



The Impact of Sex Education on Adolescent Health.

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ABSTRACT: -

Sex education plays a pivotal role in the sexual and reproductive health of adolescents. As adolescence is a critical period of physical, emotional, and social development, providing accurate, age-appropriate, and comprehensive sex education can significantly influence young people's understanding of their bodies, relationships, and overall well-being. This paper explores the diverse impacts of sex education on adolescent health, focusing on its effects on sexual behaviour, knowledge, attitudes, mental health, and the prevention of sexually transmitted infections (STIs) and unintended pregnancies. One of the most significant benefits of comprehensive sex education is the provision of accurate information about human sexuality, reproduction, and relationships. Adolescents who receive formal education about sexual health are better equipped to make informed decisions regarding their bodies and their sexual behaviours. Evidence suggests that comprehensive programs, which include discussions about consent, contraception, sexual orientation, and gender identity, contribute to healthier sexual practices among young people. By addressing these issues early, sex education reduces the prevalence of risky behaviours, such as unprotected sex, multiple sexual partners, and early sexual initiation, which are strongly associated with adverse health outcomes. Another critical aspect of sex education is its impact on the reduction of unintended pregnancies. Research has consistently shown that adolescents who receive comprehensive sex education are less likely to engage in unprotected sex and, as a result, are less likely to experience teen pregnancies. These programs promote the use of contraceptive methods, educate about their effectiveness, and emphasize responsible sexual behaviour. As a result, countries with robust sex education programs often report lower rates of adolescent pregnancies compared to those with limited or no sex education policies. Sex education also plays a crucial role in the prevention of sexually transmitted infections (STIs). Adolescents are particularly vulnerable to STIs due to their lack of experience, limited knowledge about sexual health, and sometimes peer pressure to engage in risky sexual behaviour. Comprehensive sex education, which includes lessons on STI prevention, safe sex practices (such as condom use), and regular testing, has been shown to reduce the incidence of STIs in adolescent populations. By fostering a greater understanding of personal responsibility, communication, and safer sex practices, sex education helps young people protect themselves and their partners from infections. Beyond physical health, sex education has profound effects on adolescent mental and emotional well-being. Adolescents often experience confusion and anxiety about sexual identity, relationships, and expectations placed upon them by society. A comprehensive and inclusive sex education program provides a safe space for young people to explore these issues without judgment or stigma. It also empowers them to understand and assert their rights, including the importance of consent and boundaries in relationships. Furthermore, sex education can contribute to the reduction of harmful gender stereotypes and discrimination, fostering an environment of respect and equality for all genders and sexual orientations. The availability and quality of sex education also correlate with the development of healthier attitudes toward sexuality. Adolescents who are well-informed about sexual health are more likely to approach sexual relationships with greater respect and maturity. They are better prepared to engage in consensual, respectful, and emotionally fulfilling relationships, reducing the likelihood of experiencing sexual violence, exploitation, or coercion. By teaching young people to understand their desires and communicate openly, sex education equips them to navigate the complexities of sexual relationships in a responsible and emotionally intelligent manner.

Furthermore, sex education can help address issues of sexual abuse and violence. By teaching about consent, healthy relationships, and personal boundaries, adolescents can recognize inappropriate or abusive behaviours and feel empowered to speak out against them. This knowledge not only prevents victimization but also promotes a culture of mutual respect and accountability among peers. However, the impact of sex education is not uniform across different contexts. The effectiveness of sex education programs depends on several factors, including cultural norms, political climates, and the degree to which curricula are comprehensive and evidence-based. In some regions, sex education programs may be limited or non-existent due to cultural or religious opposition, potentially leaving adolescents vulnerable to misinformation and harmful practices. Moreover, in settings where sex education is not mandatory or is inadequately delivered, adolescents may receive incomplete or inaccurate information, which undermines the potential benefits of these programs. In conclusion, the impact of sex education on adolescent health is profound and multifaceted. Comprehensive, age-appropriate, and inclusive sex education provides adolescents with the knowledge and skills needed to make informed decisions about their sexual health, reduces the risk of unintended pregnancies and STIs, and fosters healthier relationships. It also plays a crucial role in promoting mental and emotional well-being, reducing gender-based violence, and addressing harmful stereotypes. As such, enhancing the accessibility and quality of sex education is essential for improving adolescent health outcomes globally. Policymakers and educators must ensure that all young people have access to the resources and support necessary to navigate this crucial stage of development with confidence, responsibility, and respect for themselves and others.

