

EARLY ADOLESCENT PERCEPTIONS REGARDING
SOURCES OF SEXUAL HEALTH INFORMATION

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Abstract

Early adolescence includes youth approximately 11-14 years of age. This age group represents a population open to learning more information about sexuality and signifies a developmental period where effective sexuality interventions may begin (Ott & Pfeiffer, 2009; Grossman et al., 2014). Early adolescence is a critical period when adolescents' initial views on sexuality are formed. Influencing early adolescent sexual health attitude and behaviors are many sources of information, including parents, peer groups, teachers, and media sources (Batchelor et al., 2004; Grossman et al., 2014; Sennott & Mollborn, 2011; Secor-Turner et al., 2011).

Literature focusing on older adolescents (Mollborn & Sennott, 2015; Secor-Turner et al., 2011) may not adequately convey information that is relevant to early adolescents, as sexual health and informational needs may differ. Previous research suggests investigating sources of sexual health information among adolescents and the content of sexual health discussions (Sennott & Mollborn, 2011). Therefore, my dissertation study examines early adolescent perceptions regarding sources of sexual health information.

My dissertation study builds upon previous work completed through my written comprehensive examinations. In my first comprehensive examination, I completed a literature review regarding ways to incorporate adolescent perspectives into public school sexual education practice. In this review, we discussed aspects affecting public school sexual education, including historical contributions, abstinence-only education, and comprehensive sexual education, followed by literature discussing adolescent perceptions. Based on the literature review, we developed six recommendations for public school decision makers to consider when incorporating adolescent perspective into public school sexual education practice. Completion of this comprehensive examination provided background knowledge and context to build future

research work, as well as introduced me to various adolescent perspectives and familiarized me with various factors affecting school-based sexual health education.

In my second comprehensive examination, I completed a qualitative pilot study discussing fathers' experiences talking with their children about sexually related topics. In this pilot study, I completed individual semi-structured interviews with five fathers of children between the ages of 14 to 18. Using an inductive content analysis approach, we examined transcript data using a coding process adapted from Graneheim and Lundman (2004), where we took original transcript text and developed meaning units, codes, and categories. Based on analysis of the categories, we collapsed and grouped similar categories and developed three overall themes illustrating the fathers' experiences shared in the pilot study. Completion of my second comprehensive examination acquainted me with parent literature regarding sexual health topics which I applied to portions of the introduction section and within the implications for future research section of my dissertation study. I used the insight gained from completion of my second comprehensive examination to inform a similar process for data collection, coding, and data analysis for my dissertation study.

In my third comprehensive examination, I completed a quantitative survey exploring health education teachers' experiences involving parents in sexuality education. For this paper, we developed a survey, adapted in part from Eisenberg and colleagues (2013), reviewed by an inter-professional group and two experts with experience in health education/survey construction. To identify methods health educators use to involve parents in public school-based sexuality discussions, we distributed a survey among the Kansas Association for Health, Physical Education, Recreation and Dance (KAHPERD) email list. Twenty-six participants completed the 25-item web-based survey (using REDCap). Using Spearman Rank Order Correlation

Coefficients, we found good to excellent correlations among various curriculum topics that participants believed should involve parent participation. We identified the percentage of methods used to communicate, educate, and involve parents in sexuality discussions, with 52% of participants reporting not involving parents in sexuality discussions at school. Participants reported various sexuality curriculum topics should involve parental participation; however, a mismatch existed between belief and teaching practice. Completion of my third comprehensive examination further influenced my understanding of factors affecting school-based sexuality education, particularly from a sexual health educators' perspective, as well as introduced me to the REDCap survey program. I used a similar process from my third comprehensive examination to inform the development of the survey used within my dissertation study.

My comprehensive examination manuscripts illustrate my research experiences and aligning of topics which ultimately built up to my dissertation study, including the selection of the dissertation topic and study methods. As part of examining aspects of sexuality education, my dissertation builds on my previous comprehensive examinations, which included a comprehensive literature review, fathers' experiences, and health educators' experiences. My dissertation adds to the body of sexuality education research by exploring early adolescent perceptions, an age group that has less inclusion in existing sexual health research, both through a qualitative approach using individual semi-structured interviews, and a quantitative approach via individually administered surveys.

Based on the individual semi-structured interviews, we identified two overarching themes each with three categories, that convey the participants experiences and perceptions regarding sources of sexual health information. Survey data indicated participants believe their mom to be the most frequent source of sexual health information, followed by close friends, dad, and the

internet. Survey results highlight sexual health topics that participants currently want to know more about, with puberty and healthy relationships being the two most common topics.

Information from both the individual interviews and survey data contribute to early adolescent research by offering participant insight through two different modalities, thereby illustrating participants' individual experiences acquiring sexual health information.

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Introduction

Adolescence is a stage of development characterized by not only physical development but increases in behavioral autonomy, decision making skills, and social relationships (Coley, Votruba-Drzal, & Schindler, 2009; Ott, Pfeiffer, & Fortenberry, 2006). Though this is a heightened time of independence and self-discovery for adolescents, it also represents a critical developmental period as youth begin to transition social relationships into potential sexual relationships. Adolescents increased interest in sexual behaviors coupled with limited sexuality knowledge can result in negative health outcomes for early adolescents (youth approximately 11-14 years of age) (Ott & Pfeiffer, 2009). Lara and Abdo (2015) reported that adolescent females who initiate sexual intercourse at age 14 or younger experience more negative health outcomes (e.g., decreased use of contraception, increased sexual partners, increased risk for depression, increased risk for sexually transmitted diseases (STDs) and cervical cancer) than adolescent females age 16 or older. Parents, close peers, teachers, and media play roles in shaping adolescents' beliefs and expectations for sexual relationships, as well as sources of sexual health information (Ali & Dwyer, 2011; Secor-Turner, Sieving, Eisenberg, & Skay 2011; Teitelman, Bohinski, & Boente, 2009).

Parents may serve a protective influence as they are uniquely able to discuss sexuality content to meet their child's developmental needs (Secor-Turner et al., 2011). Parents can influence their child's decision about whether and when to have sex (Sennott & Mollborn, 2011). Adolescents who engage in conversations with their parents are more likely to delay sexual initiation compared to youth who primarily discuss sexuality issues with their peers (Teitelman et al., 2009). Cox, Shreffler, Merten, Gallus, and Dowdy (2015) found, among urban seventh graders, a supportive parent-child relationship decreases the likelihood that sexual relationships

are considered normal for same aged peers. Similarly, Coley and colleagues (2009) suggest that active and involved parenting practices (e.g., eating meals together, engaging in family activities, providing supervision and routine, etc.) provide a protective benefit by reducing adolescent opportunities to engage in unsafe sexual behaviors.

A multitude of research exists discussing the benefits of parental involvement in adolescent sexuality education (Coley et al., 2009; Lara & Abdo, 2015; Markham et al., 2009; Maria, Markham, Bluethmann, & Mullen, 2015); however, adolescents and parents both report difficulty engaging in conversations about sexuality topics. Parents report difficulty conveying medically accurate information and embarrassment with sexuality topics as reasons to avoid sexuality discussions with their children (Walker, Rose, Squire, & Koo, 2008). Likewise, adolescents report that parents can offer information regarding sexuality topics, but such conversations are often limited to the negative aspects of sexual relationships and do not help teens learn to negotiate broader sexuality topics (Teitelman et al., 2009). For additional information on sexuality topics, adolescents may turn to their peers and close friends.

Research indicates that adolescents refer to their close friends for more specific sexuality knowledge and topics, such as defining slang terms, sexual relationships, and other intimate behaviors aside from sexual intercourse (Teitelman et al., 2009). In addition to providing sexuality information, peer groups serve as an influence for sexually normative behaviors. The more an adolescent perceives that their close friends/peers are engaging in sexual behaviors, the more acceptable sex becomes for that peer group (Sennott & Mollborn, 2011), increasing the probability that an individual will initiate sexual intercourse (Ali & Dwyer, 2011). Similarly, Cox and colleagues (2015) found an increase in favorable attitudes toward sex among early

adolescent females who have a friend or sibling that becomes a teen parent, and among male and female early adolescents when pregnancy is viewed as common within their school.

Research further suggests that adolescent sexual behavior may be equally guided by peer and parental influences (Sennott & Mollborn, 2011). Secor-Turner and colleagues (2011) found that peers/siblings and parents plus peers/siblings represented the two main sources of sexuality information among ninth and twelfth grade sexually experienced males and females. Access to information from parents or parents plus similar age peers was associated with fewer sexual partners and increased condom usage at last sexual experience among ninth grade students, and reduced odds of pregnancy for both ninth and twelfth grade students. Researchers found increased protective factors among younger adolescents (Secor-Turner et al., 2011).

Early adolescence represents a transitional period whereby youth progress from viewing sexual relationships as “that’s nasty” to sexuality being a “normative” part of one’s development (Ott & Pfeiffer, 2009). Youth falling between the “that’s nasty” and “normative” phases, represent a group of individuals who are “curious” about the transition to sexual relationships. It is this group of individuals, those in the “curious” phase, that may be most open to sexuality education depicting healthy models of adolescent sexuality (Ott & Pfeiffer, 2009).

Grossman, Tracy, Charmaraman, Ceder, and Erkut (2014) suggest that sexuality communication should begin before youth initiate sexual activity. Education programs providing access to both school-based and parent-based sexuality education are important to adolescent health outcomes. Grossman and colleagues (2014) found that school-based sexuality education, which included family activities, promoted early support for family communication among early adolescent students. This time period is particularly important as research suggests there is a

high-risk for breakdown in parental relationships, specifically within father-child relationships, at the onset of puberty (Akers, Holland, & Bost, 2011; Kirkman, Rosenthal, & Feldman, 2002).

In addition to parents, peers, and teachers, mass media outlets may also influence sexual behavior during early adolescence. Youth spend a considerable amount of time (6 to 9 hours daily) with some form of media (e.g., music, television, magazines, Internet sites, etc.) (Brown, Halper, & L'Engle, 2005). As media is an integrated part of a youth's day, we must consider the influence media may have on the development of early adolescents' sexual attitudes and behaviors (Batchelor, Kitzinger, & Burtney, 2004). Chandra and colleagues (2008) argue that youth receive a substantial amount of sexual information through viewing television programs and frequent exposure to sexuality content on television can predict early pregnancy (before age 20). Similarly, Brown and colleagues (2005) identified that earlier maturing girls are more likely to turn to media as a source of sexuality knowledge and information that they perceive is not available in their later maturing peer group.

As media serves the role of a "super peer" (Brown et al., 2005), media may provide a means of talking about and relating to sexuality issues. Media may also serve a preventative health role, as media outlets can raise awareness and provide information on health-related issues pertinent to early adolescents (Batchelor et al., 2004). Further, media outlets can provide a source of sexuality discussions between parents and children, as previous research encourages parents to view and discuss with their children media sources that portray sexually related topics (Chandra et al., 2008).

Early adolescents may also be more prone to misinterpreting information or trusting information from unreliable sources; therefore, placing early adolescent youth at greater risk for negative health outcomes and in need of informational sources to assist them in navigating this

developmental period. As previous research suggests (Ott & Pfieffer, 2009; Grossman et al., 2014), early adolescents represent a population open to learning information about sexuality and represents an age group where more effective sexuality interventions may begin. Further, early adolescence signifies a critical time whereby adolescent views on sexuality are formed through the influence of parents, peer groups, teachers, and media sources (Ali & Dwyer, 2011; Batchelor et al., 2004; Chandra et al., 2008; Grossman et al., 2014; Sennott & Mollborn, 2011; Secor-Turner et al., 2011; Teitelman et al., 2009). Brown and colleagues (2005) suggested that future research should further investigate different sources of sexual health information among adolescents, as well as who adolescents are talking to about sexual behaviors and the content of those discussions (Sennott & Mollborn, 2011).

Many previous studies have focused on older adolescents (Mollborn & Sennott, 2015; Secor-Turner et al., 2011; Sennott & Mollborn, 2011; Teitelman et al., 2009), youth 14 and older, with fewer studies (Grossman et al., 2014; Ott & Pfieffer, 2009) focusing on early adolescent sources of sexual health information. Therefore, in this study, we used a concurrent mixed method approach to explore early adolescent perceptions regarding topics they are likely to explore with parents, peers, teachers, or other sources (e.g., media, Internet). We examined the following research questions: 1) What sources (e.g., parents, peers, teachers, Internet, etc.) do early adolescents use to gain information about sexual health topics? 2) Which sexual health topics are early adolescents seeking more knowledge or information about? and 3) Are there clear differences in sources of sexual health information based on grade level?

Method

Design

We employed a concurrent mixed method design to explore early adolescent perceptions regarding sources of sexual health information both qualitatively, using interviews, and quantitatively, via survey responses. Utilizing both a qualitative and quantitative approach may provide a more comprehensive account of early adolescent perceptions. The use of a concurrent mixed method design enhances the current body of early adolescent literature by providing insight from the early adolescent participants via two response formats, allowing for the convergence of qualitative and quantitative data.

Participants

After receiving university Institutional Review Board approval, we recruited both male and female participants enrolled in grades six to eight. To gain participants, we posted flyers in multiple communities in one Midwestern State and utilized snowball sampling (word of mouth) techniques. We contacted the superintendent and/or principle from multiple school districts, through email and/or telephone, to ask if they would like to participate in the research study. No school districts were willing to participate due to the sensitive nature of sexuality education and concern over content appropriateness for the middle school age group. We then contacted families personally to invite them to participate. We made initial contacts to the parents of children in grades 6th, 7th, or 8th, that the first author knew, and asked if they would like to participate. We then asked for additional names or ideas on potential participants from our study participants (snowball sampling). Prior to participation in the research study, we obtained signed parent/guardian consent documents and child assent documents.

We had a total of 11 participants; nine (5 male, 4 female) completed both the individual semi-structured interview and survey, while two (1 male, 1 female) completed only the survey.

Overall, participant ages ranged from 12 to 15 years. Most participants self-reported race as White (73%) and ethnicity as not of Hispanic, Latino, or Spanish origin (100%). According to the most recent state school district data (Kansas Department of Education, 2015), 90 percent or more of the student population includes students identified by the racial group White within the school districts that our participants attend, thus our participants represented a slightly more diverse group. The majority of participants reported living at home with both a mom and dad (81%), and either at least one brother (55%) or sister (55%). Participants reported accessing the internet most frequently at home (64%), followed by school and cell phone (each 55%). Table 1 provides a more complete description of the participant demographic information.

Materials

Individual Semi-Structured Interviews. We used individual semi-structured interviews with prepared questions to gain early adolescent perceptions regarding sources of sexual health information. An inter-professional group, consisting of occupational therapists, a speech language pathologist, a social worker, a school psychologist, and a parent advocate, all of whom have experience working with children, reviewed the prepared questions. Based on feedback and suggestions from the inter-professional group, we created the final version of the interview with eight questions. Additionally, we used a separate demographic form (seven questions) to collect demographic information at the start of the interview. Though we presented the participants' parent/guardian with the option to preview the interview questions, no parent/guardian did so prior to participation.

Survey. We used the Research Electronic Data Capture (REDCap) web-based application system to create the web-based form of the survey (Harris et al., 2009). We examined popular teen media sources, based on three separate Internet searches in August and September 2016, using such search terms as “popular teen magazines,” “most popular teen magazines in

2016,” “popular teen media sources” and “popular teen websites”. Additionally, we received suggestions for potential teen media sources from the same inter-professional group that provided feedback on the interview questions. We pulled titles from magazine articles (e.g., Teen Vogue, J-14, Cosmopolitan, Marie Claire, Elle, Seventeen, Teen Ink, Men’s Health, and Girl’s Life), websites (e.g., Scarleteen.com and Teenink.com.), and YouTube videos. We selected titles that represented broad sexual health topics, for example: “Abuse in relationships: Would you stop yourself” reflects the broad sexual health topic sexual violence; “Should I dump my boyfriend for my girlfriend?” reflects the topic sexual orientation; and “Casual...cool: Making choices about casual sex” reflects the topic decision-making. Many of the magazines, used for title selections, were aimed toward female interests, this represents a lack of magazine articles geared toward early adolescent males regarding sexual health topics; Batchelor and colleagues (2004) identified similar selection difficulties in their previous work on sexuality in youth media.

