A Comprehensive and Inclusive Approach to Sex Education and Reproductive Health: Utilizing the Public Health Model for Prevention, Intervention, and Support

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Abstract

Sex education and the reproductive health of youth is a controversial, yet significant topic. Receiving medically inaccurate and biased sex education can lead to various negative outcomes throughout adolescence, continuing into adulthood. Youth spend much of their time within the school context, which can profoundly shape behaviors and beliefs. School psychologists can play a pivotal role in promoting a positive and inclusive environment surrounding sex education, while helping students develop healthy behaviors. In this paper, various prevention and intervention strategies will be discussed within a three-tiered system of supports. This includes reviews of current evidence-based interventions, recommendations for meeting the needs of all youth, as well as future practice and research implications.

Teenage pregnancy and sexual health issues affect youth everywhere. Although there have been great strides to improve our nations' various teenage pregnancy prevention and sex education programs, rates of sexual risk behavior among adolescents remain troubling. In a national sample, approximately 24% of high school students reported having four or more sexual partners by the time they graduate and 40% of sexually active students reported not using a condom during their last act of sexual intercourse. It is also estimated that teenagers and young adults in the United States account for approximately half of all new STI cases every year (Goesling, Colman, Trenhold, Terzian, & Moore, 2013). Additionally, teen birth rates in the United States remain the highest among developed nations (National Research Council, 2013).

On the other hand, teen birth rates are currently at a record low in the United States among 15 to 19 year olds (Oman, Merritt, Fluhr, & Williams, 2013). In fact, the rate of teen pregnancy in the United States has decreased by a third since teenage pregnancy reached its peak in the early 1990s (Wright, Duffy, Kershner, Flynn, & Lamont, 2015). While current progress of sex education programs in schools may attribute to this decline, high statistics of poor sexual health outcomes in youth remain. Current sex education curriculum and implementation should be analyzed for effectiveness to see which contributing factors assist in this decline of teenage pregnancy. Future sex education programs should aim to replicate these positive features and work towards filling in gaps.

The topic of adolescent sexual and reproductive health can be highly controversial, as most parents have strong opinions about how sex education should be delivered to their children. Some parents believe it is a school's responsibility to educate their children about sexual health, and therefore take a passive role, while other parents are more interactive. Additionally, parents may lack knowledge, feel uneasy, or not know the best approach to discussing sexual health with their children (Byers, Sears, & Weaver, 2008). Although parents may want to oversee how sex education is delivered and dictate whether their child should be allowed to participate, it is crucial for youth to develop independence and assert control over their sexual health. Teenagers will soon become adults, crossing the threshold of needing guidance and protection from parents and adults to claiming their right of autonomy (Schalet, Santelli, Russell, Halpern, Miller, Pickering, Goldberg, & Hoenig, 2014). A key developmental task of adolescence is establishing satisfying romantic relationships, while navigating personal sexual development (Myer, Bradford, Makadon, Stall, Goldhammer & Landers, 2008).

In addition, protective and risk factors influence teenager's personal attitudes and can help or deter sexual development and healthy relationships (Schalet, et al., 2014). The environment of a school setting can contribute to these protective and risk factors, as schools are an important setting for youth development. A positive school climate is created through shared respect and engagement, and requires continual commitment by students, staff, and other members of the community (Bradshaw, 2015). Additionally, school-wide efforts to foster positive school climate have been linked with learning and favorable behavioral outcomes (Sheras & Bradshaw, 2016). In order for students to have positive sexual health outcomes, an encouraging and respectful environment must be promoted within schools.

This paper will address the issue of school involvement in teenage pregnancy prevention and promotion of comprehensive sex education. Through the three tiers of the public health model, school staff can offer support and provide effective measures to combat negative impacts of these issues. Primarily, this paper provides information regarding the universality of sexual health concerns and consequential poor outcomes. Second, the specific risk factors and special populations to consider will be examined. Next, the subject of federal funding and how government involvement affects these issues, including the problem with abstinence-only education, will be discussed. Lastly, a discussion of the public health model will be addressed, including why we should be concerned with various levels of support for all students, what specific interventions show promising effects, and how school psychologists can be involved within each tier of the public health model.

Data Gathering Strategies

A literature review for this study was conducted utilizing Chapman University Library databases ERIC-EBSCO, PsychARTICLES, and PsychINFO. Keywords used to search for articles and peer reviewed journals, included, but were not limited to, “teenage”, “teen”, “pregnancy”, “prevention”, “comprehensive”, “inclusive”, “abstinence-only”, “sex”, “sexuality”, “education”, “public health model”, “multi-tiered system”, “reproductive health”, and “supports”. Additionally, the United States Department of Human and Health Services, Office of Adolescent Health was used to identify specific evidence-based interventions used to deliver comprehensive sex education.

Risk Factors

Social and cultural factors play a pivotal role in an adolescent’s life, and issues such as poverty or economic inequality can profoundly shape sexual health for a teenager or young adult (Schalet, et al., 2014). Though there has been an overall decline in the rate of teenage pregnancy in the last 30 years, there has been a slower decline in certain populations. Blatant disparities still exist in pregnancy rates between teens of specific socioeconomic and racial groups in the United States (Wright, Duffy, Kershner, Flynn & Lamont, 2015). The teenage pregnancy rates for African American and Latina girls between the ages of 15 and 19 are almost double the rate for

Caucasian girls of the same age and young minority women are more likely to live in poverty (Silk & Romero, 2014).

There is a gap between what youth learn from adults through education and what teenagers see in the world around them. This is exaggerated with youth from economically disadvantaged and/or minority backgrounds, when sex education is typically predicted upon middle class value systems and life courses. For these youth, such conventional teachings are not in concurrence with their surrounding influences. Contrasted with middle to upper class women, who traditionally delay childbearing until later in life, poor women face a different reality with less compromised by young parenting (Sisson, 2011). While early motherhood can be seen as the source of social disadvantage, it may be understood better as a product of disadvantage (Furstenberg, 2007).

Over half of teenage mothers grow up in families with very low socioeconomic status, and approximately 80% live in poverty, or almost in poverty, before they become pregnant (Sisson, 2011). Youth in poverty are more likely to attend lower quality schools, providing them with very few resources (Murry, Heflinger, & Suiter, 2011). These children and teenagers often lack access to quality health services in their community, including mental and physical health services (Schalet, et al., 2014). Research also suggests that exposure to poverty during adolescence, even more so than exposure during childhood, substantially increases the risk of becoming a young parent (Wodtke, 2013).

For many young women living in poverty and facing diminished future prospects, less is compromised by early entrance motherhood. For this population, being a mother is seen as an important role that does not need to be delayed (Sisson, 2011). Rather than an obstacle to socioeconomic attainment, youth in low-income neighborhoods may view sexual activity and pregnancy as a pathway to social status (Schalet et al., 2014). Young minority, socially disadvantaged men tend to overestimate the positive consequences and underestimate the negative consequences of having a child (Quinlivan & Condon, 2005). Negative consequences include not graduating high school. Young fathers often have lower levels of schooling, leading to lower occupational income (Brien & Willis, 2008). Additionally, in one sample, one third of teenage girls who dropped out of high school reported they dropped out because they became pregnant or had a baby. (Wright, Duffy, Kershner, Flynn, & Lamont, 2015).

Children and adolescents that live below the poverty line are more likely to become sexually active early and have a higher risk of contracting an STI, getting pregnant, and having a non-marital birth (Schalet et al., 2014). The disparity in race regarding sexually transmitted infections (STIs) is just as startling. The majority of new HIV cases are among the African American and the Latino population. Additionally, the HIV incidence rate for African American females is 20 times the rate for Caucasian females (Center for Disease Control and Prevention, 2012a & b). The soaring rates of HIV and high-risk sexual behavior for homosexual youth are also overlooked and often excluded in the sex education curriculum, leading these youth to navigate their sexual health in silence.

The intersection of race, poverty, and sexual health has powerful resonance. Such disparities by poverty, race, sexuality and ethnicity validate the critical need for effective and medically accurate sex education. Public schools, because they have access to a diverse range of students, are in the best position to deliver medically accurate and comprehensive sex education because these children may not have access to these services elsewhere (Schalet, et al., 2014).

