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Effects of Comprehensive Sex Education on Unplanned Pregnancy Rates and STI Occurrences among Chinese American Adolescents

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**Effects of Comprehensive Sex Education on Unplanned Pregnancy Rates and STI
Occurrences among Chinese American Adolescents**

by

Onsheng Seto

A Senior Thesis submitted to the faculty of Dominican University of California in partial
fulfillment of the requirements for the degree of Bachelor of Science in Nursing

Dominican University of California

San Rafael, CA

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Abstract

Sexually transmitted diseases/infections (STIs) and unplanned pregnancies is a continuing health concern among adolescents. They are more likely to engage in risky behaviors that increase the likelihood for STIs and unplanned pregnancies which emphasizes the need for comprehensive sex education (CSE). This research proposal strives to determine if CSE is an effective tool in reducing cases of STIs and unplanned pregnancies, specifically in Chinese American adolescents. The literature review identified CSE successfully decreasing STIs and unplanned pregnancies in youths. However, limited research correlates the relationship between CSE and Chinese American adolescents. In addition, few studies take cultural influences into account when analyzing this demograph's sexual practices and behaviors, thus showing a lack of diversity in sex education. To assess the effectiveness of CSE, a convenience sample of 100 adolescents will participate in completing an initial 20 question survey, followed by an sex education course, and then a post-test of the same 20 question survey. Results should show improvement in test scores after the intervention. Data will be analyzed through p-value to indicate statistical significance. In addition, descriptive statistics such as mean, mode, and median will be utilized to compare pre-intervention and post-intervention test scores.

Keywords: comprehensive sex education, STIs, unplanned pregnancies, Chinese American adolescents, Asian American adolescents, sexual behaviors and attitudes.

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Introduction

Unplanned pregnancies and sexually transmitted diseases/infections (STIs) are major health concerns among adolescents. In 2018 the Centers for Disease Control and Prevention (CDC) estimated youth ages 15-24 accounted for almost half of the 26 million new STIs that occurred in the United States (CDC, 2021). This is not surprising as adolescents are more likely to engage in high-risk behavior such as concurrent partners or sex without condoms and are less likely to utilize sex health services compared to adults (Shannon & Klausner, 2019). Despite teen birth rates being at an all time low, the US remains higher than that of other developed countries such as Canada and the United Kingdom (Office of Population Affairs, n.d.). While numerous efforts are needed to address the issue of adolescent pregnancies and STIs, comprehensive sex education remains a crucial part of any solution. Developing a proper understanding of human sexuality and procreation, contraception, STIs, abstinence, sexual orientation, consent and sexual violence, and reproductive responsibilities can guide adolescents in making safe and informed choices in sexual activity and their reproductive health.

Purpose Statement

Although comprehensive sex education (CSE) has shown to decrease unplanned pregnancies and STI rates among adolescents, there is a lack of literature on the effects of sex teaching specifically on Chinese American adolescents. This may be due to language barriers or insufficient data or reports from this population. Another possibility could be the attitude in Chinese culture on the topic of sex which tends to be more repressive and conservative. Chinese parents may not feel comfortable discussing the topic of sex to their children as it is viewed as untraditional and considered a personal matter. Using China and its cultural context, the aim of

this paper is to analyze the impact comprehensive sex education has on unplanned pregnancy and STI rates among Chinese American adolescents ages 13-20.

Research Question

This paper strives to answer the question of whether comprehensive sex education compared to no sex education affects unplanned pregnancy rates and STI occurrences among Chinese American adolescents. Obtaining sufficient knowledge on the topics of sex enables youth to approach sex and sexual health wisely and confidently. Chinese American adolescents should experience reduced unintended pregnancy and STI rates through CSE.

Literature Review

The following literature review examines the impact sex education has on unintended pregnancy and STI rates among adolescents. It will also explore the influence Chinese culture has on sexual attitudes, behaviors, and knowledge of sex in youths in China. Additionally, the review will discuss the significance of cultural factors that affect sex teaching and sex education effectiveness among Asian American adolescents in the United States. The articles were acquired through the National Library of Medicine and Google Scholar database. Key terms used to search the articles include “sex education,” “Chinese adolescents and sex”, “Asian American adolescents and STIs”, “teen pregnancy in Asians”, and “sexual knowledge and unplanned pregnancies and STIs.”

