Gender Differences in Sex Education Received by Adolescents in China and the United States

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ABSTRACT
Sex education provides teenagers with healthy and comprehensive knowledge about sexual lives. As new adult Human Immunodeficiency Virus (HIV) infections and adolescent pregnancies have become serious problems, some countries have begun to attach importance to sex education. For teenagers, different genders have different physiological structures and sexual maturity ages, which may lead to differences in the content of sex education. This paper aimed to review the gender equality of sex education in different countries, taking China and the United States as examples. In China, due to the traditional Confucianism culture, females’ attitudes towards sex education have shown an implicit tendency, which is opposite from males’ attitudes. In addition, Lesbian, Gay, Bisexual, and Transgender (LGBTQ+) people are not acknowledged by law in China, which is the reason why sex education towards this community shows obvious deficiency. In the United States, there are two major policies, Abstinence-Only Education (AOE) and Comprehensive Sex Education (CSE). Gender-stereotyped content has been found in AOE, in which teaches boys and girls to play different roles in a sexual relationship. Also, AOE is still based on heterosexual relationships and neglects the LGBTQ+ community, while CSE takes these into consideration. Sex education for different genders in CSE is relatively equal, while in AOE it still has a long way to go.

Keywords: Sex education, Gender differences, Sexuality, China, the United States.

1. INTRODUCTION
Adolescence is a period when both physical and mental conditions experience great changes. If adolescents are not taught by schools or families about how to deal with these changes properly, it may lead to some serious consequences. For males, the lack of sexual and reproductive health knowledge may cause the infection of venereal diseases; for females, except diseases, unintended pregnancy and abortion may also pose a threat to their physical health [1]. According to the fact sheets posted by the World Health Organization (WHO), adolescents account for about 10% of new adult HIV infections and most of the infected people are females [2]. Adolescent pregnancies are also a global serious problem that may occur in marginalized communities among all countries. There are 43 births per 1000 to adolescent girls aged 15-19 years per year and these females will face more risks compared to females aged over 20 years [3]. All these facts pointed to one reason, which was the insufficiency of sex education. More attention should be paid to providing access to healthy and comprehensive sexual knowledge.

Appropriate sex education can let teenagers know the age-based, culturally relevant information, which helps them make better decisions on when and how to start their sexual lives [4]. The content of sex education varies due to a lot of factors. The area is one of the factors. For example, in eastern countries, the attitudes towards sex are considered to be more conservative than in western countries [5]. That may lead to differences in policies concerning sex education. China is an eastern country and a developing country that owns the largest population in the world. Although some research illustrates that opinions on sexual expression are becoming more and more open since the open-door policy, the comprehensive result of sex education in China still shows deficient [6]. In the United States, a developed
In this section, this paper will introduce gender differences in sex education received by adolescents in China. The sexual education of Chinese adolescents has gone through three stages in different years: the confinement stage (1949-1977), the initiation stage (1978-1987) and the development stage (1988-present). A system of adolescent sex education based on policies, schools, families and society has been gradually established [8].

2.1. Gender Differences in Sources of Sex Knowledge

The main approaches for students to acquire sex knowledge are newspapers, magazines, Internet, television, radio, school education, classmates, friends, parents, doctors, and videotapes.

In terms of access to sex knowledge, parental education has a greater impact on girls than boys. The difference between boys and girls is that boys select more classmates, friends, videotapes, and the Internet as their sources of sex knowledge [9]. However, girls rely more on school education, newspapers, magazines, books, and parents for their selections [9]. Clearly, girls have more concentrated sources of knowledge than boys, and the importance of parents as educators is more important for them than for boys.

In terms of access to sex knowledge, boys are more inclined to acquire sex knowledge through classmates, friends and the Internet. 54.7% of male students have sex knowledge from their classmates and friends, which is significantly higher than 43.1% of female students [10]. Also, boys are more vulnerable to the influence of networks, video data, and informal publications than girls [11]. In that case, there are significant differences in the channels of sex knowledge acquisition among different genders. In the process of teaching sex knowledge, teachers can use this feature to provide more suitable sex education for both genders.

