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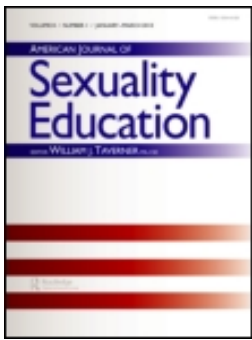


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Angulo-Olaiz, Francisca; Goldfarb, Eva; and Constantine, Norman A., "Sexuality Information Needs of Latino and African American Ninth Graders: A Content Analysis of Anonymous Questions" (2014). *Department of Public Health Scholarship and Creative Works*. 139.
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To cite this article: Francisca Angulo-Olaiz , Eva S. Goldfarb & Norman A. Constantine (2014) Sexuality Information Needs of Latino and African American Ninth Graders: A Content Analysis of Anonymous Questions, American Journal of Sexuality Education, 9:1, 21-40, DOI: [10.1080/15546128.2014.883266](https://doi.org/10.1080/15546128.2014.883266)

To link to this article: <https://doi.org/10.1080/15546128.2014.883266>

 Published online: 13 Mar 2014.

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Sexuality Information Needs of Latino and African American Ninth Graders: A Content Analysis of Anonymous Questions

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This study used qualitative content analysis to examine anonymous questions about sex and sexuality submitted by Latino and African American adolescents in Los Angeles, California, classrooms. The majority of questions asked about sexuality and sexual behavior, or anatomy and physiology, with fewer questions about pregnancy and pregnancy prevention, sexually transmitted infections, and condoms. Overall, a notable mix was found of questions implying exposure to or awareness of a wide range of sexual activities, together with questions demonstrating fundamental misunderstandings or confusion about some of the most basic aspects of sex and sexuality. Gender differences emerged across topics, subtopics, and question types. The results of this study suggest that differences exist between what Latino and African-American teens yearn to know about sex and sexuality, and what information they are getting on these topics from other sources. This reinforces the importance of considering the concerns and needs of the intended audience in designing and evaluating health education programs.

KEYWORDS *Sexuality education, adolescent sexuality, sexual health, sexual behavior, gender*

The authors thank Tamar Antin, Wendy Constantine, and Petra Jerman for helpful reviews and suggestions, and the Planned Parenthood Los Angeles Sexuality Education Initiative classroom facilitators for collection of student anonymous questions.

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INTRODUCTION

Most curriculum-based classroom sexuality education is designed to provide essential information about sexuality and sexual health to young people (Goldfarb & Constantine, 2011). Although there can be wide variation in how different topics are addressed and what gets emphasized, these programs generally include information about anatomy and physiology as well as pregnancy and sexually transmitted infection (STI) prevention. Within this common framework, students are often encouraged to ask questions in order to get clarification of concepts or to solidify their learning. A well-established and common technique within sexuality education programs has been to provide students an opportunity to submit their questions anonymously, often on index cards. Such an opportunity has been recognized by educators as important for several reasons. First, it can provide adolescents a safe space to explore and ask questions about anything related to sexuality including topics that may go beyond the content of the curriculum. Second, students' anonymous questions collected during sexuality education instruction can play an important role in assessing their understanding of the information being delivered and identifying gaps in their knowledge and skills. Third, many youth are not comfortable asking questions about sex or sexuality publicly. Some may fear that they will be judged as sexually ignorant or, conversely, as too sexually knowledgeable or experienced based on their queries. They might be more willing to seek answers if given the opportunity to ask questions anonymously, as this would protect them from public scrutiny. Finally, anonymous questions have the potential to elucidate not only what youth want to know but also how they think and feel about sex and sexuality, what types of sexual issues they are facing, and how their views and assumptions might reflect societal norms on sex, gender, and sexuality.

In addition to being a useful tool for educators, researchers have found that analyzing anonymous questions can provide a window into what young people may be wondering or worrying about when it comes to sexuality that they might not be willing to divulge publicly. Such research has the potential to identify areas of disconnect, for example, between information provided by a curriculum or program and that being sought by adolescents. Previous studies of anonymous questions submitted during sexuality education classes, for example, have shown that youth were not only interested in topics traditionally covered in sexuality education curricula such as pregnancy, STIs, and anatomy and physiology, but they also wanted to know more about a variety of sexual behaviors, sexual orientation, and personal relationships (Calderwood, 1963; Campbell & Campbell, 1987; Davis & Harris, 1983; Moreno, Breuner, & Lozano, 2008). Research on sex and sexuality questions submitted anonymously via other venues has yielded similar findings about a diversity of topics. For example, in a study of call-in questions during a

radio program, young adults more frequently asked questions about relationships than about STIs or pregnancy (Kang & Quine, 2007). In addition, a study on questions submitted to a Planned Parenthood sexuality education website showed that sexual behavior questions were most prevalent, and that relationship questions were more frequent than questions about sexual health services or STIs (Vickberg, Kohn, Franco, & Criniti, 2003).