We used titles from the magazines, websites, and YouTube videos to formulate questions to indirectly ask early adolescents what sources (e.g., parents, peers, teachers, Internet, etc.) they use to gain information about sexual health topics and which sexual health topics they are seeking more knowledge or information. The inter-professional group reviewed the survey questions for construction and clarity. We used feedback and suggestions from the inter-professional group to formulate the final version of the survey questions. The final survey consisted of 51 title based questions presented in a matrix format and two questions addressing additional sexual health information that the youth might want to learn about. In addition, we used the same demographic questions for both the individual semi-structured interviews and survey (the only required questions).

Procedures

The first author completed all procedural phases of the study. As previously mentioned, to recruit participants, we posted flyers in multiple communities and used snowball sampling techniques. We asked the parent/guardian of potential participants if they were interested in their child participating in both the individual interview and survey, or if they would like their child to just participate in either the individual interview or survey. After a parent/guardian agreed to allow their child to participate, we reviewed the informed consent documents (interview and/or survey consents) with the potential participants' parent/guardian. If the parent/guardian consented, then we presented the early adolescent participant with child assent documents (interview and/or survey consents).

After the child signed the assent documents and agreed to participate, we asked the child to complete the interview demographic form, as well as to select a pseudonym for the interview to maintain confidentiality. Following completion of the demographic form, the early adolescent participant completed the individual semi-structured interview. To encourage open communication from the participant and to maintain confidentiality of responses, the participants' parent/guardian were not present during the interview portion. We audio-recorded all interviews for later transcription. Before, during, and after each interview the researcher kept reflective journaling notes and made participant observations. After the individual interview, the early adolescent participant completed a paper copy of the survey. We entered participant survey responses into REDCap for data collection and storage. We selected the interview then survey procedural order so that participant responses, during the interview, would not be influenced by exposure to information contained within the survey, as we wanted to obtain authentic experiences from the participants.

The consent and assent interviews, as well as the individual interview and survey completion, took place in a location that offered privacy and at a time agreed upon by the researcher, participant's consenting parent/guardian, and youth participant. We kept all signed consent documents separate from any interview or survey materials to further maintain confidentiality. Additionally, no documents, beyond the consent documents, contained any personally identifiable information and we used participant pseudonyms throughout the interview portion to protect participant confidentiality.

Data Analysis

Individual Semi-Structured Interviews. We used an inductive content analysis approach to qualitatively explore the individual semi-structured interview data. Within a content analysis approach, researchers try to increase understanding and knowledge about the experiences being studied (Hsieh & Shannon, 2005). We began initial data analysis after the first interview and continued the analysis process throughout the remaining interviews until we achieved data saturation.

Study researchers thoroughly examined interview transcripts to identify significant phrases, thoughts, or ideas; we referred to these as phrases throughout the analysis process. We used the identified phrases to develop codes and then grouped similar codes into categories. We developed initial codes and categories based on information from the first interview transcript. The same inter-professional group reviewed the initial codes and categories and provided researchers with suggestions and feedback for the coding process. Using the same procedure, we developed codes and categories from the second interview transcript and compared to those derived from transcript one. From this comparison, we identified similar codes and categories and added any new codes and categories to the coding process. We used this set of codes and

categories to inform the coding process on the remaining transcripts; we added novel codes and categories found among subsequent transcripts to the coding process.

To assist in establishing reliability/dependability of the categories, four researchers compared their codes and categories for the third transcript, reaching a final agreement level of 85% for codes and 88% for categories. From this comparison, we added examples and key phrases to strengthen category descriptions and aid in coding the remaining transcripts. We did return to transcripts one and two to ensure that the transcripts met the adjusted coding criteria. After we determined reliability of the categories, we grouped similar categories into overarching themes.

Trustworthiness and Methodological Rigor. Within qualitative research, trustworthiness refers to the goodness of the qualitative research (Marshall & Rossman, 2011) by maintaining the credibility, transferability, dependability, confirmability, and authenticity (Lincoln & Guba, 1985; Munhall, 2012; Tobin & Begley, 2004) of the research findings. To support these tenets of trustworthiness, we utilized: peer debriefing among researchers during data collection and analysis; member checks to clarify points with participants throughout the interview process; field notes; an accurate transcription process by comparing the written transcript to the audio recording; an audit trail to document the decision-making process in developing codes, categories, and study themes; reflective journaling before, during, and after each individual interview; and the use of open-ended questioning within the individual interviews.

To establish rigor, or the process of demonstrating integrity and competence within qualitative research (Tobin & Begley, 2004), we employed an accurate transcription process. To maintain accuracy, we compared the written transcript to the audio recording for each individual

interview and made corrections to the written transcript if necessary based on the audio recording. We further supported study rigor through member checking, developing an audit trail, and peer debriefing.

Survey. We used IBM: SPSS 23 and data reports available through REDCap to complete statistical analyses. We used descriptive statistics to examine participant demographic information. Completion of a power analysis, using G power (Faul, Erdfelder, Buchner, & Lang, 2009), indicated that we needed a minimum of 81 participants to complete higher level statistical analyses. As we did not achieve such a sample with our initial survey, we used descriptive statistics, including frequencies and percentages, to begin exploring the sources early adolescents use to gain information about sexual health topics and which sexual health topics they are seeking more knowledge or information.

Results

Individual Semi-Structured Interviews

As seen in Table 2, our data analysis revealed two overarching themes, with six categories, depicting early adolescent perceptions regarding sources of sexual health information.

Theme one: Exposure to sexual health information. This theme focuses on the different ways in which youth may learn about or are exposed to sexual health information.

Within this theme, there are three categories: *Scope of sexual health education in school*; *Perceived definition of sexual health information*; and *Accessing unknown information*. These three categories relate to factors impacting the acquisition of sexual health information.

Scope of sexual health education in school. This category includes information about sexual health content taught within the school setting. All participants reported learning about some sexual health topics within the school setting. Participants reported that physical education/health class or science class were the most common courses to discuss sexual health topics. Many sixth and seventh grade level participants reported that initial sexual health discussions consisted of a one-time conversation or video, whereas the eighth grade level participants reported having a specific health class for one quarter during the school year. A sixth grade male participant shared, “they split us up [separated girls and boys] last year when we watched the video,” whereas an eighth grade level male participant commented “In PE they gave us flash cards...we had to find the answers...I think it was like for two months.” Female participants reported a similar process, with sixth grade female participants reporting initial discussions consisting of a one-time conversation given by the school nurse, and eighth grade female participants reporting participating in a specific health/sexual health class for one quarter.

Despite differences in amount of content exposure, most participants reported school-based sexual health topics included information on anatomy, hygiene, and puberty, with a specific emphasis on menstruation reported by female participants, and the reproductive system, specifically reported by male participants. Many participants indicated the school-based setting represented their first experiences learning about sexual health information, sharing comments such as, “I didn’t know much about it. Really, I didn’t know anything about it” and “Just new to me ‘cause I never learned it before.” Further, some participants shared that they did not discuss sexual health content outside of the class setting in which they were learning about such topics. A female participant shared, “We just went back to class and acted like nothing happened,” after her first experience at school discussing sexual health topics.

Perceived definition of sexual health information. This category focuses on the definition that participants assign to what they believe sexual health information includes. This category captures the different topic areas that some participants reported as being sexual health topics based on their individual definition of sexual health. Topics shared by participants include menstruation for girls, how your body works, health information, reproductive system, and anatomy. These topics represent the different components that participants believe are sexual health topics. A male participant commented, “Like health kind of...Like how your body works...,” when describing what sexual health topics mean to him. A female participant shared she believed sexual health topics means discussions about “Like when girls get their periods and stuff like that.” These topics may represent participants’ previous exposure to sexual health topics through presentation of such information in the school setting. However, this category is distinct from the *Scope of sexual health education in school* category, as this category relates to

the definition that participants' give to the broad topic of sexual health information versus the delivery of health information.

Accessing unknown information. The previous two categories represent the influence of school-based and participant perceptions of sexual health information. The third category within this theme includes the methods participants use to access unknown information. This category includes the ways in which the participants reported finding information that they do not already know, both when accessing general information and information related to sexual health. Most participants reported a willingness to ask familiar sources (e.g., parents, mother, father, sister, teacher, school nurse, doctor, and/or peers) when accessing unknown information. Specifically, a male participant shared "Probably like my parents or maybe a teacher...They kind of had experience, they're older, they've kind of gone through that," when referring to who he would ask to find out more information about sexual health topics. A female participant responded that she would ask "Probably my mom...Because I trust my mom." Some participants reported using the internet as a source of information for more general topics or if a familiar person was not available to ask, as a participant shared "Just type it on the internet," as the internet poses easy access to information using various search engines, such as Google. All participants identified at least one person they could ask for more information regarding sexual health questions.

Theme two: Participant factors influencing the attainment of sexual health information. This theme focuses on personal factors of participants which may influence their willingness or comfort in accessing sexual health information. This theme includes three categories: *Comfort level with sexual health content; Participant need for information; and Preference for same gender person when having sexual health discussions.* These three

categories encompass participant characteristics that may influence attainment of sexual health content.

Comfort level with sexual health content. The first category within this theme includes participant comfort level with sexual health content and discussions regarding sexual health topics. Many participants reported feeling uncomfortable learning about sexual health content. This is captured by various participants sharing comments such as, “It kind of grossed me out,” “I was really uncomfortable...All the pictures,” and “Awkward I guess.” Though there was a level of discomfort reported by some participants, this category also includes those individuals (e.g., parents, mother, father, teacher, peers, etc.) that participants shared feeling comfortable with discussing sexual health information. A male participant shared, “I wouldn’t be, I’d probably just go with my mom or dad,” when discussing who he felt comfortable with when discussing sexual health topics, whereas, another male participant mentioned “Friends or my teacher” as comfortable sources for such discussions. Though most participants acknowledged a comfortable source for sexual health conversations, some participants shared a reluctance to have such conversations, as one female participant shared, “...I just thought I’d keep it to myself,” when discussing if she ever talked to anyone about her feelings of discomfort learning about sexual health topics.

Further, some participants shared that they needed time to feel comfortable learning about sexual health topics by commenting, “I kind of got used to it when we started talking about it a little more,” whereas other participants shared a need for privacy when having such discussions by stating, “I didn’t want other people hearing my conversation and like what I was talking about.” Further, a few participants shared that staff consistency in presenting sexual health content added to their level of comfort discussing such topics with that person,

particularly if they were the person who initially presented the information to the participant. For example, a female participant shared that the school nurse was the person who initially discussed sexual health topics with the girls in her class and this was a person the participant reported feeling comfortable talking with because they had already had a conversation about such topics; likewise, a male participant reported a similar experience with his school principal.

Participant perceived need for information. This category focuses on participants conveying whether they want more sexual health information or not, or that they are fine with their current level of sexual health knowledge. The distinguishing feature of this category includes the participant perception that they desire or have a need for more sexual health information. One female participant shared, “Not really, I don’t really have a big interest in the subject,” when discussing whether she wanted to know more about sexual health topics. Most participants reported that they did not have a current need to know more about sexual health topics because their class or school discussions covered “enough” information. This is captured by the following from a male participant, “I’m not sure if they [class at school] covered everything but I think it covered a lot of what I needed to know.” Some participants acknowledged that there would be more things to learn as they get older, but they were not ready for that information at the current time. A male participant shared, “I just don’t think I need to know anything about it...if I had any questions I would ask them later...Like high school when we have a designated class to it.”

Preference for same gender person when having sexual health discussions. The third category within this theme includes participants reporting a preference for having sexual health discussions with a person that is the same gender as they are. This includes girls reporting a preference for a female to convey sexual health information and boys reporting a preference for

males to share such information. Some participants shared a belief that only individuals of the same gender (e.g., girls learning from a female) could adequately understand and accurately share information. One female participant shared, "...it would probably make him feel weird and he wouldn't know right off the bat what it was or what anything was..." when referring to if a male teacher were to provide sexual health information to female students. Similarly, participants reported a higher level of comfort having sexual health discussions with others that are the same gender as they are. A male participant stated, "Yeah, it makes it more comfortable cause if it was a girl it would be kind of weird," when discussing why he is comfortable asking his male teacher about sexual health topics.

Survey

To address research question one, *what sources do early adolescents use to gain information about sexual health topics*, we utilized descriptive statistic frequency counts. Within the survey, participants could answer all 51 questions, or skip items if they chose, and were given the option to select multiple sources (up to eight) for each question. Given we had 11 participants, each response option (e.g., mom, dad, close friend, etc.) had a maximum of 561 total responses possible. Based on total frequency, participants indicated mom (194 responses) as their most frequent source of information for sexual health topics. Following mom, participants rated close friends (88 responses), followed closely by dad (87 responses). Participants rated the internet as the fourth most frequent source of sexual health information with 49 responses. Remaining sources of information include sister/brother (34 responses), peers/classmates (19 responses), someone else/somewhere else (e.g., step-mom, doctor; 17 responses), and teacher (3 responses).

To further explore early adolescent sources of sexual health information, we looked at individual questions to identify which sources had at least five or more responses, as five represented an approximate mid-point of potential participant responses. We identified 14 questions that had five or more responses selected for the source mom. For questions with the source mom, common characteristics included five questions relating to appearance (e.g., “Suck it in.”), five questions relating to relationships (e.g., “Why am I single?”), and four questions relating to female health issues (e.g., “Is **that** my period? What’s normal (and what’s not) down there.”). We identified one question for the source dad that had five or more responses (“Toxic Masculinity: Why big boys don’t cry”); no other sources had five or more responses for any give question.

Again, using descriptive statistics, we addressed research question two, *which sexual health topics are early adolescents seeking more knowledge or information about*, and identified puberty (55%) and healthy relationships (45%) as the two topics rated highest by our participants. Following puberty and healthy relationships, participants rated adoption and abortion (18% each) as the next most frequent topics this group of early adolescents wanted to know more about. Lastly, participants rated equally (9%) human anatomy, decision-making, and sexually transmitted diseases (including HIV/AIDS). No participants selected interpersonal communication, abstinence, contraceptive methods, teen parenting, sexual orientation, media influence, or sexual violence as topics they currently wanted to know more about.

To address research question three, *are there clear differences in sources of sexual health information based on grade level*, we used survey data from the sixth grade and eighth grade level participants, as these grade levels had a similar number of participants (five and four respectively). Due to our limited number of survey participants, we were not able to perform

more advanced statistical analyses. Figure 1 graphically depicts the five highest responses for the sixth and eighth grade participants. Based on frequency count, both sixth and eighth graders responded with mom as their most frequent source (81 and 67 responses, respectively) and dad as the fifth most frequent source (20 and 9 responses, respectively). Sixth grade participants responded in the single digits with the remaining sources (peers, teacher, and someone else/somewhere else), we also found this for the eighth grade participants, with some sources receiving zero responses (sister/brother and teacher).

Discussion

Through this study, we explored early adolescent perceptions regarding sources of sexual health information. Gaining a better understanding of the common sources of information in early adolescents' lives can inform sexual health curricula. Research suggests that parents, peers, media, and school-based sexual health education are common sources for sexual health information among adolescents (Teitelman et al., 2009). Within this study, we sought to investigate sources common among early adolescents, through qualitative inquiry and a survey approach. The use of individual semi-structured interviews provided insight into the early adolescent participants' experiences learning about sexual health topics and provided us with insight into their personal sources of sexual health information. Similarly, the use of a survey approach allowed us to gain a preliminary understanding of early adolescent sources of sexual health information using media titles that targeted different sexual health topics with specific sources of information as response options. Through this process, we generated two themes each with three underlying categories, as well as gained descriptive information on sources that early adolescents use to find out sexual health information.