Effects of Sex Education on Unintended Pregnancies and STIs

Comprehensive sex education covers the same topics as sex education and matters of sexuality, sexual expression, gender equality, human rights, and civic engagement. The goal of CSE is to better equip students to make empowered decisions regarding their sexual health and well-being. Studies have shown CSE successfully improves sexual and reproductive health. In a

quasi-experimental study, the effects of federal funding for more CSE had on reducing teen births in the United States was analyzed (Mark & Wu, 2022). Obtaining data from the National Vital Statistics System and the Catalog of Federal Domestic Assistance, the study identified 55 counties that received federal funding for more comprehensive sex education and age-specific teen birth rates at the county level. The results showed that funding for CSE led to a reduced county-level teen birth rate by more than 3% (Mark & Wu, 2022). This emphasizes the role CSE plays in reducing teen births and success in providing adolescents the exposure they need on topics of intercourse, sexual health, and sexuality. Although the study may understate the true impact of CSE on teen births at the county level, a limitation in this study was recognizing the number of teens treated when a county received funding and the effects CSE had on the individual level.

To further examine the effects between school-based sex education and STI rates, Craig-Kuhn et al. (2020) conducted a study among 1196 African American men from New Orleans aged 15-24. Participants were asked to provide a first catch urine sample and complete a survey on their sex education experiences, STI history, and STI fatalism and sexual behaviors. They also had to identify which sex education topics they were familiar with. Results suggested that young African American men who reported receiving institutionally delivered sex education were less likely to engage in high STI-risk activities (Craig-Kuhn et al., 2020). Limitations in this study include convenient sample size and self-reporting data thus making outcomes more susceptible to bias and a generalization of young African American men in New Orleans.

Another study carried out by Oman et al. (2018) introduced a sexual health education intervention for youths called Power Through Choices (PTC). The study tested the effectiveness of PTC in increased use of birth control and decreased adolescent pregnancy. It used a 2-arm

cluster randomized controlled trial involving 1036 youths living in group care homes from California, Maryland, and Oklahoma. Assessments were performed before and after PTC, and at 6-and 12- month follow up between the control group and participants in the intervention group. The study concluded youths who received PTC had 28% lower odds of having had sex without birth control and had 33% lower odds of ever being pregnant or getting someone pregnant (Oman et al., 2018). Limitations within this study include self-report on behaviors and outcomes, lack of prior research on PTC, and focus population only on youths living in group care settings.

These studies demonstrate sexual education as an effective intervention. CSE Programs and methods of teaching vary widely in content, emphasis, and effectiveness but target behavioral outcomes and promote healthy sexual development. Ultimately, encouraging comprehensive sex education is beneficial and demonstrates success in reducing rates of risky sexual behaviors, STIs, and adolescent pregnancy.

Sex in Chinese Culture

Despite China's rapid modernization, traditional values on the behaviors of sex and sexual morality continue to prevail. China is still dominated by Confucian principles and ideology which emphasizes traditional gender roles, social stability, family harmony, patriarchy, and communalism (Xu et al., 2022). A tremendous pressure is placed on individuals to be heterosexual and pursue a heterosexual marriage. Anything outside those standards is viewed as mentally unstable or sexually irresponsible. Women are also expected to be obedient to their father, husband, and son (Lyu et al., 2020). Matters of infidelity and premarital sex is less tolerant for women and having a child outside of marriage is considered irresponsible behavior and a violation of traditional family values. Men can demand and expect fidelity while engaging in commercial sex. Open discussion about sex is considered taboo

making it difficult to create an incentive for schools to deliver sex education programs (Leung et al., 2019). The lack of sexual health teaching, awareness, and acceptance in Chinese communities can result in dangerous, risky behaviors or practices and false information on sex.

