Reducing Unintended Teen Pregnancy in China
Collaboration Between Government, Schools and Aid Centres

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ABSTRACT
In China today, an increasing number of unintended teen pregnancy has raised public concerns of sexual reproductive health of teenagers. The aim of this thesis was to reduce unintended teen pregnancy through collaboration between government, schools and unintended teen pregnancy aid centres in China. This study reviewed previous research on the following aspects: teenagers’ attitudes towards sex behavior, current situation of unintended teen pregnancy, sexual education, governmental management, collaboration case in China, and successful experiences on reducing unintended teen pregnancies in other countries. Four interviews and discourse analysis of text was conducted in this study. The findings were analyzed with collaboration theory. The result indicated the lack of established collaboration among the government, schools and unintended teen pregnancy aid centres. Therefore it suggested various collaborative approaches to ameliorate the situation and to reduce unintended teen pregnancy in China.

Keywords: unintended teen pregnancy, collaboration, public administration, government, sexual education, unintended teen pregnancy aid
ACKNOWLEDGEMENT

The writing of this thesis has been a wonderful journey that I have ever experienced. Here I would like to thank everyone who made this journey pleasant and meaningful. I would like to express my deepest gratitude to my supervisor, Dr. Jesper Schlaeger. You have provided me skillful and patient supervision with your wealth of knowledge, which lighted up my whole writing process. I would like to thank my family and my boyfriend Yemao Man, for their sweet love which has always been my strongest and warmest support. I would also thank the four interviewees who have been interviewed by me during the field work. Thank you for your kind help and active participation.
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1. INTRODUCTION
This chapter states the research problem, the purpose and the aim of the research and specific research questions which are to be further investigated and answered. In addition, a disposition is summarized to briefly explain contents of the thesis and after that the thesis contribution is presented.

1.1. Research Problem
Since China’s economic reforms and open-door policy in the 1980s, social mores relating to sex, love and marriage have changed dramatically under the influences of rapid modernization, greater mobility, economic development and exposure to Western culture (Yu, 2010). Since then, a sexual revolution is under way in China, particularly among youth (Wu, 2010). The social changes have affected sex consciousness among Chinese teenagers. Today teenage sex and premarital sex are no longer disapproved of by the young in China, and some of teenagers lost their virginity at high school age (Yu, 2010). During teenage period, the rapid growth of both body and mind triggers teenagers’ curiosity for sex, in which the deepest mysteries are those concerning sexual emotions and practices - a forbidden territory for them (Ruan, 1991). However, conservative ideology of sex led to the lacking of sexual education in Chinese education system so that it could not meet the demands of teenagers’ curiosity. With more open attitudes toward sex, increased sexual behavior, lacking sexual knowledge and low levels of contraception use among teenagers, the issue of unintended teen pregnancy frequently appears in various media and public views in China (Wei et al., 2010).

Actually, teen pregnancy has been an important public health issue in the world (Langille, 2007). The evidence shows that children born to teenage mothers are more likely to experience a range of negative outcomes in later life and are more likely, in time, to become teenage parents themselves - perpetuating the disadvantage that young parenthood brings from one generation to the next (Department for Children, Schools and Families, 2010). In China, according to the World Bank (2014), teenage fertility rate (births per 1,000 women ages 15-19) increased to 9 by 2012. Due to teenage girls have not fully reached physical and mental maturity and often lack sufficient gynecological
knowledge, they are in risk of the negative outcomes from their unintended pregnancy, no matter they give birth willingly or to abort the pregnancy (Wei et al., 2010). As stated by the World Health Organization, there are mainly three dimensions of negative impacts of teen pregnancy: health of the adolescents and their infants; individual social and economic effects; and societal level impacts (World Health Organization, 2008). Specifically, the serious negative consequences of unintended teen pregnancy and childbearing have been summarized mainly as follow:

- Pregnant teenagers are more likely than women who delay childbearing to experience maternal illness, miscarriage, stillbirth, and neonatal death (Luker, 1996). The Maternal death rates for teenagers are 4 times greater than for women in their 20s, and rates of newborn death to average about 50% higher to adolescent mothers versus mothers in their 20s (World Health Organization, 2008).

- Teen mothers are less likely to graduate from high school and less educated than their peers who delay childbearing so that to live in poverty and to rely on welfare (Hoffman, 2006).

- The children of teenage mothers are often born at low birth weight, abused, and/or neglected, experience health and developmental problems, and are at increased risk of poverty, low educational attainment, poor housing, poor health, and have lower rates of economic activity in adult life (Hoffman and Maynard, 2008; Martin et al., 2011; NCPTUP, 2010).

- Teenage pregnancy poses a substantial financial burden to society, estimated at $10.9 billion annually in lost tax revenues, public assistance, child health care, foster care, and involvement with the criminal justice system (NCPTUP, 2011).

Additionally, numerous studies have also shown that there is an association between teen pregnancy, and negative social and economic effects on both mothers and children while delaying teenage births could significantly lower population growth rates, potentially generating broad economic and social benefits (World Health Organization, 2008). Teenage pregnancy is as well as a cause of health inequalities and child poverty in a country (Department for Children, Schools and Families, 2010). The scope of the problem
and the considerable social cost require for more governmental and public attention on this issue.

1.2. Research Purpose and Aim
By investigating what work have been done by local government, schools and aid center on the topic of unintended teen pregnancy based on the different emphasizes of their work, the purpose of this thesis is to investigate collaboration between government, schools and unintended teen pregnancy aid centre on reducing unintended teen pregnancy. Depending on the findings and analysis according to collaboration theory in public administration, this thesis aims at reducing unintended teen pregnancy in China through both preventing proactively and aiding afterwards.

In China, the number of unintended pregnant teenagers is increasing. There were 400 thousand pregnant teenagers who have received induced abortion, which counted for 25% of total induced abortion in 2002 (People Daily, 2004). According to previous research, increasing unintended pregnant teenagers in China has been on account of the backward sexual education and teenagers’ dimly understanding towards related knowledge. This will grow on the negative impacts of unintended teen pregnancy on individuals and society in China.

In public administration, the government, schools and medical institutions are significant actors and they could play the roles respectively and collaboratively on the issue of unintended teen pregnancy. The studies of sexual education programs in the United States and the United Kingdom have already shown that they have reduced teen pregnancy and its underlying or associated risk factors by providing sexual education at meantime collaborating with government (Planned Parenthood Federation of America, 2013; Department for Children, Schools and Families, 2010). It is also proved that the most successful programs aimed at reducing teenage pregnancy are those targeting younger teenagers who are not yet sexually experienced (Frost and Forrest, 1995). Thus this thesis argues that it is possible to reduce and further prevent unintended teen pregnancy through collaboration between government, schools and medical institutions.
This is essential for government and health educators to develop feasible and effective intervention strategies targeting the growing population of unintended pregnant teenagers.

1.3. Research Questions
Based on the problem statement, and research purpose and aim, the thesis seeks to research how to reduce teen pregnancy through collaboration between government, schools and medical institutions. To be more specific, this thesis conducted the research about local government, schools and unintended teen pregnancy aid centre in Chongqing, China. Thus the thesis is guided by the research questions as below:

1. How do local government, schools and unintended teen pregnancy aid centre collaborate on reducing unintended teen pregnancy in Chongqing?

2. What is the optimal form of collaboration between local government, schools and accidental pregnancy aid centre collaborate to reduce unintended teen pregnancy?

1.4. Disposition
The thesis consists of altogether six chapters. The introduction is made up of the research problem of unintended teen pregnancy, the research purpose and aim, the research questions to be answered and thesis contributions is presented to find out the collaboration between government, school and unintended teen pregnancy aid centre can effectively reduce unintended teen pregnancy. In order to find out the relevant theoretical empirical studies in the field, the second chapter gives a literature review on untended teen pregnancy, sexual education, governmental actions on unintended teen pregnancy, and example of existing collaboration model in China. Moreover, reviewing successful experience from other countries also helps to answer questions. The third chapter outlines the Barbara Gray’s and Agranoff and McGuire’s collaboration theory of the thesis so that to better understand the relationship between government, schools and unintended teen pregnancy aid centre from public administration perspective. The fourth chapter explains the research was conducted in Chongqing, and methods of interviews, combination of comparative analysis and discourse analysis which were adopted in this
thesis to analyze data. Analysis of research findings and discussion are presented in the fifth chapter. Lastly, the sixth chapter concludes with answers to the research questions and further reflections.

1.5. Thesis Contributions

In this thesis I conduct research on the collaboration between government, school and unintended pregnancy aid centre in order to analyze reducing unintended teen pregnancy in China, and more specifically how these three social actors perform their roles at their positions under the environment of Chongqing. Due to the negative consequences of unintended teen pregnancy not only lead to unhealthy reproduction but also closely accompany many other critical social economic issues which have been discussed before. With its severe impacts, unintended teen pregnancy should gain more public concern and rethinking. At this point, figuring out the way to reduce unintended teen pregnancy through collaboration between government, schools and medical institutions can better prevent unintended teen pregnancy from the beginning, as well as improve the aids which have been provided to unintended pregnant teenagers. By doing this, it not only technically helps these teenagers with solving the problems accompanying unintended pregnancy but also improves teenage reproductive health in the society, thus further reduces negative impacts and lower risks that unintended teen pregnancy may bring to individuals, families, and society.
2. LITERATURE REVIEW

In order to find out the relevant theories as concrete basis for the thesis, this chapter reviews on unintended teen pregnancy from perspectives of teenagers’ attitudes towards sexual behavior, current situation of unintended teen pregnancy, sexual education, and governmental management on unintended teen pregnancy in China. Moreover, successful experiences on reducing unintended teen pregnancies in other countries are also investigated to get a comprehensive understanding of the topic so that can helpful to answer research questions. The literature is found mostly through the Internet by key clues like unintended teen pregnancy in China, sexual education, sexual attitudes of teenagers, collaboration and countries that have successfully reduced unintended teen pregnancy.