Based on our results, early adolescents utilize their mom as the most frequent source of sexual health information. Participants also identified mom as a source of sexual health information within individual interviews, as many participants shared they would ask their mom for information or if they had questions regarding a sexual health topic. However, based on our individual interviews, we also identified that some participants preferred learning information from someone of the same gender. We suspect that mom as a source of sexual health information is considered a neutral person, and that same gender refers to other individuals aside from the participants' mother. Research supports the role that mothers play in conveying sexual health information to their children (Commendador, 2010; Guilamo-Ramos et al., 2012).

Previous literature suggests mother-child interactions reduce the risk of adolescent pregnancy and influence decision making regarding contraception use (Commendador, 2010). Thus, mothers may serve as a common source of sexual health information among early adolescents and assist in healthy decision making as adolescents continue developing.

Due to the frequency and significance of support for the mother-child interaction in learning about sexual health topics, mothers or maternal figures may need additional educational materials to support their role as a sexuality educator for their children. Educators should consider providing additional sexual health information to mothers, as well as fathers to assist in establishing a basis for sexual health communication, as a means to support sexual health discussions at home. As previous research suggests (Walker et al., 2008), parents often report feeling inadequate in presenting sexual health information to their children. Educators can support parental roles by providing parents (or primary caregivers) with sexual health information and suggestions for how to discuss sexuality topics with children in the home environment. This may also be particularly relevant for those families who elect to not have their children participate in sexuality discussions occurring within the school setting. Education providers can assist parents who opt their children out of sexual health education by providing them with sexual health content to share with their children at home. This would allow parents access to sexual health information that they then can share with their child at their own discretion while at the same time honoring the parent's decision to opt their child out of school-based sexuality education. We suggest that all sexual health education materials include a parent or family component, and provide recommendations for discussions in the home environment as well as suggested time lines for such discussions. Parents may not fully be aware of their child's interest or developmental readiness for sexual health content, therefore, providing parents

guidance for such discussions is necessary, particularly before youth initiate sexual intercourse as research suggests the importance of having sexuality discussions prior to initiating sexual behaviors (Grossman et al., 2014).

In addition to mothers, both interview and survey data findings, indicate that close friends, dad, sister/brother, and the internet are valued sources of sexual health information; though frequency of responses do vary between grade levels. Within our study, younger participants (6th graders) showed a higher response rate of utilizing close friends, sister/brother, and dad, compared to older participants (8th graders) who tended to utilize the internet, close friends, and someone else/somewhere else. Though all participants listed having at least one sister and/or brother, sixth grade level students represented the majority of responses within the sister/brother category and included the third most frequent source for this grade level; however, in the interview data only two female participants mentioned they would ask their sisters' for more sexual health information. Sexual health curriculum developers may need to consider the role that siblings, close friends, and the internet play in conveying sexual health information, particularly among varying grade level groups. Sixth grade or younger adolescents, learning about sexual health topics for the first time, may need more guidance from familiar people within their everyday lives, thus sexual health educators need to tailor activities so these early adolescents are learning where and from who to access reliable information. Eighth grade or older adolescents may already have a basic knowledge of sexual health content as they have been exposed to more learning opportunities and informational sources already; therefore, they may rely on other sources of sexual health information (e.g., media, internet, etc.) and need direction in how to interpret these potentially new information sources.

All participants conveyed, during the individual interviews, that school is the primary source for initially learning about sexual health topics; however, within the survey, teachers represented the lowest response rate as a source of sexual health information. This represents a mismatch between who early adolescents see as a source of information and who is charged with providing sexual health education. This is a potentially troublesome finding, given the emphasis placed on teachers to provide sexual health information to early adolescents. Why didn't our participants respond more frequently with teacher as a source of sexual health information? We speculate, with the use of media titles, our participants may not view these topics as something that their teacher would be discussing in the classroom setting, therefore, the participants did not select teacher as a source of sexual health information.

We selected media titles as these are sources of sexuality content that youth may encounter in their daily lives. The notion that youth may not see teachers as a source of information for these media based sexuality topics becomes particularly relevant as early adolescents are not considering asking their teacher about sexual health topics beyond those identified within the sexual health class setting. We believe sexual health content should also include discussions about topics encountered by youth within everyday materials (i.e. magazines, YouTube videos, etc.). Expanding the content discussed within the classroom environment may encourage youth to talk with their teacher about sexual health topics beyond those available in an established sexual health curriculum. Further, taking an active approach to sexual health education is necessary to provide early adolescents with opportunities to engage and interact with the sexual health teacher during instruction. An active approach may involve utilizing small group teacher discussion forums, whereby students are able to discuss a variety of topics, beliefs, and perceptions about sexual health content in a more approachable format with the

teacher. By offering opportunities for student-teacher engagement and diverse sexuality content, this may increase early adolescents' comfort level with the teacher being a source of sexual health information.

Similarly, providing a more interactive format for sexual health education delivery may also provide experiences for early adolescents to learn from and recognize different sources available for sexual health information. Given the high frequency of responses to close friends as a source of sexual health information, sexual health education curriculums need to consider methods to incorporate close peers into sexual health education. Secor-Turner and colleagues (2011) suggested that peers sharing information about sexual topics is one mechanism for influencing sexual norms within a peer group and can increase partner communication regarding sexual behaviors, leading to less risky sexual behaviors. However, we encourage that educators provide guidance for peer information sharing so that accurate, quality information is conveyed, as misinformation would be counterproductive and could result in negative health outcomes.

Our study also sought to identify those sexual health topics that early adolescents are seeking more information about. Of those participants that completed both the interview and survey, only one female participant indicated wanting to know more about a sexual health topic during the interview portion, yet, all participants indicated they currently wanted to know more about at least one sexual health topic on the survey. This may indicate that early adolescents do not understand the scope of sexual health topics and are not able to articulate what other information they might currently want to learn about; however, in the survey format, we listed out various sexual health topic options and this may have created an awareness for the participants to see what topic areas they might be interested in learning about. We do recognize that the lack of response in the interview format may be attributed to the comfort level between

the participant and interviewer, and/or gender differences may also have contributed to less information sharing as male participants may not have felt as comfortable discussing sexual health topics with the female interviewer. However, our results indicate that early adolescents are interested in learning more about puberty and healthy relationships. These may be timely sexual health curricula topics, as early adolescents are at the beginning stages of pubertal development and are beginning to transition social relationships into more romantic relationships (Waylen, Ness, McGovern, Wolke, & Low, 2010).

Though we acknowledge the importance of our study findings, we are aware that various study limitations exist. Due to a low number of participants, our results may not generalize to a larger, more diverse population, particularly as our sample consisted of mostly rural, White early adolescents living in traditional two-parent homes. A larger, more diverse population may yield different findings. Our small study sample size also did not allow for the completion of more advanced statistical analyses; however, we did achieve saturation of qualitative data and the initial survey data gained within this study may provide direction and information for future studies exploring similar topics. Given the sensitive nature of sexual health topics and our target population of early adolescents, school systems were reluctant to participate, therefore, we utilized snowball sampling techniques. This recruitment process may have further contributed to the heterogeneity of our participants. School systems hesitancy hinders researchers' ability to study such topics among this population, thereby limiting our ability to directly impact sexual health curricula for early adolescent students. Though a reluctance exists, school systems represent an instructional entity that can be instrumental in assisting early adolescents as they begin to navigate sexual health subjects.

Given the nature of qualitative research, study bias may exist, including participant bias, whereby participants' respond in a way that is socially acceptable, and researcher bias, where biases and previous knowledge may influence qualitative findings (Munhall, 2012). To prevent such study bias, we established rapport with participants and encouraged participants to respond freely to questions they felt comfortable answering. Additionally, we implemented a coding process that we deemed reliable among four separate researchers and utilized strategies to uphold the tenets of trustworthiness and rigor, including; maintaining an audit trail, member checks, peer debriefing, reflective journaling, and an accurate transcription process.

Implications for Future Research

Though our results reveal initial findings about early adolescent perceptions regarding sources of sexual health information, future research needs to include a larger sample to gain a diverse perspective. Engaging school districts allows access to a larger, diverse sample of early adolescent participants. Further, social media outlets could also be used as youth have greater availability to various online forums. Accessing a larger sample would allow for greater generalizability of study findings and contribute to the growing body of research regarding early adolescent sexual health development.

Within our study we incorporated survey questions using media titles. Given the abundance of media that youth are exposed to daily (Chandra et al., 2008), it is important to understand how early adolescents are interpreting such information. We suggest future research continue to explore the unique role that media plays as early adolescents are developing a sense of sexual health and their own sexual identity. This may be particularly relevant for internet sources of information.

Our participants rated the internet as the fourth most frequent source of sexual health information. Future research may need to investigate what online sources early adolescents are using to attain sexual health information, as well as how informational sources are different for those youth who do not have easy access to the internet. All our study participants reported having at least one method available for accessing the internet which may have contributed to the higher frequency of responses for the internet as a source of sexual health information. Sexual health educators may need to consider different educational approaches for those youth that have greater accessibility to the internet. As there is a profuse amount of information available on the internet, sexual health curriculum developers need to consider incorporating strategies to teach early adolescents about internet safety, appropriate online sources, reputable websites, evaluating

internet facts, and information search strategies as a means to educate early adolescents about reliable and unreliable online information sources.

Similarly, future research may investigate the parent perspective regarding their child's perceived understanding of sexual health content within media outlets. Such research may be particularly relevant for parents of early adolescent females, as previous research suggests (Cox et al., 2015) increased television viewing significantly increases the odds of endorsing a favorable attitude toward sex among early adolescent females. Research approaches regarding parent perspective/awareness should include both qualitative and quantitative research approaches. Qualitatively, researchers could interview parents and their children regarding the methods that youth use to access sexual health information and their understanding of sexuality content within various media sources. This would allow for an in-depth, authentic investigation of sexual health sources and sexuality content knowledge identified between parent-child dyads. Quantitatively, researchers could develop surveys using media titles, perhaps with an additional emphasis on internet sources given the greater accessibility to such information among early adolescents, and have parents determine who they believe their child would discuss the given topics with and compare that to the child's responses. This would again allow for a parent-child framework to understanding sources of sexual health information and content knowledge, and could inform sexual health education materials aimed at fostering parent-child sexual health discussions.

Future research may also consider the role siblings play as youth gain sexual health information. This may include addressing the impact of birth order (i.e., do first born children have a different view than their younger siblings). Research by Cox and colleagues (2015), suggests that exposure to an older female sibling, who is a teen parent, results in greater

endorsement of a favorable attitude toward sexual activity for early adolescent females. Future research needs to continue exploring prevention and interventions strategies targeted at younger siblings exposed to teen parent siblings.

Another area of future research may include addressing the implicit messages within sexual health education. Within the interview portion of our study, observations indicate that our early adolescent participants may believe it is taboo to discuss certain sexual health information outside the confines of a class setting or beyond the boundaries of sexual health education. Future research may investigate the unspoken nuances that early adolescents perceive as they are learning about sexual health topics. This could also include research exploring social influences, family influences, religious beliefs, and personal factors that affect early adolescents' willingness to discuss sexual health topics. This may be particularly relevant among younger children, those in grades lower than we sampled in this study, such as fourth or fifth graders, who are learning about sexual health topics for the very first time. It may be necessary to investigate why some youth are more willing to ask questions or seek out information compared to youth who believe they should keep such questions to themselves. Such research findings could have implications for the development of sexual health curricula designed for early adolescents and preadolescent youth.

Conclusion

Through completion of this study we gained qualitative and preliminary survey data regarding early adolescent sources of sexual health information. Based on our findings we identified two themes that characterized early adolescents' experiences learning about and gaining sexual health information. Our participants identified mom as the main source for learning about sexual health information. This is consistent with previously mentioned research regarding parental roles in sexual health education. Our findings further highlight early adolescents' use of close friends, their dad, and the internet as sources of sexual health information, and our participants expressed a lack of support for teacher as a source of information. As educational decision-makers develop and consider various sexual health curriculum components, we encourage incorporating these different sources of sexual health information (i.e. parents, close friends, internet) into sexual health information for early adolescents.

As early adolescents are developing sexual attitudes and behaviors, they may not be aware of or consider all available sources of sexual health information. This lack of awareness may lead to unanswered questions or pursuing information from unreliable sources. By encouraging access to different, reliable sources of information we may allow for the development of more comprehensive sexual health education, thus increasing the likelihood for positive early adolescent sexual health outcomes. Furthermore, if educational materials incorporate sources of sexual health information deemed reliable and trustworthy by early adolescents, the youth maybe be more inclined to seek answers to their questions; therefore, allowing them to acquire more sexual health knowledge which may result in shaping positive short-term and long-term sexual health behaviors.

Table 1

Demographic information

Participant	Grade	Age	Gender	Race (self-reported)	Currently Lives With	Internet Access
1*	8	13	Male	White	Mom, dad, brother(s)	School, public library, home, cell phone
2	8	15	Female	White	Mom, sister, other (dad's house)	School, home, cell phone
3	6	12	Female	White and Mexican	Mom, dad, brother, sister, other (dog)	Home, other (friend's house)
4*	6	12	Female	White	Mom, dad, sister	School, home
5	8	13	Female	White	Mom, dad, brother	Cell phone
6	6	12	Male	White and American Indian	Mom, sister, mom's boyfriend	School, Cell phone
7	7	12	Male	White	Mom, dad, sister	School, cell phone
8	6	12	Female	White and American Indian	Mom, dad, sisters	Friends
9	7	13	Male	White	Mom, dad, brother	School, public library, home
10	8	14	Male	White	Mom, dad, brothers	Home
11	6	13	Male	White	Mom, dad, brothers	Cell phone

* Indicates the participant only completed the survey

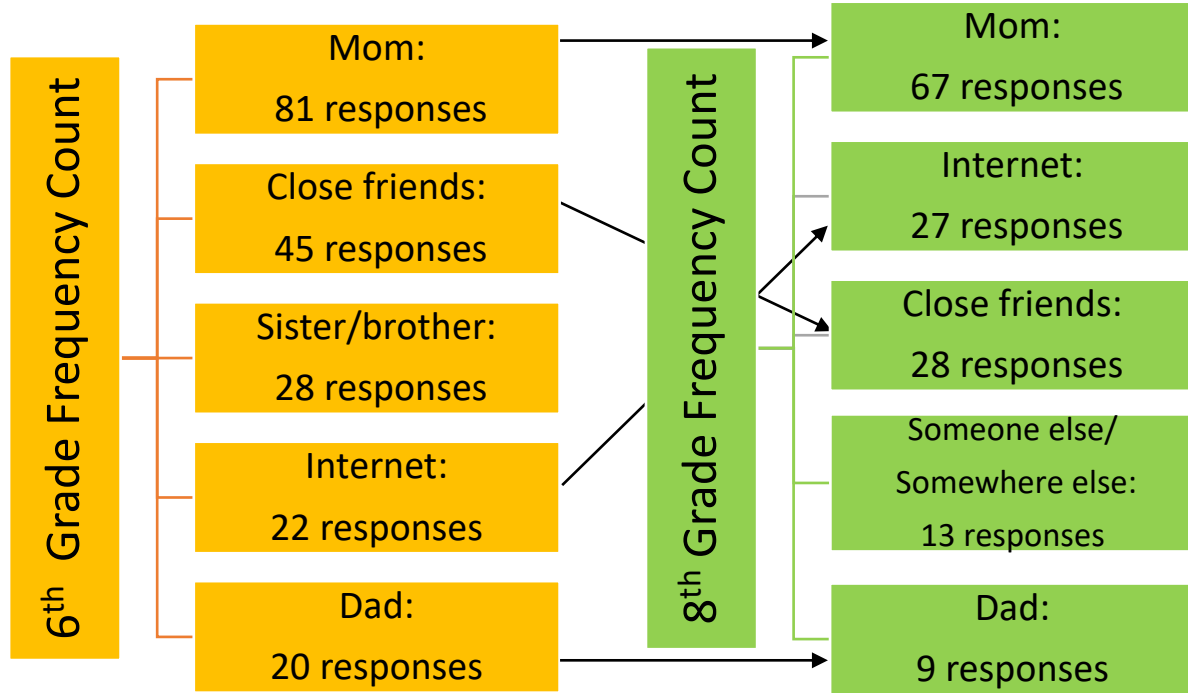
Table 2

Themes with corresponding categories and participant quotes.