In a cross-sectional study surveying 5965 undergraduates aged 15-24 from nine universities in Zhejiang, Henan, and Yunnan Provinces, results showed low sexual knowledge with students scoring on an average of 50% on a multiple choice sex test (Lyu et al., 2020). The study obtained data from surveys and questionnaires and assessed sexual knowledge, sexual attitudes, sex-related behaviors, and sex education. Among the 5965 undergraduates, 87.8% of them thought condoms can be used more than once and 40.3% believed masturbation was harmful to health (Lyu et al., 2020). There were significant differences in sexual attitudes between sexes. Males seemed to have more sexual freedom compared to females. For example, male students did not view premarital sex as a misdeed, they believe one night stands are acceptable, it is the girl's responsibility to use contraception, and some boys thought it was acceptable to force a girl to engage in sexual activity (Lyu et al., 2020). Females were more likely to accept homosexuality and males agreed more that a person who catches a STI "is getting exactly what he/she deserves" (Lyu et al., 2020).

An additional cross-sectional study brings awareness to pregnancy rates among unmarried youth in China. It surveyed 11,076 unmarried female youths ages 15-24 to investigate the outcomes and social factors associated with pregnancy. Data was obtained from a 2009 nationally represented survey called the Survey of Youth Access to Reproductive Health. The study found that adolescents aged 15-19 had a significantly higher birth rate than young adults aged 20-24 years (Guo et al., 2019). Both groups are more inclined to resort to unsafe abortion due to social cost and stigma. Individuals from lower socioeconomic status were associated with

higher risk of pregnancy due to low educational level and are less likely to be aware of sexual and reproductive health knowledge. Additionally, those from lower socioeconomic status have limited access to contraceptive services and sex education (Guo et al., 2019). Limitations to this study include disregard to sexual behaviors of youths after marriage and possible under-reporting due to embarrassment and stigma surrounding premarital pregnancy.

Attitudes towards sex in Chinese culture are more conservative compared to western countries. These cultural and social norms restrict conversation and essential sex education, consequently leading to misconceptions and misinformation on sex. The gender differences in Chinese culture also solidifies power imbalances in sex and place women at higher risk of STIs and unplanned pregnancies. Stigma and discrimination are associated with non-traditional gender identity and sexual orientation making it difficult for sexual expression.

Sexual Behaviors and Education Among Asian American Adolescents

Although teen pregnancy and STIs are major public health issues in the United States, disparities in teen pregnancy and STIs among racial and ethnic groups still exist. The CDC reported from 2018-2019, teens aged 15-to-19-year-olds experienced decreased birth rates in Hispanic females (5.2%), non-Hispanic White females (5.8%), and non-Hispanic Black females (1.9%) (CDC, 2021). Birth rates were unchanged for non-Hispanic American Indian/Alaska Natives, non-Hispanic Asians, non-Hispanic Native Hawaiian, and other Pacific Islanders (CDC, 2021). The race/ethnicity with the highest birth rate was American Indian/Alaska Native teens while the lowest rates were among Non-Hispanic Asians (CDC, 2021). In addition, Asian Americans in the US made up 6% of the total HIV cases and accounted for 2% of new HIV diagnoses (CDC, 2020). Asian Americans also had the lowest rates of reported cases of chlamydia, gonorrhea, and syphilis in the US 2021 (CDC, 2023). These statistics contribute to

the perception that this population is at lower risk for unplanned pregnancies and STIs. However, limited research discusses the sexual practices, behaviors, and health of Asian American adolescents, more specifically Chinese American adolescents.

An exploratory study conducted by Ansari-Thomas et al. (2019) compared sexual activity, contraceptive use, and sexual violence among Asian American high school students and students of other racial/ethnic groups. It pooled data from the 2013, 2015, and 2017 CDC's Youth Risk Behavior Survey (YRBS), utilizing a sample size of 42,854. The study concluded that a small proportion of Asian students engaged in sexual behaviors or using contraception and had fewer experiences of forced sexual intercourse and compared to their peers (Ansari-Thomas et al., 2019). Self-reporting bias and treating Asians as a homogenous racial group are limitations of this study.