2.1. Chinese Teenagers’ Attitudes towards Sexual Behavior

In China, young people’s attitudes towards sex have changed considerably since open-door policy and the economic reforms of the 1980s, attitudes towards sexual behavior became more open (Gao et al., 2001). Especially, teenage sex and premarital sex are no longer disapproved of by young people (Yu, 2010). To some extent, for the young the sexual values and practice of young people have moved away from what have been perceived to be traditional Chinese values (Yu, 2010). According to previous studies conducted in different cities in China, than half of teenagers who study in high schools support premarital sex, believing premarital sex could make a relationship more stable; there is also quite a few teenagers agreed with one-night stands, even accepted extramarital sex; more than one-tenth of these teenagers having been pregnant or having made a female pregnant (Yu, 2012).

These findings provide clear insights into teenagers’ attitudes towards sex and sexual behavior in contemporary China to some extent. However, in turn, new challenges arise for sexual health, particularly among youth populations. The negative impacts of early sexual intercourse increasingly become issues of social and health concern (Yu, 2010), and unintended teen pregnancy is one of them.
2.2. Unintended Teen Pregnancy in China

The sexual and reproductive health of young people could become a public health issue in China because of the real and perceived increase in sexual activity, premarital pregnancies, abortions and sexually transmitted infections (STIs) among young people (Ma et al., 2008). Especially, risky sexual behavior, for example, sex behavior without contraceptive methods, increases the risk of unintended pregnancy, abortion, single motherhood, and sexually transmitted diseases (STDs) (Tang, 2013).

Study in developing countries has shown that the main reason for unintended teen pregnancy is that teenagers do not receive sufficient information about contraception, which often results in misconceptions about reproduction (World Health Organization, 1995). Not exceptional in China, insufficient attention has been given to reproductive health of teenagers, including contraception, unintended pregnancies and induced abortions. Now sexual activity is initiated at a much younger age on the whole compared with the last century in China (Wu, 2010), which fuelled by the lack of knowledge about contraception, limited access to contraceptive services and unawareness of the risk of getting pregnant have resulted in increasing unintended teen pregnancy (Yu, 2012). The lack of knowledge regarding contraception is inseparable with low rate of contraception use, which is stated as the second important factor that has increased unintended teen pregnancy rates in China (Wu, 2010).

Although noticed of negative impacts of unintended teen pregnancy both on individuals and society, there is little released official data regarding unintended teenage pregnancy rates in China. However, according to the World Bank (2014), teenage fertility rate (births per 1,000 women ages 15-19) in China increased to 9 by 2012; the 2001 Almanac of China’s Health also showed that as many as 10 million induced abortions are performed annually in China and about 20% to 30% were provided to unmarried young women (Wu, 2010).

Even though attitudes towards sex have been changing and becoming more open among the youth, unintended teen pregnancy is still unacceptable in Chinese cultural settings.
The loss of virginity or chastity before marriage have been considered as a heightened sexual shame, the unintended pregnant teenagers tend to feel guilt about derogating family honor, face ridicule and blaming etc. (Chan, 2007). The public, as well as teachers and parents still avoid discussing sensitive topics such as premarital sex, contraception, and abortion with young people (Ma, et al., 2008), but Chinese society places great emphasis on the topic associated social stigma and shame. Study has even shown that the primary reason for unintended pregnant female to undergo induced abortions is simply that they are unmarried (Qian, 2004). For teenagers girls, when facing an unexpected pregnancy, they experience fear, confusion, guilty even deny the existence of their pregnancy (Lin, 2006). The fear of being stigmatized and revealing the pregnancy to other people may prevent them from receiving early advice (Mahon, 1998). Under the pressure of current Chinese social and cultural norms, most of them with unintended pregnancies prefer to choose a secret induced abortion for pregnancy termination (Wu, 2010).

Considering the cultural context of Chinese society, and the main cause that lacking of sexual education on contraception knowledge, preventing unintended teen pregnancy proactively should be the prior measure in reducing unintended teen pregnancy in China, which calls for a comprehensive sexual education.

2.3. Sexual Education in Contemporary China
The main concern with increasing sexual activity among the youth is that sexual activity often occurs in the absence of formal sexual education (Liu et al., 2011). In China, sexual education is largely dominated by the state and by an abstinence idea that shapes the development of programs in schools and the content of sex education textbooks (Aresu, 2009). The Chinese government began to notice that importance of school sexual education in 1985 after China’s first case of HIV was identified (Yu, 2012). It was planned into the curriculum offered to teenagers in junior high schools in 1988 (Beijing Education Bureau 1988), however, the policy has still not been well implemented in some areas (Yu, 2012). It is written in the Population and Family Planning Law of the People’s Republic of China (2001) that the schools should educate students about
personal hygiene, puberty, or sexual education in a planned way according to the characteristics of the students. As a matter of fact, it is common for sexual education to be taught in biology classes and with an extremely narrow focus on biological part and/or a little psychological guide (Aresu, 2009). Moreover, the Chinese government enacted the Population and Family Planning Law, which obliged schools to provide sexual education in 2002 (Watts, 2004), but its implementation has been slow. The first sexual educational textbooks were printed the same year, but teachers have been reluctant to use those (Watts, 2004).

*Roses hidden in a school bag* (Sun and Zhang, 2009), the first interview recording book about sex among teenagers in China, which also condemns the lack of sexual education in China, which has stirred up debate about the school system’s failure to keep pace with physical and social changes that have put an increasingly promiscuous generation of young people at risk of unwanted pregnancies (Watts, 2004). In this book, one fact has been revealed: none of the interviewees showed satisfaction to sexual education both in schools and families because that there was no sexual education for them at all, even though 1/3 of these teenagers come from key schools and famous schools (Sun and Zhang, 2009). The book wrote that sexual education mostly remains within morality level that teachers emphasize morality rather than passing on the knowledge of psychology and physiology from a sexually educational perspective (Sun and Zhang, 2009).

There is a wide gap between teen students and teachers regarding to sexual education, for teenagers and teachers cannot directly confront sexual problems. Teachers escape from questions what students ask for or avoid using the proper terms for sex-related words, for instance, using “this thing” to call condom instead of say it directly (Sun and Zhang, 2009). Parents and teachers think that talking about these terms and teaching contraceptive knowledge to teenagers will lead them to have sex activity (Sun and Zhang, 2009). These negative manners can not only result in students’ distrust in education but also reflects the problems existing in China’s sexual education for teenagers.
Actually, the role of school was deemed crucial regarding to sexual education, that is to say sexual education in schools have the scope to reach Chinese teenagers before they leave school at 16 when most of them are still sexually inactive and this is one of the most important tools to equip teenagers with the knowledge they need so that to make healthy and informed choices on their sexual behavior (Yu, 2012). However, in current China, most teenagers did not have received sufficient formal sexual education at schools. The teenagers’ lack of basic understanding contraception knowledge and this lack of contraception knowledge puts teenagers at greater risk for negative sexual health outcomes, for example, unintended pregnancy.

2.4. Governmental Management on Teenage Sexual Reproductive Health in China
The National Health and Family Planning Commission of the People's Republic of China has attached importance to teenage sexual reproductive health. The commission pointed out that “teenage sexual and reproductive is an important part of the work in maternal and child health” (The National Health and Family Planning Commission of the People's Republic of China, 2013). Indeed, the commission especially the Department of Maternal and Child Health Services have been deploying their work on teenage sexual and reproductive health.

In order to improve the sexual education and reproductive health among unmarried teenagers, the Department of Maternal and Child Health Services suggested that health institutions should collaborate actively with educational sector to process the sexual and reproductive health education for teenagers. In 2013, the Department of Maternal and Child Health Services supervised and assessed the implementation of United Nations Population Fund (UNFPA)’s project of teenage sexual reproductive health in Chongqing and other two regions. The department also suggested spreading propaganda of sexual and reproductive health for teenagers to the public to improve the related services for teenagers; report the working on sexual reproductive health for teenagers to local government actively in order to form a working pattern of collaboration and joint management on this topic (The National Health and Family Planning Commission, 2013).
Due to the increasing numbers of unintended pregnancies and abortion among young females in China, the Department of Maternal and Child Health Services seeks to improve the safe contraception and teenage reproductive health. In September 2014, the Department of Maternal and Child Health Services held the initiating meeting of the pilot project of teenage sexual reproductive health in Beijing. The project was introduced by National Health and Family Planning Commission and UNFPA and it recommend combining sexual education to social reproductive service (The National Health and Family Planning Commission of the People's Republic of China, 2014). Two cities - Beijing and Chongqing and other three provinces were chosen as pilot regions and the staff training for this project was also held in Chongqing (The National Health and Family Planning Commission of the People's Republic of China, 2014). At this point, it can be noticed that Chongqing has been a key region when it comes to the dedication to teenage sexual and reproductive health.

2.5. Collaboration in China for Social Challenges: the Case of Yunnan

When it comes to sexual reproductive health, China faces the challenge of HIV epidemic as well. Among Chinese provinces, Yunnan has been greatly challenged by the HIV epidemic and has fewest resources for efficiently controlling HIV (Wang, 2012). To confront this challenge, Yunnan applied the government-driven multi-sector partnership model. This model follows a top-down process and integrates the public sector’s response from both the national HIV control framework and Yunnan’s local strategy (Wang, 2012). In this model, government leads in the planning, financing, determining the division of labor and implementing of HIV partnerships; subsumed under government, under the government leadership, various public organizations, such as China Women’s Federation, All China Youth League, China Family Planning Association, serve a range of functions related to the control the HIV epidemic (Wang, 2012). The functions of these public organizations can be mass mobilization, communication, education, and professional medical guidance and public services. With the operations of these organizations, it can integrate the work within the field of their political, social, and professional activities and communicate with their organizational networks. Moreover, Yunnan has been more open
than other provinces in collaborating with foreign countries, such as receiving foreign assistance and broad-based support (Wang, 2012).

