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“Why Can’t We Just Have Sex?”: An Analysis of Anonymous Questions About Sex Asked by Ninth Graders

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**ABSTRACT**

During the high school years, most young people in the United States receive school-based sexuality education, but there is little research on what they want to know about sex and sexuality but may be afraid to ask. This study is a content analysis of anonymous questions about sex \( (N = 645) \) asked by ninth-grade students from the greater Los Angeles area. A sample of predominantly lower-income and Latino/a students submitted anonymous questions before participating in sexuality education. Results show that young people are eager to understand how to use birth control and prevent pregnancy, have misinformation about sex and sexuality, and are misinformed on many topics. Results are discussed in light of what educators and others can do to help young people develop a safe, healthy sex life.

High school is the time when most young people in the United States begin to learn about and engage in sexual behaviors. By ninth grade about one third of students have had vaginal intercourse, and by twelfth grade that portion has doubled to two thirds (Kann et al., 2014). About two thirds of high schools students have also had oral sex (Copen, Chandra, & Martinez, 2012), and about one in ten have had anal sex (Chandra, Mosher, Copen, & Sionean, 2011). This period of sexual initiation is often accompanied by school-based sexuality education. Although it varies by state, sexuality education is usually offered in high school (Demissie et al., 2015). Young people also get informal sexuality education from their peers, families, and media (Brown, 2002; Cameron et al., 2005; Chia, 2006; Chia & Gunther, 2006; Flores & Barroso, 2017; L’Engle, Brown, & Kenneavy, 2006; Widman, Choukas-Bradley, Noar, Nesi, & Garrett, 2015). Yet despite all that is known about young people’s sexual behaviors and where they are learning about sex, very little is known about what they want to know about sex.

Examining young people’s questions about sex can reveal important information about their knowledge gaps, risk perceptions, and what they are eager to know.

**KEYWORDS**

Birth control; content analysis; high school; pregnancy; sexuality education

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Anonymous questions are especially important as they allow young people to ask questions without fear of embarrassment or social sanctions and provides a forum for asking questions that might be taboo. Yet, there is little research on young people’s sexual inquiries. Some studies have analyzed anonymous questions from middle school students, finding that they mostly want to know about puberty, pregnancy, menstruation, anatomy, and sexual activity (Charmaraman, Lee, & Erkut, 2012; Moreno, Breuner, & Lozano, 2008). A study of anonymous questions submitted online to a teen website found most questions to be about pregnancy, services, and contraception, but rarely about sexually transmitted infections (STIs) (Vickberg, Kohn, Franco, & Criniti, 2003). Conversely, a study of questions submitted to an adolescent clinic website found that STI questions were among the most common, along with questions about the cost of contraception (Buzi, Smith, & Barrera, 2015). Few studies have examined high school students’ anonymous questions about sex. One study of high school-aged students in Arizona examined anonymous questions asked by participants in drug treatment and community-based programs (Stevens et al., 2013). They found that questions about bodies, relationships, and health were the most common, while tactical questions (i.e., how-to and advice) and questions about pleasure were the least common. An earlier study done on a similar sample to the present study examined ninth-grade students’ anonymous questions about sex after six and twelve sessions of sexuality education instruction (Angulo-Olaz, Goldfarb, & Constantine, 2014). The most common topic asked about was sexual behavior, including arousal, and many of these questions were about potentially negative experiences. The authors also found that students’ questions demonstrated a concerning amount of confusion and fear about sexual behavior and sexuality. They also noted few questions about pregnancy, STIs, or condoms, and almost no questions about sexual orientation or abortion. The present study examines anonymous questions asked by ninth-grade students before receiving high school sexuality education instruction, to gain an understanding of what young people want to know about sexuality and sexual behavior.