2.2. Gender Differences in Quantity of Sex Knowledge

In terms of the number of sex knowledge, there are differences between boys and girls, which is not very apparent because the average number of sexual knowledge available to boys is slightly higher than girls [10]. However, there are obvious gender characteristics. As for the specific sex knowledge mastered by boys and girls, sex knowledge directly related to their sexual maturity is understood more, while sex knowledge related to the opposite sex is understood less [10]. For instance, boys have a larger amount of sex knowledge about spermatorrhea and masturbation, while girls have the most sex knowledge about menstruation and rape. In general, there should be differences between boys and girls in understanding sex knowledge. More specifically, if this difference is allowed to develop, it may have a negative effect on the family life of individuals after they grow up. If individuals only know about their sex knowledge and do not know about the opposite sex knowledge, it is a structural defect of sex knowledge.

2.3. Gender Differences in the Cognitive Level of Specific Sex Knowledge

2.3.1. Gender Differences in Understanding of Basic Physiological Knowledge

Most adolescents have a good understanding of basic physiological phenomena, but they lack understanding of the opposite sex. Most students have a correct understanding of spermatorrhea, especially boys. But nearly a third of the girls don’t know what spermatorrhea is [9]. Meanwhile, the awareness rate of menstruation in boys is lower than that in girls [9]. Both genders are supposed to strengthen their understandings of the sex
knowledge of the opposite gender for better protecting each other and thereby building a good gender relationship.

While being involved in deeper reproductive health knowledge, the awareness rate of both males and females decreases significantly. For some more profound knowledge of reproductive health, boys and girls have failed to answer, and some have made a lot of mistakes such as which period of the menstrual cycle is most likely to be pregnant? [9]. Some students thought that they are ashamed to know the reproductive health knowledge of another gender. In fact, this should not be a shame. Both genders ought to have a deeper understanding of reproductive health knowledge, which is good for both genders.

2.3.2. Gender Differences in the Understanding of Contraceptive Measures

Most adolescents have heard of some popular modern contraceptive methods in society, such as male condoms, oral medicine, male sterilization, and female sterilization. However, they know little about traditional methods such as safety period and in vitro ejaculation. The awareness rate of emergency contraception is relatively low, and only 26.1% of students have heard of it, of which girls account for a small percentage [9]. As for the role of condoms, most students know that condoms have a contraceptive function, but only 60% of students know that condoms have the function of preventing sexually transmitted diseases, and the awareness rate of girls is low [9]. In general, boys have a higher level of knowledge about contraception than girls. Therefore, teachers should pay attention to gender equality when teaching this aspect of sex knowledge in the future.

2.4. Gender Differences in Sexual Ethics

2.4.1. Gender Differences in Views on Chastity

In China's social tradition, the concept of chastity is the core part of sexual morality, which has always been highly rigid. But this very strict chastity view is mainly targeted at girls. The traditional concept of chastity is strict with girls and relatively tolerant of boys [9]. It not only affects a significant proportion of boys, but also makes some girls think that chastity is important to them, but not to boys. This paper argues that both boys and girls should recognize the idea of gender equality with their whole being and not let some prejudices affect their cognition. Admittedly, there is gender inequality in this regard, and girls are supposed to get rid of this stereotype in themselves.

2.4.2. Gender Differences in Views on Premarital Sexual Behavior

In terms of premarital sexual behavior, people still show tolerance to boys and a strict tendency to girls. Compared with girls, more boys are very concerned about whether their girlfriend is a virgin. The proportion of girls who have the same expectations for boyfriends is lower [9]. This reflects the deep imprint of traditional sexual morality and values among a considerable number of people. And gender inequality still has a potential impact, including being solidified in the consciousness of some girls.

2.4.3. Gender Differences in Attitudes Towards AIDS Patients

Only a few students treat AIDS attitude is that they are guilty and more girls than boys hold this view. Most students are sympathetic to people who have contracted AIDS through sexual channels; a small number of students consider it guilty, with more girls than boys [9]. The attitude towards AIDS reflects the civilization and tolerance of the society. Under the social background of the increasing number of people infected with AIDS, schools and relevant parties should strengthen the education of the spirit of tolerance.

2.5. Gender Differences in Expectations and Attitudes Towards Sex Knowledge

Most adolescents are curious to know more about sex, but gender inequality still exists in this area. More than two-thirds of the students hold the view that schools should strengthen sexual health education [10]. Nearly 36% of the students hope that they can have a better understanding of sex knowledge, of which there are more boys than girls mention about this; more than half of the students want to know a little, and the proportion of girls is higher [9]. And in terms of expectations for future lovers' sex knowledge, they want boys to know more [9]. This shows from another aspect that traditional sexual morality has more strict constraints on girls. Still, it has a certain impact on today's people's attitude towards acquiring sex knowledge, especially may affect the initiative of girls to understand relevant sex knowledge. Thus, the authors believe that it is necessary for teachers to tell students the purpose and significance of learning sex knowledge, so as to reduce students' psychological burdens of sex education caused by stereotypes and other factors.