Gender Inequality within Sex Education

Many abstinence-only programs teach gender stereotypes as fact, impeding women's sexual autonomy and self-efficacy, while increasing vulnerability to unintended pregnancy and STIs (Schalet et al., 2014). The burden to prevent teenage pregnancy frequently excludes the role of the male partner, and often places the burden and blame upon the female partner (Sisson, 2011). Masculinity is linked to heterosexual sexual activity, a high sex drive, frequent sexual initiation and a lack of emotional involvement. On the contrary, femininity is correlated with sexual restraint and passivity, emotional involvement and controlling boys' desires (Schalet et al., 2014). Many sex education programs condition young women to believe their own desires are not significant compared to their male counterparts. These negative beliefs make it difficult for girls to assert control of their sexual health (Hamilton & Armstrong, 2009).

When girls possess a sense of power over their own sexual health decisions, they are more likely to engage in safe behaviors, such as refusing unwanted sex or insisting on condom or contraceptive use (Schalet et al., 2014). Research suggests that when girls are educated and feel entitled to healthy sexual behaviors, they are in a better position to advocate for themselves and their reproductive health (Hirst, 2013). By empowering young women, whose desire is often stigmatized, they will be able to take control of their sexual behaviors (Tolman, 2002). There is also an underlying sexual double standard in society, encouraging boys to desire sex and adhere to traditional male behavior (Bowleg, Belgrave, & Resien, 2000). Young men who embrace these traditional masculinity roles report a higher number of sexual partners, engage in more unprotected sex, use condom or contraceptives less, and sometimes assert violence in intimate relationships (Noar & Morokoff, 2002).

Sex education should incorporate information on contraceptive methods and help adolescents learn ways to communicate and negotiate with their sexual partners to promote a safe and respectful relationship. By empowering youth to recognize and take control of their own desires, they will be able to control their sexual behaviors in a healthy way (Tolman, 2002). However, with a lack of discussion concerning sexual desires in most sex education programs, teenagers are less prepared to make the best decisions for themselves (Sisson, 2011). Federally funded sex education working toward gender equality by avoiding gender stereotyping is lacking. Unless gender stereotyping, either overt or implicit, and harmful gender beliefs are challenged, these beliefs will continue to be reinforced (Schalet et al., 2014).

Heterosexual Bias within Sex Education

The needs of lesbian, gay, bisexual, transgender, queer and questioning (LGBTQ) students are often not addressed in sex education and reproductive health services in schools. Alarmingly, these students have greater rates of HIV, high-risk sexual behavior, and higher rates of pregnancy (Mustanksi, Newcomb, Du Bois, Garcia, & Grov, 2011). LGBTQ youth are often left without relevant and pertinent information to make safe sexual health choices. Not only are LGBTQ excluded in sex education, but abstinence-only programs sometimes include hostile messages about the LGBTQ population (Cianciotto & Cahill, 2003). Consequently, LGTBQ students attending schools with abstinence-only programs may face greater harassment and anti-LGTBQ remarks. This perpetuates the victimization and hostile school climates most LGTBQ students encounter (Schalet et al., 2014). These conditions can exasperate LGTBQ youth to disguise their sexuality and prove to others that they are not gay, thus leading to unsafe heterosexual activity (Blake, Ledksy, Lehman, Goodenow, Sawyer, & Hack, 2001).

LGTBQ youth report an earlier age of first sexual intercourse, more recent sexual partners, higher pregnancy rates, and higher rates of alcohol and drug use before sex. One study in particular found high rates of pregnancy among lesbian adolescents (Blake et al., 2001). Along with these high-risk behaviors, sexual minority students are less likely than heterosexual students to report practicing safe sex, such as using condoms (Pingel, Thomas, Harmell, & Bauermeister, 2013). By excluding sexual minorities in sex education and forbidding the discussion of LGBTQ issues in the classroom in a positive manner, feelings of rejection and isolation are reinforced.

Inclusive strategies, which are linked to academic achievement and positive mental and behavioral health, can promote healthy sexual behavior for LGBTQ students (Schalet et al., 2014). By addressing variations of sexual behavior, sexual minority adolescents may feel more included in the learning process (Beshers, 2007). By refusing to acknowledge all sexualities and identities, heterosexual bias is perpetuated (Pingel et al., 2013). Some states have laws forbidding the discussion of LGBTQ sexual health issues in a positive light, even requiring sex education to include negative messages about homosexuality (Schalet, et al., 2014). Unless sex education becomes accepting and inclusive of all students, inherent discrimination will persist. Bias of an adolescent's sexual orientation within the context of sex education causes unhealthy sexual behaviors and high rates of HIV, STIs, and teenage pregnancy.

Federal Funding of Sex Education

Beginning in 1998, sexuality education focused primarily on abstinence-only-until marriage (AOUM) programs (Schalet, et al., 2014). The Adolescent Family Life Act, which was the birth of the abstinence education movement, reached a peak of $176 million in federal funding by 2006 (Beshers, 2007). After the election of President Obama, AOUM programs were replaced by funding for comprehensive sex education (Greslé-Farvier, 2013). According to the

Sexuality Information and Education Council of the United States (SIECUS, 2010), two thirds of federal funding for AOUM programs was eliminated and $190 million was provided to fund more comprehensive sex education. In addition, President Obama's 2010 teen pregnancy prevention initiative requires that funded programs be evidence-based according to scientific findings (Schalet, et al., 2014).

In 2010, legislation enacted the Patient Protection and Affordable Care Act, which includes the Personal Responsibility Education Program (PREP). PREP provides young people with age-appropriate and medically accurate sex education to help reduce the risk of STIs and teenage pregnancy. According to SIECUS (2010), under the state grant portion of PREP, states are required to fund programs that include both abstinence and contraception to prevent pregnancy and STIs. There are different federal funding streams, including PREP, to fund sex education. Currently, the United States Department of Health and Human Services (HHS) has approved funding for approximately 35 evidence-based interventions (EBIs) that were tested through clinical trials and show effectiveness in sexual health outcomes (Schalet, et al., 2014). These EBIs vary tremendously, as they target an array of populations. This makes it easier for a school to choose a program tailored to its specific needs.

The HHS Office of Adolescent Health's (OAH) administers a two-tiered Teen Pregnancy Program (TPP) grant program. In the first tier, OAH funds replications of their EBIs proved effective after they have been evaluated rigorously. In the second tier, OAH will fund TPP research and demonstration programs to develop new innovative strategies and approaches to prevent teenage pregnancy. EBIs are modeled after clinical trials and implemented with the intention change targeted behaviors. However, the evidence found in these EBIs only includes certain scientific findings. For example, although abstinence programs remain at odds with scientific thinking about youth sexual health, federal policy continues to fund some abstinence programs. (Schalet, et al., 2014).

AOUM Sex Education Concerns

The federal government defines abstinence as "voluntarily choosing not to engage in sexual activity until marriage. Sexual activity refers to any type of genital contact or sexual stimulation between two persons including, but not limited to, sexual intercourse" (Beshers, 2007). AOUM programs reflect strong moral and religious beliefs, including the belief that sex outside of a heterosexual marriage is sinful and teaching about contraception encourages sex before marriage (Santelli, Ott, Lyon, Rogers, Summers & Schleifer, 2006). Those who oppose comprehensive sexual health education argue that teaching youth about contraception and healthy sexual behaviors encourages them to become sexually active. However, evaluations of AOUM programs have failed to show a delay in initiation of sexual intercourse, reducing the number of sexual partners a young individual has, or increasing contraceptive use (Schalet, et al., 2014).

Regardless, federal and state-funded AOUM programs still remain in many areas of the United States. In fact, according to the Guttmacher Institute (2016), 37 states require that information on abstinence be provided, while 26 of states require abstinence to be stressed. Additionally, 19 states require that instruction be provided on the importance of waiting until marriage to be sexually active. However, abstinence-only programs may be in contradiction with the law of many states where they are taught. These states allow minors access to contraceptive services and abortion without consent of a parent (Greslé-Favier, 2013). There is a striking contrast here that remains overlooked.