Keywords - sexually transmitted infections, sexual abuse, contraceptive, coercion, comprehensive

Introduction:

Adolescence is a life-changing period characterized by social, emotional, and physical changes that influence a person's behavior and general health. Sexual health is one of the most important areas of growth during this time. Teenagers start to exhibit behaviors, sexual desire, and curiosity that can have a big impact on their general wellbeing (1). In order to help young people navigate the intricacies of relationships, sexual health, and personal limits, thorough and accurate sex education becomes crucial as these transitions take place (2). Given that studies show that well-designed programs can result in improved health outcomes, healthier sexual practices, and increased awareness of the hazards associated with sexual activity, the effect of sex education on adolescent health is a topic of significant interest (3). Anatomy, reproductive health, contraception, STIs, sexual orientation, consent, relationships, and the emotional components of intimacy are just a few of the many subjects covered in sex education. Cultural, religious, and political factors can have a significant impact on how sex education is approached, and the curriculum's structure can vary significantly between nations and even within the same nation's various areas (4). Some promote comprehensive sex education, which includes knowledge on safe sex practices and contraception, while others support programs that focus solely on abstinence. A growing amount of evidence, however, indicates that comprehensive sex education is more successful in fostering favourable health outcomes for teenagers (5). The prevention of unwanted pregnancies is one of the most important effects of sex education on teenage health. Adolescence is a period of curiosity and experimentation, and young people may have sex without fully comprehending the repercussions (6). Adolescent pregnancy rates have been found to decrease in areas that employ comprehensive sex education. For example, nations with strong sex education policies, like Sweden and the Netherlands, often report lower rates of adolescent pregnancies than do those with weak or abstinence-based sex education policies (7). Sex education reduces the risk of unwanted pregnancies by empowering adolescents to make educated decisions by educating them about safe sex practices, contraception, and the emotional responsibilities that come with sexual engagement. Apart from preventing pregnancy, sex education is essential for lowering the spread of STIs. Due to their inexperience and lack of information about safe sex practices, adolescents are especially susceptible to STIs (8). Adolescent STI rates have been demonstrated to decrease with comprehensive sex education that covers topics such as condom use, STI prevention, and the value of routine testing. Teenagers who are educated about STI prevention and contraception are more likely to use condoms and other protective measures when having sex, according to research. This proactive approach promotes a sense of personal responsibility for sexual health in addition to aiding in the prevention of STIs.

Additionally, adolescents' comprehension of consent, healthy relationships, and other topics is greatly influenced by sex education (9). Furthermore, adolescents' comprehension of consent, healthy relationships, and mental wellbeing are all significantly impacted by sex education. The discussion of sexual consent and power dynamics in partnerships has received more attention in recent years, and sex education programs are starting to take these changing societal issues into account. Teenagers who are taught about mutual respect, consent, and boundaries are more likely to have wholesome and civil relationships. This knowledge can help lower the prevalence of coercion, sexual violence, and sexual harassment among youth. Comprehensive sex education promotes emotional and psychological well-being by giving teenagers the skills they need to negotiate the complexity of intimacy and relationships with an emphasis on communication, empathy, and respect. Even with sex education's obvious advantages, there are still many obstacles to overcome (10). Even with the obvious advantages of sex education, its application is nonetheless fraught with difficulties and disputes. Disparities in the quality and accessibility of education can result from cultural, religious, and political influences on the content and delivery of sex education programs. Some areas solely offer abstinence-based sex education programs, which may not adequately address the realities of teenage sexual behaviours (11). Young people are put at danger because these programs frequently leave out important information regarding STI prevention and contraception. Furthermore, some communities and parents are against comprehensive sex education because they believe it will promote rather than discourage sexual activity (12). These worries have spurred discussions about whether sex education in schools is appropriate and whether parents or religious organizations should be in charge of providing it. Adolescent sexual health is become more complicated due to the growth of social media and digital technology (13). Numerous young people are exposed to sexual content on the internet, which occasionally contains harmful or erroneous information. There has never been a more pressing need for trustworthy and accurate sex education in this setting (14). Unrealistic depictions of relationships, body image, and sexual conduct can be reinforced by digital platforms such as social media, internet videos, and dating apps. Adolescents who are not properly educated may internalize these false beliefs, which could result in dangerous behaviours and harmful expectations. Comprehensive sex education, which offers a fair, fact-based viewpoint on relationships and sexuality, can aid in reversing negative affects (15). It is impossible to overestimate the role that sex education plays in influencing teenage health. It promotes good relationships, self-esteem, and mental well-being while acting as a preventive strategy against unwanted pregnancies, STIs, and sexual assault. There is evidence of better adolescent health outcomes, such as decreased prevalence of STIs, sexual violence, and teenage pregnancy, in nations with well-established sex education programs (16). These encouraging results imply that a thorough approach to sex education is advantageous for both public health generally and individual health in particular. Ensuring that all teenagers have access to thorough, age-appropriate, and culturally sensitive sex education is still difficult, though. (17)