Gender differences in the types of questions asked can inform researchers' understanding of how male and female youth perceive themselves as developing sexual beings (Forrest, 2000). One of the earliest studies analyzing anonymous questions among ninth graders found that pressures to conform to heterosexual masculine norms kept ninth grade boys from admitting to gaps in their knowledge of sexual behavior (Calderwood, 1963). Nonetheless, boys were eager to access sexuality information if they could do so without revealing their lack of knowledge. This study also found that girls were more knowledgeable than boys about their anatomy and physiology, but were more likely to ask questions about romantic relationships and related challenges.

Adolescent girls have been found to be more open to obtaining information from a trusted adult, especially a mother, and this has been attributed at least partly to the conversations about menstruation that girls typically have with their mothers early in a girls' sexual development (Calderwood, 1963; Measor, 2004). Measor argued that because the onset of puberty for boys is not as pronounced as it is for girls, opportunities to talk with parents about sex and sexuality are not as salient for boys, potentially leaving them to seek information from other sources, such as peers and media that might not be as accurate or appropriate. Many of these alternative sources often provide explicit sexuality information that promotes heterosexual masculine norms depicting men as having a high level of sexual skill and knowledge (Measor, 2004).

While previous research has established the importance of studying anonymous questions as a way to better understand what young people are thinking about when it comes to sexuality, no studies have specifically looked at urban Latino and African-American youth to consider their unique information needs and concerns about this topic. This study addresses a gap in the literature by providing information that will be valuable for educators, curriculum developers and others who work to deliver sexuality education to urban Latino and African-American youth.

In the current study, we used qualitative analysis methods to examine anonymous questions submitted by ninth-grade Latino and African American adolescents in Los Angeles, California. We had three primary research questions:

1. What kinds and types of information about sex and sexuality are sought by Latino and African American adolescents?

2. To what extent does the information sought vary by gender?
3. What are the developmental and programmatic implications of the content, patterns, and gender differences in information sought?

METHODS

Procedures

This study employed data from a larger randomized trial evaluating a multicomponent comprehensive sexuality education program in eight charter high schools in low-income neighborhoods in South and East Los Angeles, California (Marques & Ressa, 2013). For this larger trial, 44 ninth-grade classrooms across eight schools were randomized during fall 2011 into two conditions, a three-session control curriculum (20 classrooms) or a 12-session intervention curriculum (24 classrooms). Written anonymous questions were solicited on two occasions during the 12-session curriculum, which was delivered to 655 students in the 24 intervention classrooms (the three-session control curriculum did not involve anonymous questions). The overall sample of participating students was 83.4% Latino, 9.1% African-American, and 50.2% female. Each student received only one card, and fewer than 1% of all students asked more than one question per card. The cards used for the written questions included a field for the students to indicate their gender. Students submitted an average of 14 questions per class.

As part of Session 6, the facilitator requested questions about sexual anatomy or reproduction:

I'm going to pass out some index cards. If you have a question about sexual anatomy or reproduction, please write it down on this card. Don't put your names on the cards—we want to keep this anonymous. You can write questions now or anytime during this class. I will collect these near the end of the period. I will try to answer as many as I can today. If I do not have an answer, I will have it at the next session. If you don't have a question, write down one thing you've learned or would like to learn in these classes. This means I should get a card back from everyone.

During Session 12, the facilitator's instructions were more open ended: "It's anonymous questions time. I'm going to collect your index cards and answer as many questions as possible since this is our last session."

Analysis

We used qualitative content analysis (Weber, 1990). The unit of analysis was the question as a whole. We conducted an initial review of all the anonymous questions and identified six overarching topic categories and four

question-type categories. A second cycle identified subtopics within each of the six overarching topic categories. The lead author and research assistant coded all questions using ATLAS.ti, a qualitative data analysis software program. Discrepancies between the coders were resolved by discussion (Harry, Sturges, & Klingner, 2005). Finally, the second and third authors reviewed the data for consistency and suggested further revisions to the codes, which were decided based on consensus.

Data were initially analyzed separately by session and by sex. Although instructions to the students differed for the two sessions, similar categories and codes emerged. As such, the two sessions were collapsed for all analyses.