Furthermore, an 2015 integrative literature review study analyzed the factors related to sexual behaviors among Asian-American adolescents and evaluated the success of sex education programs for this population. It identified five influential factors: family-centered values, parental relationships, acculturation, gender roles, and lack of knowledge and information about sex and STIs that played a central role in sexual behaviors among Asian Americans adolescents (Lee et al., 2015). The study also pinned two sexual educational programs that met the inclusion criteria and provided evidence towards effectiveness: Safer Choices and Seattle Social Development (Lee et al., 2015). A limitation in this study is the lack of published research studies that examine cultural values and gender roles associated with sexual behaviors in this population. Another limitation was the non-existent sex programs developed specifically for Asian-American adolescents. The study ultimately emphasized the need for culturally sensitive

sexual education programs that are mindful of influencing factors which may help develop better sex teaching strategies and a deeper understanding of this population's sexual health.

Few studies have examined sexual and reproductive health in Asian American adolescents and fewer discuss matters of sexual behaviors specifically among Chinese American youths. The limited research on this demographic identifies a gap in the literature and overlooks their practices, beliefs, and behaviors in sex. As a result, it is unclear how effective comprehensive sex education is among Chinese American adolescents. In addition, there is no discussion on cultural influences on the topic of sex which is crucial in reducing health disparities, understanding diverse beliefs, and developing quality, patient-centered care within this population.

Theoretical Framework

Madeleine Leininger, a renowned nursing professor and anthropologist, is known for developing the Transcultural Nursing Theory or Culture Care Nursing Theory which focus on health-illness care and nursing actions that is in congruent with a patient's cultural beliefs, lifestyles, institutions, and values. The theory aims to help nurses be understanding, open-minded, and respectful of a patient's cultural background when creating a plan of care. Leininger's theory is demonstrated through the Sunrise Model which includes technological, religious and philosophical, kinship and social factors, cultural values and lifestyle, political and legal, economic and social factors (Değer, 2023, sec: 4.8.4.1). These factors influence care expressions in three systems: folk care, nursing care, and professional care. This allows for identification of nursing care decisions and actions in three cultural care concepts: preservation and maintenance, accommodation or negotiation, and repatterning or restructuring.

In regards to CSE in Chinese American youths, Leninger's theory suggests a transcultural approach to care. It is necessary to understand a group's cultural characteristics in order to meet the needs of those with different practices and attitudes to disease. Being able to recognize cultural differences and health beliefs can further help collect data and identify necessary factors that lie behind behaviors.

Research Proposal

Implementing sex education for adolescents is crucial for enhancing understanding and promoting safety in matters of sexual activity and behaviors. The literature review highlighted evidence that teaching sex-related topics lowers cases of adolescent pregnancies and STI. Available published works further support this point, however, it is unclear how effective sex education is among Chinese American adolescents. The purpose of this study is to see if comprehensive sex education can decrease unplanned pregnancy rates and STI occurrences in Chinese American adolescents.

Research Design

This study will use a cross-sectional approach to collect quantitative data from 100 participants ages 13-20. Participants will be chosen from the San Francisco Bay Area through convenience sampling. They will be asked first to complete a questionnaire or test to evaluate their knowledge on sex and inquire about their sexual activity and behaviors. Then participants will receive sex education as the intervention, followed by a retake of the same test. Results will ideally support the hypothesis that sex education is beneficial in decreasing rates in STIs and unplanned pregnancies in adolescents.

Sample and Recruitment

The convenience sample size of this study will be 100 adolescents. Participants will be sought in schools and clinics located in the San Francisco Bay Areas. Recruitment will focus on those who fulfill the inclusion criteria of being 13-20 years old and Chinese American. After eligibility has been established, the researchers will proceed with the test. Exclusion criteria are those who are outside the age bracket and are not American with Chinese descent.

Methodology

After consent is obtained, participants will begin the test. The test will consist of 20 questions, 10 asking general knowledge on sex and contraceptives and another 10 questions on sexual beliefs, practices, and behaviors. The 10 knowledge-based questions will be multiple choice while the other 10 questions will be measured on a scale: strongly agree, agree, neutral, disagree, and strongly disagree. Prior to using this question tool, it will be sent to 3 content experts to be validated before implementation. Following the test, participants will receive the sex education course and then retake the same test at the end. Test scores prior to the intervention and after the intervention will be analyzed to determine the effectiveness of the education course.