Many high school students learn about sexuality and sexual behavior in school-based education (Demissie et al., 2015). In U.S. public high schools about 95% of students are taught how HIV/STIs are transmitted, 70% are taught the importance of using condoms, and 54% are taught how to correctly use a condom. However, there is wide variation in what states require schools to teach. Most states offer school-based sexuality education, but only 24 states require it. Eighteen states require that information be provided on contraception; 34 states require information on HIV; and 20 states require information on avoiding coerced sex (“Sex and HIV Education,” 2016). A nation-wide study by the Centers for Disease Control and Prevention also found that education varies widely between states. The percentage of schools that teach HIV/STI and pregnancy prevention ranges from 16% to 70% across the states, while the percentage that teach about birth control ranges from 27% to 97% (Demissie et al., 2015). They also found that specific instruction given by educators varies greatly.
While sexuality education has consistently been shown to improve sexual health knowledge among young people (Cavazos-Rehg et al., 2012; Jaramillo, Buhi, Elder, & Corliss, 2017; Kirby & Laris, 2009; Lindberg & Maddow-Zimet, 2012; Song, Pruitt, McNamara, & Colwell, 2000), many are still misinformed about sex and underserved by their education system. A nation-wide probability sample study found that a majority of teens say they learned about HIV/STIs (86%), and how to say no to sex (82%), but far fewer say they learned about how to use birth control (60%) (Lindberg, Maddow-Zimet, & Boonstra, 2016). This study also found that the number of young people claiming they learned about birth control and HIV/STIs has declined in recent years. Only half of young people say they learned how to use a condom, while slightly less than half say they learned about contraception or where to get birth control before they had sex. Many young people report receiving inaccurate information about birth control and sexual behavior during their school-based sexuality education (Landry, Darroch, Singh, Higgins, & Donovan, 2003; Pingel, Thomas, Harmell, & Bauermeister, 2013). This finding is no surprise given that one third of educators tasked with providing sexuality education do not receive any special training (Eisenberg, Madsen, Oliphant, Sieving, & Resnick, 2010). Some of the inaccurate information young people receive comes from abstinence-only until marriage (AOUM) curricula. AOUM is required in many schools (SIECUS, 2014), despite a lack of evidence that it is effective at improving sexual health outcomes (Chin et al., 2012; Lindberg & Maddow-Zimet, 2012; Santelli et al., 2006), and may even undermine lesbian, gay, bisexual, transgender, queer, and questioning (LGBTQ) sexual health (Elia & Eliason, 2010; Kosciw, Greytak, Bartkiewicz, Boesen, & Palmer, 2012). AOUM programs teach that premarital sexual behaviors and abortion can have adverse psychological effects, despite a lack of data proving this is the case (Santelli et al., 2006). A 2004 report found that 11 of the 13 most commonly used sexuality education curricula were inaccurate, containing falsehoods about HIV, abortion, and birth control (U.S. House of Representatives, Committee on Government Reform, 2004). In addition, young people encounter a deluge of inaccurate and misleading information about sexuality and sexual behavior from television, the Internet, and popular music (Buhi et al., 2010; Hust, Brown, & L’Engle, 2008; Pariera, Hether, Murphy, de Castro Buffington, & Baezconde-Garbanati, 2014; Primack, Gold, Schwarz, & Dalton, 2008; Ward, Gorvine, & Cytron-Walker, 2002), further impeding their access to accurate and practical information that could benefit them.

As they enter adulthood many young people have not been adequately educated about sex (Kaye, Suellentrop, & Sloup, 2009), and it shows. Youth in the United States have high STI and unplanned pregnancy rates (CDC, 2015; Kost & Henshaw, 2012; Satterwhite et al., 2013). Half of new cases of STIs (approximately 10 million) are among young people, and about 5% of teens become pregnant each year. Young people are entering adulthood with poor sexual health outcomes and insufficient knowledge about sexuality and sexual behaviors, and because of this it is crucial to find ways to meet their information needs early on. Listening to the needs of young people about what they want to know about sex will provide a better foundation for
understanding what needs to be covered in their sexuality education, whether from schools, parents, peer educators, or health care providers.

This study provides a content analysis of what ninth-grade students want to know about sex, but may not want to ask out loud. We examine students’ anonymous questions submitted during sexuality education classes in Los Angeles area schools in order to determine what exactly these students want to know about sex. Exploring these anonymous questions provides valuable insights into young people’s curiosities, risk perceptions, and information needs.

Methods

Procedures

Questions were collected from ninth-grade students at schools in the Southern California area, as part of a unit on sexuality education. Thirteen schools were included in data collection, including a geographically diverse sampling from across the county. At the start of the first class on sexuality, students were provided with a slip of paper and invited to write any questions they had about sex. They were told, “Today you will have the opportunity to ask questions about anything you may be wondering about anything related to sex. These questions are anonymous, meaning you do not need to write your name. You can write multiple questions. I will collect the questions and try to answer as many as I can. If you don’t have a question, you can write down what you plan on doing this weekend. This means I should get paper back from everyone.” All students were required to submit a slip of paper, to avoid making it visibly evident who had or had not asked questions, thus ensuring anonymity. Students were given 3–5 minutes to write their questions. The first author served as a facilitator in these classes and retained the students’ anonymous questions, which were later used for this study. Questions asked out loud by the students were not counted or recorded, but to provide some context the instructor observed that typically very few students asked questions out loud about sexuality and sexual behavior. The authors read through each question and removed any that were personal questions about the instructor, questions about what to expect in the class, and nonquestion statements. Questions that may have been asked as a joke were included. Although it is possible some of the questions were asked by students for a laugh (e.g., “what’s a dirty sanchez”), the impression of the instructor was that these instances were rare and that in some cases students still seemed to want to know the answer. Since it would be impossible to assess which questions were insincere, all questions were considered a genuine curiosity by the students. Some students wrote multiple questions on their paper, which were counted as separate observations in the current study, the unit of analysis being the question. A total of 751 students were present, and 572 (76%) of them asked anonymous questions about sex. Sixty-four students (11%) asked multiple anonymous questions (55 asked two questions, and nine asked three questions), for a total of 645 anonymous questions included in the analyses. Data collection took place between 2013 and 2014.
Participants