RESULTS

Students asked a total of 676 anonymous questions. Fifty-seven percent of the questions were asked during Session 6 compared with 43% during Session 12. Forty-four percent of questions were marked as coming from a male student, 46% from a female student, and 10% did not include a gender identifier.

Six overarching topic categories emerged from an inductive analysis of the questions: sexuality and sexual behavior (35%), anatomy and physiology (31%), pregnancy and pregnancy prevention (14%), sexually transmitted infections (8%), condoms (5%), and other (8%). As detailed in Table 1, more specific subcategories were coded within each overarching category.

Questions were further coded by question type. As summarized in Table 2, approximately 80% of the questions were characterized as information seeking (asking about something factual and specific). Other types of questions were about being normal (10%; seeking to understand the normal range, size, proportion, amount, of something or some activity, or to discern if the asker is in that normal range) and about advice or permission (8%; seeking advice on how to handle a situation or how to engage in some sexual behavior correctly, or permission from the facilitator or teacher to engage in some behavior the asker was contemplating). Two percent of questions were questions regarding the sexuality education program.

Sexuality and Sexual Behavior

Students asked 249 questions about sexuality and sexual behavior. Nearly a quarter of these were about arousal. Male students were more likely to ask questions about arousal than were female students (12.6% of male questions versus 3.4% of female questions). Of the 14 questions related to masturbation, nine were by male students and two by female students, while three did not identify a gender.

TABLE 1 Topics, Subtopics, and Example Questions

Overarching topics (percent of all male questions, percent of all female questions ^a)	Subtopics and example questions (percent of all male questions, percent of all female questions ^a)
Sexuality and sexual behavior (33.6, 32.4)	Sexual arousal (12.6, 2.9) Male arousal (4.9, 0.6) <i>Why is it that our hormones get all crazy when we see a fine girl? (male)</i> <i>How do guys get turned on? (female)</i> Female arousal (4.9, 1.7) <i>How do you know if a girl is faking to moan pleasure? (male)</i> <i>What makes the female feel pleasure and why? (female)</i> Masturbation (2.8, 0.6) <i>What happens if you masturbate more often? (male)</i> <i>Is it bad to masturbate or play with my parts? (female)</i> Virginity (1.5, 3.1) <i>Why do girls bleed when they lose their virginity? Does it happen to all women? (male)</i> <i>When you put in a tampon, are you still a virgin? (female)</i> Sexual intercourse (4.9, 5.1) First sexual intercourse (0.9, 4.8) <i>How does it feel the first time? (male)</i> <i>Does it hurt when you first have sex? If it does, will it ever stop hurting? (female)</i> Vaginal intercourse (2.2, 1.1) <i>Can you pee inside a girl's vagina during sex? (male)</i> <i>How does the penis fit in the vaginal opening? (female)</i> Oral intercourse (1.2, 2.6) <i>Why do girls give head? (male)</i> <i>What happens if you perform oral sex with your boyfriend and he comes in your mouth? (female)</i> Anal intercourse (1.5, 1.4) <i>Can a girl get pregnant when the guy puts his sperm into the girl's anal? (male)</i> <i>Is it bad to f@*! some1 by their butt? (female)</i> Other sexuality and sexual behavior (13.6, 15.9) <i>How many positions are in sex and the best one? (male)</i> <i>Is it true that when you have sexual relationships you lose your body shape? (female)</i>
Anatomy and physiology (37.3, 28.1)	Male anatomy and physiology (23.8, 4.0) Penis size (4.9, 0) <i>What is the average size of a penis? (male)</i> Circumcision (1.9, 0) <i>Can you pull back the foreskin to show the head with an uncircumcised penis? (male)</i> Other penis (2.7, 0.6) <i>Why does it hurt when you touch your penis hard? (male)</i> <i>Why does the penis have the little bump on top? (female)</i> Scrotum and testicles (4.9, 0) <i>Why does it hurt when you get bit in the balls? (male)</i> <i>Could the balls be different sizes? (male)</i> Semen and preejaculate (5.2, 0.9) <i>At what age does sperm comes out? (male)</i> <i>How many semen do men release? (female)</i>

(Continued on next page)

TABLE 1 Topics, Subtopics, and Example Questions (*Continued*)