Objectives:**Impact on Physical Health:**

One of the most thoroughly recorded advantages of sex education is its beneficial effect on physical health, especially regarding the prevention of pregnancies and the decrease of sexually transmitted infections (STIs). Young people face an increased risk for unintended pregnancies and STIs because of a deficit in experience and understanding. The significance of delivering precise, age-appropriate details about contraception, STI prevention, and sexual conduct cannot be emphasized enough (18).

1)Pregnancy Prevention: Young people frequently do not possess the knowledge and resources necessary to make educated choices regarding sexual activity. Comprehensive sex education delivers information about various contraception methods, such as condoms, birth control pills, and additional alternatives. Many studies show that having access to this type of education is linked to reduced rates of unplanned teenage pregnancies. For instance, in nations like the Netherlands, where comprehensive sex education is standard, teenage pregnancy rates are markedly lower in comparison to countries that offer limited or abstinence-only education. These results imply that when young people are educated about safe sex practices, they are more inclined to postpone sexual initiation and utilize contraception when they engage in sexual activity (19).

1) Reduction in STIs: Thorough sex education programs have been demonstrated to lower the rates of sexually transmitted infections among teenagers. Informing young individuals about the significance of condom usage, the dangers of unprotected, and the necessity for routine STI screenings encourages them to engage in safer, sexual behaviors. A research article published in the *Journal of Adolescent Health* indicated that teenagers who received thorough sex education were more inclined to consistently use condoms, which greatly minimizes the spread of STIs such as chlamydia, gonorrhea, and HIV. These findings underscore the significance of delivering accurate sexual health information to lessen the physical, risks linked to adolescent sexual activities (20).

Challenges and Limitations:

Despite the obvious advantages, implementing sex education comes with its own set of challenges. In numerous areas, political, cultural, and religious elements affect both the content and the delivery of sex education. Programs centered on abstinence, which emphasize exclusively the promotion of abstinence until marriage, are still common in various countries, especially in the United States. These programs have faced criticism for offering incomplete information and not sufficiently addressing the realities of adolescent sexual conduct. Research has indicated that abstinence-only education is less successful in decreasing teen pregnancies and STIs compared to comprehensive programs that also cover contraception and STI prevention (21). In addition, there is increasing acknowledgment that digital media and social media platforms have introduced new obstacles for adolescent sexual health. Young people are frequently exposed to unrealistic representations of sexuality online, which can skew their views on relationships and sexual behaviours. Consequently, many specialists contend that sex education must be modified to account for the influences of digital technology and social media in shaping adolescent sexuality (22).

Benefits of Sex Education:

1) Promotes Healthy Relationships: Sex education helps individuals understand consent, boundaries, respect, and communication, which are all crucial aspects of healthy relationships. This leads to fewer instances of abuse, exploitation, and misunderstanding (23).