By implementing the government-driven multi-sector partnership model, Yunnan made maximum use of political authorities and organizational strengths to mobilize its scarce resources. This model took effect, as the rate of new HIV infection in Yunnan has slowed, even though overall HIV infection in China has increased (Wang, 2012). The experience of Yunnan has shown that in collaboration, government’s leading role and organizational networks are important resources for meeting the social challenges in China.

2.6. International Perspective on Reducing Unintended Teen Pregnancy

From the successful experience from the countries below, it can be learnt theoretically that the collaboration between government and either schools or public medical services can remarkably reduce unintended teen pregnancy. To this degree, it is possible for us to assume that collaboration between government, schools and unintended teen pregnancy aid centre could also reduce unintended teen pregnancy in China. However, we do know yet whether this scheme can be suitably applied in China, and it needs to be further discussed based on the findings.

2.6.1. Government-Supported Comprehensive Sexual Education Program

Due to the United States has a bad record on teenage pregnancies among the developed countries, the United States has been taking a number of initiatives to reduce teenage pregnancy rates as well as the accompanying negative outcomes,. In general, these initiatives incorporated sexual education and information in the schools and in the media, improvements in funding for and access to family planning services, and youth development programs to improve the life options of impoverished teenagers (Planned Parenthood Federation of America, 2013).

The comprehensive sexual education program collaborated with government is the main reason for successful reduction of unintended teen pregnancy in the United States (Planned Parenthood Federation of America, 2013). The United States had implemented
Abstinence Education Program that cautioned teenagers to not have sex before marriage (Landry et al., 1999). This is exactly similar to the values that have been instilling to teenagers by adults when it comes to sexual activity. However, it turned out to be that this abstinence-only programs were not effective because they failed to delay the onset of intercourse and provided information that was medically inaccurate and potentially misleading (Kirby, 2007; Kohler et al., 2008). At this point, comprehensive sexual education programs were launched. These programs combined medically accurate information on a variety of sexuality-related issues, including contraception, safer sex, and the risks of unprotected intercourse and how to avoid them, additionally the improvement of communication, negotiation, and refusal skills on these sexual issues (Planned Parenthood Federation of America, 2013).

Evaluations of comprehensive sexual education programs show that these programs can effectively increase condom and contraceptive use, delay onset of sexual activity, reduce the frequency of sexual activity, reduce number of sexual partners, and further reduce unintended teen pregnancy (Planned Parenthood Federation of America, 2013). Due to comprehensive sexual education programs have been proven effective at reducing teen pregnancy, for the first time federal monies were appropriated for more comprehensive sexual education programs (SIECUS, 2010) so that the government transferred funds from the Abstinence Education Program and budgeted more financial support to the evidence-based comprehensive sexual education programs across the country (Boonstra, 2010).

The second factor in preventing unintended pregnancy has been found to be the easy and confidential access to family planning services through health centres, school-linked health centres, and condom availability programs (Planned Parenthood Federation of America, 2013). The improvement of teenagers’ access to contraception services did not increase rates of sexual activity but increased a number of positive outcomes (Kirby, 2007; Kohler et al., 2008). The American Academy of Pediatrics also recommended that schools were appropriate sites for condom distribution (AAP, 2001). Moreover, expanding insurance coverage for contraception is also one way to improve teenagers’
access to contraception, especially for those teenagers who are from low-income families (Planned Parenthood Federation of America, 2013).

2.6.2. Teenage Pregnancy Strategy
Aside from the United States, the United Kingdom has the worst record on teenage pregnancies in the developed world (Gerard, 2009). That is why England launched the Teenage Pregnancy Strategy in 1999. Over the past decade there has been significant progress in reducing teenage pregnancy, especially teenage pregnancy rate is currently at its lowest level in England for over 20 years (Department for Children, Schools and Families, 2010).

Basically, there are two key planks of the strategy: receiving the information, advice and support from teachers, parents, and other professionals to deal with pressure to have sex and experience good sexual health; can access and know how to use contraceptives effectively to avoid unintended pregnancy (Department for Children, Schools and Families, 2010). Continually, the focus will move forward on improving teenagers’ knowledge of sex, skills and confidence through strong and consistent delivery of Sex and Relationships Education (SRE) in schools and other settings, alongside improving access to and use of effective contraception (Department for Children, Schools and Families, 2010). The progress in reducing teenage pregnancy also depended on a change in culture so that sex can be discussed more easily and it requires a collaborated approach across all sectors in society (Department for Children, Schools and Families, 2010).

2.6.3. The Combination of Sexual Education with Contraception
The Netherlands has managed to reduce teenage births by 72 percent in 30 years (UNICEF, 2001), and now is boasted as one of the lowest teen birth rates in the world. The Studies of the Dutch experience have concluded that the underlying reason for the success had been the combination of sexual education with contraception (Gerard, 2009). In the Netherlands, sexual education begins in preschool and is integrated into all levels and subjects of schooling. This has paved the way for sexual relationships to be discussed at an early age, before barriers of embarrassment can be raised and before sexual
education can be interpreted as sending a signal that the time has come to start having sex (Gerard, 2009). Therefore, even though young people in the Netherlands have a higher average age at first intercourse, they have lower levels of subsequent regret, higher levels of contraceptive use and effectiveness, and report more discussion and forward planning between partners (Gerard, 2009).

2.7. What we do not know
Unintended teen pregnancy in China has been examined only to a limited extent by existing research and there is little official statistics of unintended teen pregnancy in China, even though previous studies on the subject of sexual education and changes of young people’s attitudes towards sexual behaviors have been carried out in the Chinese context. Potential negative impacts of unintended pregnancy has been noticed from the view of sexual reproductive health in the previous studies, little of them has put forward practical suggestions on how to reduce and prevent it, not mention the specific way of collaboration between governmental measures, school education and medical aids to discuss this issue comprehensively. The intention to reduce and prevent unintended teen pregnancy has not received enough attention in academia in China. Especially, there remains a vast vacuum of scholarly research on collaboration on this topic, which needs to be filled in the field. On the other hand, research on this topic in Western countries has proven that the strong governmental support, early sexual education and pragmatic public service collaborate to reduce unintended teen pregnancy worked well with remarkable achievements. With its severe negative impacts, unintended teen pregnancy should gain more public concern and rethinking in China.
3. THEORY

In this chapter, collaboration theory is reviewed firstly starting with presenting the understanding the concept of collaboration in sense of Public administration. Following the interdisciplinary ideology in collaboration is explained in academic aspect, the collaborative activities based on the theory of collaboration will be elucidated more specifically combined with Chinese social context so as to examine the main hypotheses that the implementing collaboration between government, schools and unintended teen pregnancy aid centre can effectively reduce unintended teen pregnancy in China.

3.1. Collaboration Theory

3.1.1. The Concept of Collaboration in Theory

In the late 1990s, Gray drew the general definition of collaboration in public administration field as “a process of joint decision making among key stakeholders of a problem domain about the future of that domain” (Gray, 1989:227). Here, stakeholders are actors, including all individuals, groups, or organizations which have an interest in a common issue and "directly influenced by the actions others take to solve a problem" (Gray, 1989:5); the problem domain is a situation where the complex problems require an inter- or multi-organizational response, for problems are beyond the capability of any individual or group to solve single-handedly (Trist, 1983).

Thenceforth, Agranoff and McGuire developed and refined collaboration theory more detailed as “based on the value of reciprocity and can include the public”, collaboration describes “the process of facilitating and operating in multi-organizational arrangements for solving problems that cannot be achieved, or achieved, or achieved easily, by single organizations” (Agranoff and McGuire, 2003: 4). Specifically, it emphasize “to co-labor, to achieve common goals, working across boundaries and in multi-sector and multi-actor relationships” (Agranoff and McGuire, 2003: 4). Managing collaboration in public administration requires firstly getting together across multiple organizations, then specific actions should be taken or institutions need to be created to solve problems through collaborative mechanisms (McGuire et al., 2010). Today collaboration partnerships within internal government, and between government and non-governmental
organizations have moved to the core of practice (McGuire et al., 2010). These collaborative partnerships involve profit and nonprofit organizations, individuals and other social actors collectively responding to public issues which cannot be handled effectively by a single entity (Brown et al., 2013). The promise of collaboration is that the whole is greater than the sum of the collective parts, and to generate outcomes that no one organization could produce on its own (Brown et al., 2013).

Moreover, collaboration across multiple organizations in public administration is constructed in a specific context of one country and it incorporates combinations of political, economic, social, and cultural factors.

3.2. The Interdisciplinary Ideology in Collaboration

The study of collaboration in Public administration integrates various academic fields. It involves politics but much farther and deeper than political questions; it incorporates sociological and cultural factors but it is also beyond these issues; it deals with a variety of human constructs which merge into a unique branch of knowledge (Vigoda, 2008). Facing a demand for better management of public values, and for advancing the collective idea of accomplishing these goals together, collaboration must start by sharing knowledge, which is the basic essence of collaboration in public administration (Vigoda, 2008). This view evidently explains public administration that it has many faces, and the extension of its boundaries is necessary so that is able to meet the complex challenges in modern society.