Overarching topics (percent of all male questions, percent of all female questions ^a)	Subtopics and example questions (percent of all male questions, percent of all female questions ^a)
	Other male body (4.0, 2.6) <i>Why do guys grow pubic hair? (male)</i> <i>How does a boy's body work? (female)</i>
	Female anatomy and physiology (12.0, 22.2) Vagina or vulva (5.2, 8.0) <i>What does a vagina smell like? (male)</i> <i>Why does a woman get discharge when they're not horny? (female)</i>
	Breasts (0.3, 1.4) <i>Can boobs pop? (male)</i> <i>What are boobs for other than to produce milk? (female)</i>
	Reproductive tract (1.9, 2.0) <i>What does the uterus do? (male)</i> <i>Why do females reproduce eggs and not sperm? (female)</i>
	Menstruation (4.0, 8.8) <i>Why do women have periods? (male)</i> <i>Why do girls get their periods? (female)</i>
	Other female body (0.6, 2.0) <i>Why is the digestive system separated from the vagina? (male)</i> <i>Do females have pre-cum or can they cum? (female)</i>
	Other anatomy and physiology (1.5, 2.0) <i>Why do people grow pubic hair? (male)</i> <i>Why do guys' body parts look different from girls' body parts? (female)</i>
Pregnancy (9.6, 20.7)	Pregnancy causes and prevention (8.4, 15.7) <i>Can a girl get pregnant without having sex? (male)</i> <i>How can a girl not get pregnant without using protection or pills? (female)</i>
	Fetal development and childbirth (1.2, 5.1) <i>Why do babies sometimes come early before 9 months? (male)</i> <i>Can babies be born through an operation? (female)</i>
Sexually transmitted infections (7.7, 8.2)	Sexually transmitted infections (7.7, 8.2) <i>Can you get STDs by masturbation? (male)</i> <i>How does the fluid already have those types of infections? (female)</i>
Condoms (5.2, 2.6)	Condoms (5.2, 2.6) <i>Can a condom get stuck in a girl's vagina? (male)</i> <i>When you are married do you have to use a condom? (female)</i>
Other (6.5, 8.0)	Other (6.5, 8.0) <i>Where is a clinic? (male)</i> <i>Is it weird if we are abstinent 10 years from now? (female)</i>

^a324 questions were marked as coming from male students, 352 from female students.

Across all subtopics, 35 (14.1%) of the questions about sexuality and sexual behavior were also coded as negative or potentially negative experiences (e.g., "Does it hurt when a guy puts his penis in the vagina?"). Of these 35 questions, 29 (82.9%) were asked by female students, 4 (11.4%)

TABLE 2 Types of Questions

Question type (percent of all questions)	Example questions
Information seeking (80%)	<i>What is the average size of a penis? (male)</i> <i>Do condoms work if your sexual partner has HIV? (male)</i> <i>Can a girl get pregnant when she's already pregnant? (male)</i> <i>What does poppin' a cherry mean? (female)</i> <i>Why do people moan? (female)</i> <i>Why do some twins come out one a boy and one a girl? (female)</i>
Being normal (10%)	<i>Why is my penis small and does not cum a lot? (male)</i> <i>Is it good to have a lot of hairs on your sac? (male)</i> <i>Could the balls be different sizes? (male)</i> <i>Is it bad to shave your vagina? (female)</i> <i>Is it normal if you have your period for more than a month? (female)</i> <i>Is it normal if a girl that is 14 years or older has one breast bigger than the other? (female)</i>
Advice or permission (8%)	<i>What condom would you recommend? (male)</i> <i>People tell me not to have anal sex. Why can't you have anal sex? (male)</i> <i>How do I get girls? (male)</i> <i>What can we do if our partner gets violent after we say "no" to sex? (female)</i> <i>Is it okay to suck dick? (female)</i> <i>How can you have a healthy relationship? (female)</i>
Program related (2%)	<i>Are we going to get condoms? (male)</i> <i>Why didn't we see more videos? (female)</i> <i>Would you ever pass out condoms to us so we can have safe sex? (female)</i>

were asked by male students, and two (5.7%) did not identify a gender. Many of the questions about negative experiences asked by female students were related to first intercourse. Of the 21 questions about first intercourse, 17 (81%) were asked by female students, three (14.3%) by male students and one (4.7%) did not identify a gender. Further, of the 17 questions asked by female students about first intercourse, 15 were about negative experiences, predominantly pain or bleeding.

Anatomy and Physiology

The second largest proportion of questions related to anatomy and physiology. Students were interested in what belongs where and who has what, and also sought information about how their anatomy is related to sexual functioning. Nearly a quarter (23.8%) of male student questions were about the male body, with the highest percentage asking about the penis (9.5%) (e.g., shape, sensitivity, size, erections), while 22.2% of female student questions were about the female body, with the highest percentage asking about

menstruation (8.8%). In addition, 12% of the male student questions asked about the female body, and only 4% of the female student questions asked about the male body.