All students were in the ninth grade of high school in the greater Los Angeles area. Because questions were totally anonymous no description of the sample’s gender, race, age, or socioeconomic status is available. However, based on demographic data provided by each school, the sample for this study is most likely Latino (ranging from 40% to 80% between schools) and black (ranging from 8% to 25% between schools). Most students were lower income, with 50% to 75% receiving free or reduced-price lunches, and the sample was roughly evenly split between boys and girls because all schools were coed. All students were about to begin their sexuality education program but had not yet received sexuality education that year. While we do not know the exact prior sexuality education for each student, the policies of the school district these students resided in require opt-out, medically accurate sexuality education from seventh to 12th grade. Starting in seventh grade students must be taught that abstinence is the only way to prevent pregnancy and STIs, and has many social and psychological benefits. They are also required to be taught how STIs are transmitted and prevented, the effectiveness and safety of contraceptive methods, and information on testing and care for STIs. They must also receive 8–10 hours of instruction on HIV prevention in middle school (Los Angeles Unified School District, 2014).

Data analysis

Two rounds of content analysis were conducted. First, a conventional content analysis of the students’ questions was conducted. Because 44.3% (n = 286) of the questions referred to birth control and pregnancy prevention, a summative content analysis was also conducted to understand what specific types of birth control young people were asking about.

Qualitative content analysis

A conventional qualitative content analysis using the inductive approach was used to guide the analysis (Hsieh & Shannon, 2005). The authors first engaged in open coding, which entails reading through the questions and taking detailed notes. Preliminary codes were formed from these notes, and the authors began coding while periodically analyzing the anonymous questions for representation of the categories. Each new code was checked against other questions with the same code to ensure category validity. The authors debated until a consensus was reached and codes were revised as needed. The second author, who was not affiliated with the sexuality education program, coded all the questions. The first author separately coded 50% of the questions to determine reliability. Krippendorff’s alpha, a statistical measure of the agreement between coders, showed that reliability coefficients ranged from $\alpha_K = .92–1.0$, meaning inter-rater reliability was high.

After completion of the qualitative content analysis the authors reflected that many of the questions indicated misinformation. The first author, who has extensive expertise in sexual health, conducted a tally of the number of questions that
indicated some kind of misinformation, for example, “If you have sex with a pregnant girl, when her cervix opens up does it touch the baby?” or “When a guy or anybody suck on a woman's breast, will their breast get bigger?” or “Why do most gays get HIV/AIDS?” The second author separately conducted a tally and the two authors discussed disagreements until a consensus was made, consulting with health care professionals when needed. Krippendorff’s alpha was high: $\alpha_K = .90$.

**Summative analysis of birth control topics**

While the qualitative content analysis was conducted to understand the underlying meaning behind students’ questions, a summative analysis was conducted separately to understand raw counts of mentions of birth control. A student coder was trained to read all 645 questions and indicate when a word or synonym related to birth control had been used. For example, if a question included the word “condom,” “rubber,” or “Trojan” it was marked as “condom.” Unless female condom was specified it was assumed that “condom” referred to the male condom. If a question referred to birth control in general (e.g., “What is the most effective method?”) it was labeled as general birth control. Computer-assisted searches for words were also conducted to ensure accuracy of counts. Categories were not mutually exclusive, since some questions included multiple types of birth control. For example, if a question read, “If the male has a condom can the female use the sponge?” In cases such as this the question was coded as “male condom” and “sponge.” Krippendorff’s alpha was used to measure reliability with the principal investigator coding 50% of all anonymous questions for this round of analysis. Resulting reliability coefficients ranged from $\alpha_K = .96–1.0$.

**Results**

**Conventional content analysis**

Results from the conventional content analysis are provided in (Table 1). Twelve codes were developed based on the qualitative content analysis: procedural questions about birth control, understanding risk of pregnancy, what happens during sex, what happens during pregnancy and childbirth, resources and access, understanding risk of STIs, slang terms, understanding others’ behavior, bodies (nonsexual), guidance on norms, legal/ethical, and communication. There were no questions about sexual assault, sex work, pornography, gender identity, nor explicitly about same-sex attraction. Analysis revealed that the most common type of question asked by students was procedural questions about birth control, meaning its usage or side effects. Questions in other categories might mention birth control, but this category only included any question about how birth control works or is used, such as “How does the ring prevent the sperm to come through?” “When do you take the pill?” and “Can you overdose from birth control?” Over one fifth ($n = 131$) of questions were from this category.