According to this view, to achieve collaboration in public administration an interdisciplinary platform should be developed and it should be based on shared knowledge and experiences. The most relevant fields of knowledge are political studies, social and cultural understanding, and managerial and organizational wisdom (Vigoda, 2008), which are also reflected in this thesis.
3.3. Collaborative Approach in Chinese Social Context

3.3.1. The Top-down Form in Governmental Management System

China has liberalized rapidly from its former collectivized economy. The birth of all new private and nonprofit organizations and the diminished public sector workforce create the impression that the Chinese context for collaborative governance is consistent with societies that have pursued Western models of political transformation (Brown et al., 2013). Due to the reforms that China has undertaken since 1978 still have not yet created clear demarcations between government, market, and civil society, even though China has a rapidly growing economy with new partnership activity, which is to say that governmental management still remains highly regulated by a rigid, bureaucratic public sector (Brown et al., 2013). Especially, Chen and Jing reveal that coercive pressures in social services provision are more likely to result from a top-down policy in China (Chen and Jing, 2013). This hierarchical approach also explains my hypothesis that collaboration has not been widely adopted in Chinese public administration as well as collaboration between government, schools and unintended teen pregnancy aid centre have been unprecedented in the context of China, due to different social actors are constrained from the state, which has been provided a harsh context for adopting collaboration in public administration.

Even though there has been a top-down form in Chinese governmental system, Brown et al. (2013) argue that current China does offer a context where the conditions for collaborative governance have recently emerged and capacities for managing collaboration have just begun to develop, especially in the area of social services, appear to offer more favorable conditions for lower-level partnerships. In fact, China is ripe as a context for studying collaborative governance, for its scale, unique historical experience, and regional influences present multiple research lines worthy of test and inquiry (Brown et al., 2013). Indeed, China in transitional era offers numerous opportunities to study collaboration and test theories that reflect both local and global perspectives.
3.3.2. Collaborative Activities

In government-involved collaboration activities, government takes the centre position of the activities. Governments possess some legal and fiscal authorities, which keeps governmental units at the centre of collaborative transactions, and this can also function as counterweights to any financial, informational, or operational asymmetries that may be caused by nongovernmental organizations (Agranoff and McGuire, 2003). Especially for cities in China that have been operated in top-down form, the compliance to the “top” has be ingrained by transmitting through rules, standards and ideas. At this point, the proper solution for local government is to use executive instruments managed by requiring multiple organizations linkages, comprehensive plans and implementation of the plans (Agranoff and McGuire, 2003). A primary aspect of top-down management is local compliance. The top-down approach suggests compliance and expectations.

Collaborative activities can be conducted through both vertical and horizontal ways. For this thesis, information seeking and project-based work are employed from vertical and horizontal perspectives respectively.

*Information seeking*

The most central vertical collaborative activities involve contacts between government and other social actors for the purpose of seeking out information (Agranoff and McGuire, 2003). For making policy, information is an important resource in settings where other resources, such as finances, expertise or knowledge, legal authority, personnel are held by multiple nongovernmental actors (Agranoff and McGuire, 2003) who become necessary partners in both making and implementing policies. Policymaking and policy implementation is dependent on the perceptions of the information, for example, feasibility, timing, risks. A common approach to seek information is to convene, identify the problems, reach agreement on them and search for joint solutions (Agranoff, 1986). After information seeking, government is able to induce collaboration through multiple means, such as allocating funding, arrange technical assistance, enact project or program that satisfy local needs and solve the problems.
Project-Based Work

Among other horizontal means, project-based work is suitable for a collaboration which has not been conducted before yet, in which all actors are partners for each other. Due the project-based work can be either short-term or long-term, it gives more flexibility on the collaboration. The information from the process and outcomes serve as a reference for future measures of solving the problems. In another word, with a specific purpose, the collaboration can be assessed and adjusted according to its performance. With proper implementation and effectiveness of the collaboration, strategies tend to employ longer lasting-term, which demand dependable managerial structures within which development is formulated and implemented, specific projects also require considerable effort (Agranoff and McGuire, 2003).

The transitional and developing Chinese society offers context and opportunities for studying collaboration in public administration today. Under the collaboration theory, this thesis will discuss that collaboration between government, schools and unintended teen pregnancy aid centre can effectively reduce unintended teen pregnancy.

To study collaboration in China, due to the limitations such as time, this thesis embodies research in a local level. As a matter of fact, collaboration locally reveals the level of local implementation capacity and thus can allow a city to confidently pursue collaboration (Agranoff and McGuire, 2003). Managing locally also has become far more involved than coordinating plans from the top or complying with them from the bottom. More specially, local governmental officials work on promote and maintain lines of contact and communication, propose actions, execute programs between government and other social actors, exchange resources, and make accommodations and adjustments (Agranoff and McGuire, 2003). However, as cities pursue opportunities within their own complex governing context, the level of collaboration in different cities varies.
4. METHODOLOGY
This chapter introduces the meta-theoretical choices of the research, research settings and data collection methods. In addition, ethical considerations, validity and reliability are tells rational of the research.

4.1. Meta-theoretical Choices
In terms of epistemological and ontological considerations, this thesis is conducted from the meta-theoretical perspectives of interpretivism and constructivism. Interpretivism refers to respecting the differences between people and the objects of the natural science, thus it needs researcher to grasp the subjective meaning of social action (Bryman, 2012). While constructivism implies that social actors are continually accomplishing social phenomena and their meanings, which are not only produced through social interaction but also in constant revision (Bryman, 2012). This thesis studies an social phenomenon that unintended teen pregnancy rate is increasing in China, by interpreting related social actions of sexual education in schools, governmental management, and the aids provided by unintended teen pregnancy aid centre. The social actors, which are government, schools and unintended teen pregnancy aid centre in this thesis, could contribute into the issue to improve its current situation. This is achieved by generating collaboration between these three social actors. To demonstrate that the research is of trustworthiness, the research ethical considerations, validity and reliability are scrutinized.

4.2. Research Settings
The fieldwork for this thesis was conducted in the municipality Chongqing, which is located in South West China along the Yangtze River. Chongqing is the youngest and the biggest municipality which is directly under the jurisdiction of the central government in China. With its rapid economic development, Chongqing is becoming one of the most important economic centres in western China. However, there is a need of developing and improving the health education to provide better knowledge and behavior to meet today’s community health needs of the population in Chongqing(Ying et al., 2008). As reviewed in literature review chapter, it is noticed that Chongqing has been a key city which is involved in a series of governmental activities regarding improving teenage
sexual reproductive health. Moreover, choosing Chongqing rather than Beijing or Shanghai as the site for fieldwork also implies that this thesis tries to avoid the particularities in the field existing in the most advanced cities in China.

More specifically, the severe situation of the sexual education in schools and unintended teen pregnancy in Chongqing is supported by evidence. Only 23% of teenage students were satisfied with school sexual education in Chongqing (Yu, 2010). Chongqing Population and Family Planning Science Technology Academy announced that in 2002, there were 400 thousand pregnant teenagers who have received induced abortion, which counted for 25% of total induced abortion in China, as a result, Chongqing Family Planning Hospital established China’s first teenage accidental pregnancy aid centre in 2003 (People Daily, 2004). Within the first month of opening, the centre provided counsels to 300 girls aged 16 and younger (China Daily, 2003). In 2013, the Women's Federation’s leadership group of Jiulongpo District, medical expert group of Huaxi Maternity Hospital and Yuzhou Street Community Office composed a more organized unintended teen pregnancy aid centre to provide medical, psychological and economic aids to unintended pregnant teenagers (Xinhua News, 2013). Chongqing Health and Family Planning Commission authorized the hospitals and appropriated funds to provide aid to unintended pregnant teenagers. These active actions made by either government or other social actors in Chongqing to aid unintended pregnant teenagers also became reason for me to conduct such a research in this city environment.

4.3. Interviews
In this thesis, I conducted four semi-structured interviews in total. The nature of semi-structured interview and its capacity provide better insights into how research participants view the topic (Bryman, 2012). The interviews took place at three schools and the Health and Family Planning Commission in Chongqing. I contacted interviewees through my acquaintances in Chongqing and obtained their permissions for me to interview them before I went to Chongqing. The first three of them were conducted around sexual education and unintended pregnant teen students in school, where it is biology teachers who usually teach sexual reproductive knowledge to students so that they were selected
as my interviewees. The first interviewee is also a biology teacher (gender: male, age: 29) who is teaching in Junior Grade One in a top middle school. This school is one of the most famous key schools with a great reputation in Chongqing. It has not only an excellent record of enrollment rate for key universities in China, a considerable numbers of students who get admitted by universities abroad after graduation but also being well-known for its comprehensive quality education in Chongqing. The second interview took place in a second-tier high school with a biology teacher (gender: male, age: 27) as well as the head teacher of a class at Senior Grade Three. This school is one of the key schools but at a relatively lower ranked position, which means that the school has a well enough enrollment rate for national college entrance examination and more students who devotes themselves in study than those in third-tier schools. The third interview was conducted with the dean as well as a biology teacher (gender: female, age: 47) of the Senior Grade Three at a third-tier high school. This school is not one of these key schools in Chongqing, and has a low enrollment rate for college entrance examination and relatively more underachievers and many of them spend more time outside campus, such as in bars and other adult social settings rather than on study. According to the performance of these three schools, the situation of sexual education and unintended teen pregnancy case in the three schools could be the expected, which would be better implementation of sexual education and less unintended teen pregnancy cases in the top school, while lacking enough sexual education and more risks of unintended teen pregnancy are more serious with the reputations or qualities of schools go down. The fourth interview was conducted in the Health and Family Planning Commission, with an official also the deputy director (gender: female, age: 52) of the commission. This interview sought to understand governmental management in teenage reproductive health and the issue of unintended teen pregnancy in Chongqing.