Pregnancy

A higher proportion of female student questions than male student questions focused on pregnancy (20.7% vs. 9.6%, respectively). Questions revolved around three themes: how pregnancy occurs, pregnancy prevention, and fetal development and childbirth. The largest proportion of questions from students of both genders focused on the myths or facts surrounding the occurrence of pregnancy, including body to body rubbing, oral sex, having sex while menstruating, the difference between preejaculate and semen, and anal intercourse. Only seven questions (four from female students and three from male students) related to abortion (e.g., Why do women get abortions?, What do you think about abortions?, Do you think it's right?).

Sexually Transmitted Infections

Questions concerning STIs were asked with equal frequency by male (7.7%) and female students (8.2%). The majority of these questions involved the means of transmission of an STI.

Condoms

Questions about condoms were asked by 5.2% of male and 2.6% of female students. Most of these were about general information on condoms, their effectiveness in preventing STIs and pregnancy, how they work, where they could be obtained, and whether condoms were going to be distributed during class time. Three questions were about the female condom (e.g., What about girl condoms?).

Other

Questions about topics that could not be classified under any of the previously listed topics comprised 6.5% of male and 8.0% of female student questions. Almost half of these questions from male students were about slang terms or urban sexual myths, whereas female students tended to ask more questions about relationships.

DISCUSSION

Low-income, Latino and African American ninth graders in our sample asked questions on a wide variety of topics and across a number of question types.

Overall, there was a notable mix of questions implying exposure to or awareness of a wide range of sexual activities, together with questions demonstrating fundamental misunderstandings or confusion about basic aspects of sex and sexuality. Differences between males and females were found across question topics and subtopics, many of which are consistent with societal and cultural gender roles and messages.

Sexuality and Sexual Behavior

Sexuality and sexual behavior outside the context of pregnancy and disease prevention are not typically emphasized in sexuality education. Yet research has shown that young people are curious about and seek information on these issues (Brown, Keller, & Stern, 2009; Kanuga & Rosenfeld, 2004). Our finding that this category yielded the highest proportion of questions among female students, as well as the second highest among male students, supports those previous findings.

Our results are consistent with sexual script theory, which posits that heterosexual relationships largely follow social scripts that reflect cultural norms (Sanchez, Fetterolf, & Rudman, 2012). In the United States, the prevailing cultural script is one in which men play a more dominant and agentic role related to sexual behavior compared with women, taking control and acting as initiators and directors of sexual behaviors, including when, how, and under what circumstances they occur, while women play a more submissive role in these matters (Sanchez et al., 2012; Blumstein & Schwartz, 1983; Byers, 1996). This script guides how men and women interact with each other interpersonally within sexual relationships but also provides a framework for how men and women view their own sexuality on a personal level (Wiederman, 2005; Sanchez et al., 2012). Arousal or sexual response was a common subtopic among male students. They were more likely than females to ask questions that implied a view of sex as pleasurable, and to take the perspective of an active participant in sexual intercourse. They asked about sexual positions, physical sensations, having sexual intercourse with several females, having sex for an extended period of time, and how to perform certain sexual behaviors. Male students' interest in these topics might speak to a high level of curiosity, and to their willingness to engage in sexual intercourse as adolescents. These findings are consistent with sexual script theory, suggesting that gender norms promote males as ready to take control of sexual behaviors and interactions. The comparatively fewer questions about this topic by female students might indicate a lack of interest or curiosity, or more likely, a lack of permission girls feel to ask these types of questions, even anonymously. The dominance of the traditional gender role script that dictates that women and girls remain passive and largely uninformed about sex (Wiederman, 2005) is also supported by these findings.

Although male students asked many more questions about sexual arousal and pleasure, and nearly all of the questions about masturbation, female students asked the majority of questions concerning negative experiences, in particular pain and bleeding during first intercourse. Female students did not ask any questions about how they or their partners could make this first experience a more pleasurable one. For female students, questions about first sexual intercourse and virginity were closely linked in their references to pain and blood, characterizing the early sexual experience of women as negative. The saliency of this topic for females suggests that losing one's virginity is an important part of young women's sexual identity. As discussed by Carpenter (2002), it might be that some young women are resigned to the idea that their introduction to heterosexual intercourse will include discomfort or pain, and that these feelings are theirs alone to bear.

The concept of men as active sexual agents is also revealed in the absence of questions regarding first sexual intercourse and virginity loss among male students. For men, gender expectations can frame their sexual experience as something they do, not something that is done to them (Pascoe, 2005). Furthermore, Carpenter (2002) has argued that popular culture reinforces the idea that first sexual intercourse and the loss of virginity is a female experience, and a negative one at that.