Advocates of AOUM programs assert that minors lack the capacity to make reasonable choices regarding their sexuality, and by giving children rights, parental authority is weakened. Additionally, abstinence-only programs deny the possibility of participation from youth and leave no room for the discussion of another pertinent side of sexual health education, which includes desires, feelings and sexual orientation (Greslé-Favier, 2013). AOUM programs carry multiple concerns, including issues of scientific accuracy, withholding of life-saving information, lack of effectiveness, promotion of racial and gender stereotypes, and insensitivity to non-heterosexual youth (Schalet, et al., 2014). Perpetuating stereotypes and allowing no room to acknowledge other areas of sexual health and sexuality education does not protect students from discrimination (Greslé-Favier, 2013). It is imperative that educators and school staff do not perpetuate inequalities within the classroom through explicit or implicit stereotyping, which is a component of abstinence-only education.

The Public Health Model

The public health model is a three-tiered approach that was originally used in the medical field. It has since been adapted for use in the field of psychology and can aid in developing systems of academic and behavioral support for all students within the school setting (Merrell & Buchanan, 2006). According to the public health model, prevention efforts are focused into three distinct population groups: primary (universal), secondary (targeted), and tertiary (indicated) (Merrell & Buchanan, 2006). By enforcing distinct prevention and support systems tailored to each specific tier, the public health model ensures that the educational and mental health needs of every student are addressed (Merrell & Buchanan, 2006).

The public health model is cyclical. It is a problem-solving model that ties the cause of problems to the onset, or protection against onset, and cure, impairment, or relapse of the problem (Merrell & Buchanan, 2006). In other words, the best way to cure a problem is to have the best preventative procedures in place from the beginning. Primary, or tier one, prevention efforts are universal and implemented to all students at a given school. Tier two, or secondary supports, are reserved for about 10% to 15% of students who were unresponsive to tier one prevention efforts. Finally, tertiary, or tier three interventions, are targeted to the 5% to 7% of students who need more intensive and individualized support, where tier one and two interventions were insufficient. The three-tiered public health model offers a systematic and data-informed approach, offering students prevention strategies based on their specific school or individual needs (Lane, Carter, Jenkins, Dwiggins, & Germer, 2015).

Tier One: Universal Prevention

Universally, most young females are at-risk for becoming pregnant and every sexually active youth runs the risk of contracting an STI. Because this has such a far-spreading reach, it is imperative that children and teenagers know how to protect themselves, making prevention paramount. Often, sex education is framed as a private, family issue, and it is asserted that parents should take responsibility for teaching their children about healthy sexual behavior (Silk & Romero, 2014). However, while a multilevel effort of support involving parents and trusted adults is helpful, families may lack the knowledge, communication skills, connection, and comfort necessary to discuss sexuality (Silk & Romero, 2014).

Consequently, schools have a vital role in promoting sexual and reproductive health. Schools are in the best position to offer the most accurate and non-discriminatory sex education possible to help protect all students. Because schools include students across the socioeconomic spectrum, schools have the opportunity to teach and serve youth who may not have access to these educational services elsewhere (Schalet et al., 2014). According to the Guttmacher Institute

(2016), only eight states assert that sex or HIV education must be culturally appropriate and unbiased. Establishing healthy behaviors from a young age promotes healthy development into adulthood. This fosters positive self-concept and autonomy around sexuality and relationships (Center for School, Health, and Education, 2011).

At the primary, or tier one, level of the public health model, the mental health and educational needs of all students need to be addressed (Merrell & Buchanan, 2006). "Universal" may be subjective, however, as the needs of students vary from demographic to demographic. Some schools may be limited in variety of student population, such as schools that only contain one gender or a primary racial group, while other schools are filled with a mix of cultures and ethnicities. This affects the type of intervention or program that will be implemented from school to school, as no single program model is right for every population and setting. There is no single recipe for success to improve sexual health outcomes in adolescents (Goesling et al., 2013). However, there are universal considerations to remember while executing a sex education and teenage pregnancy prevention program.

No matter the population of a school, the basis of comprehensive sex education should be inclusive and comprehensive. There is a great need for sex education to approach adolescent with an all-inclusive and holistic approach. Inherent structural racism, gender inequality, poverty, and stigmatization of LGBTQ individuals within a sex education curriculum impact sexual health outcomes negatively. It is imperative to stop these inequalities within the classroom (Schalet et al., 2014). Furthermore, comprehensive and effective sex education has the potential to allow young people opportunities to critically examine inequalities linked to sexuality, poverty, race, and gender (Fine & McClelland, 2006). In turn, this can build a more considerate and inclusive school environment.

Universally Effective EBIs

The OAH lists 36 evidence-based teen pregnancy prevention programs, and 24 of these programs are given a high quality rating. According to the U.S. Department of HHS (2016), to be considered a high quality study, randomized controlled trials must have low rates of attrition, no reassignment of sample members, identical data collection strategies between groups, and include more than one subject or group in both treatment and control conditions. Of these 24 high quality rated programs, 16 have an intended target population of both males and females of all races and ethnicities. Moreover, only six of these programs are labeled a comprehensive sex education program. The OAH measures outcomes of programs in seven categories: recent sexual activity, number of sexual partners, frequency of sexual activity, contraceptive use and/or consistency, sexual initiation and abstinence, pregnancy or birth, and STDs (including HIV). Analyzing these sex education programs further, five out of the six programs only have evidence of effect in one or two outcomes. According to the OAH, only one EBI (Be Proud! Be Responsible!) has evidence of effect in four out of the seven outcome categories.

Be Proud! Be Responsible! (BPBR)

BPBR is a six-session sex education program originally designed for inner city, young African American men to reduce risky sexual behaviors for up to at least 12 months. However, BPBR has been extended for use in diverse populations of youth, ranging in ages from 13 to 18. Replications of BPBR have been used with success in other minority, and non-minority youth, as well as females. The BPBR curriculum, focusing on sexual responsibility and accountability, is comprised of six 50-minute modules that include group discussions, role model stories shown in videos, and interactive exercises, like role-playing. BPBR draws on social cognitive theory, with the curriculum intended to influence perceived risk, knowledge, beliefs, efficacy and control related to sexual health behavior change (Borawski, Trapl, Adams-Tufts, Hayman, Goodwin, & Lovegreen, 2009).

Through BPBR, adolescents learn to protect themselves from STIs and pregnancy while building negotiation and refusal skills. Abstinence is promoted as the most effective form of protection, but BPBR also provides education about safer-sex practices, including thorough discussions of contraceptives and condom demonstrations. According to OAH, BPBR incorporates core behavioral beliefs and outcome expectancies. This includes the belief that having unprotected sex can interfere with dreams for an education and career and the belief that condoms reduce the risk of pregnancy, STIs, and HIV/AIDS. It also includes the beliefs that condom use will not cause a negative reaction from a sexual partner and that sex can still be pleasurable when condoms are used during intercourse (Borawski et al., 2009).

In one study of 1,357 ninth and 10th grade students, research suggests the students receiving BPBR curriculum (3.05, $p<.05$) reported greater knowledge about condom use and the spread of STIs immediately following the intervention and up to one year after the intervention compared to the control group (3.08, $p<.05$). Consequently, this made students in the intervention group (4.62, $p<.05$) feel more confident in their ability to correctly use a condom and negotiate the use of a condom when being sexually active compared to the control group (4.51, $p<.05$) (Borawski et al., 2009).

BPBR has shown effectiveness in some areas of sex education. However, BPBR appears to resonate differently between genders and race. Research shows BPBR has a longer impact regarding cognitive factors on African American youth compared to Caucasian or Hispanic adolescents. Additionally, research suggests BPBR is more effective with boys than girls. BPBR also lacks efficiency in frequency and initiation of sexual intercourse. BPBR has not been proven to show postponement of sexual intercourse or increase frequency of actual condom use (Borawski et al., 2009).