Analysis

Data will be collected through a paired t-test and results will be interpreted using statistical methods to calculate p-value. A p-value less than 0.05 will indicate statistical significance, suggesting comprehensive sex education is effective in decreasing the likelihood of unplanned pregnancies and STIs in Chinese American adolescents. Descriptive statistics such as mean, mode, and median will be used to compare pre-intervention and post-intervention test scores. Further analysis of results from the paired t-test may lead to investigation of specific questions.

Limitations

Due to the nature of this study, there is no control group making it difficult to determine the full impact the intervention had on outcomes. Recruitment was also convenient sampling thus creating a potential for bias. Lastly, no time span has been determined for the intervention and specific topics that will be taught in the sex course should be identified. For future reference, participants can comment on the surveys to describe what sex topics they would want to discuss.

Ethical Consideration

Adolescents are a part of a vulnerable group as they are unable to provide consent until they reach adulthood. Thus, consent will be obtained from their parents or legal guardians prior to participation. Personal medical information and safety measures will be taken to ensure privacy, confidentiality, and prevention of harm. The International Review Board (IRB) in California will also review this study before initiation to guarantee the safety and protection of participants. Participants can withdraw from the study at any time without facing consequences.

Conclusion

Comprehensive sex education has shown improvements in lowering STIs and unplanned pregnancies among adolescents. Implementing a sex education course equips youths with the tools to develop a safe and positive view of sexuality which encourages them to approach sex and sexual health wisely and confidently. This research proposal seeks to evaluate the efficacy of CSE in Chinese American adolescents while emphasizing the need for culturally sensitive sex education programs. The findings from this study aims to promote CSE and bring awareness to the disparity in teen pregnancy and STIs among ethnic groups.

Nurses have a key role in providing adolescents necessary resources, education, counseling, and screenings to promote positive sexual health. Furthermore, cultural awareness

and cultural competency in nursing is essential in reducing health disparities and understanding diverse beliefs. Relating better to people with cultural differences as a nurse can lead to delivering quality, patient-centered care for Chinese American adolescents and other ethnic and racial groups as well.

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Appendix A. Literature Review Table

Authors/Citation	Purpose/Objective of Study	Sample - Population of interest, sample size	Study Design	Study Methods	Major Finding(s)	Strengths	Limitations
<p>Megan C. Craig-Kuhn, Norine Schmidt, Alyssa Lederer, Gerard Gnomes, Shannon Watson, Glenic Scott, Jr., David H. Martin, and Patricia Kissinger</p> <p>Sex education and STI fatalism, testing and infection among young African American men who have sex with women (2020) DOI: 10.1080/14681811.2020.1809369 PMID: 34483728</p>	<p>To examine the relationship between institution-delivered sex education and sexually transmitted rates (STI), STI fatalism, and prior STI testing among African American men aged 15-24</p>	<p>15-24 year old African American men who have sex with women. Sample size: 1196</p>	<p>Cross-sectional Correlational analysis</p>	<p>Participants were recruited through venue-based recruitment and social marketing. Eligible participants then completed a survey and provided a first catch urine sample. STI status was assessed using a nucleic acid amplification test. STI fatalism score was calculated using a 5-item adapted version of a HIV fatalism scale.</p>	<p>Those receiving institution-delivered sex education were more likely to report a history of Chlamydia testing and prior STI screening other than Chlamydia and HIV. Participants receiving institution-delivered sex education were significantly more likely to illustrate lower STI fatalism compare to those without institution-delivered sex education</p>	<p>Moderate sample size and data showed the association between men who received institution-delivered education compared to no institution-delivered sex education.</p>	<p>Generalized the target population of young American American men in New Orleans. The design of this study cannot be fully applied to casual relationships and survey answers may be biased. The actual quality of sex education was subjective and the STI fatalism scale has been focused towards HIV but was adapted for all STIs in this study.</p>
<p>Jinpin Lyu, Xiaoyun Shen, and Therese Hesketh</p> <p>Sexual Knowledge, Attitudes and Behaviors among Undergraduate Students in China-Implications for Sex Education (2020) DOI: 10.3390/ijerph17186716 PMID: 32942651</p>	<p>Explore gender differences in sexual knowledge, sexual attitudes and sexual behaviors, and sex education among undergraduates in China</p>	<p>15-24 year old undergraduate students from nine universities in Yunnan, Henan, and Zhejiang. Sample size: 5965</p>	<p>Cross-sectional</p>	<p>Participants were asked to fill out an online survey/questionnaires on their sexual knowledge, attitudes, and behaviors. The questions were adapted from the World Health Organization Illustrative Questionnaire for Interview-Surveys with Young People (IQISYP)</p>	<p>The students illustrated low sexual knowledge and female students were significantly more conservative in sexual attitudes and sexual behaviors</p>	<p>Highlights the need for sex education in early adolescent</p>	<p>More female respondents, participants were recruited from three provinces making results not generalizable to undergraduates across the country, and self-reporting bias</p>