Despite female students' asking substantially fewer questions about arousal and response than male students, some female students did ask questions related to desire and pleasure. These students wanted to know such things as how to achieve an orgasm and whether having sex was fun. This might suggest that the stereotype of the adolescent woman as uninterested in topics of sexual behaviors and pleasure is not universally accurate despite this assumption underlying much of the formal sexuality education young women receive. While the pressure for both males and females to conform to traditional sexual scripts has been well-documented in the literature (Dworkin & O'Sullivan, 2005; Rickert, Sanghvi, & Wiemann, 2002; Sanchez et al., 2012; Seal & Ehrhardt, 2003), these findings may also suggest that, granted anonymity, girls may feel freer to abandon those scripts.

Almost 16% of questions in the sexuality and sexual behavior topical category were about general consequences of sexual behaviors. These questions went beyond specifics on pregnancy or STIs, to potential connections between sexual activity and unwanted results ("What happens if you masturbate too much?" "Can a boy get an infection if they do anal sex?" "Is it risky to deepthroat?" "What happens to your body if you have sex too hard?").

The mix of curiosity and caution (sometimes fear) related to sexual arousal and behaviors reflects, in part, developmentally appropriate (from biological, social, and cognitive perspectives) interests in sexuality by adolescents (Marques, Goldfarb, Mauldon, Constantine, in press). Add to this the highly sexualized environment in which they live, including media and pop culture that promote the pleasures of sexual behaviors and sexual

relationships (Hust, Brown, & L'Engle, 2008; Brown & Keller, 2000; Teitelman, Bohinski & Boente, 2009), and it is easy to understand the desire for more information about how it is done, how it feels, and in some cases, permission to engage in those behaviors. At the same time, most young people are routinely warned about the dangers of sex, especially early sex or premarital sex, from conventional educational sources, and they receive these same messages at home (Fine & McClelland, 2006). It should not be surprising that their questions reflect this dichotomy. What is concerning is that if adolescents hear from educators and parents only about the dangers of sex, they might cease to listen to them, and instead turn to the less reliable but more encouraging information they get from mass media or their peers (Bleakley, Hennessy, & Fishbein, 2011; Brown & Keller, 2000; Teitelman et al., 2009; Walsh-Childers, Gotthoffer, & Lepre, 2002).

Anatomy and Physiology

Information about anatomy and physiology, specifically sexual and reproductive anatomy and physiology, is one of the core content areas of most sexuality education programs. Furthermore, one of the two question prompts used in this study was specifically about sexual anatomy and reproduction. It is therefore not surprising that questions pertaining to this topic were so frequently asked by both male and female students in this study.

Many questions related to anatomy and physiology were framed as a comparison of one's pubertal development or physical appearance with that of one's peers. For example, nearly half of the anatomy and physiology questions from male students were about the penis (e.g., size, circumcision). This interest might suggest the prominence of the penis in men's sexual identity and their seeking of accurate information that can explain the physical changes they are undergoing.

Female students in this study asked a sizeable number of questions about menstruation (e.g., timing, why boys do not have periods). Interest in this topic reinforces that menstruation is an important developmental milestone central to the female experience, yet some girls have little understanding about its function and connection to reproduction. Female students wanted to know about their bodies and body processes in more detail, perhaps so they could anticipate what to expect and how to make informed decisions about sexual health in particular. This is demonstrated by the number of questions that linked menstruation with pregnancy. For example, female students asked if not having a menses meant that you were pregnant or whether having sex while menstruating could prevent a pregnancy. Such an emphasis on menstruation and pregnancy is also consistent with sexual script theory which, in addition to identifying submissiveness and passivity as the dominant cultural script for heterosexual women, posits

that women are also expected to be the gatekeepers to sexual behaviors and to be responsible for pregnancy prevention. It is important to note that, in addition to information-seeking questions, many of the questions in the anatomy and physiology topical category, for both males and females, were about being normal. It is not surprising that 14–16 year olds might be pre-occupied with their bodies insofar as how they compare to their peers in size, shape, growth, and function (Harvey, Brown, Crawford, Macfarlane, & McPherson, 2007). It is also noteworthy that several questions were about seeking advice (“What can we do if our partner gets violent after we say ‘no’ to sex?”) or permission (“Everyone says we shouldn’t have anal sex, why can’t I have anal sex?”). Educational programs are often focused primarily on information dissemination and specific prevention-related skill-building (e.g., proper condom use) while typically ignoring the needs of adolescents to know whether what they are experiencing as far as growth, feelings, and sexual response is normal and to get guidance and support from reliable, respected sources. Yet in an ideal environment in which young people can expect the reassurance, care, and assistance they seek, it would likely be easier for them to hear and absorb the other, more didactic prevention messages they receive.

