
Both	52 (91)	56,5 (126)	55 (217)
None***	2 (3)	1 (2)	1 (5)

*2 missings
**1 missing
***Cells have expected count less than 5
p Value = NS

25. Which following diseases do you believe can be transferred from sexual contacts?

	Males (N=174*)	Females (N=223*)		Total (N=397)
	% (N)	% (N)	p Value	% (N)
AIDS	95 (165)	96 (215)	NS	96 (380)
Chlamydia	30,5 (53)	25 (55)	NS	27 (108)
Herpes	36 (62)	22 (49)	0,003	28 (111)
Condyloma	28 (48)	19 (42)	0,039	23 (90)
Cervical cancer	8 (14)	18 (40)	0,004	14 (54)
Hemorrhoids	3 (5)	4 (8)	NS	3 (13)
Cancer in the bladder	5 (8)	3 (7)	NS	4 (15)
I don't know/I'm uncertain	3 (6)	5 (12)	NS	4,5 (18)

*2 missings
**1 missing

26. Which following diseases do you believe are caused by virus?

	Males (N=172*)	Females (N=222*)		Total (N=394)
	% (N)	% (N)	p Value	% (N)
AIDS***	91 (158)	88 (196)	NS	90 (354)
Chlamydia	20 (34)	21 (46)	NS	20 (80)
Herpes	24 (42)	16 (35)	0,032	19,5 (77)
Gonorrhea	46,5 (80)	47 (104)	NS	47 (184)
Condyloma	17 (30)	16 (35)	NS	16,5 (65)
I don't know/I'm uncertain	5 (9)	9 (20)	NS	7 (29)

*4 missings
**2 missings
***3 males missing

27. Has fear of HIV/AIDS affected your sexual behavior?

	Males (N=172*)	Females (N=222**)	Total (N=394)
	% (N)	% (N)	% (N)
No	19 (33)	15 (34)	17 (67)
Yes, a little	42 (72)	28 (63)	34 (135)
Yes, a lot	30 (51)	35 (77)	32,5 (128)
I don't know/I'm uncertain	9 (16)	22 (48)	16 (64)

*4 missings
**2 missings
p Value = 0,001

The questions were easy to understand

	Males (N=166*)	Females (N=219**)	Total (N=385)
	% (N)	% (N)	% (N)
Very easy	52 (86)	44 (96)	47,5 (183)
Easy	32,5 (54)	31 (68)	32 (122)
Neither easy or difficult	8 (13)	18 (40)	14 (53)
Difficult	5 (9)	3 (7)	4 (16)
Very difficult***	2 (3)	4 (8)	3 (11)

*10 missings
**5 missings
***Cells have expected count less than 5
p Value = 0,024

The questions were important

	Males (N=166*)	Females (N=219**)	Total (N=385)
	% (N)	% (N)	% (N)
Very important	52 (86)	43(94)	47 (180)
Important	25 (42)	33 (72)	30 (114)
Neither important or unimportant	19 (32)	15 (33)	17 (65)
Unimportant	4 (6)	6 (14)	5 (20)
Very unimportant***	0 (0)	3 (6)	2 (6)

*10 missings
**5 missings
***Cells have expected count less than 5
p Value = 0,035

The questions were uncomfortable to answer

	Males (N=166*)	Females (N=219**)	Total (N=385)
	% (N)	% (N)	% (N)
Very comfortable	42 (69)	30 (66)	35 (135)
Comfortable	22 (36)	25 (55)	24 (91)
Neither comfortable or uncomfortable	20 (33)	23 (50)	22 (83)
Uncomfortable	11 (19)	15 (33)	13,5 (52)
Very uncomfortable	5 (9)	7 (15)	6 (24)

*10 missings
**5 missings
p Value = NS

I answered the questions sincerely

	Males (N=166*)	Females (N=219**)	Total (N=385)
	% (N)	% (N)	% (N)
Very sincerely	79,5 (132)	79,5 (174)	79,5 (306)
Sincerely	15 (25)	16 (35)	16 (60)
Neither sincerely or insincerely***	2 (3)	3 (7)	3 (10)
Insincerely***	2 (3)	1 (3)	2 (6)
Very insincerely***	2 (3)	0 (0)	1 (3)

*10 missings
**5 missings
***Cells have expected count less than 5
p Value = NS