The second most common type of question was about risk of pregnancy ($n = 122$). This category of questions included those that were explicitly trying to
Table 1. Types of anonymous questions by students (N = 645).

<table>
<thead>
<tr>
<th>Code</th>
<th>Sample questions</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Procedural questions about birth control</td>
<td>“Does a girl take the pill after or before you have sex?”</td>
<td>131</td>
<td>20.3</td>
</tr>
<tr>
<td>Understanding risk of pregnancy</td>
<td>“How do you know the condom is on right?”</td>
<td></td>
<td></td>
</tr>
<tr>
<td>What happens during sex</td>
<td>“Can you get pregnant while you’re on your period?”</td>
<td>122</td>
<td>18.9</td>
</tr>
<tr>
<td>Pain/pleasure</td>
<td>“Is it possible to pee during sex?”</td>
<td>114</td>
<td>17.7</td>
</tr>
<tr>
<td>Understanding risk of pregnancy and childbirth</td>
<td>“What happens when you have oral sex and you swallow their precum and sperm?”</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resources and access</td>
<td>“Is sex painful?” “Does a girl bleed during sex?”</td>
<td>34</td>
<td>5.3</td>
</tr>
<tr>
<td>Slang terms</td>
<td>“What can happen [to the baby] if a woman gets pregnant on birth control?”</td>
<td>48</td>
<td>7.4</td>
</tr>
<tr>
<td>Understanding others’ behaviors</td>
<td>“If you have sex with a pregnant girl, when her cervix opens up does it touch the baby?”</td>
<td>42</td>
<td>6.5</td>
</tr>
<tr>
<td>Bodies (nonsexual)</td>
<td>“Where do you get the Plan B pill?”</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Understanding risk of sexually transmitted infections</td>
<td>“Which prescription method is least expensive?”</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slang terms</td>
<td>“How do you even get STDs from having oral sex?”</td>
<td>32</td>
<td>5.0</td>
</tr>
<tr>
<td>Guidance on norms</td>
<td>“What is a cherry pop?”</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Legal/ethical</td>
<td>“What is blue balls? Explain.”</td>
<td>29</td>
<td>4.5</td>
</tr>
<tr>
<td>Communication</td>
<td>“When a girl moans, does that mean it feels good?”</td>
<td>28</td>
<td>4.3</td>
</tr>
<tr>
<td></td>
<td>“If you sort of overdose with the pill does it lessen the change of pregnancy?”</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. Percentages do not add up to 100, due to rounding. Examples of student questions provided here have been edited to correct spelling and punctuation errors.

ascertain pregnancy risk, including questions about pregnancy risk with different birth control methods. While birth control was sometimes mentioned in this category (and others), questions were only counted if they pertained to pregnancy risk. The authors felt it was important to differentiate between questions ascertaining risk of pregnancy from questions about birth control usage and side effects. Examples include, “Is it true that it is less likely for a girl to get pregnant if she is on top during intercourse?” and “Can a girl get pregnant if they’re naked and the guy’s penis touches the vagina?” and “If you sort of overdose with the pill does it lessen the chance of pregnancy?”

The third most common type of question was about what happens during sex (n = 114), such as “Can your vagina stretch if you have a lot of sex?” and “What happens if a girl swallows the cum?” During coding the researchers noted that many of the questions in this category were specifically about if or when to expect pain or pleasure. A subsequent count revealed that one third of the questions in this category (n = 34) were questions about pain or pleasure. These included many questions about whether having sex for the first time would hurt, and questions about whether sex is painful or pleasurable, including, for example, “If the female is not wet, will the penis entering be way more painful?” “Does sex hurt or does it feel good?”
The previous three categories of questions made up the bulk of students’ anonymous questions (60%). Of the remaining questions, 7% \((n = 48)\) were about what happens during pregnancy or childbirth. Many of these questions were about how substances like birth control and drugs and alcohol affect fetuses and embryos, while some were about how childbirth feels. Some questions about abortion were included in this category and most of those were questions about the steps involved in abortion or how abortion feels.