Themes	Categories	Sample of Participant Quotes
1. Exposure to sexual health information	1a: Scope of sexual health education in school	<p>“This year we did a sex ed. class at school.”</p> <p>“...he gave us some flash cards to go over...”</p>
	1b: Perceived definition of sexual health information	<p>“Like personal parts or something like that.”</p> <p>“...the puberty stuff and body changes stuff.”</p>
	1c: Accessing unknown information	<p>“...I looked it up on Google...”</p> <p>“With my mom... Yeah I asked.”</p>
2. Participant factors influencing the attainment of sexual health information	2a: Comfort level with sexual health content	<p>“I don’t know just felt odd around other people.”</p> <p>“It was kind of weird talking about that.”</p>
	2b: Participant perceived need for information	<p>“Just for now... As in when I get older and I start it, I’ll want to know more.”</p> <p>“I think I am good for the time being... I’m pretty sure it’s good...”</p>
	2c: Preference for same gender person when having sexual health discussions	<p>“talking about guy stuff and she’s a girl.”</p> <p>“if it’s a boy doctor because they probably don’t know what they are talking about.”</p>

Figure 1

Comparison of 6th and 8th grade level sources of sexual health information



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Appendix A

Consent Documents

Interview: Parent Recruitment and Consent Document

You are being asked to consider a research study for your child, titled “Early Adolescent Perceptions Regarding Sources of Sexual Health Information” led by Dr. Winnie Dunn and Kylea Shoemaker. Participating in research is different from getting standard medical care. The main purpose of research is to create new knowledge for the benefit of future patients and society in general. Research studies may or may not benefit the people who participate.

Research is voluntary, and you or your child may change your mind at any time. There will be no penalty to you or your child if your child decides not to participate, or if they start the study and decide to stop early. Either way, they can still get medical care and services at the University of Kansas Medical Center (KUMC).

This consent form explains what your child will have to do if they are in the study. It also describes the possible risks and benefits. Please read it carefully and ask as many questions as you or your child need to, before deciding about this research.

You or your child can ask questions anytime during the study. The researchers will tell you and your child if they receive any new information that might cause you or your child to change your mind about participating.

Your child is being asked to participate in this research study because he/she is enrolled in grades sixth to eighth. The purpose of this research study is to explore early adolescent perceptions regarding sexual health topics they are likely to discuss with parents, peers, teachers, or other sources (e.g., media, Internet). Specifically, we will address what sources (e.g., parents, peers, teachers, Internet, etc.) early adolescents use to gain information about sexual health topics and which sexual health topics early adolescents are seeking more knowledge or information. Your child may not directly benefit through participating in this research study; however, considering early adolescents’ perceptions may provide better insight for sexuality education curricula for youth just becoming curious about sexual health topics and relationships.

If you agree to let your child participate in this research study he/she will be asked to complete an individual interview that will last approximately 30-60 minutes during a time and location agreed upon by the researcher completing the interview, a parent/guardian, and the participating adolescent. Using open ended interview questions, we want to learn how your child finds out sexual health information, as well as who they talk with or ask when they have sexual health questions. Your child may feel uncomfortable or embarrassed by answering the interview questions. Your child may skip questions that they do not feel comfortable answering and are free to stop the interview at any time if they do not want to continue. Your child is not required to complete this interview. Information that your child shares will be kept confidential, unless he/she shares that someone is harming them, they are harming their self, or they are harming others; mandatory reporting laws require the reporting of such information. We will use an audio recording device to record the interview, so that we may later transcribe the information

obtained during the interview. We will store all transcribed information on a password protected computer. Following the completion of the interview, we will keep any printed and recorded data in a secure, locked file, for 15 years or as required by IRB guidelines.

If you have questions regarding this research study, please contact Kylea Shoemaker at kshoemaker2@kumc.edu or 620-794-3084. This research study has been reviewed and approved by the Institutional Review Board (IRB) at the University of Kansas Medical Center. For questions regarding your rights, or if you have complaints, concerns, or questions about the research you may contact the University of Kansas Medical Center Institutional Review Board at humansubjects@kumc.edu, 913-588-1240. Thank you for your assistance and allowing your child to participate in this research study.

CONSENT

Dr. Winnie Dunn or Kylea Shoemaker has given you and your child information about this research study. They have explained what will be done and how long it will take. They explained any inconvenience, discomfort or risks that your child may experience during this study.

By signing this form, you say that your child is freely and voluntarily consenting to participate in this research study. You have read the information and had your questions answered.

You will be given a signed copy of the consent form to keep for your records.

Date: ___/___/___

Child's Name: _____

Child's Age: _____

Child's Grade: _____

Parent's Name: _____

(please print)

Parent's Signature: _____

Individual Interview Child Assent Document

We are doing a study to learn who kids in your grade talk to and how you find out information when you have questions or want to talk about sexual health topics. We are asking you to be in the study because we do not know very much about where kids in your grade go to find answers to sexual health questions.

If you agree to be in the study, you will participate in an individual interview, lasting 30 to 60 minutes. We will ask you some questions about who you talk to and where you find information when you have questions about topics that involve sexual health information. The questions we ask are only about what you think or what you might do. There are no right or wrong answers because this is not a test. We just want your thoughts. We will use an audio recording device to record the interview, so that we may later write down the information discussed during the interview. We will keep all information on a password protected computer. Following the completion of the interview, we will keep any printed and recorded information in a secure, locked file, for 15 years or as required by the University Institutional Review Board (IRB) guidelines.

You can ask questions about this study at any time. If you decide at any time not to finish, you can ask to stop. You may also skip questions that you do not feel comfortable answering. Information that you share will be kept confidential (private), unless you share that someone is harming you, you are harming yourself, or you are harming others; mandatory reporting laws require the reporting of such information.

Your parents have said that it is okay for you to be in this research. Being in this research is up to you. If you sign your name on the line, it means you want to be in the research. If you do not want to be in the research, do not sign your name. You can stop being in the research any time, even if you sign your name today. No one will be upset if you don't sign your name or if you change your mind later. If you agree to be in this research and complete the interview, please sign your name, age, and today's date.

Your Name

Age

Date

Survey: Parent Recruitment and Consent Document

You are being asked to consider a research study for your child, titled “Early Adolescent Perceptions Regarding Sources of Sexual Health Information” led by Dr. Winnie Dunn and Kylea Shoemaker. Participating in research is different from getting standard medical care. The main purpose of research is to create new knowledge for the benefit of future patients and society in general. Research studies may or may not benefit the people who participate.

Research is voluntary, and you or your child may change your mind at any time. There will be no penalty to you or your child if your child decides not to participate, or if they start the study and decide to stop early. Either way, they can still get medical care and services at the University of Kansas Medical Center (KUMC).

This consent form explains what your child will do if they are in the study. It also describes the possible risks and benefits. Please read it carefully and ask as many questions as you or your child need to, before deciding about this research.

You or your child can ask questions anytime during the study. The researchers will tell you and your child if they receive any new information that might cause you or your child to change your mind about participating.

Your child is being asked to participate in this research study because he/she falls within the target grade level for this research study (enrolled in either 6th, 7th or 8th grade). The purpose of this research study is to explore early adolescent perceptions regarding sexual health topics they are likely to discuss with parents, peers, teachers, or other sources (e.g., media, Internet). Specifically, we will address what sources (e.g., parents, peers, teachers, Internet, etc.) early adolescents use to gain information about sexual health topics and which sexual health topics early adolescents are seeking more knowledge or information. Your child may not directly benefit through participating in this research study; however, considering early adolescents’ perceptions may provide better insight for sexuality education curricula for youth just becoming curious about sexual health topics and relationships.

If you agree to let your child participate in this research study he/she will be asked to complete an anonymous survey that will last approximately 15-20 minutes. If your child attends a participating school district, the survey will be given during a portion of one class period during the school day. Using article titles from popular teen magazines, websites, and YouTube videos, we will ask your child who he/she talks to or how he/she finds out information when he/she has questions about sexual health topics (please see attached sample questions). We want to know if your child talks about different topics with his/her parents, friends/peers, teachers, or other sources. Your child may feel uncomfortable or embarrassed by answering the survey questions. Your child may skip questions that they do not feel comfortable answering and are free to stop the survey at any time if they do not want to continue. Your child is not required to complete this survey.

If you have questions regarding this research study, please contact Kylea Shoemaker at kshoemaker2@kumc.edu or 620-794-3084. This research study has been reviewed and approved by the Institutional Review Board (IRB) at the University of Kansas Medical Center. For questions regarding your rights, or if you have complaints, concerns, or questions about the

research you may contact the University of Kansas Medical Center Institutional Review Board at humansubjects@kumc.edu, 913-588-1240. Thank you for your assistance and allowing your child to participate in this research study.

CONSENT

Dr. Winnie Dunn or Kylea Shoemaker has given you and your child information about this research study. They have explained what will be done and how long it will take. They explained any inconvenience, discomfort or risks that your child may experience during this study.

By signing this form, you say that your child is freely and voluntarily consenting to participate in this research study. You have read the information and had your questions answered.

You will be given a signed copy of the consent form to keep for your records.

Date: ___/___/___

Child's Name: _____

Child's Age: _____

Child's Grade: _____

Parent's Name: _____

(please print)

Parent's Signature: _____

If your child is enrolled in a participating school district:

Please return the signed consent form to researcher Kylea Shoemaker, she will be at your child's school on _____ (date) to collect consent forms.

Thank You!

Survey Sample Questions

We have included some sample questions so you may have a better understanding of the types of questions we will ask your child during the survey portion of this research study. As previously stated, we used titles from popular youth magazines (such as Teen Vogue, Cosmopolitan, Seventeen, Men’s Health, Girls Life, etc.), websites, and YouTube videos, as these are items youth may encounter in everyday activities, to serve as our survey questions. If you provide consent and your child agrees to be in the study they may be asked questions that look like the following:

Title	Mom	Dad	Sister/ Brother	Close Friends	Peers/ Classmates	Teacher	Internet	Someone or Somewhere Else
“Zits, cliques, and friend drama”								
“Hello Sailor, how to build, board, and navigate a healthy relationship”								
“Casual...cool: Making choices about casual sex”								
“How to make your ex jealous”								
“Can I get pregnant, OR get a pass on an STI from that?”								

Please let us know if you have any questions regarding this research study by contacting Kylea Shoemaker, kshoemaker2@kumc.edu or 620-794-3084. If you give permission for your child to participate in this research study, please sign and return the enclosed consent form. Thank you!

Survey Child Assent Document

We are doing a study to learn from kids in your grade. We want to know who you talk to and how you find out information when you have questions or want to talk about sexual health topics or subjects. We are asking you to be in the study because we do not know very much about where kids in your grade go to find answers to sexual health questions.

If you agree to be in the study, you will complete a survey that asks you some questions about who you talk to and where you find information when you have questions about topics that involve sexual health information. We want to know if you talk about these different topics with your parents, friends/peers, teachers, or other sources. The questions we ask are only about what you think or what you might do. There are no right or wrong answers because this is not a test. We just want your views.

You can ask questions about this study at any time. If you decide at any time not to finish, you can ask to stop. You may also skip questions that you do not feel comfortable answering. All survey responses are anonymous and confidential (private).

Your parents have said that it is okay for you to be in this research. Being in this research is up to you. If you sign your name on the line, it means you want to be in the research. If you do not want to be in the research, do not sign your name. You can stop being in the research any time, even if you sign your name today. No one will be upset if you don't sign your name or if you change your mind later. If you agree to be in this research and complete the survey questions, please sign your name, age, and today's date.

Your Name

Age

Date

Appendix B

Interview Documents

Demographic Questions for Individual Interviews

Participant Pseudonym: _____ Date of Interview: _____

1. What grade are you currently in?

- a. 6th
- b. 7th
- c. 8th

2. What is your current age?

- a. 10
- b. 11
- c. 12
- d. 13
- e. 14
- f. 15

3. Do you think of yourself as...

- a. Male
- b. Female
- c. Other: _____

4. Where do you go to get on the Internet? Mark all options that apply to you.

- a. School
- b. Public Library
- c. Home
- d. Cell phone
- e. Other: _____

5. What race do you think of yourself as? Mark all options that apply to you.

- a. White
- b. Black, African American
- c. American Indian or Alaska Native
- d. Native Hawaiian or Other Pacific Islander
- e. Some other race: _____

6. What ethnicity do you think of yourself as?
- a. No not of Hispanic, Latino, or Spanish Origin
 - b. Hispanic, Latino, or Spanish Origin

7. Who lives with you at home? Mark everyone who currently lives with you.

- a. Mom
- b. Dad
- c. Brother
- d. Sister
- e. Grandma
- f. Grandpa
- g. Aunt
- h. Uncle
- i. Niece
- j. Nephew
- k. Cousin
- l. Brother in law
- m. Sister in law
- n. Mom's boyfriend
- o. Mom's partner
- p. Dad's girlfriend
- q. Dad's partner
- r. Family friend
- s. Other: _____

Guide for Interview Questions

1. How is school going this year?
2. What types of things do you like to do for fun?
3. When you are hanging out with family or friends, what do you like to do?
4. When someone says something, like a phrase or word, and you do not know what they are talking about, what do you do? Tell me about a time when that has happened.
5. When did you talk about sexual health subjects at school? What did you talk about afterward?
6. If you had questions or things you were wondering about regarding sexual health subjects, who would you ask? What made you ask that person or look there for information?
7. Tell me about a time when you wanted to know more or wanted to talk about sexual health subjects or topics.
8. What sexual health subjects or topics do you currently want to know more about? Tell me about why you selected those subjects/topics? How might you find out information about those subjects/topics?

Appendix C

Survey Questions

We are doing a study to learn from kids in your grade. We want to know who you talk to and how you find out information when you have questions or want to talk about sexual health topics. We are asking you to be in the study because we don't know very much about where kids in your grade go to find answers to sexual health questions.

If you agree to be in the study, you will complete a survey that asks you some questions about who you talk to and where you find information when you have questions about topics that involve sexual health information. We want to know if you talk about these different topics with your parents, friends/peers, teachers, or other sources. The questions we ask are only about what you think or what you might do. There are no right or wrong answers because this is not a test. We just want your views.

You can ask questions about this study at any time. If you decide at any time not to finish, you can ask to stop. You may also skip questions that you do not feel comfortable answering. All survey responses are anonymous and confidential (private).

Your parents have said that it is okay for you to be in this research. Being in this research is up to you. You can stop being in the research any time, even if you already signed your name to participate. No one will be upset if you don't participate or if you change your mind later. Completion of this survey means you agree to participate in the research study. If you agree to participate, then continue with the survey.