It is not surprising to find that young people are most interested in aspects of their own gender’s body functioning (e.g., penis size, shape, and function for males; the vagina and menstruation for females). That male students showed significantly more interest in female anatomy and physiology than female students showed in male anatomy and physiology is worth pondering, however. This finding might reflect society’s gender role norms for men and women regarding sexuality and sexual interest. Expectations that young women are and should be ignorant about their own bodies when it comes to sexual and reproductive anatomy and functioning, and especially related to that of the other gender, affect how young women are raised as well as how and what they are taught. Conversely, expectations that men are naturally more interested in sex and supposed to be the initiators of sexual activity, as well as being responsible for both their and their partner’s pleasure, likewise affect how young men are raised and how and what they are taught. In addition, a substantial proportion of the questions on anatomy and physiology were about the body in relationship to, or in service of, sexual functioning, going beyond what is typically referred to as “the plumbing” and how that relates to pregnancy and disease prevention—often the primary focus of sexuality education programs.

Pregnancy, STIs, and Condoms

Relatively few questions were asked about pregnancy, STIs, or condoms. This might reflect that these topics are already covered much more thoroughly

in the sexuality education program within which the anonymous questions were asked, and perhaps in other formal and informal educational messages that young people receive throughout their lives, so that fewer questions remain. These types of questions might also be easier to ask in front of a group without the need for anonymity. Alternatively, it could mean that young people are just less interested in issues of pregnancy prevention and safer sex, especially compared with sexuality and sexual behaviors when they are given the rare opportunity to ask questions anonymously. In any case, this finding is consistent with previous studies demonstrating that queries related to sexual health were not as prominent among adolescents asking anonymous questions as were questions about sexual behaviors. (Kang & Quine, 2007; Vickberg et al., 2003).

Infrequent Topics

Two topics that were largely ignored by both male and female students in their questions were sexual orientation and abortion; just 1% of questions related to each of these topics. Only seven questions on lesbian, gay, or bisexual topics were asked, six of which came from female students asking about how two females have sex with each other, the genetic roots of homosexuality, and how people become homophobic. Similarly, only seven questions, four of which were from female students, addressed the topic of abortion. These questions ranged from advice or permission-seeking about whether and when abortion is acceptable, to wanting information about up to what point in a pregnancy women could get an abortion. The three male students who asked questions on abortion all wanted to know why females have abortions.

It is difficult to speculate why so few questions were asked about these societally salient topics. One possibility is that as both of these areas continue to be taboo, even with the protection of anonymity young people did not feel safe to raise these subjects. In addition, many sexuality education programs ignore or deemphasize these topics because of their perceived controversial nature or, in the case of sexual orientation, an implicit heteronormative bias (Elia & Eliason, 2010a, 2010b; Mathison, 1998; Savage, Prout, & Chard, 2004; Walton, 2005). Previous research also suggests that regardless of a program's prescribed content, educators themselves often de-emphasize or avoid altogether what they perceive to be controversial topics because of their own discomfort or disagreement with teaching about these topics (Firestone, 1994; Henry J. Kaiser Family Foundation, 2000). Such silence might signal to students that some topics were off limits, even anonymously. Although the reasons remain unclear, the dearth of questions on these topics deserves attention given the saliency of these issues in the larger domain of human sexuality.

Knowledge Gaps

Overall, the questions asked by the ninth-grade adolescents in our study exposed their significant gaps in knowledge about sex and sexuality. Their queries suggest an advanced awareness of the range of sexual behaviors, including oral, anal, and vaginal sex. In addition, the use of language such as “deep throating,” “pop her cherry,” and “queef” seems to suggest prior exposure to sexuality-related information from more casual sources such as friends, the Internet, and pop culture. At the same time, however, many of the questions betray a naïveté about the basic mechanics of conception and pregnancy prevention as well as anatomy that might point to a lack of sexuality-related information and education from reliable sources (“If you kiss lots of guys would you get pregnant?” “If you have sex with a pregnant girl can the baby get pregnant too?”).

Even though schools, parents, and youth-serving agencies tend to remain largely silent on the topic of sexuality—especially with young women, for fear of sexualizing them or putting them at risk (Fine, 1988)—this silence could be causing harm by leaving young women and men to learn about sex and sexuality on their own. Just as their questions suggest that both young men and women are affected by gender norms, which influence what questions they ask, those same gender norms largely dictate what kind of information is available to young people from supposedly reliable sources.