2) Prevention of Unintended Pregnancies: Comprehensive sex education, especially when it includes information about contraception and reproductive health, reduces the likelihood of unintended pregnancies, particularly among teenagers. This gives individuals the tools to make informed decisions about their sexual health (24).

3) Reduces the Spread of Sexually Transmitted Infections (STIs): Sex education can help individuals understand the risks of STIs, how they spread, and the importance of using protection (like condoms). This knowledge contributes to reducing the transmission rates of STIs (25).

4) Supports Emotional Well-being: Education about sexual health can reduce shame, guilt, and confusion about natural sexual feelings. It helps individuals navigate the emotional and psychological aspects of their sexuality, leading to better mental health and self-esteem (26).

5) Empowers Informed Decision-Making: Sex education equips individuals with the knowledge to make informed choices about their sexual health, including understanding their bodies, contraception options, and the potential consequences of their decisions (27).

6) Fosters Gender Equality and Respect: By teaching about gender roles, sexual orientation, and identity, sex education promotes an understanding of diversity and fosters respect for people regardless of their gender or sexual orientation. This can help reduce discrimination and promote equality (28).

7) Reduces Risky Behaviors: Young people who receive comprehensive sex education are more likely to delay sexual activity and engage in safer practices when they do choose to be sexually active. Education can also reduce the likelihood of alcohol or drug use in relation to sexual encounters (29).

8) Encourages Open Communication: When people are educated about sexual health, they are more likely to have open and honest conversations with their partners, parents, and healthcare providers. This improves overall sexual health outcomes and relationships (30).

9) Supports Long-Term Health: By understanding sexual health and hygiene from a young age, individuals are more likely to continue practicing safe behaviors as they age, leading to long-term positive health outcomes, such as regular screenings for STIs and awareness of health risks (31).

10) Prepares for Future Parenthood: Sex education that includes aspects of parenting, child-rearing, and responsible decision-making helps young people prepare for possible future parenthood, providing them with the necessary tools to make decisions when they are ready (32).

Barriers to Implementing Effective Sex Education Programs:

1. Cultural and Religious Beliefs

- **Cultural Stigma:** In many cultures, discussing sex and sexuality openly is considered taboo. This can lead to resistance from parents, communities, and policymakers, hindering the adoption of sex education programs.
- **Religious Beliefs:** Some religious groups may oppose certain aspects of sex education, especially topics such as contraception, LGBTQ+ rights, or sexual activity outside of marriage. These beliefs can influence policies and make it difficult to implement comprehensive programs in schools (33).

2. Lack of Political Will or Support

- **Political Resistance:** Sex education can be a politically sensitive issue. Elected officials may avoid supporting comprehensive programs to appeal to conservative or religious voters. This can result in limited or inconsistent implementation across different regions or states.
- **Funding Issues:** Effective sex education programs often require funding for curriculum development, teacher training, and materials. In many regions, these programs are underfunded or not funded at all, leading to subpar education or no education on the topic (34).

3. Inconsistent Curriculum Standards

- **Variations in Curriculum:** There is often no standardized, evidence-based curriculum for sex education across schools, leading to inconsistency in what students learn. Some schools might focus only on abstinence, while others might offer comprehensive education, resulting in disparities in the quality of sex education.
- **Lack of Expertise:** Teachers and educators may not have the necessary training to teach sex education effectively. Without professional development and up-to-date resources, educators might not cover all aspects of sexual health, leaving gaps in students' knowledge (35).

4. Parental and Community Opposition

- **Parental Consent and Approval:** Some parents may feel uncomfortable with their children receiving sex education or may want to control the type of information being provided. This can lead to opt-out policies or parents pushing for more limited programs, such as those focused solely on abstinence (36).
- **Misinformation and Myths:** Parents and community members who lack accurate information about sex education may spread misconceptions that influence the broader community's stance on the issue. These myths can reinforce harmful stereotypes and limit the effectiveness of sex education programs (37).