3. GENERAL OVERVIEW OF SEX EDUCATION POLICIES IN THE UNITED STATES

There are two major sex education policies in the United States: Abstinence-only Education (AOE) and
Comprehensive Sex Education (CSE) [12]. In the 1990s, the United States adopted abstinence-only education as the only approach to increase adolescents' knowledge of contraception, sexually transmitted diseases, and HIV/AIDS. It has received funding from both states and the government [12]. "Abstinence" generally has no clear definition [13]. Health professionals view "abstinence" as delaying or never having any sexual activity [13]. For the proponents of abstinence-only education, the term "abstinence" often connects with words such as "virgin," which has more meaning with mortality [13].

The goal for abstinence-only education mainly discourages young men and women from having sex before entering marriage [14]. Although preventing sexual activity theoretically reduces the chances of the spreading of STDs, scientific research has discovered that the effect of abstinence-only sex education is not promising [12] [13]. Abstinence-only education fails to delay the initial sexual activities among adolescents. 57% of the adolescents still decided to have sex at the end of high school. The adolescent birth rate does not decrease under this policy [14]. It is often suggested to update abstinence-only education [13] [15]. Comprehensive sex education also includes abstinence in its curriculum. However, it does not reinforce the stress of completing abstinence [16]. According to Planned Parenthood, comprehensive sex education covers a wide range of topics for K-12 students, including human development, relationships, personal skills, sexual behavior, sexual health, along with society and culture [17]. Conducting comprehensive sex education has been proven to positively impact adolescents in terms of postponing the time for sexual intercourse, increasing condoms, and decreasing the frequency of sexual activities [12].

3.1. Gender Difference of Adolescents' Level of Receipt of Sex Education in the United States

The level of adolescents' level of sex education receipt in the United States has faced a trend of decline continued from 2006 to 2013 [12] [18]. There also lies disparities in the level of sex education receipts between genders. According to data presented by Guttmacher Institute, above 80% of adolescents aged between 15-19 years old received formal sex education in 2011-2013, which refers to the instruction given by community-based locations (e.g., schools and churches) [18][19]. While the majority of the adolescents receive sex education containing content of STDs, HIV, and AIDS or "how to say no to sex," there is a difference between males and females in terms of the level of receiving education on the methods of birth control. With a population of only 55%, young men received formation sex education with birth control content, which was 5% lower than young women [18]. 21% of females and 35% of males did not receive instructions on birth control either from formal or parental sex education [18].

As demonstrated by the research conducted by Lindberg et al., the decline of formal instructions on sex education concentrated mainly on young female adolescents, especially for white teens who lived in rural areas [18]. Lindberg et al.'s research examines adolescents' receipt of sex education from 2015 to 2019. New disparities were identified among different races. Both young black males and females have received less sex education than white adolescents [20]. The result of this decline should be covered with more attention to improving the sex education policy in the United States.

3.2. Gendered Meanings Behind the Abstinence-Only Education Policy in the United States

The sex education policy in the United States has been often discovered to be containing gender-stereotyped content. In a discourse analysis study published by Beechley and Moon in 2015, Gender in the Adoption and Implementation of Sex Education Policy, three of the most implemented abstinence-only curricula are interpreted to analyze any sign of gender differences in the content [21]. In their research, it is found that abstinence-only education strongly identifies the difference between genders. The gap between gender has been established through the portrayal of masculinity and femininity depicted in the words of educators, stories chosen, and course structures. According to the abstinence-only education curricula, men are commonly assumed to be more independent, rational, and active. At the same time, women, on the complete opposite, are classified as vulnerable, emotional-oriented, and passive [21]. Females are taught to be more submissive in their romantic relationships and accept that males hold more emotional and physical power than females.

A similar result appears in other studies. Elliott, in 2014, evaluated several different sex educators' classes by discourse analysis [22]. Their lectures about how to become "responsible sexual agents" are found to have a strong connection with gender-stereotyped messages: women must be in a position of caring and obedient while required to control men's sexuality; men are educated to restrict their desire in a heterosexual relationship [22]. Social conservatives are also shaming young women for being sexually active [14]. With the difference in characteristics labelled by abstinence-only education programs on genders and the shaming of females' sexual activities, females generally hold more societal stress. A culture of greater oppression on females that emerged from sex education should be considered with greater attention.