Draw the Line/Respect the Line

Draw the Line/Respect the Line is another EBI, with evidence of effectiveness in two areas of outcomes: recent sexual activity and sexual initiation and abstinence. According to the U.S. Department of HHS, OAH (2016), the program is delivered through mini-lectures, role-plays, small group work, guest speakers, and games in nineteen 45-minute sessions over the course of three years. Draw the Line/Respect the Line was designed and has been tested with youth in grades six to eight. In sixth grade there are five lessons, featuring content on setting limits and refusal skills in a nonsexual context. In seventh grade there are seven lessons, the curriculum explores the consequences of unplanned sex, STI information, and applying refusal skills. In eighth grade there are seven lesson, featuring practice of refusal skills within the context of dating and relationships, as well as a condom demonstration.

Draw the Line/Respect the Line is based on Social Inoculation Theory and Social Cognitive Theory. This, much like BPBR, focuses on changing attitudes and beliefs about sexual activity, while promoting a sense of autonomy and respecting boundaries and limits. The core of Draw the Line/Respect the Line, however, is focused on abstinence and fostering positive attitudes about not having sex. This EBI does contain information on the use of condoms and promotes condom use if a student decides to have sex. Draw the Line/Respect the Line also includes a component of parent-child communication and includes a discussion of cultural and family values.

According to the Resource Center for Adolescent Pregnancy Prevention (ReCAPP, 2016), the program had a more positive impact on boys than girls in regard to initiation of sex and number of sexual partners. In a study of 2,829 sixth grade students followed for 36 months, boys in the intervention group and control group (6.34 and 4.33, $p<.07$) saw greater outcomes than girls in the intervention and group and control group (3.99 and 2.78, $p<.20$). From sixth to eight grade, boys in the intervention group had a statistically significant drop in reporting sexual activity than that control group ($p=.01$). Additionally, boys in the intervention group reported significantly greater HIV and condom related knowledge than the control group ($p<.001$). There were no statistically significant changes seen in girls of both groups (Coyle, Kirby, Marin, Gomez, & Gregorich, 2004). ReCAPP (2016) also asserts that while students were more knowledgeable about STIs and condom use post-intervention, just like BPBR, there was no impact on frequency of actual condom use by either males or females.

Infant Simulator Intervention (Real Care Simulators and Baby Think it Over)

The use of infant simulators to give youth a realistic experience of caring for a baby has grown in popularity. Two popular infant simulators, Real Care Simulators and Baby Think it Over (BTIO), have received criticism over the lack of conclusive research and the high costs of the intervention materials (Barnett, 2006). These infant simulator interventions are designed to teach adolescents the realities and challenges of parenting by taking simulation infants home for a few days, or typically over the weekend (Herman, Waterhouse, & Chiquoine, 2011). The use of these simulators remains controversial because there is a lack of evidence to show effectiveness. While some studies noted an increase in knowledge level following the BTIO intervention, others revealed no increase.

Additionally, while some studies concluded that participants had a more realistic attitude about teen parenting post intervention, other studies cited BTIO had little impact on attitudes towards teen parenting. In one study of 79 teens ages 14 to 18, the mean pretest score regarding teen parenting attitudes was 115.2 and the posttest score was 113.5 ($t=1.79$, $p=.0786$), showing no significant difference following implementation of BTIO (Herman et al., 2011). However, Barnett and Hurst (2004) found that after students completed the program, teens were more likely to postpone sexual activity. However, in an earlier study they found that students in the BTIO intervention were more sexually active than the control group (Barnett & Hurst, 2003). The results of utilizing infant simulators remains mixed, although some outcomes look promising. There must be further research conducted, including the prospect of a longer period of exposure to an infant simulator (i.e. caring for the "infant" for two weeks instead of two days) so that the parenting experience may be more realistic (Herman et al., 2011).

Implications for Tier One Prevention Methods and the School Psychologist's Role

Although BPBR and Draw the Line/Respect the Line appear to be comprehensive, there is still something missing from the curriculum if they only increase knowledge and attitudes about healthy sexual activity, but do not increase safe behaviors. Both programs are two of the highest rated federally funded prevention methods at a universal level, yet outcomes are not very promising. This means that while some parts of certain curriculum may be beneficial, sex education is lacking.

There is a common thread woven through most EBI that have shown some efficiency and positive outcomes of promoting healthy sexual behaviors. These methods empower youth and promote autonomy so they can make informed choices regarding their bodies and their health. The most promising interventions are much more complex than a straightforward universal prevention method. It is difficult to call an intervention "universal" when the needs of students are so varied. With many underlying controversies and biases in sex education, these interventions must go way beyond simple condom demonstrations and classes to promote real social change (Sisson, 2011).

School psychologists are in the best position to facilitate this change. Primarily, school psychologists should be involved in researching the best universal sex education program for their school. The unique needs of each school and students must be analyzed individually. These findings will lead to an evidence-based sex education program chosen according to these factors.

Programs should focus activities around ideals of the local community to gather support from parents, community members, and school administration. It is imperative to focus on community values where the program is going to be implemented and not assume that the opinions of parents are known (Mcclung & Perfect, 2012). By creating a cohesive and supportive community environment around sex education in schools, youth will feel more supported by their community. Service learning programs, forming new mentoring relationships, and reflecting on the ability to contribute to society can greatly increase healthy sexual behaviors. Subsequently, parents will feel more empowered to talk to their children about sexual health. Research shows that parental communication with children regarding sexual health can decrease unprotected sex between youth, delay sexual intercourse, and decrease the number of sexual partners (Parsons, Butler, Kocik, Norman, & Nuss, 1998; Sunder, Ramos, Short, & Rosenthal, 2006).

Furthermore, a school psychologist should work with staff in regards to implementation of sex education curriculum. It should be emphasized that personal judgement needs to be removed, and delivering comprehensive, medically accurate, and non-biased sex education is the focal point. There must also be an emphasis on fostering a positive environment in the school setting around sex education. School psychologists should also be available to all students if they have further questions regarding their sexual and reproductive health. This should also include collaborating with the school nurse, who is knowledgeable about medical aspects of sex education.

Tier Two: At-Risk Interventions

There is a need for sexual health advocates to keep building a class-conscious model of sexual health that recognizes the need of providing more options for at-risk youth (Sisson, 2011). Although comprehensive sex education needs to be implemented universally, there are youth more prone to unhealthy and risky sexual behavior than others. As previously mentioned, risk factors such as demographic, ethnicity and poverty level affect these rates tremendously. Low-income, racial minority and LGBTQ populations may need more targeted interventions falling under the second tier of the public health model.

Children’s Aid Society (CAS) Carrera Programs

Children’s Aid Society developed the Carrera Adolescent Pregnancy Prevention Program (CAS-Carrera), which is an EBI, and more specifically, a youth development program. Under the OAH, it is not labeled a sex education program, yet it includes sex education in the development program. ReCAPP (2016) states that CAS-Carrera is targeted to work with both boys and girls of all populations, although it has mostly been evaluated with minority youth. It is a long-term youth development program, beginning from the age of 10 or 11, following throughout high school and beyond. CAS-Carrera emphasizes a holistic approach to empowering youth, and sees adolescents “at promise” not “at risk”. Although many aspects of CAS-Carrera can apply to all youth universally, minority children and adolescents from low socioeconomic backgrounds may benefit the most.

This youth development program includes seven components. First, educational help, such as tutoring, SAT prep and academic plans for college are emphasized. Second, employment preparation is emphasized, from opening a bank account and exploring career choices, along with getting a part-time job while in school. Third, weekly comprehensive sex education sessions are taught. Fourth, mental health services are provided, largely done within group sessions, but individual counseling and crisis counseling are available. Fifth, medical and dental care is provided with partnership from local providers. Sixth, music, dance, writing and theater workshops are introduced, where students can build self-esteem and discover new talents. Seventh, exposure to sports programs is utilized, where self-discipline and team work can be built.