1. What grade are you currently in?

- a. 6th
- b. 7th
- c. 8th

2. What is your current age?

- a. 10
- b. 11
- c. 12
- d. 13
- e. 14
- f. 15

3. Do you think of yourself as...

- a. Male
- b. Female
- c. Other: _____

4. Where do you go to get on the Internet? Mark all options that apply to you.

- a. School
- b. Public Library

- c. Home
 - d. Cell phone
 - e. Other: _____
5. What race do you think of yourself as? Mark all options that apply to you.
- a. White
 - b. Black, African American
 - c. American Indian or Alaska Native
 - d. Native Hawaiian or Other Pacific Islander
 - e. Some other race: _____
6. What ethnicity do you think of yourself as?
- a. No not of Hispanic, Latino, or Spanish Origin
 - b. Hispanic, Latino, or Spanish Origin
7. Who lives with you at home? Mark everyone who currently lives with you.
- a. Mom
 - b. Dad
 - c. Brother
 - d. Sister
 - e. Grandma
 - f. Grandpa
 - g. Aunt
 - h. Uncle
 - i. Niece
 - j. Nephew
 - k. Cousin
 - l. Brother in law
 - m. Sister in law
 - n. Mom's boyfriend
 - o. Mom's partner
 - p. Dad's girlfriend
 - q. Dad's partner
 - r. Family friend
 - s. Other: _____
8. We are going to give you titles to actual articles from popular teen magazines, websites, or YouTube videos. After reading the title, let us know who you would talk to or ask questions about the topic. If you select the option "someone/somewhere else" please write in who else you would talk to or where else you would find the information. You may mark multiple options for each title.

Title	Mom	Dad	Sister/ Brother	Close Friends	Peers/ Classmates	Teacher	Internet	Someone or Somewhere Else
“Zits, cliques, and friend drama”								
“Hello Sailor, how to build, board, and navigate a healthy relationship								
“Pot holes and dead ends: Relationship road blocks to look out for”								
“What your birth order says about your dating style”								
“School dance survival guide: Dresses, dates, do’s and don’ts”								
“Boy intel: Get out of the friend zone”								
“Um...are my boobs normal: + 16 other body questions you want answered”								
“Are you a good flirt”								
“Be the man your dog thinks you are”								
“Build your best body now”								
Title	Mom	Dad	Sister/ Brother	Close Friends	Peers/ Classmates	Teacher	Internet	Someone or Somewhere Else
“How to talk to cute guys and other crucial crush knowledge”								
“8 things you didn’t know about pubic hair”								
“People are angry about this cake featuring a Ken doll in a dress”								
“Popular is not a swear word”								
“A desperate guy’s guide to promposal”								
“Suck it in”								
“Toxic masculinity: Why big boys don’t cry”								
“Sorry Charlie...the answer was still no”								

“The truth about eating disorders”								
“17 things every girl should know before she’s 21”								
Title	Mom	Dad	Sister/ Brother	Close Friends	Peers/ Classmates	Teacher	Internet	Someone or Somewhere Else
“Breaking the cycle: It’s time to put an end to period shaming”								
“Five things you need to say to a guy today”								
“Master online dating (she’ll swipe right)”								
“Casual...cool: Making choices about casual sex”								
“How to make your ex jealous”								
“Can I get pregnant, OR get a pass on an STI from that?”								
“Is *that* my period? What’s normal (and what’s not) down there”								
“Be a sex magnet”								
“After contraception or commitment, why you still gotta rock safer sex”								
“Should I dump my boyfriend for my girlfriend”								
Title	Mom	Dad	Sister/ Brother	Close Friends	Peers/ Classmates	Teacher	Internet	Someone or Somewhere Else
“Jedi sex tricks: lift your bedroom game”								
“Kids react to gay marriage”								
“Look hotter naked”								
“5 ways to keep lust alive”								
“He kissed me like he was eating a sandwich”								
“Would he take the pill”								
“Love secrets that change everything”								
“Why am I single”								

“The sex hunters: Why ‘nice’ men are getting hooked on hooking up”								
“How it feels to be trans”								
Title	Mom	Dad	Sister/ Brother	Close Friends	Peers/ Classmates	Teacher	Internet	Someone or Somewhere Else
“Trapped- Short film on teen unplanned pregnancy”								
“How is your selfie esteem? The dark side of virtual beauty”								
“Love your body: Give yours the TLC it deserves- from confidence boosters to vital health checks”								
“Cup of tea anyone? What happens after a threesome”								
“Everything you need to know about pregnancy”								
“Corrective rape: Attacked for being a lesbian”								
“Almost faithful has cheating become the new normal?”								
“Is your birth control messing with your head”								
“Is your break up making you crazy? Here’s why”								
“Abuse in relationships: Would you stop yourself?”								
“Gender confusion: Being unsure doesn’t have to be a bummer”								

9. What sexual health subjects or topics do you currently want to know more about? Mark all options that currently apply to you:
- Human Anatomy
 - Puberty
 - Healthy Relationships

- d. Decision-making
- e. Interpersonal Communication
- f. Abstinence
- g. Sexually Transmitted Diseases (including HIV/AIDS)
- h. Contraceptive methods
- i. Adoption
- j. Teen parenting
- k. Abortion
- l. Sexual Orientation
- m. Media Influence
- n. Sexual Violence

10. Please list any other sexual health subjects or topics, not already listed above, that you currently want to know more about: _____

Thank you for completing this survey. Have a great day!

Appendix D

Comprehensive Examination I

Incorporating Adolescent Perspective Into
Public School Sexual Education Practice

Kylea Shoemaker

Comprehensive Examination 1

According to the 2011 “*Youth Risk Behavior Surveillance*” summary in the United States, 47.6% of high school students, grades 9-12, have engaged in sexual intercourse, with 6.2 % of students reporting their first sexual intercourse prior to age 13 (Eaton et al., 2012). See figure 1 for a greater breakdown of sexual activity among high school aged students. Among developed countries, the United States has the highest annual teen pregnancy rate, with almost 800,000 adolescents becoming pregnant (Yang & Gaydos, 2010). For adolescents that do become pregnant, 82% are unintended pregnancies (Ott & Santelli, 2007), which may pose additional health risks for both the adolescent and infant.

Pregnant adolescents experience higher rates of poor maternal weight gain during pregnancy, pregnancy induced hypertension, preterm birth, low birth weight infant, and neonatal death (Phipps & Nunes, 2011). These outcomes are negatively associated with the age of the adolescent female, with younger females experiencing more significant outcomes. Phipps and Nunes further examined pregnancy intention and health outcomes for adolescent females and found that emotional readiness was more strongly associated with risk factors for negative pregnancy outcomes. Pregnant teens not emotionally ready for pregnancy and parenting were at increased risks for depression, delayed onset and poor use of prenatal care, delayed use of prenatal vitamins, and recent smoking, drinking, or drug use (Phipps & Nunes, 2011).

Given the potential negative outcomes of teen pregnancy and the incidence of sexually active teenagers, it is important to consider sources of information that teenagers perceive as valid and accurate, regarding sexual health and pregnancy prevention (Herman & Waterhouse, 2011). Hacker, Amare, Strunk, and Horst (2000) found that teens’ perceived learning information from parents, school, and health care arenas (e.g., school nurses, community health clinic, private doctor, hospital) as important in decreasing teen pregnancy. More recently,

Teitelman, Bohinski, and Boente (2009) explored the social context in which female adolescents learn about sex, sexual health, and relationships and found that family, friends/peers, partners, school, and media were common sources of sexual health information.

Adolescents frequently discuss the influence of family on their decision to initiate or delay sexual relationships. Girls often describe family discussions as the first source for sexual and relationship information (Teitelman et al., 2009). However, family units can be a conflicting source of sexual health information, with individual families offering various levels of support, control, communication, and disclosure of contraceptive availability and use (Teitelman et al., 2009). Additionally, only 37% of adolescents report talking with their parents about sex (Hacker et al., 2000). Parents also report feeling uncomfortable communicating with their child about sex and cite a lack of accurate knowledge regarding sex and sexuality (Walker, Rose, Squire, & Koo, 2008).

Due to the many difficulties affecting parent-child communication (i.e., comfort levels, knowledge of content, time for discussions), parents often agree that sexual education programs require the support of parents, schools, and the community (Walker et al., 2008). Public school systems can enhance youth's sexual education knowledge by serving as a source of comprehensive, medically accurate, and developmentally appropriate sexual health information. Additionally, public school systems can bring children and parents together so they can begin sexual based discussions with the help of trained professionals (Walker et al., 2008). Although faith-based organizations, such as a family's church may also be a community based source of abstinence focused sexual education, adolescents do not frequently report faith-based organizations as a key source of sexual health information (Hacker et al., 2000). Furthermore,

public schools must separate church and state (Rom, 2011) in their work, so the religious aspects of sexual education will not be emphasized in this paper.

In this paper we will target public school sexual education programming with a discussion on historical influences to public school sexual education policy, abstinence-only sexual education, and comprehensive sexual education. Then we will provide an analysis of adolescent perspectives on sexual education and how their perspectives might inform public school sexual education programs. This discussion will allow for development of suggested practices for public school education programs that incorporate adolescent ideas into sexual education.

Public School Sexual Education

With evidence suggesting difficulty in parent-child communication regarding sexual topics and parent support for public school sexual education programming (Walker et al., 2008), educational institutions can provide information and resources to the majority of youth, as 95% of children aged 5 to 17 are enrolled in school, long before they initiate risky sexual behaviors (Kirby, 2002). Federal, state, and local school districts' sexual education policies can greatly influence teen pregnancy rates, as their overall goals are to reduce sexual activity among teens, provide better education and strategies for safe sex, and to prevent unintended pregnancies and sexually transmitted diseases (Yang & Gaydos, 2010).

Historical Influences

In the 1970s and 1980s, as concern increased over rising teen pregnancy rates and sexually transmitted diseases, particularly AIDS, most public schools were either offering or encouraged to offer sexual education curriculum. Federal legislation was initiated in 1978 by two U.S. Senators, Jeremiah Denton and Orrin Hatch, both with strong Christian organization

affiliations; they created the Adolescent Family Life Act (AFLA) which focused on “chastity” education (Rom, 2011). This act provided funding largely to organizations that upheld religious views on sexuality and advocated for an abstinence-only approach to sex education. Though the AFLA was met with legal challenges, regarding issues of separation of church and state, the U.S. Supreme Court ruled that the AFLA was constitutional as long as government funding of abstinence-only education aligned with secular goals and did not endorse a specific religious practice (Rom, 2011).

These early influences of faith-based thinking into public policy persisted for two decades even though federal mandates only affect public education systems. Similar practices of the AFLA were carried over with the passing of Title V of the Social Security Act of 1996, whereby sexual education in public schools had to adhere to an eight-point definition of abstinence-only education in order to receive federal funding (Boonstra, 2009). Thus, abstinence-only educational programming became the predominate theme within sexual education courses at that time.

Abstinence-only Sexual Education

Abstinence-only education programs emphasize that sex should not occur outside of marriage, with birth control discussions focused on statements of their ineffectiveness (Kohler, Manhart, and Lafferty, 2008). Federal Title V funding utilizes an eight-point definition of abstinence-only education that includes:

1. Teaching the social, psychological, and health gains of abstaining from sexual activity
2. Abstaining from sex outside of marriage is the standard for all school aged children
3. Abstinence is the only way to avoid pregnancy, sexually transmitted diseases (STD), and other associated health problems

4. A monogamous relationship in the form of marriage is the standard for human sexual activity
5. Sex outside of marriage may result in harmful psychological and physical effects
6. Having children outside of marriage is likely to have harmful consequences for the child, child's parents, and society
7. Teaching rejection of sexual advances and how drugs and alcohol increase sexual vulnerability
8. Importance of self-sufficiency before engaging in sexual activity (U. S. Social Security Administration, 2013).

Reviews of such programs suggest that they have a minimal effect on sexual risk behavior (Kohler et al., 2008). Students exposed to abstinence-only education did not differ on their rates of sexual activity or condom use when compared to a community standard control group; however, they did differ significantly on their understanding of condom effectiveness in preventing HIV and sexually transmitted infections, with those receiving abstinence-only education being less accurate (Ott & Santelli, 2007). Furthermore, abstinence-only education is positively correlated with increases in teen pregnancy and sexually transmitted infections (STIs), even after controlling for socioeconomic status (SES), educational attainment, race, and family planning services (Lavin & Cox, 2012). Additionally, because of the Title V requirements, abstinence-only programs have been considered medically incomplete by withholding information and access to contraceptives, affecting an adolescent's ability to make informed and healthy choices (Boonstra, 2009).

In 2007, based on increasing research on the ineffectiveness and questionable practices of abstinence-only sex education, Congress declined adding additional funds to continue sponsoring

abstinence-only programs (Boonstra, 2009). In a similar effort to change educational practices, by 2009, 23 states and the District of Columbia rejected funding set aside for them by abstinence-only grants. Instead, new policy makers required a comprehensive approach to sexual education that did not need to adhere to the previous eight-point definition, but focused on evidence based practices (i.e., comprehensive programs that teach both abstinence and safe sex methods, consistently implemented across multiple settings, such as varying grade levels and diverse school populations) and developmentally appropriate and medically accurate information (Boonstra, 2009). These federal changes provided funding for comprehensive sexual education programs, opening the door for new methods of teaching sex education in public schools.

Comprehensive Sexual Education

Comprehensive sexual education programs include an abstinence message; however, they also include information on birth control options as pregnancy prevention and condom usage to prevent STIs (Kohler et al., 2008). Additionally, sexual education encompasses discussions of interpersonal relationships, intimacy, body image, affection, and gender roles (Questions and Answers: Sexuality Education, n.d.). Rosenthal and colleagues (2009) argue that effective programs in reducing teen births include a comprehensive range of social and behavioral issues as well as provide sex education. Comprehensive educational programs include a discussion of birth control options, life skill development, academic support, and job training. Programs with these characteristics reduce participants' pregnancy rate, substance use/abuse, violent or criminal behavior, and risk for poverty, while increasing use of primary health care and high school graduation rates (Rosenthal et al., 2009).

Furthermore there is literature suggesting that programs designed to prevent pregnancy need to provide teenage females with information and opportunities to discuss sexual related

topics, so that teens can form opinions about pregnancy (Bruckner, Martin, and Bearman, 2004). In the same study, researchers found that females ambivalent about pregnancy were more likely to engage in risky sexual behaviors, such as having unprotected sex and/or multiple sexual partners. Pregnancy interventions need to minimize attitudes toward pregnancy and focus on attitudes toward contraception use, as this is the strongest predictor of pregnancy for females (Bruckner et al., 2004).

In contrast to abstinence-only programs, there is strong evidence that comprehensive programs equip adolescents with the knowledge to engage in healthy, responsible, and protected relationships when they decide to become sexually active (Boonstra, 2009). Additionally, in a review of 48 comprehensive sexual education programs (Kirby, 2007), two-thirds of the programs discussing both abstinence and use of condoms and contraceptives had positive behavioral effects. Positive effects included later sexual debut (first sexual intercourse experience), reduced sexual activity, reduced number of sexual partners, and increased use of condoms or contraceptives. Research further indicated that none of the comprehensive sexual education programs accelerated the initiation of sexual relationships or increased the frequency of sexual activity (Kirby, 2007).

Despite the benefits that adolescents may receive from comprehensive public school sexual education programs, teaching sexual education to youth is a sensitive and complex topic. Nationally there are suggested core standards and skills for teaching sexual education (Future of Sex Education Initiative, 2012), yet each state and local district determines how and what to teach. Nationwide, only 22 states and the District of Columbia mandate sexual education (Sex and HIV Education, 2013). Remaining states may allow for teaching sexual education, even though it is not required within state educational regulations. Of those states that allow or

require the teaching of sexual education, information on abstinence is required in 37 states, whereas information on contraception is required in 17 states and the District of Columbia. Additionally, the majority of states and the District of Columbia require school districts to involve parents in sexual education and/or HIV education; however, variations exist among state requirements as to how parental consent and participation is obtained (Sex and HIV Education, 2013).

These data suggest that there are clear inconsistencies throughout the United States regarding public school sexual education programming, which does not permit all adolescents the opportunity to learn important health information. This is particularly troublesome as health education courses are the second most common reported source of sexual health information, with parents being the most common (Hacker et al., 2000). However, as adults we may have “missed the mark” on deciding what to include in sexual education, by failing to ask adolescents what they believe is important to learn regarding sexual education. A growing body of research is beginning to take into consideration the adolescent perspective regarding sexual health curriculum content.