5. Social and Gender Norms

- **Gendered Expectations:** Social norms surrounding gender and sexuality can impact how sex education is taught and received. For example, girls may be taught to be more modest or to avoid sexual activity, while boys may receive less education about emotional intimacy and consent.
- **Stereotypes about LGBTQ+ Individuals:** LGBTQ+ students may face discrimination or exclusion in sex education programs. Many curricula fail to address LGBTQ+ issues, leading to a lack of inclusivity and alienating students who do not conform to heterosexual norms (38).

6. Insufficient Access to Resources:

- **Limited Access in Rural or Underfunded Areas:** Schools in low-income or rural areas often lack the resources to implement comprehensive sex education programs. These schools may struggle to afford updated materials, trained instructors, or even the time to include sex education in their curriculum.
- **Inadequate Training for Teachers:** Many teachers lack formal training in sexual health education, leaving them ill-prepared to address sensitive topics in a way that is accurate, inclusive, and respectful. This can result in teaching that is either too limited or, at worst, inaccurate (39).

7. Social Media and Misinformation:

- **Impact of social media:** Young people are increasingly turning to social media for information about sex and relationships. Unfortunately, much of this information can be misleading, inappropriate, or harmful, exacerbating the need for accurate sex education in schools. Without effective programs, students may receive distorted or incomplete information.
- **Peer Pressure:** Peer groups can influence the way young people view sexuality, often leading to misinformation or unrealistic expectations about sex and relationships. Peer-driven myths can undermine the positive impact of formal sex education (40).

8. Legal and Policy Restrictions:

- **Laws Limiting Content:** In some regions or countries, laws may limit what can be taught in sex education, such as banning discussions about contraception, abortion, or LGBTQ+ rights. This can severely limit the scope of sex education, leaving students without critical information.
- **Lack of Federal or National Standards:** In many places, sex education standards are left up to local or state authorities, leading to inconsistencies and gaps in coverage. Without clear federal or national guidelines, sex education programs can vary widely in quality and effectiveness (41).

9. Misalignment with Public Health Goals:

- Focus on Abstinence: In some cases, sex education programs focus exclusively on abstinence until marriage, which may not address the full spectrum of sexual health and safety issues. This narrow approach can leave young people unprepared to make informed decisions about their sexual health.
- Underemphasis on Emotional and Mental Health: Sex education programs that only focus on the physical aspects of sex may neglect the emotional and psychological impacts of sexual activity. A well-rounded program should include topics like consent, emotional readiness, and relationship dynamics (42).

10. Overcoming Personal Discomfort:

- Teacher Discomfort: Some educators may feel uncomfortable discussing sexual topics due to personal or cultural reasons. This discomfort can hinder the delivery of important information and make it harder for students to engage with the material.
- Student Discomfort: Many students may feel embarrassed or uncomfortable discussing sex education in class. This can affect their willingness to ask questions or participate in discussions, limiting the effectiveness of the program (43).

Conclusion:

Sex education plays a crucial role in shaping the health and well-being of adolescents. Comprehensive sex education equips young people with the knowledge, skills, and confidence to make informed decisions about their sexual health, relationships, and personal safety (44). When implemented effectively, it helps prevent unintended pregnancies, reduces the spread of sexually transmitted infections (STIs), and fosters emotional well-being by promoting healthy attitudes toward sexuality. Moreover, sex education can empower adolescents by addressing issues like consent, respect, gender equality, and LGBTQ+ inclusivity. By providing accurate, age-appropriate information, it helps break down stigmas, reduce shame, and combat misinformation that can lead to risky behaviours. Adolescents who receive comprehensive sex education are more likely to delay sexual activity, engage in safer practices when they do become sexually active, and seek out necessary healthcare and support when needed. In addition to its physical benefits, sex education contributes to the mental and emotional development of adolescents by promoting self-esteem, positive body image, and healthy relationships. It also supports long-term health outcomes, including improved sexual health knowledge, better decision-making, and the ability to navigate relationships with confidence and respect. In conclusion, sex education is a vital tool in promoting adolescent health. It not only addresses the physical aspects of sexual health but also empowers young people to develop the skills and knowledge they need for safe, respectful, and fulfilling relationships (45). By overcoming barriers to effective implementation and ensuring access to comprehensive, inclusive, and culturally sensitive programs, society can help foster a generation of adolescents who are informed, empowered, and healthy (46).