Another 7% \((n = 42)\) of the questions were about sexual health resources and access. In this category students asked questions about where to get birth control and how much it would cost. Six percent of the questions were about STI risk \((n = 37)\), such as “If a girl has an STD and she gives a guy anal sex, will the guy also be contaminated?” Of all STI-related questions, most were about STIs in general. Only five questions asked specifically about HIV/AIDS, and only one other STI, Herpes, was mentioned by name. Another 5% of the questions \((n = 32)\) were about slang terms, with most of these including the word “cherry” (e.g., “what is a cherry pop?”). Another 5% of the questions \((n = 29)\) were about trying to understand other people’s behaviors. These included “why” questions about things students had observed or heard about, for example, “Why do people have sex with animals?” and “Why doesn’t my girlfriend want to do anal?”

About 4% of the questions \((n = 28)\) were about bodies that did not relate specifically to sexual behavior, since those were coded as questions about what happens during sex. This category included questions about puberty, such as “What is the purpose of pubic hair?” and “Why do you get cramps?” Another 4% of the questions \((n = 27)\) were those that indicated the student was seeking guidance on norms. These were either about prescriptive norms (“How long should you wait to have sex with your partner?”) or descriptive norms (“How old do most people start having sex?”). Another 4% \((n = 25)\) were legal/ethical questions, such as “Is animal sex legal?” and “What should a man do if he feels like he’s being abused physically?” Lastly, about 2% of the questions \((n = 10)\) were about communication. These questions were mostly about how to tell a parent if one is pregnant, and a few were about communicating with a sexual partner.

Thirty-seven percent of all questions indicated some kind of misinformation. Some questions pertained to things that were highly unlikely, such as getting the penis stuck in the vagina, sexual intercourse making the vagina “too loose,” and addiction to sex. Some questions indicated that students might think birth control could cause bodily harm to themselves and permanent infertility. Other questions referred to the penis entering the cervix, the legal repercussions of having sex and buying condoms, and how many types of hormonal birth control women should take at once.

**Summative analysis of birth control topics**

Any question from the entire sample that mentioned birth control was counted, irrespective of the category it was in for the qualitative content analysis. While
Table 2. Types of birth control mentioned in anonymous questions by students (N = 286).

<table>
<thead>
<tr>
<th>Type</th>
<th>Example/description</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Condom (male)</td>
<td>“Do you feel a condom when you have sex?”</td>
<td>74</td>
<td>11</td>
</tr>
<tr>
<td>General birth control</td>
<td>“What’s the most popular prescription?”</td>
<td>65</td>
<td>10</td>
</tr>
<tr>
<td>Pill</td>
<td>“If you miss one day of your pill, would you get pregnant?”</td>
<td>25</td>
<td>4</td>
</tr>
<tr>
<td>Patch</td>
<td>“Does the patch affect your chance of getting pregnant later on in life?”</td>
<td>14</td>
<td>2</td>
</tr>
<tr>
<td>Sponge/diaphragm</td>
<td>“Would the sponge block off urine?”</td>
<td>12</td>
<td>2</td>
</tr>
<tr>
<td>Condom (female)</td>
<td>“Is there women condoms?”</td>
<td>12</td>
<td>2</td>
</tr>
<tr>
<td>Implant</td>
<td>“Does it hurt to take out or put in the implant?”</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>Emergency contraception</td>
<td>“Does Plan B hurt?”</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>Ring</td>
<td>“What side effects does the ring have?”</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>Pull-out</td>
<td>“Can I use the pull-out method once I perfect it?”</td>
<td>9</td>
<td>1</td>
</tr>
<tr>
<td>Shot</td>
<td>“What’s the side effect of the depo shot?”</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>Abstinence</td>
<td>“Which method is most effective besides abstinence?”</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>Sterilization</td>
<td>“Are vasectomies 100% effective?”</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>Dental dams</td>
<td>“Can you use a plastic bag as a dental dam?”</td>
<td>2</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Abortion</td>
<td>“Do you need parent consent to have an abortion?”</td>
<td>20</td>
<td>3</td>
</tr>
</tbody>
</table>

Note. Categories are not mutually exclusive.

Discussion

This study reveals what many ninth-grade students want to know about sex. The analysis showed that these young people are eager to understand how sexual behavior and birth control work, and how to avoid pregnancy. They are also in need of more comprehensive and accurate information about sexuality and sexual behavior.

Avoiding pregnancy

Overall, the content analysis of students’ anonymous questions reveals some surprising findings of what these students want to know about sex. Results showed that more than anything else, young people are eager to know how to avoid pregnancy. Almost half of the questions pertained to avoiding pregnancy: one fifth were about pregnancy risk, another fifth were about how to use birth control, and another 7%
were about where and how to get birth control. This suggests that students may be aware that they are at risk for pregnancy and that this is not an ideal outcome for themselves or their sexual partner. Few students had questions about abortion. This finding is not surprising given that abortion rates among teens are at a record low, with less than 2% having had an abortion in their teen years ("U.S. Teen Pregnancy, Birth and Abortion Rates Reach the Lowest Levels in Almost Four Decades," 2016). Students also want to know what to expect during their first sexual intercourse, specifically whether or not it will be painful or cause bodily damage. Taking the top three most common types of questions together suggests that young people are curious about what to expect with sexual behavior, and may be thinking about how to avoid pregnancy if and when they become sexually active.