The basic principles of CAS-Carrera include fostering a sense of community and family, where implementers of the program treat each student as if he/she has potential. While this program is intensive, and takes up much more time than other intervention programs (six days a week, including Saturdays), it may be useful for students with fewer resources. For students who lack family and community support, CAS-Carrera offers a support system to build self-efficacy. Participants who completed the intervention were more likely to delay sexual intercourse, resist sexual pressure, use contraception and condoms together and visit the doctor for reproductive health care. Girls receiving the CAS-Carrera intervention also reported a significantly lower rate of pregnancy (10%) compared to the control group (22%) (Philliber, Kaye, & Herrling, 2001; Philliber, Williams, Herrling, & West, 2002; Manlove, Terry-Humen, Romano, Franzetta, Williams, & Ryan, 2001).

Sisters Saving Sisters

Sisters Saving Sisters is another EBI targeted specifically towards Latina and African American girls. The purpose of the intervention is to reduce frequency of unprotected sexual intercourse, with and without drug and alcohol use, reduce STIs, and decrease the number of sexual partners. According to ReCAPP (2016), Sisters Saving Sisters specifically addresses the high rates of HIV and STIs within the population of Latina and African American women with an emphasis on safer sex through condom use. Abstinence is addressed as the most effective way to eliminate risks, but acknowledges that many young women will choose to be sexually active, and therefore should be prepared to protect themselves.

The first component of the program is focusing on goals and dreams and how they relate to behavior. Sisters Saving Sisters also integrates negotiation and refusal skills into the curriculum. Instead of a lengthy discussion, the program is delivered interactively, and includes culture and gender sensitive videos. In a study of 682 sexually active African American and Latino teens, positive outcomes were seen twelve months post-intervention. Participants of Sisters Saving Sisters (mean [SE], 2.27 [0.81]; $p=.05$), had significantly less unprotected sex compared to and information-intervention group (mean [SE], 4.04 [0.80]; $p=.03$) and a health control-intervention group (mean [SE], 5.05 [0.81]; $p=.002$). Girls receiving the Sisters Saving Sisters curriculum also reported less sexual partners (mean [SE], 0.91 [0.05]; $p=.04$) compared to the health control-intervention group (mean [SE], 1.04 [0.05]) and were 10.5% less likely to test positive for STIs (mean [SE], 10.5% [2.9%] (Jemmott, Jemmott, Braverman, & Fong, 2005).

Rikers Health Advocacy Program (RHAP)

Rikers Health Advocacy Program (RHAP) was created to promote HIV/AIDS prevention in high-risk young minority men, particularly drugs users and youth in correctional facilities.

However, it can be adapted for certain target populations in schools. According to ReCAPP (2016), RHAP is a small group intervention where participants share their thoughts and beliefs about unsafe sexual behaviors. Within the group, participants identify particular problem behaviors, suggest alternate solutions, and the group evaluates the options. Active learning is involved, including role-play and rehearsal activities. The relationship between drug use and unsafe sex is also discussed. Problem Solving Therapy is emphasized, as participants define their problems, evaluate alternative possibilities, and set realistic goals. Following the intervention, participants were more likely to use condoms during all sexual intercourse (Magura, Kang, & Shapiro, 1994). RHAP is listed as an evidence-based intervention through OAH, and while it has promising outcomes outside of the school setting, the research is limited to its effectiveness when implemented in schools.

Implications for Tier Two Intervention Methods and the School Psychologist's Role

More targeted prevention methods have been developed for minority youth from low-socioeconomic backgrounds. While this is necessary and has been effective, there is a gap in the literature for more comprehensive sex education programs for LGBTQ youth in schools. Currently, there are no OAH approved EBIs that specifically include or are targeted to LGBTQ youth. School psychologists can help with this issue and should be involved with more targeted approaches. Until sex education becomes more inclusive of LGBTQ students, providing this population with alternatives to learning about risks and protective practices are necessary. Research suggests that LGBTQ utilize the Internet for information about sexual health, which has shown to be an increasingly viable source (Bowen, Horvath, & Williams, 2007; Kalichman, Cherry, Cain, Pope, Kalichman, Eaton, Weinhardt, & Benotsch 2006; Kok, Harterink, Vriens, De Zwart, & Hospers, 2006; Mustanski, Garofalo, Monahan, Gratzer, & Andrews, 2013). School psychologists should investigate alternative resources for LGBTQ youth to access medically accurate and inclusive sexual health interventions, and incorporate this into the school curriculum.

Additionally, school psychologists should be competent and well trained in this area to deliver group counseling sessions and implement tier two interventions. A school-wide screening tool to figure out which students are more at-risk should be utilized. This screening tool could be a questionnaire with specific inquiries regarding current sexual activity level and risky behaviors. School psychologists would also benefit from having more information about students, including socioeconomic status and sexual orientation. These findings may help place an individual in a more effective sex education intervention program. School psychologists with mental health and counseling backgrounds are in the best position to deliver small group interventions and counseling sessions to at-risk populations.

Tier Three: Pregnant Youth, Teenage Mothers and Fathers

Not all youth are receptive to tier one and two interventions. These interventions may have ineffective outcomes if they were not suitable for specific individuals. Regardless of which intervention is implemented in a school, teenage pregnancy may still occur. A school has the responsibility to provide support to teen mothers and destigmatize the negative connotations associated with teenage pregnancy. Young parenthood has often been portrayed as a "cautionary tale" to other students in an attempt to deter youth from risky sexual behaviors. Additionally, the media, which can be highly influential, often represents teenage pregnancy as an "epidemic" (Vinson & Stevens, 2014).

These negative views do not foster an environment of understanding and can cause emotional distress and feelings of isolation within young mothers and fathers. Evidence suggests that the levels of psychological distress in teenage mothers are higher than those in older pregnant women and mothers. Teenage mothers are prone to hostility from teachers and peers and may also be encouraged by school staff to transfer to a school with special services for pregnant or parenting youth. Many schools do not want to suggest that they support teen pregnancy or parenthood, so they do not provide accommodations for this population (Vinson & Stevens, 2014). This predicament leaves many teenage mothers to navigate their future with limited resources. Additionally, young women who become a mother before the age of 20 have a one in five chance of a subsequent birth while still in their teens (Martin, Hamilton, Ventura, & Osterman, 2013; Klerman, 2004; Manlove, Mariner, & Papillo, 2000).

Furthermore, young fathers may have high levels of unrecognized emotional distress, although there is limited data on the psychological aspects of teen fatherhood (Quinlivan & Condon, 2005). Research suggests young fathers have more behavioral problems, such as substance abuse, high-risk sexual activity and aggressive behaviors, compared to peers not involved in teen pregnancy (Tan & Quinlivan, 2004). Because young parents and pregnant teens face adversity and emotional distress, schools should reduce judgment and foster a respectful environment. Additionally, exclusively identifying sex education as “teen pregnancy prevention” may imply that teen pregnancy and parenthood is inherently negative. Implementing a well-rounded sex education and reproductive health curriculum should empower all students, including pregnant teenagers and young parents (Vinson & Stevens, 2014).

There are two new programs aimed to help high-risk teenage mothers overcome obstacles they face. One program, AIM 4 Teen Moms (AIM), is used in Los Angeles, California, while the other, Teen Options to Prevent Pregnancy (T.O.P.P), is offered in Columbus, Ohio. Both Los Angeles and Columbus have high rates of repeat teenage pregnancy and are also home to large populations of low-income young mothers (Los Angeles County Department of Public Health, 2009; Ohio Department of Health, 2010; California Department of Public Health, 2010; Ohio Department of Health, 2013). AIM and T.O.P.P. work to delay repeated teenage pregnancy by getting teen mothers to increase contraceptive use through targeted interventions implemented in community locations, over the telephone, or with home visits (Asheer, Berger, Meckstroth, Kisker, & Keating, 2014). While these programs have not yet been replicated in the school setting, outcomes are promising and these interventions may show efficiency in schools.

AIM 4 Teen Moms (AIM)

AIM 4 Teen Moms is a nine-session program, with seven sessions delivered one-on-one in participants' homes. AIM was developed by researchers at Children's Hospital Los Angeles and is offered around the Los Angeles County area (Asheer et al., 2014). The program is based on the Theory of Possible Selves, which focuses on motivation in the present by imagining a positive future (Boland, Lian, & Formichella, 2005). Through AIM, young mothers are motivated to delay another pregnancy by defining life aspirations and making healthy choices to achieve their goals. Seven in-home sessions and two community-based sessions discuss career goals, reproductive health plans, communication skills, the empowerment of motherhood, and contraceptive use. Additionally, transportation and child care services are provided during sessions. Participants are also encouraged to obtain contraceptives, which are provided through local clinics or their medical providers. Following an implementation of AIM, one study found 92.9% of participants intended for their partner to use a condom in the next year of future sexual activity and 95.3% of participants intended to use other birth control methods in the next year (Asheer et al., 2014).