Reference:

- 1) Planned Parenthood Federation of America Sex education: A national survey on support among likely voters (2018) Available at: https://www.plannedparenthood.org/uploads/filer_public/7a/ac/7aacf0ad-fd1c-4dcc-b65f-47e3c3754e0d/sex_education_-_a_national_survey_on_support_among_likely_voters_logo.pdf. Accessed 1st Jun 2020
- 2) E.S. Goldfarb A crisis of identity in sexuality education in America: How did we get here and where are we going? Elizabeth Schroeder, Judy Kuriansky (Eds.), Sexuality education: Past, present, and future, vol. 1, Praeger, New York, NY (2009), pp. 8-30
- 3) C. Trenholm, B. Devaney, K. Fortson, *et al.* Impacts of abstinence education on teen sexual activity, risk of pregnancy, and risk of sexually transmitted diseases *J Policy Anal Manage*, 27 (2008), pp. 255-276
- 4) J.M. Sales, R.R. Milhausen, R.J. DiClemente A decade in review: Building on the experiences of past adolescent STI/HIV interventions to optimise future prevention efforts *Sex Transm Infect*, 82 (2006), pp. 431-436 [View at publisher](#) [Crossref](#) [Scopus](#) [Google](#)
- 5) R.J. DiClemente, C.P. Crittenden, E. Rose, *et al.* Psychosocial predictors of HIV-associated sexual behaviors and the efficacy of prevention interventions in adolescents at-risk for HIV infection: What works and what doesn't work? *Psychosom Med*, 70 (2008), pp. 598-605 [View in Scopus](#) [Google Scholar](#)
- 6) J.J. Card, L. Lessard, T. Benner PASHA: Facilitating the replication and use of effective adolescent pregnancy and STI/HIV prevention programs *J Adolesc Health*, 40 (2007), pp. 275.e1-275.e14 [View PDF](#) [View article](#) [Google Scholar](#)
- 7) L. Robin, P. Dittus, D. Whitaker, *et al.* Behavioral interventions to reduce incidence of HIV, STD, and pregnancy among adolescents: A decade in review *J Adolesc Health*, 34 (2004), pp. 3-26 [View PDF](#) [View article](#) [View in Scopus](#) [Google Scholar](#)
- 8) K. Guse, D. Levine, S. Martins, *et al.* Interventions using new digital media to improve adolescent sexual health: A systematic review
- 9) *J Adolesc Health*, 51 (2012), pp. 535-543 [View PDF](#) [View article](#) [View in Scopus](#) [Google Scholar](#) E.S. Goldfarb, N.A. Constantine Sexuality education B. Bradford Brown, M. Prinstein (Eds.), *Encyclopedia of adolescence*, vol. 2, Elsevier, Inc., Amsterdam, Netherlands (2011), pp. 322-331 [View PDF](#) [View article](#) [View in Scopus](#) [Google Scholar](#)