The interviews were audio-recorded after interviewees’ permissions and transcribed by spending about five hours for each hour in the interview. During the whole process, each interviewee talked with me in a separate room so that there were no more than two persons in each interview, which made the interviewees more relax. Moreover, I communicated with them in Chongqing dialect which is my native language, because the
ability to be able to communicate in the native language, especially using special words and slang, is an advantage to understand and penetrate into the culture one is researching (Bryman, 2012). However, different standpoints and positions of interviewees might bring their subjective perceptions as well as their bias in my data. For example, teachers may consider that unintended pregnant teenager is a “bad” student who does not study but make troubles, as biology teacher 1 said “unintended pregnant teenagers are more likely to be found in relatively worse schools where some bad students do not study hard but play truant, hanging out on the streets so that they are under higher risk of getting pregnant.”

4.4. Combination of Comparative Analysis and Discourse Analysis

According to Charles Ragin (1987), comparative analysis in qualitative approach focuses on making comparisons to generate explanations. This comparison involves representing each case as a combination of causal and outcome conditions, which can be compared with each other and then logically simplified through a bottom-up process (Patton, 2002). This diversity-oriented method systematically codes and takes into account commonalities, thus elucidates both similarities and differences (Patton, 2002). The information from the data displays the different conditions produce specific outcomes. The information is ultimately evaluated by the extent of enhancing understanding of specific cases.

In this thesis, I employ a basic comparative analysis due to the interviews could be compared and generate to a general explanation. For example, I compare situation of sexual education in three schools and their causal conditions respectively. Figuring out the causes that have led to the current sexual education in different schools, a more comprehensive understating of the implementation of sexual education and its causal and consequent conditions in educational sector will be generated. Then by cross-cases comparison, I also compare the outcomes from in schools with that from government. The consequence of governmental decisions could be one of the causes for implementing or not implementing sexual education in schools as well. Thus based on data from each singular school and government and then compare them to understand that to what extent
sexual education in schools and governmental management have contributed to unintended teen pregnancy. The outcomes can be different from each other or share a lot of similarities, but they serve as a map which provides guidance to the research topic through comparing multiple cases. Meanwhile all the interviewes are coded, for instance, I code the interview with the governmental official like this, and questions are coded as task, awareness of unintended teen pregnancy, regulations, and collaboration.

In addition to comparatively analyze data from four interviews, I adopt discourse analysis method to analyze text that teaches sexual reproductive knowledge on textbook from school and the official website of unintended teen pregnancy aid centre. Discourse was defined by Michel Foucault (1972: 117) as “A group of statements in so far as they belong to the same discursive formation; discourse is made up of a limited number of statements for which a group of conditions of existence can be defined”. The majority of contemporary discourse analysis approaches follow Foucaul’s conception of discourses. Bryman (2003) explains that discourse analysis is an approach to language that is applied to forms of communication and text, other than talk. Thereby the text of website can be analyzed through discourse analysis. Discourse analysis focuses on linguistics relating to an object and the ways of depicting it so that frames the way we comprehend that object (Bryman, 2003).

Despite there are several different approaches that are classified as discourse analysis, in this thesis I analyze what has actually been written as the text, linguistic patterns in the statements and identify the hidden information behind the language which can constitute another version of the object in reality. Firstly, I code data collected from the textbook and official website of unintended teen pregnancy aid centre as aid provided, concrete operational process, and supporting organizations. Secondly, I analyze language from perspective of linguistic features, for instance, I will discuss the reason that why the aid centre uses the word operation (later explained as termination of pregnancy in a smaller introduction part) instead of using the easy-to-understand word abortion for teenagers.
In order to collect and handle more comprehensive data about the subject, this thesis consulted the text both from offline sources and online sources, such as textbook from school that teachers are using to teach teenage students about sexual reproductive knowledge, official reports, previous academic studies, and the official website of unintended teen pregnancy aid centre. When doing the analysis, I analyzed collected data not only based on its reality but also combined with causal and consequent conditions, and social practice.

4.5. Ethical Considerations

Basically, this research carried out in accordance with the ethical guidelines as described by the Swedish Research Council\(^1\). Specifically, a number of ethical principles would be respected with regard to interviews and data collection. I always introduced myself in the beginning, my master student status and the topic of my thesis when making contact with interviewees. Before interviewing anybody, I was fully conversant with the schedule. Because interview can be stressful for interviewer so that training interviewer self before the real ones is especially important (Bryman, 2012), and I have practiced with interview questions before conducting them. I obtained the permission before I record the interview and take pictures of the text the interviewees offered. The interviewees were voluntary and anonymity. If there is a need of quoting, obtaining permission from interviewees is necessary. This thesis studies unintended teen pregnancy, but I am unable to interview teenagers, due to it involves parents or guardians’ permissions and I also need more experience that able to conduct interview with children without making them uncomfortable. Finally, the collected information and data were treated confidentially and stored safely, and only could be used for this master thesis.

In addition, reflexively being aware of social background and educational background could have influence the way of interpreting data. Regarding the interviews, my status as a master student from a university abroad could also have had an impact on what specific answers the interviewees decided to provide. Especially for the governmental official, her

\(^1\) http://www.vr.se/inenglish/researchfunding/applyforgrants/generalconditionsforgrantapplications/ethicalguidelines.4.5adac704126af4b4be280007769.html
answers were perhaps influenced by the sense of Chinese governmental security, authority and cautions. Another fact is that the discussions were held in native dialect both for them and for me. With a language that we entirely mastered and share the same city context could avoid the barrier in understanding language such as linguistic nuance during the discussions.

4.6. Reliability and Validity
Reliability and validity are prominent criteria for the establishment and evaluation of social research. In qualitative research, reliability and validity have been explained by many studies. In this thesis, I scrutinize the validity and reliability according to Bryman (2012). Reliability, which means that the degree to which a research can be replicated (LeCompte and Goetz, 1982). Although it has difficulties in “copy” a same social settings and circumstances as the initial research, but it can be possible to using strategies to approach the requirements of external reliability, for instance, researcher can adopt a similar social role to that adopted by the original researcher (LeCompte and Goetz, 1982). This thesis can be replicated by using the introduced methods, theory or theoretical framework, and adopting a similar social role or view as mine. Consequently, the outcomes can be comparable to my research. Validity refers to the conclusions are generated from a piece of research, including the conclusion that has a causal relationship between the causes (internal validity) and the results can be generated beyond the specific research context (external validity) (Bryman, 2012). This thesis presents concrete causal relationship not only between governmental management, sexual education in school and aid provided by unintended teen pregnancy aid centre and reducing unintended teen pregnancy in public administration, but also between their collaboration and reducing unintended teen pregnancy. The results of this thesis can also be generated from the original research context. This thesis studies governmental sector, educational sector and healthcare sector, which are representative social actors in public administration in a social context. The outcomes of this research can also serve as empirical data from studies in the field in the future. By achieving considerations based on Bryman (2012)’s instruction as above, the research owns reliability and validity.
5. RESEARCH FINDINGS AND ANALYSIS

The intention of this chapter is to conceptualize the findings by using collaboration theory as the backbone. Based on the backbone, it gives a brief description of coded data from the interviews and is followed by a concrete analysis by the methods of comparative analysis and discourse analysis.

5.1. Sexual Education for Teenagers in Schools

As described before, I have interviewed three teachers associated with sexual knowledge related course, which is biology course, in three schools which represent three different tiers of schools in Chongqing. For the purpose of clarification, I used school 1, school 2 and school 3 for the first-tier school, second-tier school and third-tier school respectively. Interviewee 1 (male, 29) is also a biology teacher who is teaching students at Junior Grade One in school 1. Interviewee 2 (male, 27) is the head teacher of class as well as a biology teacher at Senior Grade Three in school 2. Interviewee 3 (female, 47) in school 3 is the dean as well as a biology teacher of the Senior Grade Three.

To analyze the data obtained from interviews, firstly I coded the data into four categories: course settings, feedbacks, unintended teen pregnancy cases and collaboration. For the course settings, I asked questions around specialized sexual education course offered by schools and teaching approaches. In school 3, there is no such a course that is specially set up for sexual education, but teachers teach teenagers the knowledge of insemination and the cause of pregnancy from biological perspective only for one chapter on the textbook at Junior Grade Two. Teaching time of this chapter takes two-three classes’ time and teachers could further voluntarily teach teenagers sexual knowledge more than what have written on textbook, however, interview 3 said that “this teaching time is not counted into the formal teaching time so that we barely do that”. School 2 does not provide sexual education course neither except teaching reproductive knowledge in a very short time during the biology class. Interviewee 2 said that “we teach students reproductive knowledge that written on textbook and it might only take about 10 minutes”. This is much shorter than the teaching time of sexual reproductive knowledge in school 3. In school 1, there is no sexual education course, but besides biology course, the school
has held two lectures on the changes of body in puberty and sexually transmitted diseases (STDs) for students. Interview 1 said that “When we were talking STDs, we mentioned contraception is one of the methods for avoiding AIDS conceptually, but it did not go further to the detailed contraception methods that available for students”. Comparing these three schools, it can be known that schools do not offer specialized sexual education course but sexual reproductive and pregnancy knowledge is taught on biology course. There is neither any education regarding to specific contraception methods. In a word, sexual education especially contraception knowledge is almost entirely ignored by schools’ education.

Compared the reasons for ignored sexual education from three schools, it found that the common goal of national college entrance examination is the main reason for ignoring sexual education, especially happens on school 1 and school 2. As have explained before, schools are divided or ranked according to their performances in the national college entrance examination, which directly decides schools’ public reputations as well as enrolments. The better ranked schools, the more teaching time in subjects that applies in the national college entrance examination. That is why interviewee 2 said that “school does not arrange sexual education course for students, for it is useless for getting high grades in the examination”, which explained why they spend only about 10 minutes on reproductive knowledge as going through the formality. Another reason can be that schools think providing contraception services will increase sexual behaviors among teenagers, which also can be harmful to schools’ reputation in the public. But the successful experience from the United States proved that the improvement of teenagers’ access to contraception services did not increase rates of sexual activity but increased a number of positive outcomes (Blake et al., 2003; Kirby, 2007; Kohler et al., 2008).