Teen Options to Prevent Pregnancy (T.O.P.P.)

Teen Options to Prevent Pregnancy is offered to teen mothers in the Columbus, Ohio area and provides services for 18 months through telephone-based sessions, including motivational interviewing and access to family-planning services. Additionally, T.O.P.P. predominately serves Medicaid-eligible teens between the ages of 10 to 19 years old, who are either newly postpartum or at least 28 weeks' gestation (Asheer et al., 2014). This intervention focuses on the Behavioral Model of Health Services Use, which works on altering a woman's perception of the need for contraceptives. By providing easy access to contraception, behavior will be changed and usage will increase (Babitsch, Gohl, & Von Lengerke, 2012). Through monthly sessions done via telephone, nurse educators talk to teen mothers about birth control options, including abstinence, how they can take control of their reproductive health, and most importantly, delaying repeat teen pregnancies. Following an implementation of T.O.P.P., one study found 81% of participants intended for their partner to use a condom in the next year of intended future sexual intercourse and 96.7% of participants intended to use other birth control methods in the next year (Asheer et al., 2014).

Implications for Tier Three Intervention Methods and the School Psychologist's Role

Given the hostility and lack of resources that pregnant teenagers and young mothers may face in schools, tier three methods must be further developed and implemented. Fostering a more respectful and inclusive environment, while providing access to resources, can help young mothers and pregnant youth continue their education. School psychologists can be involved in this third tier by helping to provide these resources. Additionally, one-on-one counseling sessions can be extremely beneficial and necessary. For example, T.O.P.P. and AIM both offer encouragement through one-on-one sessions, giving social and emotional support to youth who may not receive it from school staff, family, friends, partners or parents.

Participants in the AIM intervention also stated they would have liked to continue with sessions longer than the initial 12 weeks. (Asheer et al., 2014). This implicates the need of a therapeutic relationship, including a longer span of counseling sessions, with pregnant youth and young mothers who need support. Despite adversity from home or school, staff working with teen mothers should be comfortable discussing intimate information and work to keep the teen engaged in school. Furthermore, the time period after giving birth is often stressful, emotional, and sensitive. School psychologists can work with outside medical sources to support pregnant teens and young mothers with professional postpartum care.

School psychologists can also work by connecting young mothers and fathers with one another, and establish support groups within the school setting. Just like young mothers, young fathers, can benefit from counseling sessions as well. By establishing positive connections within the school context, young fathers may feel better about attending school. In turn, this can increase the percentage of young fathers graduating high school. Moreover, school psychologists can help young fathers talk positively about transitioning into fatherhood and help them understand their own feelings to better support their partner, while fostering feelings of pride, responsibility, and maturity (Ross, Church, Hill, Seaman, & Roberts, 2012).

Conclusions and Implications for Practice and Future Research

There is discomfort within American society surrounding adolescent sexuality, which carries over into the teaching of sex education within schools. Other developed nations have shifted away from this discomfort, fostering sex education programs aimed at supporting youth in various aspects of their development. These countries, such as The Netherlands and Denmark, are seeing better overall adolescent sexual and reproductive health outcomes (Rose, 2005; Singh, Darroch, & Frost, 2001; Schalet, 2011). The Netherlands in particular has been noted for its comprehensive approach to sex education, which has been described as a "sex positive environment" (Ferguson, Vanwesenbeeck, & Knijn, 2008). Although there are political limitations, the United States can look towards other countries with very low teen pregnancy rates and adapt effective strategies into comprehensive sex education.

A defining characteristic about sex education delivered in The Netherlands is that they do not tell adolescents what to do, but rather encourage youth to think about what they want in advance. Sexual feelings are also acknowledged within Dutch sex education, including the possibility that sexual feelings may be toward someone of the same or opposite sex. Masturbation and other sexual activity are presented in a positive light, including the pleasurable aspect of sex and relationships. Material content, including where to buy condoms and information about taking the birth control pill is also included. Additionally, sex education in The Netherlands is framed much differently, with programs given more positive names, such as "Long Live Love" (Ferguson et al., 2008).

Data provides evidence that Dutch and American youth do not differ much in terms of sexual activity. The difference lies mostly in preventative behavior, with Dutch youth using contraceptives much more. Sex education in The Netherlands places attention on discussing values, communicating wishes and desires, establishing boundaries, and developing assertiveness. By framing sex in a less taboo manner, and normalizing adolescent sexuality, Dutch youth have more positive outcomes. If sex education in the United States was delivered like sex education in The Netherlands, American youth may see similar positive outcomes.

However, policies in the United States differ from The Netherlands, so this may cause some limitations (Ferguson et al, 2008).

Sex education, although it has progressed over the years, still lacks important content within its curriculum. It is imperative that a school chooses a comprehensive and non-biased sex education program to ensure more positive outcomes for students. If students do not receive accurate and effective sex education while in school, they may not receive it elsewhere. Research suggests that the younger a student is exposed to an intervention, the more successful the outcomes. This is because emphasis is placed on prevention, rather than changing established behaviors (Poobalan, Pitchforth, Imamura, Tucker, Philip, Spratt, & Van Teijlingen, 2008). Therefore, promoting an inclusive school environment and exposing youth to a comprehensive sex education program before they become sexually active is imperative.

School psychologists have a responsibility to use their expertise to facilitate sex education programs and prevent adolescents from basing sexual health decisions on misinformation. Given school psychologists' background in evidence-based interventions and data-based decision-making, they can provide consultation through a public health model. Additionally, a school psychologist's expertise in the social-emotional well-being of youth can help guide decisions of sex education implementation and can work to tailor these programs to a school's specific needs. The integration of a three-tiered public health model to promote students' unique needs, while also considering school-wide factors within the context of a community is a distinctive skill of a school psychologist (Mcclung & Perfect, 2012). By guiding the development of a positive, inclusive, and comprehensive approach to adolescent sex education and reproductive health within each tier of the public health model, school psychologists can help youth reach promising outcomes.

References

Asheer, Subuhi, Berger, Amanda, Meckstroth, Alicia, Kisker, Ellen, Keating, Betsy. (2013). Engaging pregnant and parenting teens: early challenges and lessons learned from the evaluation of adolescent pregnancy prevention approaches. *Journal of Adolescent Health*, *54*, S84-S91. doi:10.1016/j.adohealth.2013.11.019.

Babitsch, B., Gohl, D., & Von Lengerke, T. (2012). Revisiting Anderson's Behavioral Model of Health Services Use: A systematic review of studies from 1998-2011. *Psychosocial Medicine*, *9*.

Barnett, J.E. (2006). Evaluating "Baby Think It Over®" infant simulators: A comparison group study. *Adolescence*, *41*, 103-110.

Barnett, J.E., & Hurst, C. (2003). Abstinence education for rural youth: An evaluation of the Life's Walk program. *Journal of School Health*, *73*(7), 264-268.

Barnett, J.E., & Hurst, C. (2004). Do adolescents take "Baby Think it Over®" seriously? *Adolescents*, *39*, 65-75.

Beshers, Sarah. (2007). Abstinence-what?: A critical look at the language of educational approaches to adolescent sexual risk reduction. *Journal of School Health*, *77*(9), 637-639.

Blake, Susan M., Ledsky, Rebecca, Lehman, Thomas, Goodenow, Carol, Sawyer, Richard, & Hack, Tim. (2001). Preventing sexual risk behaviors among gay, lesbian, and bisexual adolescents: the benefits of gay-sensitive HIV instruction in school. *American Journal of Public Health*, *91*(6).

Boland, J. Lian, B., & Formichella, C. (2005). The origins of hopelessness among inner-city African-American adolescents. *American Journal of Community Psychology*, *36*, 293-305.