**Fear, myths, and misinformation**

One finding from the analysis is that students seem to have a great deal of misinformation about sex. Many of their questions (37%) pertained to things that are highly unlikely and even impossible. We must consider the possibility that asking these questions does not necessarily mean students believe these misconceptions, and in fact it might be taken as a positive that they are asking for clarification. However, these findings are consistent with past research that this age group has a great deal of fear and misunderstanding about sexuality and sexual behavior (Angulo-Olaiz, Goldfarb, Constantine, 2014; Buzi, Smith, Barrera, 2015). The prevalence of misinformation among this group is especially remarkable given that students in this region are likely to have had comprehensive, medically-accurate sexuality education during middle school. The pervasiveness of so many questions referring to myths and misunderstandings, in this study and in past research, serves to highlight the urgency for accurate and early sexuality education for young people. False information about sex abounds, even sometimes in school-based sexuality education, and it will take ongoing, accurate, and frank sexuality education in and out of school to counter this deluge.

The prevalence of these questions also points to the fact that young people want accurate information about sex. Educators must continue to inquire what young people believe about sex to reveal prevailing myths, thus allowing educators to tailor their curricula to address those myths. Simply encouraging students to ask anonymous questions during sexuality education is one way to locate harmful myths and address them head on. Curriculum developers might also consider incorporating media literacy elements into sexuality education. Since many young people turn to the Internet and television for information on sex (Buhi, Daley, Fuhrmann, & Smith, 2009; Kaiser Family Foundation, 2004; Simon & Daneback, 2013; Sutton, Brown, Wilson, K. M., & Lein, 2002) and since much of this information is inaccurate and narrow (Buhi et al., 2010; Hust, Brown, L’Engle, 2008; Pariera et al., 2014; Signorielli & Bievenour, 2015; Simon & Daneback, 2013; Ward, Gorvine, Cytron-Walker 2002), providing young people with the tools to discern myth from fact is an important foundational skill for continued sexual development.
Concurrent with this, it is also crucial to help prepare sexuality educators to address these topics with young people. Providing training on how frontline educators can address myths and misinformation is especially important given that some sexuality educators feel students should be discouraged from asking sexuality-related questions (Herbert, Henry, Sherwood-Laughlin, & Angermeier, 2014). Moreover, many report being unprepared to teach sexuality education (Eisenberg et al., 2010; Howard-Barr, Rienzo, Pigg, & James, 2005; Rhodes, Jozkowski, Hammig, Ogletree, & Fogarty, 2014; Wilkenfeld & Ballan, 2011), especially in teaching sexuality education that is inclusive of gay, lesbian, and bisexual youth (Lindley & Reininger, 2001; Meyer, Taylor, & Peter 2015; Robinson & Ferfolja, 2008). Sexuality educators who receive training are more likely to cover more sexual topics, and feel more comfortable doing so (Hammig, Ogletree, & Wycoff-Horn, 2011; Lindau, Tetteh, Kasza, & Gilliam, 2008; Myers-Clack & Christopher, 2001; Rhodes et al., 2014). Studies have found that even brief training can improve sexuality educators’ knowledge, comfort, and likelihood of covering more topics (Buston, Wight, Hart, & Scott, 2002; Levenson-Gingiss & Hamilton, 1989). For young people to receive accurate information on risks, safer sex, and have common myths about sex dispelled, sexuality educators must be given the appropriate tools to tackle those issues.