- 10) SIECUS Position statements. [PDF]. 2018Sexuality Information and Education Council of the United States, Washington DC (2018) Available at: <https://siecus.org/wp-content/uploads/2018/07/Position-Statements-2018.pdf>, Accessed 1st Jun 2020 [Google Scholar](#)
- 11)Future of Sex Education Initiative National sexuality education standards: Core content and skills, K-12 [a special publication of the Journal of School Health] American School Health Association, Bethesda, MD (2012) [Google Scholar](#)
- 13) Future of Sex Education Initiative National sex education standards: Core content and skills, K-12 (2nd ed), American School Health Association, Washington, DC (2020) [Google Scholar](#)
- 14)Centers for Disease Control and Prevention Results from the school health policies and practices study 2016 US Department of Health and Human Services, Centers for Disease Control and Prevention (2016) Available at: https://www.cdc.gov/healthyyouth/data/shpps/pdf/shpps-results_2016.pdf, Accessed 1st Jun 2020 [Google Scholar](#)
- 15) SIECUS Guidelines for comprehensive sexuality education: Kindergarten-12th grade Sexuality Information and Education Council of the United States, Washington, DC (1991)[Google Scholar](#)
- 16) A. Liberati, D.G. Altman, J. Tetzlaff, *et al.* The PRISMA statement for reporting systematic reviews and meta-analyses of studies that evaluate health care interventions: Explanation and elaboration PLoS Med, 6 (2009), p. e1000100 [CrossrefView in ScopusGoogle Scholar](#)
- 17) J. Schall, G. Kauffmann Exploring literature with gay and lesbian characters in the elementary school J Children's Lit, 29 (2003), pp. 36-45 [Google Scholar](#)
- 18) U. Eick, T. Rubinstein, S. Hertz, A. Slater Changing attitudes of high school students in Israel toward homosexuality J LGBT Youth, 13 (2016), pp. 192-206 [CrossrefView in ScopusGoogle Scholar](#)
- 19)G. Richard, O. Vallerand, M.P. Petit, A. Charbonneau Discussing sexual orientation and gender in classrooms: A testimonial-based approach to fighting homophobia in schools Educ Forum, 79 (2015), pp. 421-435 [CrossrefView in ScopusGoogle Scholar](#)
- 20) S.Z. Athanases A gay-themed lesson in an ethnic literature curriculum: Tenth graders' responses to 'Dear Anita' Harv Educ Rev, 66 (1996), p. 231 [CrossrefView in ScopusGoogle Scholar](#)
- 21) P. Van de Ven Effects on high school students of a teaching module for reducing homophobia Basic Appl Social Psychol, 17 (1995), pp. 153-172 [View in ScopusGoogle Scholar](#)
- 22) K. Helmer "Everyone needs a class like this": High school students' perspectives on a gay and lesbian literature course Educ Forum, 79 (2015), pp. 408-420 [CrossrefView in ScopusGoogle Scholar](#)
- 23) K. Helmer Gay and lesbian literature disrupting the heteronormative space of the high school English classroom Sex Educ Sex Soc Learn, 16 (2016), pp. 35-48 [CrossrefView in ScopusGoogle Scholar](#)
- 24) H. Alan, I. Miriam LGBTQ youth in american schools: Moving to the middle Middle Sch J, 42 (2011), p. 32 [Google Scholar](#)
- 25) D.F. Bentley, M. Souto-Manning Toward inclusive understandings of marriage in an early childhood classroom: Negotiating (un)readiness, community, and vulnerability through a critical reading of "King and King" Early Years: An Int J Res Dev, 36 (2016), pp. 195-206 [CrossrefView in ScopusGoogle Scholar](#)
- 26) M.F. Lucassen, J. Burford Educating for diversity: An evaluation of a sexuality diversity workshop to address secondary school bullying Australas Psychiatry, 23 (2015), pp. 544-549 [CrossrefView in ScopusGoogle Scholar](#)
- 27) L.K. Brown, V.J. Barone, G.K. Fritz, *et al.* AIDS education: The Rhode Island experience Health Educ Q, 18 (1991), pp. 195-20 [CrossrefView in ScopusGoogle Scholar](#)
- 28) S.D. Snapp, J.K. McGuire, K.O. Sinclair, *et al.* LGBTQ-inclusive curricula: Why supportive curricula matter Sex Educ Sex Soc Learn, 15 (2015), pp. 580-596 [CrossrefView in ScopusGoogle Scholar](#)
- 29) L. Baams, J. Dubas, M. van Aken Comprehensive sexuality education as a longitudinal predictor of LGBTQ name-calling and perceived willingness to intervene in school J Youth Adolesc, 46 (2017), pp. 931-942 [CrossrefView in ScopusGoogle Scholar](#)
- 30) C.N. Proulx, R.W. Coulter, J.E. Egan, *et al.* Associations of lesbian, gay, bisexual, transgender, and questioning-inclusive sex education with mental health outcomes and school-based victimization in U.S. high school students J Adolesc Health, 64 (2019), pp. 608-614 [View PDFView articleView in ScopusGoogle Scholar](#)
- 31) S.M. Blake, R. Ledsky, T. Lehman, *et al.* Preventing sexual risk behaviors among gay, lesbian, and bisexual adolescents: The benefits of gay-sensitive HIV instruction in schools Am J Public Health, 91 (2001), pp. 940-946 [View in ScopusGoogle Scholar](#)
- 32) C.A. Hill, H. Kearl Crossing the line: Sexual harassment at school AAUW (2011) Available at: <http://files.eric.ed.gov/fulltext/ED525785.pdf>, Accessed 1st Jun 2020 [Google Scholar](#)