Adolescent Perspective on Sexual Education

The term “adolescence” typically represents ages ranging from 11 to 19 years, with those youth aged 11-14 considered early adolescents, 15-17 middle adolescents, and 18-19 late adolescents. Adolescence marks a time of heightened physical, cognitive, social, and psychological change (Ott & Pfeiffer, 2009). These changes have a direct impact on sexual cognition and behavior, specifically with the development of secondary sex characteristics, the beginning of romantic relationships, and the development of a sexual self-concept.

Regardless of an adolescent's age, research studies (Aquilino & Bragadottir, 2000; Ott, Pfeiffer, & Fortenberry, 2006; Ott & Pfeiffer, 2009) have identified that adolescents view sexual development and sexual education along a continuum. As part of sexual development, adolescents perceive abstinence as a broader stage of normal development and sexual debut as part of an important transition into adulthood (Ott et al., 2006). Furthermore, early and middle adolescents perceive readiness as a key factor in initiating or abstaining from sex, along with age, life events, physical maturity, and social maturity. Characteristics effecting sexual readiness, as perceived by early adolescents, include age, school completion, social and physical maturity, and relationship characteristics (Ott & Pfeiffer, 2009).

Ott and Pfeiffer (2009) collected qualitative interview data and identified three distinct views of sexual abstinence among early adolescents. These views, marked by levels of understanding regarding sex and readiness, included the "That's Nasty," "Curious," and "Normative" groups. "That's Nasty" group consisted of those early adolescents (mean age 11.4) who had a more distant and unpleasant view of sex and aligned sexual behaviors with abstinence. Those adolescents in the "Curious" group (mean age 13.4) were in a more transitional phase, consisting of information seeking and conflicting decision making, where decisions of engaging or not engaging in sex were compared to wanting to maintain childhood innocence or taking on more "grown-up" responsibilities. The "Normative" group (mean age 14) consisted of those early adolescents who viewed sex as a part of life they transitioned to when they were ready. Sex is considered a normal part of development that one goes through as he/she moves into adulthood and takes on adult roles, compared to maintaining "kid like" roles (Ott & Pfeiffer, 2009). Table 1 provides a more comprehensive comparison of the three categories of early adolescent views.

In addition to age, attitudes and intentions (a function of an individual's attitude toward desirability and social norms regarding the behavior) toward abstinence, contraception, and sexual intercourse greatly influence whether an adolescent will engage in sexual activities (Masters, Beadnell, Morrison, Hoppe, & Gillmore, 2008) and how consistently they use contraception (Hacker et al., 2000). Masters et al. (2008), based on survey data of 365 early and middle adolescents, found positive attitudes and intentions regarding abstinence as a significant predictor in the decreased likelihood of having sex; however, positive sex attitudes and intentions predicted a higher likelihood of having sex. Furthermore, they found a significant relationship between abstinence intention (intended, expected, and/or planned to be abstinent within the next 6 months) and sexual intention (intended, expected, and/or planned to have sex within the next 6 months), whereby sexual intention is a stronger predictor of engaging in sexual activity than abstinence intention. These results may indicate that some youth have strong opinions about abstinence and having sex, and their opinions may be viewed along a developmental sexual continuum that moves from being abstinent to having sex (Masters et al., 2008).

Previous research by Hacker et al. (2000), based on a survey of 1,000 Boston 10th and 11th graders, found attitudes toward engaging in sex and using contraception influenced the adolescents' perceptions regarding effective pregnancy prevention strategies. Those youth who were abstinent believed a greater emphasis on abstinence was an important strategy, whereas those youth who were consistent contraception users viewed having easier access to contraception as an important area of emphasis. Yet both groups were more likely to say education on abstinence and delaying sex would prevent teen pregnancy, compared to youth who were inconsistent contraception users. When all three groups were considered together, they believed

“more information about pregnancy and birth control (51.9%), education about relationships (33.2%), communication with parents (32.5%), easy access to birth control (31.3%), education about the realities of parenting (29.5%), and a greater emphasis on delaying or abstaining from sex (26%) would prevent teen pregnancy.” (Hacker et al., 2000, p. 284)

Adolescents felt that they needed to know about contraceptive options and wanted detailed information on the use and effectiveness of a variety of contraceptives. More discussion on STIs was considered important and viewed as an incentive to utilize contraceptives, more so than just focusing on a potential unintended pregnancy (Aquilino & Bragadottir, 2000).

Despite the lack of research support regarding abstinence-only sexual education, research suggests that middle and late adolescents believe that an abstinence-only message is appropriate for late elementary grades (4th grade being the youngest age to begin formal sexual education) with a focus also on anatomy and physiology (Aquilino & Bragadottir, 2000). This information could provide the foundation for a more comprehensive sexual education program focusing on contraception, relationships, and sexual health decision making. Adolescents shared that an abstinence-only message did not provide teenagers with enough information to make informed decisions. Middle and late adolescents want information to guide their decision making of whether to engage in sex, rather than be told to abstain from sex (Aquilino & Bragadottir, 2000).

Adolescent Ideas into Public School Educational Practice

It is important to consider the perspective of adolescents when developing prevention strategies (Herrman & Waterhouse, 2011). Public school systems and educational decision makers must acknowledge that the variability among adolescent sexual views may require different types of information. That is, youth who are engaging in sex want information

regarding contraception, whereas youth who are abstinent need and want support for their decision (Hacker et al., 2000). Adolescents who have developed increasing comfort levels and curiosity about sex want information and skills to develop healthy sexual relationships (Ott & Pfeiffer, 2009).

Based on this knowledge and information offered by adolescents, coupled with sexual education and teen pregnancy prevention research, we can generate a list of recommendations for developing and implementing public school sexual education practices for school and educational decision makers' consideration.

1. *Know your student body.* The focus of this recommendation connects to the adolescent perspective whereby teen's value sexual education that is more specific to their individual sexual health needs (Hacker et al., 2000). Traditional models of sexual health education would present the same packaged information to all students. However, research indicates that best practice does not include a "one size fits all" model for sexual education. Instead, educational programming guided by the needs of the current adolescents within a community and educational setting creates more pertinent sexual education. Kirby (2007) also recommends that educational programs and resources directly target risky sexual behaviors identified through review of community pregnancy and STI data. We endorse an annual examination of community adolescent pregnancy and STI data, which state and/or local departments of health can provide to school principals, health educators, school nurses, and other sexual education stakeholders (i.e. parents, former students, local health department representatives) for consideration and/or to inform sexual education curriculum.

To further understand specific student needs, school health educators could annually, anonymously, survey students to gain their input. For example, if a health class is largely

comprised of individuals that are sexually active then information on abstinence may be less relevant and additional time could instead be directed to providing medically accurate information regarding contraception and resources within the community to assist sexually active adolescents. Utilizing health and student survey data, educators can create and/or modify their sexual education curricula, as well as develop strategies to target growing sexual education needs specific to the community. This annual examination of health and student data, as well as sexual education programming allow educators to provide more relevant and timely information for their given student population.

2. *Provide comprehensive and medically accurate sexual education curricula.* Literature focusing on the adolescent perspective notes the importance that teenagers place on having access to comprehensive and accurate sexual education content (Aquilino & Bragadottir, 2000), thus this perspective serves as the focus of this recommendation. Sexual education courses need to teach abstinence as one of many healthy choices within the context of a comprehensive sexual education program (Masters et al., 2008). Adolescents want access to medically accurate knowledge relating to contraception, therefore contraceptive options and methods of using contraception need to be addressed with both male and female adolescents (Hacker, et al., 2000). Equipping adolescents with this knowledge empowers them to make healthier choices should they choose to become sexually active.

Abstinence education has its place within a comprehensive sexual education program, as it is the only sexual practice that will prevent pregnancy and/or STIs. Yet, knowing that more than half of all high school seniors will graduate high school already sexually experienced (Eaton et al., 2012), an abstinence-only sexual practice option does not meet the goal of preventing teen pregnancy and/or STIs. Comprehensive sexual education also includes medically accurate

information, including both success and failure rates, of condom usage and the variety of available birth control and contraceptive options. Furthermore, as part of understanding medically accurate information, all adolescents would benefit from discussions of overall health and body hygiene, bodily changes that occur throughout the lifespan, and diseases affecting sexual organs, beyond just sexually transmitted diseases (e.g., completing breast or testicular self-exams checking for lumps). Both male and female students benefit (Aquilino & Bragadottir, 2000) from having access to comprehensive information that could affect current or future sexual relationships. Educators must also stay current with relevant medical information and utilize curriculum materials that target a variety of sexual health topics (i.e. abstinence, contraception, condom usage, prenatal care, pregnancy, motherhood, fatherhood, abortion, adoption, etc).

3. Use clear, consistent, and comprehensive language. We developed this recommendation by focusing on adolescents support in using consistent, developmentally appropriate sexual education content reinforced throughout multiple grade levels (Aquilino & Bragadottir, 2000) and literature citing adolescent confusion in understanding sexual terminology (Ott et al, 2006). Youth need sexually relevant terminology to be defined, clear, and consistently used. This is particularly salient as early adolescents begin learning about sex. Ott et al. (2006) found that many early adolescents did not have a clear understanding of what was meant by the word abstinence as it pertains to sex. This lack of understanding inhibits the youths' abilities to make informed and healthy personal choices.

Use of consistent terminology could be enhanced if educators had opportunities to discuss what students have learned in prior grades, including appropriate terminology. We advocate that elementary, middle, and high school educators collaborate to develop a consistent set of sexual education terms and definitions that will be utilized within the school district, to

facilitate consistent word use throughout a child's educational experience. This consistency throughout grade levels will increase understanding and comfort level of both educators and students with medically accurate sexual terminology.

4. *Incorporate multiple-interventions across time.* The focus of this recommendation incorporates the adolescent perspective concerning reinforcement of sexual education content from elementary school through high school (Aquilino & Bragadottir, 2000), as well as building in decision making and life skills components as sexual education content (Aquilino & Bragadottir, 2000; Hacker et al., 2000; Teitelman et al., 2009). Adolescent sexual relationships often occur sporadically, thus, youth would benefit from opportunities to develop decision making skills necessary to prevent the occurrence of unprotected sex and how to access condoms and contraceptives (Kirby, 2007). Programs incorporating open conversations about the rewards and challenges associated with teen parenting on relationships, future or current employment, and life impact (Herrman & Waterhouse, 2011) provide a multifaceted approach to sexual education. Concurrently using multiple interventions, such as education, skills building, and discussion of both abstinence and contraception can greatly reduce the risk of adolescent pregnancy (Lavin & Cox, 2012).

Sexual education implemented for longer periods of times and across multiple grade levels would allow for more comprehensive education and incorporation of multiple interventions. Students typically receive just over three hours in elementary school, six hours in middle school, and eight hours in high school of sexual education (Future of Sex Education Initiative, 2012). This is likely not enough time to adequately prepare students with a comprehensive level of sexual health knowledge. Because time is a limited resource at school, increasing the time spent on sexual education, at the high school level, could be accomplished by

collaborating with other educators to imbed this content within related curriculum. For example, the biology and/or anatomy teacher could provide more in-depth discussion and education on sexual organs, primary and secondary sex characteristics, and pregnancy. The family and consumer science teacher could incorporate additional information on goal planning, family planning, and healthy/unhealthy relationship characteristics. By incorporating sexual education components into other academic areas, it allows for repetition of core concepts and shows how sexual health is an integrated part of overall healthy life development.

In addition to collaboration between disciplines, schools need to consider expanding the amount of time spent on sexual education. We recommend sexual education be initiated at a younger age instead of the traditional fourth grade discussions of puberty. We advocate that sexual education could start in kindergarten, guided by the school nurse, school counselor, and/or physical education teacher, with an introduction to basic anatomy, including medically accurate terminology for male and female body parts, and discussions of good, helping, and bad touches. This information would then be expanded on as developmentally appropriate until fourth grade. Starting in fourth grade, discussions would also include information on puberty, primary and secondary sex characteristics, and provide definitions for sexual intercourse, abstinence, and other developmentally appropriate sexual terminology.

Starting in middle school, either sixth or seventh grade, a minimum of one semester needs to be spent on health education, with half the semester focusing on sexual health topics. At the middle school level we advocate moving from a message of abstinence-only to one of comprehensive sexual education, incorporating developmentally appropriate discussions on sex, abstinence, condoms, contraception, STIs, pregnancy, decision making, and goal planning. This practice is echoed in the concern shared by adolescents that beyond elementary school students

need access to comprehensive sexual education (Aquilino & Bragadottir, 2000). Furthermore, as adolescents' readiness levels to engage in sexual activities change (Ott & Pfeiffer, 2009), middle school represents a key developmental time period to expose students to sexual information and safe sex practices, as well as how to respond to sexual situations.

As students enter high school, information learned from middle school would be covered with greater depth and over a longer period of time. We encourage one semester (16 weeks), focusing specifically on sexual education topics, implemented in the ninth grade, with a continuation of sexual education integrated throughout all high school grade levels. This would allow for more in-depth sexual education discussions as students' sexual knowledge, experience, and needs change. Therefore, we encourage school districts to utilize one class period within current curriculum (i.e. biology class, study hall, homeroom or seminar time, etc.) monthly where students can participate in on-going sexual education discussions and life skills development.

5. Develop strategies to increase parent-child communication. Adolescents describe parents as an important source for sexual education content (Hacker et al., 2000; Teitelman et al., 2009), thus this perspective serves as the basis for development of this recommendation. It is important to encourage open and candid communication between adolescents and parents to develop honest discussions regarding sexual education topics (Herrman & Waterhouse, 2011). Teens reported parents as a source of important information regarding learning about sexual education related topics; however, only 37% of those students surveyed reported that they had frequent conversations with their parents about sex (Hacker et al., 2000). Programs could provide talking points for adolescent and parent(s)/guardian discussions or assignments that facilitate discussion about a topic covered in class. This would provide parents with information

on their child's sexual education content and offer them an opportunity to develop communication with their adolescent about family expectations regarding sexual intercourse. Adolescent and parent conversations, prior to sexual debut, have been associated with later sexual initiation and higher rates of contraception and condom use (Kirby, 2007). Communication with parents has also been linked to higher rates of consistent contraceptive use among sexually active adolescents (Hacker et al., 2000).

Educators can help facilitate parent-child communication by providing parents with on-going information related to what sexual health content is being covered at their child's school and strategies for talking with their child about the material. This may also include home assignments requiring both parent (guardian) and child input. Encouraging parental presence during sexual education discussions at school may also provide an opportunity for parents to engage in sexual health discussions. Sessions that teaches parents skills to communicate with their child about sexually related content, strategies to overcome communication barriers, and how to access resources within the community, may also be effective in building parent-child communication (Walker et al., 2008). Through this process parents would be more prepared to answer questions that their child has regarding sexual health topics and adolescents are encouraged to initiate conversations through structured sexual education homework assignments by asking for parental input. Additionally, as some states' sexual education policies allow for parents to opt their child out of sexual education discussions and teachings (Sex and HIV Education, 2013), it may be beneficial to provide those parents with sexual education materials that they can then chose to share or discuss with their child at their own discretion.

6. *Collaborate with community health and parenting agencies.* We developed this recommendation based on the knowledge that adolescents value sexual education content that

includes a variety of sources beyond school teachers and family (Aquilino & Bragadottir, 2000; Hacker et al., 2009; Teitelman et al., 2009). Based on Hacker et al.'s (2000) study, female adolescents preferred information on contraception to come from health care sources. This information can be delivered within school sexual education programs by community partners that collaborate with sexually active teenagers or teen parenting centers. This would also provide linkages to resources and contacts beyond the school health teacher and students' parents. Schools could also arrange for teen parents to talk with a class about the daily routines of a teen parent. This would offer an authentic account of teen parenting, which has been identified as a credible source of information by middle and late adolescents (Aquilino & Bragadottir, 2000).