3.3. Attitude Towards Sexuality in Sex Education Policies in the United States

Previous studies suggest that abstinence-only sex education in the United States primarily focuses on
heterosexual relationships and largely neglects the existence of alternatives [21] [22] [23]. Only nine states deliver sex education with instructions not biased against any student's cultural background, such as race, ethnicity, and sex [24]. The description of gender roles in the heterosexual relationship provided by abstinence-only education may lead to a culture with greater aggression against women.

According to the United Nations, gender equality is recognized as "the equal rights, responsibilities and opportunities of women and men and girls and boys” [25]. The abstinence-only sex education policy in the United States generally has promoted gender differences. Also, it sets up specific gender roles, which avoids the similarities that may exist between the two genders and the presence of the LGBTQ+ community. This suggests that a gender-equal and LGBTQ+ accepted society still possesses a relatively long course to be achieved for the United States. Comprehensive sex education, having a range of topics that focus not only on limiting sexual activities, has been found to contain content related to the LGBTQ+ community [26]. Comprehensive sex education effectively increases students' understandings and acceptance towards the LGBTQ+ community and tries to change the current norms of gender and sexuality through a "rights-based" approach [17] [26]. Unlike abstinence-only education, comprehensive sex education moves out of the heteronormative cultural background and explicitly and comprehensively directs students with information regarding adolescents' physical and mental growth.

4. DISCUSSION

Sex education is mainly combined with education from the below three aspects: sexual physiology, sexual psychology and sexual morality. Sexual physiology education aims to explain to adolescents the reproductive process, human body structure, sexual orientation, sexual pleasure, contraception, sexually transmitted diseases and the way of preventing these diseases. The education of sexual psychology includes cultivating adolescents' self-awareness, guiding them to recognize their sexuality and cultivating their interpersonal skills. Sexual morality refers to an individual's attitude towards sex and the education of sexual morality is to help adolescents form a certain attitude and value judgment towards sex [27].

Meanwhile, one cannot understand sexuality without reference to gender [28]. Although there are obvious differences between the sex education policy of China and the United States in the social, economic, political, and cultural dimensions, gender equality in sex education is still a common issue in both countries.

In CSE of the United States, adolescents would receive relatively equal sex education, which means males, females and other genders would have the same rights to have sex education, learn the same courses and contents, and are less influenced by preprocessed messages.

However, nuance in CSE would not be compared in this article, as we mainly discuss the differences between sex education in modern China and abstinence-only education in the United States.

China has been deeply influenced by gender stereotypes because of its long history and Confucianism. Chinese traditional sexual morality associates women with fertility and suppresses females’ sexuality and sexual pleasure. Females generally show an implicit attitude when they receive sex education, but men generally have an explicit attitude towards sex education and sexuality knowledge [29]. There is a similar issue in the United States. In AOE, men and women are treated differently. AOE emphasizes the adverse effect of sexual behaviors on women and emphasizes females’ responsibility to prevent men's violation [27]. When receiving sex education, females would feel more stress of the ethical request than males.

Gender stereotypes shape people's minds as well, which occurs especially in the states that implement abstinence-only education. Someone who supports AOE labels the typical gender characteristics in the whole education structure, and this pre-treated information invisibly requires females to be more submissive and passive, not only in a love relationship but also in their lives. In addition, AOE not only does not acknowledge the legalization of abortion for women but also does not acknowledge the legalization of homosexuality [27]. This kind of sex education infringes the rights of every gender.

Furthermore, there still exist many questions about LGBTQIA+ people to be done. In mainland China, LGBTQIA+ people are not acknowledged by law officially. There is only a heterosexual relationship in China's formal sex education textbook. Many LGBTQIA+ adolescents would never have an accurate autognosis and keep doubting themselves without searching relevant information on their own.

5. CONCLUSION

Each gender should have the same quality of the sex education they received. In sex education, there should not exist the content that contains discrimination and gender stereotypes. But unfortunately, sex education worldwide seems to fail to achieve it perfectly. It is not an important point if we can turn the unequal situation in short order or not. The most important issue is that people should be aware of this inequality in sex education. There is still a long procedure for the world to accomplish the goal of gender quality in sex education as well as in the whole educational structure.
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