Bowen, A. M., Horvath, K., & Williams, M. L. (2007). A randomized control trial of internet-delivered HIV prevention targeting rural MSM. *Health Education Research*, *22*(1), 120-127.

Bowleg, L., Belgrave, F. Z., & Reisen, C. A. (2000). Gender roles, power strategies, and precautionary sexual self-efficacy: Implications for Black and Latina women's HIV/AIDS protective behaviors. *Sex roles*, *42*(7-8), 613-635.

Borawski, Elaine A., Trapl, Erika S., Adams-Tufts, Kimberly, Hayman, Laura L., Goodwin, Meredith A., & Lovegreen, Loren D. (2009). Taking be proud! be responsible! to the suburbs: a replication study. *Perspectives on Sexual and Reproductive Health*, *41*(1), 12-22. doi:10.1363/4101209.

Bradshaw, C. P. (2015). Translating research to practice in bullying prevention. *American Psychologist*, *70*, 322-332.

Brien, M., & Willis, R. (2008). Costs and consequences for the fathers. In S. Hoffman & R. Maynard (Eds.), *Kids having kids: economic costs and social consequences of teen pregnancy* (2nd ed.). Washington: Urban Institute Press.

Byers, E.S., Sears, H.A., & Weaver, A.D. (2008). Parents' reports of sexual communication with children in kindergarten to grade 8. *Journal of Marriage and Family*, *70*, 86-96.

California Department of Public Health. *Maternal and infant health assessment, Los Angeles County*. Retrieved from http://www.cdph.ca.gov/data/surveys/MIHA/MIHASnapshots/SnapshotCoLosAngeles2011.pdf.

Center for School, Health, and Education. (2011). *The health, well-being and educational success of school-aged youth and school-based health care*. Retrieved from http://www.schoolbasedhealthcare.org/wpcontent/uploads/2011/09/APHA4_article_ Health_Rev_ 9_14_FINAL2.pdf.

Centers for Disease Control and Prevention. (2012a). Vital signs: HIV infection, testing, and risk behaviors among youth—United States. *Morbidity and Mortality Weekly Report*, *61*(47), 971–976.

Centers for Disease Control and Prevention. (2012b). Estimated HIV incidence in the United States, 2007–2010. *HIV Surveillance Supplemental Report 17* (No. 4). Retrieved from http://www.cdc.gov/hiv/topics/surveillance/resources/reports/#supplemental.

Cianciotto, J., & Cahill, S. R. (2003). *Education policy: Issues affecting lesbian, gay, bisexual and transgender youth*. National Gay and Lesbian Task Force Policy Institute. Washington, DC.

Coyle, Karin, Kirby, Douglas B., Marin, Barbara, Gomez, Cynthia A., Gregorich, Steven E. (2004). Draw the Line/Respect the Line: A randomized trial of a middle school intervention to reduce sexual risk behaviors. *American Journal of Public Health*. *91*(5), 843-851.

Ferguson, Rebecca M., Vanwesenbeeck, Ine, & Knijn, Trudie. (2008). A matter of facts…and more: an exploratory analysis of the content of sexuality education in the Netherlands. *Sex Education*, *8*(1), 93-106.

Fine, M., & McClelland, S.I. (2006). Sexuality education and desire: Still missing after all these years. *Harvard Educational Review*, *76*(3), 297-338.

Furstenberg, F. (2007). *Destinies of the disadvantaged*. New York: Russell Sage.

Goesling, Brian, Colman, Silvie, Trenholm, Christopher, Terzian, Mary, & Moore, Kristin. (2013). Programs to reduce teen pregnancy, sexually transmitted infections, and associated sexual risk behaviors: a systematic review. *Journal of Adolescent Health*, *54*, 49-507.

Gresle-Favier, Claire. (2013). Adult discrimination against children: the case of abstinence-only education in twenty-first-century USA. *Sex Education*, *13*(6), 715-725. doi:10.1080/1468 1811.2013.813387.

Guttmacher Institute. (2016). *State policies in brief sex and HIV education*. Retrieved March 5, 2016 from, https://www.guttmacher.org/sites/default/files/pdfs/spibs/spib_SE.pdf.

Hamilton, L., & Armstrong, E. (2009). Gendered sexuality in young adulthood: Double binds and flawed options. *Gender and Society*, *23*(5), 589-616.

Herrman, Judith W., Waterhouse, Julie K., & Chiquoine, Julie. (2011). Evaluation of an infant simulator intervention for teen pregnancy prevention. *The Association of Women's Health, Obstetric and Neonatal Nurse*, *40*, 322-328. doi:10.1111/j.1552-6909.2011.01248.x.

Hirst, J. (2013). It's got to be about enjoying yourself: Young people, sexual pleasure, and sex and relationships education. *Sex Education*, *13*(4), 423–436.

Jemmott, J. B., Jemmott, L. S., Braverman, P. K., & Fong, G. T. (2005). HIV/STD risk reduction interventions for African American and Latino adolescent girls at an adolescent medicine clinic: A randomized controlled trial. *Archives of Pediatrics & Adolescent Medicine*, *159*(5), 440-449.

Kalichman, S. C., Cherry, C., Cain, D., Pope, H., Kalichman, M., Eaton, L., Weinhardt, L., Benotsch, E.G. (2006). Internet-based health information consumer skills intervention for people living with HIV/AIDS. *Journal of Consulting and Clinical Psychology*, *74*(3), 545–554.

Klerman, L.V. (2004) *Another chance: preventing additional births to teen mothers*. Washington, DC: National Campaign to Prevent Teen and Unplanned Pregnancy.

Kok, G., Harterink, P., Vriens, P., de Zwart, O., & Hospers, H. J. (2006). The gay cruise: developing a theory- and evidence-based internet HIV-prevention intervention. *Sexuality Research and Social Policy*, *3*(2), 52-67.

Lane, Kathleen Lynne, Carter, Erik W., Jenkins, Abbie, Dwiggins, Lauren, & Germer, Kathryn. (2015). Supporting comprehensive, integrated, three-tiered models of prevention in schools: administrators' perspectives. *Journal of Positive Behavioral Interventions*. *17*(4), 209-222. doi:10.1177/1098300715578916.

Los Angeles County Department of Public Health, Office of Health Assessment and Epidemiology. (2009). *Key indicators of health, by service planning area*. Los Angeles (CA): Los Angeles County Department of Public Health. Office of Health Assessment and Epidemiology.

Magura, S., Kang, S. Y., & Shapiro, J. L. (1994). Outcomes of intensive AIDS education for male adolescent drug users in jail. *The Journal of Adolescent Health: Official Publication of the Society for Adolescent Medicine*, *15*(6), 457-463.

Manlove, J., Mariner, C., & Papillo, A.R. (2000). Subsequent fertility among teen mothers: Longitudinal analyses of recent national data. *Journal of Marriage and Family*. *62*, 430-448.

Manlove, J., Terry-Humen, E., Romano Papillo, A., Franzetta, K., Williams, S., & Ryan, S. (2001). *Background for community-level work on positive reproductive health in adolescence: Reviewing the literature on contributing factors.* Washington, DC: Child Trends.

Martin, J.A., Hamilton, B.E., Ventura, S.J., & Osterman, M.J.K. (2011). *Births: final data for 2011*. Hyattsville (MD): National Center for Health Statistics. Available at: http://www.cdc.gov/nchs/data/nvsr/nvsr62_01.pdf.

Mcclung, Ashley A. & Perfect, Michelle M. (2012). Sexual health education: social and scientific perspectives and how school psychologists can be involved. *National Association of School Psychologists Communique*, *40.6*.

Merrell, Kenneth W. & Buchanan, Rohanna. (2006). Intervention selection in school-based practice: using public health models to enhance systems capacity of schools. *School Psychology Review*. *35*(2), 167-180.

Murry, V. M., Heflinger, C. A., Suiter, S. V., & Brody, G. H. (2011). Examining perceptions about mental health care and help-seeking among rural African American families of adolescents. *Journal of Youth and Adolescence*, *40*(9), 1118–1131.