School districts must cultivate the key role community health agencies have as a source for current sexual health information and adolescent community health data. Educators can collaborate with health agencies and develop programs that utilize team teaching strategies for presenting sexual education content. This would increase the available resources for students' information, as well as encourage discussions relating to medically accurate sexual health information. As part of increasing access to sexual health information, school districts can partner with community health agencies to develop sexual health presentations specific for student and/or parent needs. Community health agencies could also serve as an additional resource, or work force, should school districts choose to implement on-going monthly high school sexual education discussions, as discussed in previous recommendations.

Conclusion

Nearly all adolescents experience pressure to have sex, putting them at risk for pregnancy and STIs (Kirby, 2007). Sexual education curriculums must adapt to the growing and changing

health needs of adolescents. This is particularly relevant as middle and late adolescents and young adults constitute half of the 19 million cases of new STIs and one-third of new cases of HIV infections each year (Future of Sex Education Initiative, 2012).

An important source of public school sexual education content material needs to include the ideas of adolescents. As we develop and adapt comprehensive sexual education programs, considering the adolescent perspective will lead to more valid and personally relevant curriculum for today's adolescent. In this paper, we provide six recommendations on how to incorporate adolescent ideas into public school sexual education practice, as well as implementation options for educational practices. With 63.1% of 12th grade students (Eaton et al., 2012) already sexually active, public school educators must consider what information is needed to allow an adolescent to make healthy immediate and long term decisions. Public school sexual education programming must focus not only on the decision making processes that occur during adolescence, as this is only one phase of development, but incorporate strategies that will inform life-long healthy sexual decision making.

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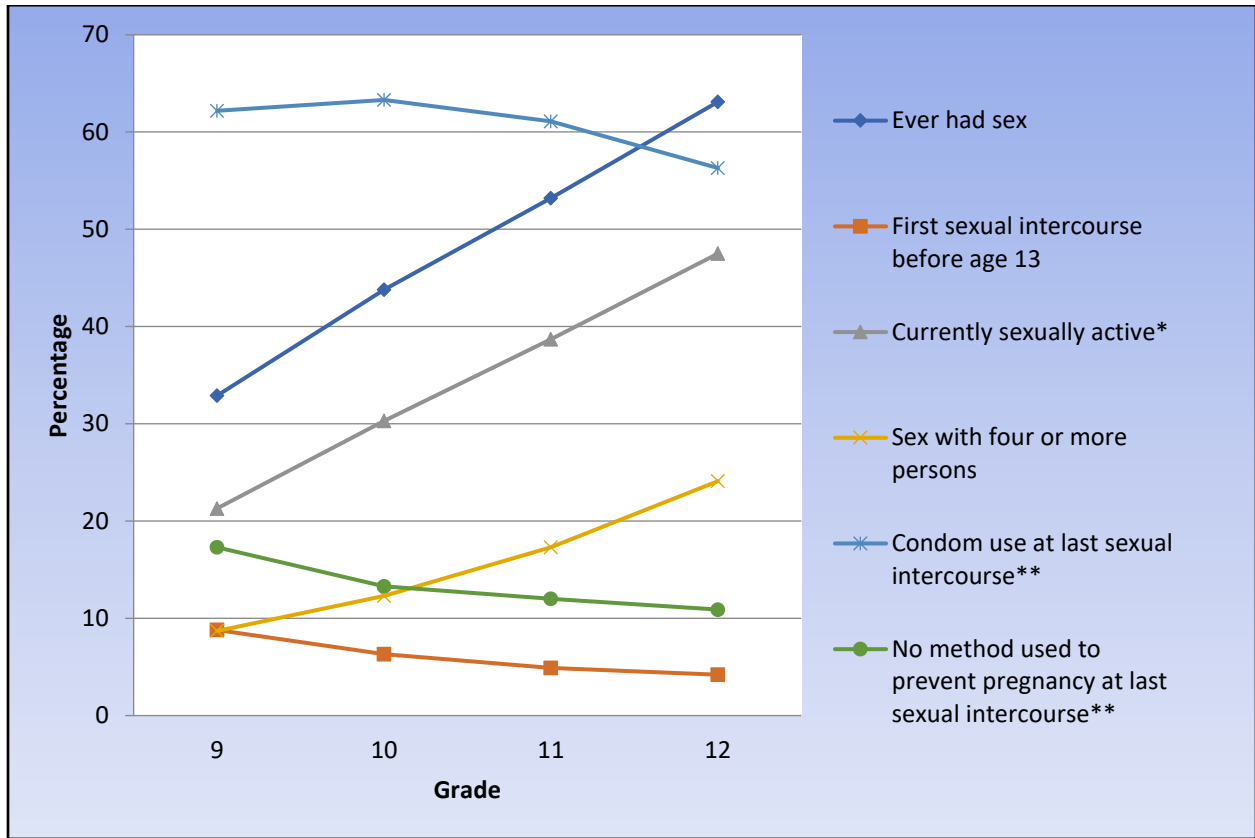
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Figure 1

Percentage of Adolescent Sexual Activity by Grade Level



*Had sex with at least one person in the three months prior to the survey

**Percentages derived from the subset of those youth who reported they were currently sexually active

Eaton, D. K., Kann, L., Kinchen, S., Shanklin, S., Flint, K. H., Hawkins, J., ... Wechsler, J. (2012). Youth risk behavior surveillance- United States 2011. *Morbidity and Mortality Weekly Report*, 61(4), 1-168. Retrieved from <http://www.cdc.gov/mmwr/pdf/ss/ss6104.pdf>

Table 1

Comparison of Early Adolescent Views

“That’s Nasty” Mean age 11.4	“Curious” Mean age 13.4	“Normative” Mean age 14
* Limited biological understanding of sex	*More curious about sexuality in general and in the mechanics of sex	*Increased understanding of sex, STIs, and pregnancy, though inaccurate knowledge of medical facts
*Sex occurs within marriage or when in love	*Sex occurs within marriage or exclusive relationships	*Sex not associated with marriage
*Sex is a transition to adulthood	*Sex is a transition to adulthood	*Sex is a transition to adulthood
*Not ready for adult transition to sex	*Sense that they are missing something important	*Sexuality is a normal part of life
*Concerned about consequences of having sex	*Less fearful about consequences of having sex than those in the “That’s Nasty” group	*Less fearful of STIs and pregnancy as they are manageable by being careful (i.e. using a condom)
*Want to engage in kid behaviors, such as playing outside or going to a friend’s house	*Abstinence connected to kid-like behavior	*Readiness for sex marks transition to sexual/adult-like relationships
*Sexual topics viewed as uncomfortable or distasteful	*Less discomfort with the topic of sex; interested in sexual facts	*Consistent comfort level discussing sexual topics
	*Sexually experienced adolescents viewed as well liked and admired by others	*Positive view of sexually active adolescents
	*Aware of stereotypes and social pressure surrounding sexual activity	

Ott, M. A. & Pfeiffer, E. J. (2009). “That’s Nasty” to curiosity: Early adolescent cognitions about sexual abstinence. *Journal of Adolescent Health, 44*, 575-581.

DOI:10.1016/j.jadohealth.2008.10.139

Table 2

Summary of Recommendations and Implementation Options

Recommendations	Implementation Options
Know your student body	<p>Annually examine community adolescent pregnancy and STI data</p> <p>Annually, anonymously, survey students' sexual activity</p> <p>Utilize community health and student data to specifically target sexual health needs</p>
Provide comprehensive and medically accurate sexual education curricula	<p>Provide medically accurate information relating to birth control and condom usage</p> <p>Utilize comprehensive sexual education materials</p> <p>Consistently present sexual health information to both male and female students</p> <p>Encourage educators to stay current with relevant medical information</p>
Use clear, consistent, and comprehensive language	<p>Develop and use consistent sexual terminology across grade levels and within school districts</p> <p>Provide collaboration time for health educators between grade levels</p>
Incorporate multiple-interventions across time	<p>Imbed decision making and goal planning education within sexual education curriculum</p> <p>Collaboration between teaching disciplines to enhance sexual health topics</p> <p>Sexual education beginning in early elementary grades, focusing on accurate terminology and good, helping, and bad touches</p>

	<p>Begin formal sexual education in fourth grade with discussions of puberty and definitions for sexual terminology</p> <p>One semester (16 weeks) of health education in middle school, with half the semester focusing on comprehensive sexual education</p> <p>Ninth grade offer one semester of comprehensive sexual health education, with a continuation of sexual education integrated through all high school grade levels</p> <p>Develop and implement monthly classroom sexual education discussions</p>
<p>Develop strategies to increase parent-child communication</p>	<p>Provide parent-child sexual education discussion assignments</p> <p>Involve parents in sexual education discussions occurring at school</p> <p>Provide parents with skills and strategies to communicate with their children about sexual topics</p>
<p>Collaborate with community health and parenting agencies</p>	<p>Offer presentations from community health agencies specific for student and/or parent needs</p> <p>Presentations from individuals that experienced a teen pregnancy</p> <p>Utilize community resources for monthly presentations</p>

Appendix E

Comprehensive Examination II

Fathers' Experiences Talking with Their Children

About Sexually Related Topics

Kylea Shoemaker

Comprehensive Examination Two

University of Kansas Medical Center

Therapeutic Science

Adolescence represents a developmental time period characterized by cognitive and physical changes (DeVore & Ginsburg, 2005), as well as increased risk-taking behaviors that can lead to negative sexual health outcomes (Guilamo-Ramos et al., 2012). Researchers have investigated the impact of positive parent-child relationships as a protective factor to reduce adolescent risk taking behaviors (DeVore & Ginsburg, 2005; DiIorio, Dudley, Soet, & McCarty, 2004; Miller, 2002). Youth do express a desire to have close relationships with their parents (DeVore & Ginsburg, 2005); however, both parents (Walker, Rose, Squire, & Koo, 2008) and adolescents (Hacker, Amare, Strunk, & Horst, 2000) report challenges to effective parent-child communication, particularly regarding sensitive topics, such as sexual behaviors.

Adolescent females often report that family is their first reference for information regarding sex and sexual relationships (Teitelman, Bohinski, & Boente, 2009). Hacker and colleagues (2000) report that while both male and female students believed that parents represented the most important source for information on teen pregnancy prevention only 37% of respondents reported talking with their parents about sexually related topics. Like adolescents, parents report a lack of knowledge and feel uncomfortable when talking with their children about sex (Walker et al., 2008).

Though parent-child communication may be challenging, effective discussions about sex are linked to decreased sexual involvement, higher rates of condom use, more consistent use of contraceptives (DeVore & Ginsburg, 2005; Hacker et al., 2000), and increased self-efficacy for refusal of sex (DeVore & Ginsburg, 2005). In contrast, decreased parent-child communication has been associated with decreased condom usage, increased sexual involvement, and decreased discussions for refusal of sex (DeVore & Ginsburg, 2005). Similar results have been identified

when studies have addressed parental supervision, suggesting that an increased parental presence in the home results in a reduction of risk taking behaviors.

The combination of parent-child communication and parental supervision creates the concept known as “parental monitoring,” which has been found to be an effective approach to reducing risky adolescent behaviors (DeVore & Ginsburg, 2005). More specifically, parental monitoring refers to a parent’s knowledge of their child’s whereabouts, activities, and associations when not under direct parental supervision (DeVore & Ginsburg, 2005). The concept of parental monitoring is highly influenced by adolescents’ voluntary disclosure regarding life events (Huebner & Howell, 2003). However, when adolescent disclosure is coupled with a supportive parent-child relationship that fosters communication, risky behaviors are reduced (DeVore & Ginsburg, 2005; Miller, 2002).

Though parental monitoring can be effective in reducing negative adolescent behaviors, researchers have identified gender differences. Stattin and Kerr (2000) identified that adolescent girls report being more closely controlled by their parents and that their parents solicit more information from them when compared to similar reports from adolescent boys; yet, parents report controlling boys more than girls. Further, adolescent boys report having a better relationship with their parents than do adolescent females (Stattin & Kerr, 2000).

Researchers have also noted differences between mothers and fathers approach to the topic. DeVore & Ginsburg (2005) reported that mothers seem to know more about their child’s daily activities than do fathers and are more likely to acquire knowledge through active supervision or voluntary disclosure from the child. Fathers are more likely to receive information from their spouse regarding their child’s activities. Mothers engage in more frequent open communication with their adolescent and offer more self-disclosure about dating

experiences during adolescence, which is associated with more conservative attitudes about sex and delayed sexual experiences (Guilamo-Ramos et al., 2012).

The effects of “parental influence” on adolescent sexual behaviors are well documented in the literature (DeVore & Ginsburg, 2005; Guilamo-Ramos et al., 2012; Hacker et al., 2000; Huebner & Howell, 2003). Research regarding parental influences on adolescent sexual behaviors has mainly focused on mothers because they are perceived to be the parent primarily responsible for providing sexuality education in the home (Commendador, 2010; Guilamo-Ramos et al., 2012). Commendador (2010) identified the influential role maternal interactions play in reducing adolescent pregnancy, encouraging adolescent decision making regarding contraception, and encouraging females to use contraception. Fewer studies have addressed paternal influences on adolescent sexual behavior.

A review, by Guilamo-Ramos and colleagues (2012), identified 13 research studies (12 quantitative, 1 qualitative) that addressed the relationship between parenting practices and adolescent sexual behaviors that contribute to pregnancy and sexually transmitted infections (STIs) of their children. Several of the research studies directly compared maternal versus paternal influences on adolescent sexual behaviors. Based on their review, distinct paternal characteristics had an effect on adolescent sexual behaviors independent of maternal characteristics. Specifically, they identified that paternal disapproval of sexual activity and close paternal relationships were associated with later sexual debut (first sexual intercourse). Whereas, higher levels of negative father-child interactions increased the likelihood of engaging in sexual activities (Guilamo-Ramos et al., 2012). These findings echo previous work by Coley, Votruba-Drzal, and Schindler (2009), who identified that fathers increase their involvement with their children as their knowledge of risky behaviors increases.

Much of the literature has focused on maternal influences, with fewer studies specifically addressing paternal roles in sexuality education (Coley et al., 2009; Guilamo-Ramos et al., 2012; Kirkman, Rosenthal, & Feldman, 2002). We hypothesize that fathers have unique experiences in discussing sexually related topics with their children. Therefore, the purpose of this study is to explore fathers' beliefs, experiences, and perceptions of their parenting role in talking with their adolescent about sexually related topics. Specific research questions addressed: 1) What is a father's perception of his role in talking with his adolescent about sex? 2) What influences how a father talks with his adolescent child about sexual topics? and 3) What information would benefit fathers as they approach sexual discussions with their adolescent?

METHOD

Study Design

We employed a qualitative, descriptive research design for this study to explore beliefs, experiences, and perceptions of fathers talking with their children about sexually related topics. This approach made it possible to gain insight from the fathers' viewpoint, as well as to supplement the current body of adolescent sexual health literature, which is dominated by maternal influences on behavior. Fathers' experiences in communicating with their children about sexually related topics can provide valuable information that may inform sexual education curriculums and teen pregnancy prevention programs.

Sample and Setting

We recruited participants for this study from two rural counties in Eastern Kansas through newspaper advertisement, flyers, word of mouth, and snow ball sampling during the fall and winter 2013-2014. Noone and Young (2010) used recruitment strategies such as these in other qualitative research among rural communities. Participants consisted of five fathers

ranging in ages 38 to 54. Participants held a variety of occupations including production coordinator, technical service worker, farmer, maintenance supervisor, and mechanic. Four of the participants were married to their children's biological mother, one father was divorced from his child's biological mother. All of the fathers had at least one child within the age range of 14-18; three of the fathers had at least one son within this age range and two of the fathers had at least one daughter within this age range.

Prior to any data collection, we provided participants with the waiver of documentation of consent document, which served as the study's research consent. We reviewed the consent form verbally with the participants and gained verbal consent prior to participation in the study. We assumed continued informed consent throughout the study through on-going voluntary participation of the participants. We informed participants that they could answer only those questions they felt comfortable and/or withdraw from the study at any time without fear of consequences.