As for feedbacks from students to the class of sexual reproductive knowledge, students from three schools act similarly, that is curious but extremely shy. Interviewee 1 described as “the girls even think the textbook is dirty and cover the picture of male genital organ on the text book”. Teenagers also seldom communicate with teachers or parents about sex-related topics.
In terms of pregnancy cases, only interviewee 3 has personally dealt with an unintended pregnancy case in her class. Due to lack of sexual knowledge, especially contraception knowledge, “the girl even did not realize her pregnancy because she even did not know she could be pregnant after sleeping with her boyfriend”, said interviewee 3. Afterwards, adopting abortion secretly is the solution for the unintended pregnant girl.

As for collaboration, it is also sub coded as collaboration with government, collaboration with unintended teen pregnancy aid centre. Similarly, three schools have never received any regulation or policy regarding to sexual education from the government, thus the collaboration between schools and government is blank. This could be the third reason that schools do not offer sexual education. Interview 1 said that “There is no requirement from the government that schools must implement sexual education so that it is reasonable for schools to not provide this course”. Moreover, there is no collaboration between schools and unintended teen pregnancy aid centre as well. The unintended teen pregnancy aid centre is not well-known among teachers in schools, for all three interviewed teachers said they never heard of this unintended teen pregnancy aid centre.

In addition to the interviews, I was offered the biology textbook which is used in teaching sexual reproductive knowledge to teenagers, and this is the only textbook from school that related to sex. I analyze related text from the textbook by using discourse analysis which mainly focuses on the language. It is the first chapter called the Origin of Man in the Unit Four - The Human in the Biosphere, which is taught in the second semester of the Junior Grade One. This chapter composed of three sections: The Origin and Evolution of Human, The Reproductive System of Human and The Puberty. The first section introduces the origin and evolution of human while the last two sections are directly linked to the sexual education. In the second section, male’s and female’s reproductive systems are introduced with four anatomical diagrams both from front view and lateral view of male’s and female’s sexual reproductive bits. The text is written in academic language with biological terminologies. When it comes to the fertilization process, it is written as “when semen that contains sperm enters into vagina” and avoids using the name of male genital organ directly. The description from cytological or theoretical
perspectives is rather vague and obscure for teenagers to obtain the intuitive impression of sexual intercourse. As teachers talked in the interviews, they also explain no more on this point, for it is too awkward and they think students will come to know it with their growth. This point is set aside with even more mysterious for curious teenagers. Then the book roughly describes the process of pregnancy from a fertilized egg to a baby. The section of Puberty explains the physical changes happening on both teen boys and girls, and reminds them to pay attention to the personal hygiene. It also mentions the psychological changes during the puberty period. The two main changes are that having psychology inversion with parents and an attachment feeling toward someone of the opposite sex. To eliminate that feeling, the book guides students like this puberty is the very time that to study, gain ability, set up great aim, shape beautiful minds. Therefore teenagers should focus minds on study, actively join in recreational activities and sports. Teenagers should also help each other, and communicate closely with teachers and parents so that they can live healthy lives during the golden years of lifetime. That is all about the education on sexual reproductive knowledge in the textbook. With its brief and formalistic discourse, the ideology of the textbook content is very similar to abstinence-only programs that was implemented in United States before, which turns out to be ineffective and was replaced by comprehensive education which emphasizes more on contraceptive methods.

Based on the analysis of interviews and textbook, it proved that schools provide neither specialized sexual education course nor contraceptive knowledge. There is not big difference among the third-tier school, the second-tier school and the top school regarding situation of offering sexual education. For the topic of unintended teen pregnancy, schools do not collaborate with government and unintended teen pregnancy aid center.
5.2. Governmental Management on Teen Pregnancy

The Health and Family Planning Commission in Chongqing is a component of the municipal government. The fourth interview was conducted with an official as well as the deputy director (female, 52) of the commission. The data from the interview was coded as task, regulation, approach, situational awareness and collaboration.

The Health and Family Planning Commission in Chongqing has its tasks and duties mainly in implementing policies and laws of health and family control; drawing up local regulations and plans on public reproductive health and maternal and child health; managing public hospitals and promoting their reform; disseminating the information of health and family plan to the publics; organizing educational activities to facilitate public health.

For regulation, the questions were mainly asked around the policies, instructions regarding sexual education and unintended teen pregnancy. For sexual education, the regulations made to schools are no more than AIDS prevention rather than sexual education itself, and there is no regulations specialized for unintended teen pregnancy. This gives similar answers to three interviews in schools, which is the government does not require sexual education to be implemented in schools. However, the Health and Family Planning Commission in Chongqing adopted several approaches aim at imparting sexual reproductive knowledge to teenagers, such as arranging specialists to some schools, communities and factories to give lectures of sexual reproduction, which was called the Green Apple Project. However, compared to answers from three schools, it turned out to be that the activity has not really been carried out in these schools, for the teachers answered they were not aware of it, or maybe schools have received the instruction from government but still make the way only for study and national college entrance examination, which are most important for schools. Government also introduced contraceptive methods to the public through the Internet, mobile phones, TV, newspapers etc., but it is not targeting teenagers. As for the aiding provided by government to these females who are pregnant, it is actually mainly for birth control in families rather than
provided to the pregnant females in all situations. Unintended teen pregnancy has not been a duty officially for the government to consider yet so far.

However, the government has already been aware of the situation of unintended teen pregnancy in the society. Even though the official statistics of unintended teen pregnancy is not released to the public, interviewee 4 said that “Since there is an increasing number of unintended teen pregnancy, we became realized that the current approaches to improve teenager’s sexual reproductive health might be not enough, we hope that there is a regulation that can be made about reducing unintended teen pregnancy”. Actually, governmental management on unintended pregnant women is mainly for those who have been married or family planning rather than for unintended pregnant teenagers. But it sensed the government will not keep ignoring the issue of unintended teen pregnancy.

So far there is no collaboration between government and schools. However, interviewee 4 has said “We think the responsibility for this phenomenon should primarily belong to schools which play roles as educators and guides to teenagers”. This shows that government points out the important role of schools when reducing unintended teen pregnancy. Interview 4 also added “of course it cannot work without governmental regulations so that I think to reduce unintended teen pregnancy we should collaborate with schools firstly”. On the other hand, there has been collaboration between government and unintended teen pregnancy aid centre. Currently, government instructs the working implemented and allocates funding to support medical aid in the aid centre. However, the government has not assessed the quality of aid provided by the unintended teen pregnancy aid centre.

Thus it can be viewed as there is a weak collaboration between government and unintended teen pregnancy aid centre, but not between government and schools. Moreover, there are gaps existing between governmental management and implementation in schools.
5.3. The Aid from Unintended Teen Pregnancy Aid Centre

This thesis examined the unintended teen pregnancy aid centre in Chongqing, which was found in 2013 with the main support from the Women's Federation, Institute of Reproductive Health, hospital where the aid centre is affiliated with. Its collaborative partners are the National Health and Family Planning Commission of the People's Republic of China, the Health and Family Planning Commission in Chongqing and Chinese Centre for Disease Control and Prevention. Among them, the Chongqing Health and Family Planning Commission appropriated funds to for the aid centre in order to provide better aid to unintended pregnant teenagers. Thus the aid centre is official and organized so that it is supposed to provide better medical, psychological, and economic aid to pregnant teenagers. In this section, I analyze the data from the official website\(^1\) of this aid centre by discourse analysis focusing on language.

Supporting by governmental funding, the aid centre can provide free or discount operation for unintended teen girls who are under the age of 18; sexual education and unintended pregnancy guide; knowledge of law of protecting the legal rights women; professional psychological counseling. It can be noticed that the aid centre uses the word operation (later explained as termination of pregnancy in a smaller introduction part) instead of using the easy-to-understand word abortion in their first aid. The Chinese government instituted a strong policy on abortions has been relaxed since 1953, and abortions under certain conditions became available, especially in 1957, as part of the government's first birth control campaign, legal access to abortion was made easier (Hemminki et al., 2005). While the government also fight on illegal abortions, especially on gender imbalance in traditional mind-sets. The process of determining legality may include the issuing of a formal certificate from the local family planning authority and getting the permission may be complicated (Hemminki et al., 2005). Accompanied with issued of ethics and morals, a deliberate policy has been prevent public discussion of abortion issues (Roberts, 2005). This could the reason why the aid centre avoids using the word abortion, even though people tend to think of abortions firstly and easily when it comes to (terminating) operation for unintended pregnant women. Another expression is

\(^1\) http://new.cqhxfk.com/yiwaihuaiyun
knowledge of law in the third kind of aid. The first impression of this aid might lead people to think they provide professional legal assistance to unintended teenagers. However, they just provide the knowledge of certain law which could be several law books in a corner for unintended pregnant girls to read, if they will. The western research has pointed out that teen girls who suffer from unintended pregnancy are mostly from low-income families, which means it is hard for them to afford the payments for hiring a professional lawyer to protect their legal rights. Without practical aiding, the knowledge of law as a legal assistance is just a decorative display.