Mustanski, B. S., Newcomb, M. E., Du Bois, S. N., Garcia, S. C., & Grov, C. (2011). HIV in young men who have sex with men: A review of epidemiology, risk and protective factors, and interventions. *Journal of Sex Research*, *48*(2-3), 218-253.

Mustanski, B., Garofalo, R., Monahan, C., Gratzer, B., & Andrews, R. (2013). Feasibility, acceptability, and preliminary efficacy of an online HIV prevention program for diverse young men who have sex with men: the keep it up! Intervention. *AIDS & Behavior*, *17*(9), 2999-3012. doi:10.1007/s10461-013-0507-z.

Myer, K. H., Bradford, J. B., Makadon, H. J., Stall, R., Goldhammer, H., & Landers, S. (2008). Sexual and gender minority health: What we know and what needs to be done. *American Journal of Public Health*, *98*(6), 989-995.

National Research Council. (2013). *U.S. Health in international perspective: Shorter lives, poorer health*. Washington, DC: National Academy Press.

Noar, S. M., & Morokoff, P. J. (2002). The relationship between masculinity ideology, condom attitudes, and condom use stage of change: A structural equation modeling approach. Interna- tional *Journal of Men's Health*, *1*(1), 43-58.

Ohio Department of Health. (2010). *Teen pregnancy counts and rates by age and by year*. Columbus, OH: Ohio Department of Health.

Ohio Department of Health. (2010). *Postpartum visits, Ohio Medicaid population*. Retrieved from http://www.odh.ohio.gov/.

Oman, Roy F., Merritt, Breanca T., Fluhr, Janene, & Williams, Jean M. (2015). Comparing school-based teen pregnancy prevention programming: mixed outcomes in an at-risk state. *Journal of School Health*, *85*(12), 886-893.

Philliber, S., Kaye, J. & Herrling, S. (2001). *The national evaluation of the children's aid society carrera-model program to prevent teen pregnancy.* New York: Philliber Research Associates.

Philliber, S., Williams Kaye, J., Herrling, S., & West, E. (2002). Preventing pregnancy and improving health care access among teenagers: An evaluation of the Children's Aid Society–Carrera Program. *Perspectives on Sexual and Reproductive Health*, *34*(5), 244-251.

Pingel, Emily Sweetnam, Thomas, Laura, Harmell, Chelsea, & Bauermeister, Jose A. (2013). Creating comprehensive, youth centered, culturally appropriate sex education: what do young gay, bisexual, and questioning men want? *Sexuality Research and Social Policy*, *10*, 293-301. doi:10.1007/s13178-013-0134-5.

Poobalan, A. S., Pitchforth, E., Imamura M., Tucker, J. S., Philip, K., Spratt, J., Van Teijlingen, E. (2009). Characteristics of effective interventions in improving young people's sexual health: A review of reviews. *Sex Education*, *9*, 319-336. doi:10.1080/14681810903059185.

Quinlivan, Julie A. & Condon, John. (2005). Anxiety and depression in fathers in teenage pregnancy. *Australian and New Zealand Journal of Psychiatry*, *39*, 915-920.

Resource Center for Adolescent Pregnancy Prevention. (2016). *Evidence-based programs*. Retrieved April 3, 2016 from, http://recapp.etr.org/Recapp/index.cfm?fuseaction=pages.ebphome.

Rose, S. (2005). Going too far? Sex, sin and social policy. *Social Forces*, 84, 1207-1232.

Ross, Nicola J. Church, Stephanie, Hill, Malcolm, Seaman, Pete, & Roberts, Tom. (2010). The perspectives of young men and their teenage partners on maternity and health services during pregnancy and early parenthood. *Children & Society*, *26*, 304-315. doi:10.1111/j.1099-0860.2010.00338.x.

Santelli, J., Ott, M. A., Lyon, M., Rogers, J., Summers, D., & Schleifer, R. (2006). Abstinence and abstinence-only education: A review of US policies and programs. *Journal of Adolescent Health*, *38*(1), 72-81.

Schalet, A.T. (2011). *Not under my roof: Parents, teens, and the culture of sex*. Chicago: University of Chicago Press.

Schalet, Amy T., Santelli, John S., Russell, Stephen T., Halpern, Carolyn T., Miller, Sarah A., Pickering, Sarah S., Goldberg, Shoshana K., & Hoenig, Jennifer M. (2014). Invited commentary: broadening the evidence for adolescent sexual and reproductive health and education in the United States. *Journal of Youth Adolescence*, *43*, 1595-1610. doi:10.1007/s10964-014-0178-8.

Singh, S., Darroch, J., & Frost, J. (2001). Socioeconomic disadvantage and adolescent women's sexual and reproductive behavior: The case of five developed countries. *Family Planning Perspectives*, *33*(6), 251-289.

Parsons, J. T., Butler, R., Kocik, S., Norman, L., & Nuss, R. (1998). The role of the family system in HIV risk reduction: Youth with hemophilia and HIV infection and their parents. *Journal of Pediatric Psychology*, *23*, 57-65.

Sexuality Information and Education Council of the United States (SIECUS). (2010). *A brief history of federal funding for sex education and related programs*. Retrieved on March 7, 2016 from http://www.siecus.org/index.cfm?fuseaction=page.viewpage&pageid=1341&nodeid=1.

Sheras, Peter L. & Bradshaw, Catherine P. (2016) Fostering policies that enhance positive school environment. *Theory Into Practice*, *55*(2), 129-135, doi:10.1080/00405841.2016.1156990.

Silk, Jessica & Romero, Diana. (2015). The role of parents and families in teen pregnancy prevention: an analysis of programs and policies. *Journal of Family Issues*, *35*(10), 1339-1362. doi:10.1177/0192513X13481330.

Sisson, Gretchen. (2011). Finding a way to offer something more: reframing teen pregnancy prevention. *Sexuality Research & Social Policy*, *9*, 57-69. doi:10.1007/s13178-011-0050-5.

Sunder, P. K., Ramos, S., Short, M. B., & Rosenthal, S. L. (2006). Adolescent girls' communication with mothers about topical microbicides. *Journal of Pediatric and Adolescent Gynecology*, *19*, 373-379.

Tan, Louisa H. & Quinlivan, Julie A. (2004). Domestic violence, single parenthood, and fathers in the setting of teenage pregnancy. *Journal of Adolescent Health*, *38*, 201-207. doi:10.1016/j.jadohealth.2004.10.014.

Tolman, D. (2002). *Dilemmas of desire: teenage girls talk about sexuality*. Cambridge: Harvard University Press.

United States Department of Health and Human Services, Office of Adolescent Health. (2016). *Evidence-based teen pregnancy prevention programs at a glance*. Retrieved March 1, 2016 from http://www.hhs.gov/ash/oah/oah-initiatives/teen_pregnancy/training/Assests/ebp-table.pdf.

United States Department of Health and Human Services, Office of Adolescent Health. (2016). *HHS Office of Adolescent Health's teen pregnancy prevention program*. Retrieved March 1, 2016 from http://www.hhs.gov/ash/oah/oahinitiatives/teen_pregnancy/about/Assets/tpp-overview-brochure.pdf.

United States Department of Health and Human Services, Office of Adolescent Health. (2016). *Teen pregnancy prevention program*. Retrieved March 1, 2016 from http://hhs.gov/ash/oah/adolescent-health-topics.

Vinson, Jenna & Stevens, Sally. (2014). Preventing pregnancy or supporting students? Learning from the stories of young mothers. *Sexuality Research and Social Policy*, *11*, 322-336. doi:10.1007/s13178-014-0157-6.

Wodtke, G. T. (2013). Duration and timing of exposure to neighbor-hood poverty and the risk of adolescent parenthood. *Demography*, *50*, 1765–1788.

Wright, Annie, Duffy, Jennifer, Kershner, Sarah, Flynn, Shannon, & Lamont, Andrea. (2015). New opportunities in teen pregnancy prevention: identifying individual and environmental differences between youth who abstain, use contraception, and use no contraception. *Journal of Community Psychology*, *43*(8), 931-953. doi:10.1002/jcop.2172 4.