Only 6% of the questions were specifically about the risk of STIs, yet half of young people will acquire an STI at some point in their youth (Satterwhite et al., 2013). However, questions about condoms were common, and as a dual protection method it could be that students asking about condoms are thinking about STI prevention in lieu of or in addition to pregnancy prevention. It is also possible that the lack of questions about STIs is not a reflection of a lack of risk perception because they are questions rather than assertions. Past research has shown that adolescents do underestimate their risk of getting an STI (Mullins et al., 2010; Whaley, 2000), so it may be helpful to highlight STI risks for young people, particularly since research has found that increasing accurate risk perceptions can be an effective intervention strategy (Agha & Van Rossem, 2004; Bajac, Feliu-Soler, Meerhoff, Latorre, & Elices, 2016; Murray, Ashcraft, & Downs, 2015). For example, researchers found that a single exposure to an interactive video about STI and pregnancy risk viewed at a health clinic was successful at improving knowledge about risk perceptions and subsequent safer sex behaviors (Murray, Ashcraft, Downs, 2015). Similarly, a 30-minute information session on accurate HIV risk improved sexual risk perceptions among partners of injection drug users, at least short term (Krauss et al., 2000), and another study found that a single web-based session aimed at increasing knowledge of risk factors was effective at reducing condomless sex among men who have sex with men (Carpenter, Stoner, Mikko, Dhanak, & Parsons, 2010). Providing accurate risk information is critical, but because sexuality education programs have been found to overstate risks, special attention must be paid to the careful creation of accurate risk messages. One other explanation for the relative dearth of questions about STIs is that the students in this sample may have already had extensive education on STI prevention, considering their school district’s HIV education mandates are
more strenuous than other sexual health topics. While we cannot conclude what the underlying reason is for students asking few questions about STIs, providing them with accurate, nonexaggerated information about risks associated with sex may still prove beneficial to their sexual decision making. Students stand to benefit if more states, school districts, and sexuality educators require sexuality education cover such topics as condoms and other methods of STI-prevention during vaginal, oral, and anal intercourse, and provide accurate information about STI risks during vaginal, oral, and anal intercourse.

It is also important to help students better understand what happens to the body during sexual behaviors, not only because students want to know, but also to alleviate some fears and misunderstandings. While most educators are not eager to emphasize the pleasurable aspects of sexual behavior, there is no reason students should be anxious over unlikely outcomes associated with sex. Many students are preoccupied with concerns about pain, and while it might indeed be an issue for some, this fear might be allayed by a better understanding of physiology and arousal, and by information about the use of lubricants. Moreover, it highlights the need felt by many to include pleasure as a topic in school-based sexuality education, to help young people contend with sexual desire and pleasure (Fields, 2008; Fine & McClelland, 2006).

**Information on birth control**

The findings also suggest that most questions are about how to effectively use birth control and prevent pregnancy. This is what most students want to know about, and thus accurate and detailed information about how to use birth control, how birth control works, and how to access it, should be available to them. Birth control is much more effective when used correctly, thus educating students about correct usage would likely help decrease unplanned pregnancies and STIs. Because students seem to have many questions about hormonal birth control, accurate information on short- and long-term side effects should also be provided so that students can make fully informed choices about pregnancy and STI prevention methods. It is imperative that sexuality education programs, especially those geared toward middle- and high school students, focus not just on birth control’s importance and failure rates, but its correct usage. Methods such as male and female condoms and latex barriers must be emphasized alongside hormonal methods, since these can protect against STIs during vaginal, oral, and anal intercourse. It is important to not lose sight of barrier methods given that the language of birth control and pregnancy prevention is inherently focused on vaginal intercourse, and thus may exclude gay and lesbian students and students engaging in same-sex behaviors.

The results from the summative analysis showed that most of the students’ questions about birth control were about male condoms and the birth control pill, which is not surprising since these are the most common forms of birth control used by young people (Martinez, Copen, & Abma, 2011). Students did not ask many questions about other forms of birth control, but it is not possible to say whether this is because they are unaware of their availability, did not think to ask about them,
uninterested in them as possible methods, or simply find them straightforward. However, because LARCs are one of the most effective methods for preventing unplanned pregnancies among youth (Baldwin & Edelman, 2013; Winner et al., 2012), young people in particular may benefit from formal instruction about these options. Currently schools that provide information on birth control tend to focus more on short-acting hormonal methods like the pill (Demissie et al., 2015), and even online sexual health resources often fail to mention LARCs (Harris, Byrd, Engel, Weeks, & Ahlers-Schmidt, 2016). Providing students with information about the full range of birth control options, including the need to consider STI prevention when using hormonal options, could help students to choose methods that fit with their lifestyle and values.

Young people in this study want and need accurate and plentiful information about birth control, pregnancy, STIs, and what to expect during sexual behaviors, including pleasure. Yet many of these topics, such as the latter, may not be easily covered in school-based sexuality education due to various social and political constraints. Educating youth about sexuality is not the purview of schools alone, and these topics could be addressed by other education sources, such as peer educators, parents, media, and health care professionals, to name a few. Peer-to-peer education is one method with a potential for addressing these sensitive topics, and one that has proven to be effective for young people (Caron, Godin, Otis, & Lambert, 2004; Layzer, Rosapep, & Barr, 2014; Pearlman, Camberg, Wallace, Symons, & Finison, 2002; Pinkleton, Austin, Cohen, Chen, & Fitzgerald, 2008; Smith, Dane, Archer, Devereaux, & Katner, 2000). There is no doubt young people are already exchanging information with each other about sex, so ensuring the information they share is accurate and age-appropriate could be a step in the right direction. Parents also serve as a crucial source of sexuality education for young people (see Widman et al., 2015) and might be well-equipped to teach their children about many of these topics, specifically pregnancy and childbirth, understanding others’ behaviors and norms, and partner communication. Efforts to help parents navigate these conversations effectively are critical, especially since parents are often reluctant to discuss sexuality with much frequency or positivity (Flores & Barroso, 2017).