As for the specific instructions of the application for free operation, the applicant must meet any of these conditions: unintended pregnancy under the age of 18; unintended teen pregnancy caused by sexual assault; unintended pregnant students who are currently studying in schools; unintended pregnant teenagers who are from poor families which have poverty certificate authorized by street communities; unintended pregnant teenagers who have gynecological disease. From the first condition - the unintended pregnancy under the age of 18, we can see that almost all unintended pregnant teenagers can be aided by free operation from the aid centre. But in the third one, it is narrowed down to “unintended pregnant students who are currently studying in schools”, which actually throws over the first condition. What is more, the aid centre also states that they refuse to provide free operation to those teenagers who have committed crimes, have poor lives because of gambling and drugs and have applied for other aids for the unintended pregnancy. But in the end, there is an added explanation in brackets saying that these three conditions can be relaxed for special applicants. However, there is no more explanation for the “special”. It seems that the aid centre has humanism nursing management for those applicants who do not meet the requirements, but in fact no one can be in that “special” case. Those so called troubled teenagers are rejected to get free operations by the aid centre. Those teenagers are associated with crimes, gambling and drugs are in higher risks to become unintended pregnant. They are more estranged from families and have much more needs for the free aid. However, this group of teenagers are rejected by the aid centre. Moreover, this rejection could also be suspected as
discriminatory intention for these troubled teenagers, which segregates them or in many cases forcing them to the margins of society.

As for the application process, firstly applicant needs to fill the form named as Aid for Unintended Teen Pregnancy in the Women's Federation or street community and submit the information of Hukou (registered permanent residence), identification card or student identification card there. After the confirmation for the identity and the pregnancy certificate of the pregnant teenager, she will be received by the aid centre. Then doctors in the aid centre give a consultation to the teenager based on personal situations. When content of the aid is drawn up, the teenager can get operation in the aid centre. Lastly, the teenager should pay a return visit and put her case on file. This process looks official, proper and logically arranged, but it is hard for teenagers to go through from the very first step to apply to the Women's Federation or street community with much personal information. There is no cause for much criticism for this legitimate and reasonable step, but when considering the situation of those unintended pregnant teenagers, it can be quite difficult. During my interview with interviewee 3 who had an unintended pregnant girl in her class, I asked that why the girl took abortion secrecy at a little-known hospital which is located in the suburb but not asking for the official help from the aid centre which provide better and free medical service, she answered “The girl and her family refused to provide all her personal information to the official organizations. She was afraid that her pregnancy will remain as an indelible stain on her lifetime, for the pregnancy case with her identifications will be recorded at every sector which is involved to the whole aid process. Being unintended pregnancy was shame for her and her family so that they wanted to keep silent over this matter so they would rather pay for the abortion bearing the risk that might be brought by poor medical facilities at an unknown hospital”.

During my field work, I also contacted the Women's Federation, street community and the aid centre for asking the unintended teen pregnancy issue they have dealt with, but they refused to offer any information with the reason that it involves in citizens' privacy. This rule might serve as a placebo for those unintended pregnant teenagers who want to
get the aid but worry about the privacy, for it actually protects personal private information to some extent.

Overall, the unintended teen pregnancy aid centre collaborates with government to aid unintended pregnant teenagers by providing free abortion operation and other kinds of aid, even though the concrete operational processes of the aid provided needs to be further improved in applicants’ conditions, specific way of aid, application process.

5.4. Discussion
The findings show that there has not been any collaboration between government, schools and unintended teen pregnancy aid centre to reduce unintended teen pregnancy, except that the government collaborated with unintended teen pregnancy aid centre one-sided. The empirical studies of successful experience on reducing unintended teen pregnancy from other countries has proven that collaboration between government and schools to implement comprehensive sexual education, which includes contraceptive knowledge particularly, has been the most effective way of reducing unintended teen pregnancy. Thus this thesis put schools in an important position in this collaboration. When discussing collaboration between government, schools and unintended teen pregnant aid centre based on collaboration theory, firstly the problem domain, the situation of reducing unintended teen pregnancy needs to be clarified. Because the problem is beyond the capability of government, schools and the unintended teen pregnancy aid centre to solve single-handedly, the complexity of the problem requires a collaborative response. Government, schools and unintended teen pregnant aid centre are social actors in public administration which are directly related to achieve common goal-reducing unintended teen pregnancy. Thus it is important for them to work across boundaries and in multi-actor and multi-sector relationships in order to effectively reduce unintended teen pregnancy.

Indeed, collaboration across multiple actors in public administration is constructed in the specific context of China. As Brown et al. (2013) argued that current China does offer a context where the conditions for collaborative governance have recently emerged and
capacities for managing collaboration have just begun to develop, especially in the area of social services, appear to offer more favorable conditions for organic partnerships. Understanding that there has been a top-down form in Chinese governmental system, this thesis assigns the leading role to government in the collaboration, which is compliant to the current Chinese social context. On the whole, government works as a leading, planning and managing role in the collaborative relationship.

The collaboration should be conducted through both vertical and horizontal perspectives. Facing a demand for management of reducing unintended teen pregnancy in China and for improving teenager’s sexual reproductive health, the collaboration must start by sharing knowledge, which is the basic essence of collaboration in public administration. At this point, information seeking works as a vertical way. It involves contacts between government, schools and unintended teen pregnancy aid centre for the purpose of seeking out information of reducing unintended teen pregnancy in China. The collected information serves as an important resource for policymaking due to resources of education, medical care are held by schools and unintended teen pregnancy aid centre who are also necessary partners in both making and implementing policies. Depending on the perceptions of the information, it is feasible to identify the problems, reach agreement on them and search for joint solutions. After information seeking, government is able to induce collaboration through multiple means to reduce unintended teen pregnancy, such as making policies and regulations, allocating funding, arranging technical assistance, enacting project or program that satisfy local needs, and supervision for seeking feedback information so that can keep continuously improving.

As for horizontal mean, this thesis suggests that the collaboration can be started as project-cased work, due to it is suitable for the collaboration between government, schools and unintended teen pregnancy aid centre has not been conducted before yet. The project-based work can be either short-term or long-term thus it gives more flexibility on the working of collaboration. At this point, the information from the collaboration process and outcomes serve as important implications for future measures of reducing unintended teen pregnancy. With this clear goal, the project of collaboration
can be assessed and adjusted according to its performance and feedbacks. Then based on the proper implementation and effectiveness of the collaboration, longer lasting-term collaboration can be employed. This demands dependable managerial structures within formulated and implemented development and is considerable continuously efforts from all of government, schools and unintended teen pregnancy aid centre.

Based on the theoretical discussion, this thesis puts forward a concrete form for the collaboration. Government plays its leading and managing role, while schools function as preventing unintended teen pregnancy by offering sexual education and unintended teen pregnancy provide aid afterwards, three actors collaborate with and supervise each other. Specifically, for schools, government makes policy or regulation to require schools to implement specialized and comprehensive sexual education, especially contraceptive knowledge to teenage students; supervises its implementation rather than only making policies then turns a blind eye to the implementation; assesses the implementation of sexual education in schools. For unintended teen pregnancy aid centre, government make regulation or instruction on improving working process; continues to funding; supervises and assesses the whole aiding process. Schools receive policy or regulation of sexual education from government and implement it in real, such as set up specialized sexual education course, use specialized sexual education textbook, introduce contraceptive methods and services to students; invite experts from unintended teen pregnancy aid centre to give lectures of contraception and sexual reproductive health, and inform students of the aid provided by unintended teen pregnancy aid centre; give feedback of implementation process to government regularly. Lastly, unintended teen pregnancy aid centre relaxes the conditions of applicant, supported by governmental funding, it should be applied to all unintended pregnant teenagers; according to the regulation or instruction from government, improves or simplify the application process with more legal helps and perfect protection mechanism for medical privacy; not only provides aid after teenagers’ unintended pregnancy but also starts to provide free contraception services to them; goes to schools to propagandize knowledge of contraception and introduce aiding services; gives feedback of the working to government regularly.
6. CONCLUSION

Finally, this chapter briefly summarizes the thesis and concludes the results of the study as to answer the research questions, and will be rounded off with a few further reflections in this field.

Aiming at reducing unintended teen pregnancy in China, this thesis conducted interviews in schools and in Health and Family Planning Commission in Chongqing, analyzed textbook and working of unintended teen pregnancy aid centre, as well as did a literature review on previous research. All of these studies have jointly drawn the answers to the research questions.

Currently, aware of the increasing numbers of unintended pregnancies and abortion among teenagers in China, government has arranged activities regarding improving the safe contraception and teenage reproductive health. However, due to there is no requirement or regulation for its implementation in schools, there has been no collaboration between government and schools regarding reducing unintended teen pregnancy. Neither schools are collaborated with unintended teen pregnancy aid centre. Nevertheless, government has collaborated with unintended teen pregnancy aid centre, even though only by supporing with funding. As showed in figure 1, the collaboration to reduce unintended teen pregnancy between these three actors is lacking.

Figure 1: Current Situation of Collaboration Between Government, Schools and Unintended Teen Pregnancy Aid Centres

Source: Yanzhu Mu, based on the analysis.
Based on previous empirical research and collaboration theory, this thesis proposes collaboration between government, schools and unintended teen pregnancy aid centre. As briefly summarized in figure 2, theoretically government plays as a leading and managing role in the collaboration by making policy or regulation, supervising and evaluating; schools play a role that to prevent unintended teen pregnancy by offering comprehensive sexual education proactively; while unintended teen pregnancy aid centre works as providing aiding services afterwards. The three actors collaborate with each other according to their own duties, the feedbacks from schools and unintended teen pregnancy aid centre are important for assessing policymaking so that government can keep or adjust management that satisfies local needs.

Source: Yanzhu Mu, based on the analysis.