Authors/Citation	Purpose/Objective of Study	Sample - Population of interest, sample size	Study Design	Study Methods	Major Finding(s)	Strengths	Limitations
Nicholas D. E. Mark and Lawrence L. Wu More comprehensive sex education reduce teen births: Quasi-experimental evidence (2022) DOI: 10.1073/pnas.2113144119 PMID: 35165192	Study the effects of federal funding for more comprehensive education on teen births in the United States	14-19 year old females. Sample size: 2927	Quasi-experimental identification	Obtained data on grants federally funded sex education programs and teen birth rates from the National Vital Statistics System and System for award Management's Catalog of Federal Domestic Assistance (CFDA). A difference-in-differences model was utilized to interpret the effects of funding for more comprehensive sex education	Results showed a 3% reduction in county-level teen birth rates from federal funding for more comprehensive sex education	Findings provide evidence on the effects of comprehensive sex education and addresses prior research on comprehensive sex education	Unable to identify the effects of comprehensive education at the individual level, only focuses on teen birth reductions, and does not identify the specific mechanism in comprehensive sex education that resulted in fewer teen births
Roy F. Oman, Sara K. Vesely, Jennifer Green, Kristen Clements-Nolle, and Minggen Lu Adolescent Pregnancy Prevention Among YOuths Living in Group Care Homes: A Cluster Randomized Controlled Trial (2018) DOI: https://doi.org/10.2105/AJPH.2017.304126	To determine if sexual health education intervention can encourage the use of birth control and reduce pregnancy among youths living in care homes	13-18 year olds from 44 residential group homes located in California, Maryland, and Oklahoma, Sample size: 1036	Cluster-randomized controlled trial	Participants were put into 2 groups, one control and one receiving the education intervention. There was an assessment before and after the intervention and a 6-and-12 month follow-up	At the 6-month follow up, participants in the intervention group showed lower odds of engaging in sexual intercourse without birth control. At the 12-month follow-up participants in the intervention group showed lower odds of ever being pregnant or getting someone pregnant	Demonstrates the impact pregnancy programs have on youths through randomized controlled trial design. This study also had a high response and follow-up rate	Self-report data and unclear on the impact sex health education has on psychosocial outcomes
Zohra Ansari-Thomas, Sheila Desai, and Laura D. Lindberg Sexual Activity, Contraceptive Use and Sexual Violence among Asian High School Students in the United States (2019)	Examines and compares the prevalence of sexual behaviors and experiences among Asian high school students in the United States other	US students in grades 9-12. Sample size=42,854	Quantitative analysis	Obtained data from Youth Risk Behavior survey from years 2013, 2015, and 2017 and identified differences between Asian students and students of other	Small proportion of Asian students reported ever having sex and using any method of contraceptive at last sex compared to White and other race students.	Demonstrates patterns of sexual health behaviors in Asian students and filling a gap in literature regarding sexual activity in Asians	A large sample size may decrease variability in sampling distribution and amplify biases/saturated information