Our results and interpretations should be considered in light of several limitations. First, only students who voluntarily submitted a written anonymous question could be included in the analysis. Students who had concerns over their language proficiency or literacy skills might not have felt comfortable writing a question. Other students might have felt there was not sufficient time to write a question or they did not want to write a question for fear of being identified as its author. Second, students were participating in a sexuality education curriculum, and furthermore the question prompt used to elicit questions during the sixth session specifically mentioned sexual anatomy or reproduction questions. As such, topics identified in this study might not reflect those that would be identified without such participation and prompts. Nevertheless, the questions received at each of the two sessions where questions were elicited covered a full range of topics and appear to offer helpful insights into the sexuality information needs of the participating adolescents.

CONCLUSIONS

The results of this study reinforce the need for sexuality education to go beyond a focus on “the plumbing” of anatomy and physiology, together with

pregnancy and disease prevention, to address sexuality as part of an ongoing process that can be positive, pleasurable, and self-affirming for both young men and women. They also suggest that, in addition to providing information, programs and educators should focus on creating an environment that offers reassurance, support, and guidance to young people and that normalizes their curiosity. These results also suggest the importance of sexuality education programs that recognize prevailing gender norms and sexual scripts and tackle them head on. Finally, the results reinforce the importance of providing young people with ample opportunities to ask questions anonymously.

Students appeared to be using what they have learned in the sexuality education class and juxtaposing this information with gaps in their own knowledge, questioning personal assumptions and the validity of what they have learned from other sources. Adolescents' desire to learn more about sexuality, sexual behavior, and their bodies—the most popular question topics in our study—might suggest that understanding the development of their bodies is closely linked with the exploration of sexual pleasure and with managing the anxiety that comes with that exploration. Part of that anxiety includes negotiating the desire for pleasure with the need to prevent an unwanted pregnancy and STIs. Although the consistent and correct use of condoms can go a long way in preventing unwanted consequences of sexual intercourse, adolescents clearly have questions that go far beyond protection. It might be that reliable information about condoms and STIs is the most accessible for and available to adolescents—especially low-income Latino and African-American adolescents who are statistically at higher risk for negative sexual health outcomes—but that more nuanced information and guidance regarding their bodies, normal sexual development, sexual functioning, and pleasure is scarce. Thus, when given the opportunity to ask questions anonymously in a safe environment, young people forgo the questions about information they can either get on their own or have already received, and ask for those critical missing pieces of information and guidance that will enable them to participate fully and with confidence in their own developing sexuality.

Input into the design and content of sexuality education programs is rarely sought from adolescents themselves. Acknowledging the concerns and needs of the intended audience for health education programs has important implications for program design and effectiveness. The results of this study suggest that differences exist between what Latino and African-American teens yearn to know about their and others' sexuality, and what information they are getting on these topics from reliable and less reliable sources (Diamond & Savin-Williams, 2000).

Directions for future research include investigating the extent to which findings from this study might be relevant for other groups of adolescents. For example, a large-scale survey study could investigate the salience of

sex and sexuality information needs and interests among a representative sample of youth in the United States or in other countries. In addition, future studies might consider the tensions between and relative influences of informal and formal sources of sexuality information to which adolescents are exposed. Finally, future studies of anonymous questions might be important for understanding how young people construct their sexuality. For example, comparing the use of language in anonymous questions by gender could provide insight into notions of masculinity and femininity among adolescents and could reveal what is considered normative and acceptable sexual behavior for high school young men and women: Do the descriptors males and females use in their depictions of sexual activities reveal anything about how they perceive these behaviors and their own role in enacting them? This study analyzed only the content of questions, and a thorough analysis of language usage around sexuality could provide much richness and context to the findings of this study.

Many forces are at play in the education of young people about their sexuality. Social, gender, and sexual scripts; pop culture; media; and other factors all help shape how young Latino and African American men and women come to understand, think, and wonder about their and others' sexuality. As reliable sources of information, educators and other adults who work with young people have an important but limited opportunity to add their influence to this mix by providing accurate, developmentally, and culturally appropriate information and guidance that young men and women need and want and that challenges the often-negative, inaccurate, and unhealthy messages they are getting elsewhere. To do that, however, it is important to learn from young people what information and guidance they seek. Understanding the sexuality information needs of young people has important implications for the development and implementation of sexuality education curricula and programs, and ultimately for enhancing the effectiveness of sexuality education.

FUNDING

This study employed data from a larger evaluation study funded by Planned Parenthood Los Angeles through a contract to the Public Health Institute, Oakland, CA. The analyses reported here were supported by grants from the Ford Foundation and the William and Flora Hewlett Foundation.

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