The collaboration between the social actors would always have many constraints and limitations in public administration under the context of Chinese society, especially when it applies in the grey area such as sexual education and unintended teen pregnant where each actor would avoid as much blame as they could. It is not a sole issue that is only related to individuals and organizations. It is also a consequence involving many other
the social factors in China, such as political hierarchy and regulations, and the awareness of the whole society, etc. Nevertheless, there are still potential opportunities and solutions that we could reconsider to make the collaboration feasible and viable in the future. In addition, it further tentatively identifies some of the existing gaps about public collaboration as one critical underpinning to boost the collaborative network development. Yet much more research still needs to be done in the administration sector, Chinese education system or mechanism, and health care in the future to investigate the detailed needs and requirement, research the availability of combining multiple forms of resources and study feasibility of the policies in order to propose more elaborate and optimal collaborative framework in the future.
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People Daily (2004) “Unintended teen pregnancy has been an increasingly severe social problem in China”, *People Daily*, 5 April 2004, available online:


Appendix 1:

1. Questions for schools

Gender/性别:

Age/年龄:

Position/职位:

1. Does the school offer specialized sexual education course or programmes to students?
   学校有开设专门的性教育课程或项目吗?
   
   Yes, how many school hours for them in total? How does teacher teach?
   有，一共有多少课时？老师是怎么教学的？
   
   No, what are the reasons?
   没有，为什么没有？
   
2. Is the knowledge of contraception and pregnancy introduced in details?
   有很详细的介绍避孕和怀孕的知识吗？
   
   Yes, how does teacher teach?
   有，老师是怎么教学的？
   
   No, what are the reasons?
   没有，为什么没有？
   
3. What are the reflections from students about the sexual education? How does the school assess it?
   学生们对于性教育课的反响如何？通过什么方式检测性教育成果？
   
4. Have you ever had students who have problems relating to sex in the school? Do they communicate with teachers? If yes, what are the problems they have?
   是否有性方面遇到问题的学生？他们会和老师交流吗？如果有，是些什么问题？
   
5. Have you ever had pregnant student? If yes, what the factors led to her pregnancy? Did she ask for aid from school? How did she live the life after the pregnancy?
   是否遇到过怀孕的女学生？是什么原因导致她们怀孕的？她们是否有寻求帮助？怀孕之后她们是怎么生活的？
6. Have you ever had male students who have made female teenagers pregnant? How do they deal with the situation?
是否有遇到过使同龄人怀孕的男学生？他们是如何处理这个状况的？

7. What policy of sexual education to teenagers did school receive from the government? To what extent does school implement the policy?
学校从政府得到什么关于青少年性教育的政策？多大程度上执行了该政策？

8. Has school ever introduced accidental teen pregnancy aid center or other similar institutions to students when they have sexual problems they seek aid from?
学校有向学生介绍过青少年意外怀孕援助中心或类似机构吗？

Yes, what are these institutions and what are the reasons?
有，有哪些机构？理由是？

9. How does the school assess the work (role) of the accidental teen pregnancy aid center?
学校如何评估青少年意外怀孕援助中心的工作？

No, what are the reasons?
没有，为什么没有？

10. How does the school assess the work (role) of the government regarding making and implementing policy of sexual education?
学校如何评估政府关于贯彻性教育方面的工作？

11. Is there any collaboration between school and other social institutions (for instance, government and unintended teen pregnancy aid center) that to improve sexual education, popularize the knowledge of contraception, and reduce unintended teen pregnancy?
学校是否和社会其他机构合作（例如，政府，医院等）进行合作来提高青少年性教育，普及避孕知识？

12. Do you think which aspects of the work of reducing unintended teen pregnancy do you think are doing well in school? Which aspects need to be improved in the future?
觉得目前针对青少年性教育中有哪些地方是做得好的？哪些地方在将来需要改进？

13. Do you have any other comments regarding the topic?
关于调查的题目，你有其他的想法吗？

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Appendix 2:

2. Questions for Government

Gender/性别:

Age/年龄:

Position/职位:

1. What is the major work of your department?
   贵部门平日最主要的工作是什么？

2. What is the policy on sexual education to teenagers?
   有关青少年性教育的政策是什么？

   e. How does superior government instruct the work of sexual education to teenagers?
      上级政府机关是如何指示关于青少年性教育的工作的？

3. How does the government arrange the work of sexual education to teenagers?
   政府是如何部署关于青少年性教育的工作活动的？

4. What is the policy on unintended teen pregnancy?
   有关青少年意外怀孕的政策是什么？

5. How does the government arrange the work of reduce unintended teen pregnancy?
   政府是如何部署关于减少青少年意外怀孕的工作活动？

6. What is the current situation and statistics of unintended teen pregnancy in Chongqing?
   本市青少年意外怀孕的现状或数据是什么？

8. How does superior government instruct the work of unintended teen pregnancy?
   上级政府机关是如何指示关于青少年意外怀孕的工作的？

9. Has your department ever made any regulation regarding implementing sexual education to teenagers and reducing unintended teen pregnancy?
   贵部门是否制定了关于实施青少年性教育和减少青少年意外怀孕的规章制度？

   Yes, what is the content?
   是，具体内容是什么？

   No, what are the reasons for it?
   否，为什么没有？
10. How does the government prevent unintended teen pregnancy and provide aid to unintended pregnant teenagers? What are the outcomes?
政府是如何预防青少年意外怀孕和援助意外怀孕的青少年的？成果如何？

11. How does the government assess the sexual education offered in schools?
政府如何评估学校提供的性教育？

12. How does the government assess the implementation of aid provided in unintended teen pregnancy aid center?
政府如何评估青少年意外怀孕援助中心的工作？

13. What do you think of the sexual education especially the knowledge of contraception offered to teenagers in Chongqing? How to improve it from the aspect of government?
是否觉得本市对于青少年的性教育尤其是关于避孕知识需要提高？从政府角度，如何提高？

14. Is there any collaboration between the government and other social organizations (for instance, schools and unintended teen pregnancy aid center) for reducing unintended teen pregnancy?
政府是否和社会其他组织部门（例如，学校，医院等）合作来减少青少年意外怀孕？

Yes, how do you collaborate? What are the outcomes?
是，怎么合作的？成果如何？

No, what are reasons for not collaborating?
没有，不合作的原因是什么？

15. Do you think which aspects of the work of reducing unintended teen pregnancy are doing well? Which aspects need to be improved in the future?
觉得目前针对青少年意外怀孕的工作中有哪些地方是做得好的？哪些地方在将来需要改进？

16. Do you have any other comments regarding the topic?
关于调查的题目，你有其他的想法吗？
Appendix 3: Extracts From the Textbook

女性的主要生殖器官是卵巢。卵巢的功能是产生卵细胞，并且分泌雌性激素。卵细胞从卵巢中排出后会沿着输卵管向子宫方向移动。子宫是胚胎发育的场所。
生殖过程

睾丸产生的精子（sperm）和卵巢产生的卵细胞（egg cell），都是生殖细胞，它们分别含有男性和女性的遗传物质。含有精子的精液进入阴道后，精子游动进入子宫，进而进入输卵管与卵细胞相遇。众多的精子中，只有一个能够进入卵细胞并与卵细胞结合形成受精卵（fertilized egg）。

受精卵不断进行细胞分裂，逐渐发育成胚泡。胚泡缓慢地移动到子宫中，最终附着在子宫内膜上，就好比一粒种子落到了土壤中（图4-9）。

卵泡中约有10个卵泡，每个卵泡中有一个卵子。卵泡开始发育，卵泡成熟一个卵泡，排出卵到输卵管中。图4-9 排卵、受精和胚泡发育示意图。双胞胎：卵子同时排卵两个成熟卵细胞，并与精子结合，形成两个受精卵，将来发育成两个个体，一男一女双胞胎。
进入青春期后，随着身体的发育，性意识也开始萌动，常表现为从初期的与异性疏远，到逐渐愿意与异性接近，或对异性产生朦胧的依恋。这些都是正常的心理变化。应当注意的是，青春期正是学知识、长才干、树立远大理想、塑造美好心灵的关键时期。因此，应当集中精力，努力学习，积极参加各种文体活动和社会活动，同学间相互帮助，与师长密切交流，健康地度过人生的金色年华。

练习

1. 下表是青春期各项发育指标的出现顺序。这个表是科学家分析研究了许多年之后归纳出来的。对于每个男孩或女孩来说，与表中各项指标相比，可能存在一些差异。只要差异不大，都可以认为是正常的。请你对照这个表，分析自己的发育情况。如果有疑问，可以请教家长、老师或医生。

<table>
<thead>
<tr>
<th>年龄（岁）</th>
<th>女孩</th>
<th>男孩</th>
</tr>
</thead>
<tbody>
<tr>
<td>8~9</td>
<td>身高突增开始</td>
<td></td>
</tr>
<tr>
<td>10~11</td>
<td>乳房发育开始，身高突增高峰，出现阴毛</td>
<td>身高突增开始，睾丸、阴茎开始生长</td>
</tr>
<tr>
<td>12</td>
<td>乳房继续增大</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>月经初潮出现，出现腋毛</td>
<td>出现阴毛，睾丸、阴茎继续增大</td>
</tr>
<tr>
<td>14</td>
<td>乳房显著增大</td>
<td>变声，出现腋毛</td>
</tr>
<tr>
<td>15</td>
<td>皮下脂肪增多，体态脂肪分</td>
<td>首次遗精，出现胡须</td>
</tr>
<tr>
<td>16</td>
<td>月经有规律</td>
<td>睾丸、阴茎达到成人大小</td>
</tr>
<tr>
<td>17~18</td>
<td>骨骺愈合，生长基本停止</td>
<td>体毛接近成人水平</td>
</tr>
<tr>
<td>19以后</td>
<td>骨骺愈合，生长基本停止</td>
<td></td>
</tr>
</tbody>
</table>

2. 通过查阅报纸、刊物、书籍和互联网等，了解除了课文已经讲述的之外，青春期的卫生保健还应当注意的事项。

3. 如果你是男生，当你发现有的女生因为月经而发生情绪变化，甚至影响睡眠或学习时，你应当怎样对待她们？（男生、女生分别发表）

健康和智慧