In fact, many young people start asking their parents questions about sex when they receive school-based sexuality education (Pariera, 2016), so schools should consider providing resources for parents leading up to sexuality education. Encouraging parents to let their children participate in school-based sexuality education could also benefit young people, especially those who attend schools with opt-in policies. The media also serve as sexuality educators, intentional or not, and are well positioned to educate young people on those topics too taboo for some schools and parents to cover, such as what happens during sexual behavior. While the medium of television does not have a reputation for providing consistent, accurate sexual health information (Pariera et al., 2014), when accurate information is presented it can be a powerful educational source (Brodie et al., 2001; Murphy, Frank, Chatterjee, & Baeconde-Garbanati, 2013). Television portrayals of sex have been found to rarely portray risks associated with sexual behaviors (Hetsroni, 2007; Signorielli
& Bievenour, 2015). This is a key area for improvement of televised depictions of sexuality, since we know young people underestimate their risks. Finally, physicians and other health care providers are a potential information source for young people on available birth control methods. Although private interactions with providers are probably infrequent, if they happen at all, these visits are a key source of information on what kinds of birth control are available and how to use them correctly. The one-on-one nature of these interactions also allows for tailored messages about sexual health, and even brief encounters have proven helpful at reducing risky behaviors (Fortenberry, 2002; Merenstein, Green, Fryer, & Dovey, 2001). Young people depend on school educators, peers, families, media, and health care providers to provide them with sexuality education that will empower them to have a healthy, satisfying sex life. We must double our efforts at finding the best ways to provide sexuality education on a wide variety of topics to an increasingly diverse group of young people.

**Conclusion**

Hearing from adolescents about what they want to know about sex is crucial to developing curricula and other resources for sexuality education, whether given by teachers, parents, peer educators, the media, or health care professionals. This study reveals that young people need to be more informed about sexuality and sexual behavior. Youth must be provided with accurate and comprehensive information about sexual behavior, and how to access and effectively use birth control to prevent pregnancy and STIs. Efforts must also be made to dispel myths about sexuality and provide a realistic view of the risks associated with sexuality. Young people have told us what they want to know about sex, and now educators and caregivers must intensify their efforts to make sure young people are equipped with the information they want and need to develop a safe, healthy sex life.

**Considerations and limitations**

There are some important things to consider when analyzing the results of this study. One limitation is the absence of demographic descriptions of the individuals in the study. Collecting demographic data on each of the questions would have decreased anonymity and likely decreased the number of questions students were willing to ask, but continued research examining demographic differences in questions will be useful in understanding how they vary by gender, sexual orientation, ability, socioeconomic status, and other sociodemographic variables. Continued research on the sexuality education needs of LGBT youth is especially crucial, as this group is particularly underserved by their educational system. Another limitation is that the sample is limited to students in California, a state that has legislated for evidence-based and medically-accurate sex education in schools. The questions ninth-grade students might ask in other regions with different curricula could be quite different. While the students in this sample may not be nationally representative, their questions still provide invaluable insights into what many ninth-grade students
want to know. Despite these limitations, this study provides an in-depth view of the
concerns and questions young people have as they navigate their sexuality.

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References

normative beliefs, risk perceptions, and sexual behavior of Zambian adolescents. Journal of

https://doi.org/10.1080/15546128.2014.883266

intervention for addressing risk perception of alcohol abuse in adolescents. Adicciones, 28(1),
41–47.

rapid repeat pregnancy in adolescents: A review. Journal of Adolescent Health, 52(4, Supple-
ment), S47–S53. https://doi.org/10.1016/j.jadohealth.2012.10.278

Communicating health information through the entertainment media. Health Affairs, 20,
192–199.

https://doi.org/10.2307/3813422

young people search for online sexual health information. Journal of American College Health;
Washington, 58(2), 101–111.

and Accuracy of Sexual Health Information Web Sites Visited by Young People. Journal of
Adolescent Health, 47(2), 206–208.

education programme: Obstacles and facilitating factors. Health Education Research, 17(1),
59–72.

health website. Journal of Sex & Marital Therapy, 41(2), 126–133. https://doi.org/
10.1080/0092623X.2013.857375

Cameron, K. A., Salazar, L. F., Bernhardt, J. M., Burgess-Whitman, N., Wingood, G. M.,
from online focus groups. Journal of Adolescence, 28(4), 535–540. https://doi.org/
10.1016/j.jadohealth.2004.10.006