Authors/Citation	Purpose/Objective of Study	Sample - Population of interest, sample size	Study Design	Study Methods	Major Finding(s)	Strengths	Limitations
DOI: https://doi.org/10.1016/j.contraception.2019.11.001	students of race/ethnicities			racial/ethnic groups on the subject of sexual activity, contraceptive use, and sexual violence	Results also showed Asian students reporting fewer experiences of forced sexual intercourse compared to other race students		
Wenjian Xu, Yuxia Huang, Wanjie Tang, and Michelle R. Kaufman Heterosexual Marital Intention: The Influences of Confucianism and Stigma Among Chinese Sexual Minority Women and Men DOI: https://doi.org/10.1007/s10508-021-02229-9	To explore how Confucianism and stigma associated with heterosexual marriage and gender roles	747 participants over the age of 18	Cross-sectional	Participants were asked to complete a questionnaire that assessed their sexual orientation and measured Confucian values using the Confucian Value Scale. Data was analyzed using IBM SPSS 22.0	Both Confucianism and stigma contributed to Chinese minority adults' intention to marry. Confucian beliefs had a stronger impact on younger and male participants on marital intentions. The proportion of sexual minority adults willing to enter a heterosexual marriage was lower than previous studies and bisexual individuals had a greater intention to marry than homosexual individuals	Fairly large sample size and successfully explores the relationship Confucianism has on sexuality and stigma among Chinese individuals	Long-term trends cannot be established and analysis lacks mediation analyses. Sample size was produced using convenience sampling
Chao Guo, Lihua Pang, Ruoxi Ding, Xinming Song, Gong Chen, Xiaoying Zheng Unmarried Youth pregnancy, Outcomes, and Outcomes, and Social Factors in China: Findings From a Nationwide Population-Based Survey DOI: https://doi.org/10.1016/j.esxm.2019.07.002	To investigate the pregnancy rate and outcomes and to identify social factors associated with pregnancy among Chinese unmarried youths aged 15-24 years	11,076 unmarried female youths aged 15-24	Cross-sectional	Data obtained from the Survey of Youth Access to Reproductive Health in China and identified factors associated with pregnancy	Participants from older age groups, low educational levels, junior and senior high school, living in non-eastern-regions, alcohol drinking, cigarette smoking, and the bottom economic status were associated	Justifies the concern for early pregnancy among unmarried youths in China and has a large sample size. Study was able to identify socio economic factors associated with pregnancy	Does not provide direct evidence of causality and data focus on unmarried youths, not the sexual behaviors of youths after marriage

Authors/Citation	Purpose/Objective of Study	Sample - Population of interest, sample size	Study Design	Study Methods	Major Finding(s)	Strengths	Limitations
					with higher risk of premarital pregnancy		
<p>Young-Me Lee, Elizabeth Florez, Joseph Tariman, Sarah McCarter, Laren Riesche</p> <p>Factors related to sexual behaviors and sexual education programs for Asian-American adolescents DOI:https://doi.org/10.1016/j.apnr.2015.04.015</p>	<p>To analyze the influential factors related to sexual behaviors among Asian-American adolescents. In addition, evaluate common factors across successful sexual education programs in this population</p>	<p>Utilizing 18 articles from CINAHL, PubMed, PsychInfo, Cochrane Library, CDC Advocates for Youth, and US Department of Health & Human Service.</p>	<p>Analytical Integrative literature review</p>	<p>Articles must fulfill the inclusion criteria: address factors related to sexual behaviors of Asian-American adolescents, has a total number of study participants greater than 200, and intervention programs are affected, incorporate at least one factor identified in this study, and focus on reducing STIs/HIV transmission and pregnancy in adolescent populations</p>	<p>Identified 5 influencing factors: family-centered values, parental relationship, acculturation, gender roles, and lack of information and knowledge about sex and STIS/HIV. These factors contribute to increased risky sexual behaviors</p>	<p>Findings urge a need for culturally sensitive sexual education programs that include influencing factors</p>	<p>Sexual education programs were developed for adolescents but none are specifically for Asian-American adolescents. Another limitation is few studies examine cultural values and gender roles associated with sexual behaviors among Asian-American adolescents</p>