- 33) J. Ramirez-Valles, L.M. Kuhns, D. Manjarrez Tal Como Somos/Just as We Are: An educational film to reduce stigma toward gay and bisexual men, transgender individuals, and persons living with HIV/AIDS
- 34) J Health Commun, 19 (2014), pp. 478-492 [CrossrefView in ScopusGoogle Scholar](#)
- 35) C.L. Ryan, J.M. Patraw, M. Bednar Discussing princess boys and pregnant men: Teaching about gender diversity and transgender experiences within an elementary school curriculum J LGBT Youth, 10 (2013), pp. 83-105 [CrossrefView in ScopusGoogle Scholar](#)
- 36) P.S. Rice Creating spaces for boys and girls to expand their definitions of masculinity and femininity through children's literature J Children's Lit, 28 (2002), pp. 33-42 [Google Scholar](#)
- 37) E. Dutro "But That's a Girls' Book!" Exploring gender boundaries in children's reading practices Reading Teach, 55 (2001), pp. 376-384 [View in ScopusGoogle Scholar](#)
- 38) J.M. Hermann-Wilmarth, R. Lannen, C.L. Ryan Critical literacy and transgender topics in an upper elementary classroom: A portrait of possibility J Lang Literacy Educ, 13 (2017), pp. 15-27 [View in ScopusGoogle Scholar](#)
- 39) G. Knotts, D. Gregorio Confronting homophobia at school: High school students and the gay men's chorus of Los Angeles J LGBT Youth, 8 (2011), pp. 66-83 [CrossrefView in ScopusGoogle Scholar](#)
- 40) C.E. Matthews, W. Binkley, A. Crisp, K. Gregg Challenging gender bias in fifth grade Educ Leadersh, 55 (1998), pp. 54-57 [Google Scholar](#)
- 41) L. Smylie, E. Maticka-Tyndale, D. Boyd Evaluation of a school-based sex education programme delivered to grade nine students in Canada Sex Educ Sex Soc Learn, 8 (2008), pp. 25-46 [CrossrefView in ScopusGoogle Scholar](#)
- 42) N.A. Constantine, P. Jerman, N.F. Berglas, *et al.* Short-term effects of a rights-based sexuality education curriculum for high-school students: A cluster-randomized trial BMC Public Health, 15 (2015), p. 293 [View in ScopusGoogle Scholar](#)
- 43) L.A. Rohrbach, N.F. Berglas, P. Jerman, *et al.* A rights-based sexuality education curriculum for adolescents: 1-year outcomes from a cluster-randomized trial J Adolesc Health, 57 (2015), pp. 399-406 [View PDFView articleView in ScopusGoogle Scholar](#)
- 44) G. Barker, C. Ricardo, M. Nascimento, *et al.* Questioning gender norms with men to improve health outcomes: Evidence of impact Glob Public Health, 5 (2010), pp. 539-553 [CrossrefView in ScopusGoogle Scholar](#)
- 45) M. Baiocchi, B. Omondi, N. Langat, *et al.* A behavior-based intervention that prevents sexual assault: The results of a matched-pairs, cluster-randomized study in Nairobi, Kenya Prev Sci Official J Soc Prev Res, 18 (2017), pp. 818-827 [CrossrefView in ScopusGoogle Scholar](#)
- 46) E. Miller, D.J. Tancredi, H.L. McCauley, *et al.* Coaching boys into men: A cluster-randomized controlled trial of a dating violence prevention program J Adolesc Health, 51 (2012), pp. 431-438 [View PDFView articleView in ScopusGoogle Scholar](#)