Data Collection

The Human Subjects Committee (HSC) at the University of Kansas Medical Center (KUMC) approved this study prior to any data collection. We contacted interested participants and provided an overview of the study purpose. We obtained verbal consent from the participants' and conducted individual semi-structured interviews. Individual semi-structured interviews enable researchers to maintain a high level of confidentiality and provide opportunities for participants to share their individual experiences with the topic. We considered focus groups as a data collection method, however, given the sensitive nature of the research topic and the challenges of group power dynamics within focus groups (Marshall & Rossman, 2011), individual semi-structured interviews bypass these risks.

We used a semi-structured interview guide with prepared questions (Appendix) to frame the individual interviews, as well as collected demographic information at the time of the individual interviews. We completed all interviews in the participants' home at a time agreed upon by the participant and researcher. The researcher conducted interviews in English and audio-recorded the conversation for later transcription by the researcher completing the interview. The researcher omitted any identifiable health and/or personal information and gave all participants a pseudonym to maintain confidentiality. The individual interviews ranged from 40 to 120 minutes.

The researcher completing the interviews, took field notes during and following the individual interviews. Field notes included participant observations during the interview and researcher reflection on the individual interview experiences.

DATA ANALYSIS

Qualitative Content Analysis

We employed an inductive content analysis to analyze data. An inductive reasoning approach allows for the generation of ideas (Thorne, 2000). Through content analysis, the researcher tries to increase understanding and knowledge regarding the experience being studied (Hsieh & Shannon, 2005). Initial data analysis began after completion of the first interview and was ongoing throughout remaining interviews.

Qualitative content analysis is data driven, whereby researchers systematically apply codes generated from the descriptive data (Sandelowski, 2000) and attempt to identify core consistencies and meanings (Patton, 2002). We thoroughly examined interview transcripts to gain insight regarding the experiences and perceptions of fathers talking with their children about sexually related topics. We identified exact words and phrases that denoted significant thoughts

or ideas and labeled them as meaning units. We developed codes to reflect content from the identified meaning units and organized similar codes into categories (see figure 1 for a pictorial example). We developed initial codes and categories based on information from the first interview transcript. An interprofessional group reviewed the initial codes and categories and provided researchers with suggestions and feedback for the coding process. We then developed codes and categories based on the second interview and compared these to the initial codes and categories from transcript one. From this comparison, we collapsed similar codes and categories found among transcripts one and two. We used the collapsed categories to inform the coding process on the remaining three transcripts; codes and categories that were unique to a given transcript were added to the coding process.

To assist in establishing reliability/dependability of the categories, two researchers compared their coding process for the third transcript, reaching a final agreement level of 90%. From this comparison process, we added key phrases to strengthen category descriptions and to aid in coding the remaining transcripts. After we determined reliability of the categories, we grouped similar categories into overarching themes to reflect fathers' experiences talking to their children about sexually related topics.

Trustworthiness and Methodological Rigor

Trustworthiness, or the goodness of the qualitative research (Marshall & Rossman, 2011), is established through five criteria; credibility, transferability, dependability, confirmability, and authenticity (Lincoln & Guba, 1985; Munhall, 2012; Tobin & Begley, 2004). We established credibility through participant observation during the individual interviews, prolonged engagement in data collection, peer debriefing during data collection and analysis, and the use of member checks, to clarify points with participants throughout the individual interviews. We

supported the transferability of our findings through the use of thick description involving field notes and accurately transcribed interviews. To ensure dependability and confirmability of our findings we used an audit trail to document the decision making process in developing codes, categories, and study themes, as well as checked for category reliability among researchers. Reflective journaling following each interview further supported dependability and confirmability of our findings. To ensure authenticity, we used open-ended questions to collect data rich with the individual participant's experiences and perspectives regarding conversations with their children about sexually related topics.

Rigor is a means of establishing the legitimacy of the research process by demonstrating integrity and competence within the qualitative research study (Tobin & Begley, 2004). We reinforced the rigor of this study by using an accurate transcription process. To maintain accuracy, we compared the written transcript to the audio recording of the individual interviews. We further established study rigor through member checking, developing an audit trail, and peer debriefing.

FINDINGS

As seen in Table 1, our data analysis revealed three overarching themes, with 11 categories, that depicted fathers' experiences discussing sexually related topics with their children.

Theme One: Influences and challenges to having sexually related discussions. This theme focuses on those factors that contribute to the ease with which a father might approach conversations regarding sexually related content, as well as addresses potential barriers or challenges to engaging in such conversations. Within this theme, there are three categories: Child's developmental readiness as a guide to content for sexually related discussions; Father's

experience learning about sexually related content; and Acknowledging parental challenges. All of these categories share a common *developmental component that can influence the sharing of information between father and child.*

Perception of the child's readiness to participate in conversations about sexually related topics impacts discussion. Fathers shared that they felt they needed to understand when their child was ready to learn about certain material so they did not scare them. Further, child readiness clues were triggers indicating when they might be ready to discuss specific sexual topics. One father shared, "I mean you say something about sex and they get embarrassed then you know then ok let's take it a little bit slower." Understanding the child's readiness and comfort with the topic influenced what fathers shared with their children or if they even spoke with their child about sexual topics at all. Another father shared, "Her face gets red, she starts um grinning...I can tell she is uncomfortable."

Developmental experiences fathers' have had learning about sexual content also influenced sexuality discussions. Fathers who experienced open conversations about sex with their parents, a sibling, or teacher were more likely to share that they are open with their children about sexual topics compared to fathers who shared that they did not talk about sexual topics when they were growing up. One father shared, "I never had anything from my parents, and I really didn't pass much on to mine [children] to be honest." Another father shared, "Having a parent like that was amazing to know you could talk to them." These developmental experiences learning about sexual topics influence what information fathers are willing to share with their children.

An understanding of the development of one's own parenting and acknowledging that parenting is challenging further influenced discussions. Fathers shared that it is challenging to

know as a parent what is appropriate information to share with their children, particularly regarding conversations of sex. Some fathers, particularly those with daughters, reported feeling uncomfortable talking about such personal information with their children and sharing their own personal experiences learning about sex. Fathers noted that there is no perfect parent and it is acceptable to let their child know that they may not have all the answers or to understand that they are going to make parenting mistakes. One father shared, "...Realize that you are going to screw up and answer wrong. All of us have." Fathers also acknowledged the difficulty determining boundaries regarding their child's dating and interpersonal relationships. Parenting challenges, the child's readiness to learn, and the fathers' developmental experiences all affect the sharing of information between father and child, in turn influencing how much a father teaches their child about his views on sexuality.

Theme two: Teaching content and rules guiding sexuality. This theme refers to the importance of teaching children family rules and expectations for intimate relationships and providing sexual health information. Within this theme, there are five categories: Teaching consequences and personal responsibility for behavior; Parental role in teaching content related to intimate relationships; Vulnerability of girls; Encouraging comfortableness with human body; and Accessing sexual education resources. Each of these five categories emphasizes *the role fathers can play in sharing and teaching* their children about their views on sexuality.

All fathers shared the belief that it was important for their children to understand the consequences of, and their personal responsibility associated with, engaging in sexual relationships. Fathers emphasized the use of condoms to prevent diseases and pregnancy and the use of examples to illustrate how to avoid getting a negative reputation. Fathers of sons also stressed that if a pregnancy was to result it was their sons' personal responsibility to help care for

the child. All fathers shared that it was important for their children to understand how engaging in sex can influence long term goals and future plans that their child might have. A father shared, “It’s [sex] all fun and experiment, but is it really worth changing your life over?”

Similarly, fathers shared that they believed it was their role to share information, not necessarily linked to a consequence, with their children regarding expectations for dating and sexual relationships. Fathers acknowledged the significant role they play in helping their children learn about sexual content. One father shared, “No one’s as good as the parents are...” All fathers shared that they have rules for dating (e.g., curfew, disclosing plans/destinations) and some fathers shared that they have talked about expectations for sexual relationships as well (e.g., be respectful, keep it private, wait to have sex); however, fathers did comment that rules for dating and sex are different from sons to daughters. This rests on the notion that girls are more vulnerable and are more likely taken advantage of sexually than are boys. There is also an underlying protectiveness of girls expressed by all fathers, even those with only sons. Overall, fathers identified their key role is in providing their child with information so that they can make informed decisions. A father commented, “They just need as much information that’s real and not...the locker room talk...it just needs to be good information.”

Similar to providing children with accurate information, fathers shared that it was important to teach their children to be comfortable with their bodies. One father shared, “Try not to make a big huge deal about it...Let them be comfortable with their bodies.” Fathers of sons shared it was their role to teach their child about male specific needs and male hygiene (e.g., how to masturbate or trimming pubic hair) but also to ensure that they were knowledgeable of female specific anatomy as well (e.g., menstruation); Fathers of daughters, however, deferred such topics to their child’s mother. Fathers shared that they typically used their personal experiences

with sex as a means to teach their children about sex, however, if they did not know the information then they would most likely look on the Internet or consult county health department pamphlets that they have received from doctor's visits or the school.

Theme three: Establishing open family communication to support sexuality discussions. This theme focuses on the importance of creating and maintaining a relationship built on trust, honesty, and open communication between parents and their children. This theme includes three categories: Importance of ongoing open parent-child relationship; Fathers' advice to other fathers; and Mothers communicate sexual health content to daughters. The key aspect of this theme involves *the way in which communication influences sexuality discussions*.

All fathers shared that parent-child communication was an important part of their relationship with their child. Fathers wanted their children to know that they could talk with them about any topic. One father commented, "If they ever needed to or wanted to talk to me I wanted them to know or feel like they could." Fathers viewed the ability to communicate and having an open parent-child relationship as important and necessary in order to facilitate conversations regarding sexual topics. The importance of communication also resonates in the advice that fathers would give to other fathers of younger children regarding starting conversations about sex. Fathers shared they would advise other fathers to ensure that their children know they are available to talk with them about sex and other personal topics. As one father said, "Just be open and honest...it's not a taboo subject, you need to talk about it."

Though all fathers acknowledged the importance of quality communication within their family and offered that as advice to other fathers, fathers of daughters expressed a reluctance to communicate with their daughters about sexual topics. Instead, they deferred such conversations to their daughter's mother, sharing that because both are female, it was more comfortable for

them to have such personal conversations. One father commented, “That’s mom’s department.” Fathers of daughters gained knowledge of such conversations through their daughter’s mother, not directly through communications between father and daughter. However, the fathers of daughters shared that if their daughter ever initiated a conversation regarding sexual topics with them they would talk about any topic. A father shared, “If they [daughters] approach me, I wouldn’t approach them about personal stuff, but if they approached me, I’d talk to them.” Despite the challenges associated with parent-child communication, fathers view communication as a very important piece in establishing a parent-child relationship that supports sexuality discussions.

DISCUSSION

Through this study, we explored fathers’ beliefs, experiences, and perceptions of their parenting role in talking with their adolescent about sexually related topics. We believe that fathers have unique experiences communicating with their children regarding issues of dating and sex and that parent-child communication patterns are influenced by developmental components. Research suggests that there are differences associated with father-child communications compared to mother-child communications, particularly in what information is shared and the comfort level associated with communications about sexual topics (Coley et al., 2009; Kirkman et al., 2002).

In understanding a fathers’ perceived role in talking with their adolescent about sexually related topics, fathers identified the importance of an open and communicative relationship with their children which promotes the opportunity for discussing more sensitive topics, like dating and sex. This is further supported in the research literature (Akers, Holland, & Bost, 2011) indicating the positive effects that supportive parental communication and behavior has in

adolescents comfortability in talking about such topics with their parents. Additionally, fathers expressed that they believed their role was to provide their children with as much accurate information as possible so that they could make informed and healthy life decisions, as well as to be available to their children should they want to talk about any topic. Fathers also shared the significance of teaching their children the rules and consequences associated with sexual relationships.

Despite the importance that fathers placed on having a supportive parent-child relationship, fathers acknowledged the challenges associated with having such conversations. Particularly fathers were unsure of what and how much information to share with their children and some fathers expressed a discomfort in talking with their children about sexuality topics. This was particularly relevant for father-daughter relationships. This finding echoes previous research (Walker, 2001; Kirkman et al., 2002) that fathers express difficulty and discomfort communicating with their children about sexually related topics, as well as prefer same gender discussions.

Our findings further revealed the significance of developmental influences and those effects on father-child communication. We identified that the child's developmental readiness, fathers' developmental experiences as an adolescent, and development in one's parenting role all influence how a father might talk with their adolescent about sexually related topics. Similar findings have been shared in the literature regarding the influence of parents' own past experience of sexuality education (Walker, 2001) and willingness or comfort level in discussing sexually related topics (Kirkman et al., 2002). Our findings revealed those fathers who did not have open discussions, regarding sexual content as an adolescent with their parents, responded

with less openness toward such topics with their children compared to fathers who experienced more open conversations with their parents as an adolescent.

Furthermore, a fathers' own personal experiences with sex also influenced what information was shared with their children. Fathers shared that their personal experiences were the best resource to inform discussions with their children regarding sexual topics. If they did not know a response, fathers shared that they were most likely to look the information up on the Internet, consult their spouse, or utilize pamphlets offered by the county health department or school. Fathers in our study felt it was important that their children had accurate sexual health information, whether it came from them, their spouse, or another resource.

LIMITATIONS

An initial limitation of this study includes the participant sample. As this was a pilot study, only five participants were selected and all of the participants were rural, white males. This may limit the applicability of these findings to other populations and a larger sample size may result in different findings.

Another limitation of this research study may include gender differences, as the primary researcher that completed the interviews was female and all participants were male. Gender differences may have created discomfort within the participants, which may have influenced their individual responses. However, the researcher completing the interviews worked to develop rapport with participants at the onset of the interviews and gradually introduced questions that may have evoked more discomfort from the participants (e.g., questions relating to their conversations about sex with their child). Furthermore, all participants were given the option to answer only questions with which they felt comfortable; one participant did chose not to respond to two questions.

Researcher bias is always a risk within a qualitative research study (Munall, 2012). To address this limitation, we utilized an inductive analysis approach as a method of ensuring that codes, categories, and themes were derived from the participants experiences and perspective and confirmed the derived categories and themes among researchers. Furthermore, we employed strategies to support trustworthiness and rigor within our study.

IMPLICATIONS

Our findings further highlight the complex nature of father-child sexuality discussions. Fathers in our study revealed a desire to inform their children about the expectations and consequences associated with sexual relationships. Fathers' sought to accomplish this through active, open communication with their child, as seen in father-son interactions, or through a more passive role in allowing their spouse to communicate such content with their child, as were the case in father-daughter interactions. Future research may consider further exploring father-child communications regarding sexuality discussions, particularly father-daughter dyads, as much of the literature has addressed only mother-daughter relationships (Commendador, 2010).

Sexual health educators can be instrumental in assisting father-child sexuality conversations by providing discussion points that adolescents address with their father or a father figure. This could serve as a means to facilitate/initiate open communication regarding sexuality discussions, as well as promote consistency in sexuality education between school and home settings (Walker, 2001). Research indicates the influential role fathers can play in communicating with their adolescent about sex and the positive effects on sexual behaviors, such as fewer sexual partners and later sexual debut (Coley et al., 2009; Guilamo-Ramos et al., 2012). School based sexual health education programs need to consider implementing curriculum materials that foster parent-child communication and build knowledge and skills to develop

parental confidence in their role as a source of sexual health information for their children (Walker, 2001).

Future research may consider exploring ways in which parents of younger children (pre-adolescents) begin to have sexuality discussions. Research has indicated that there is a breakdown in the father-child relationship at the onset of puberty (Akers et al., 2011; Kirkman et al., 2002), thus more research is needed in this area to develop interventions that promote ongoing father-child communication and interaction throughout this developmental period. Considering the important roles that fathers fill in supporting sexuality discussions with their adolescent children, family-based and school-based sexual health education and interventions need to encourage active and responsive parent-child interactions from both parents, as each adds unique attitudes, experiences, and values.

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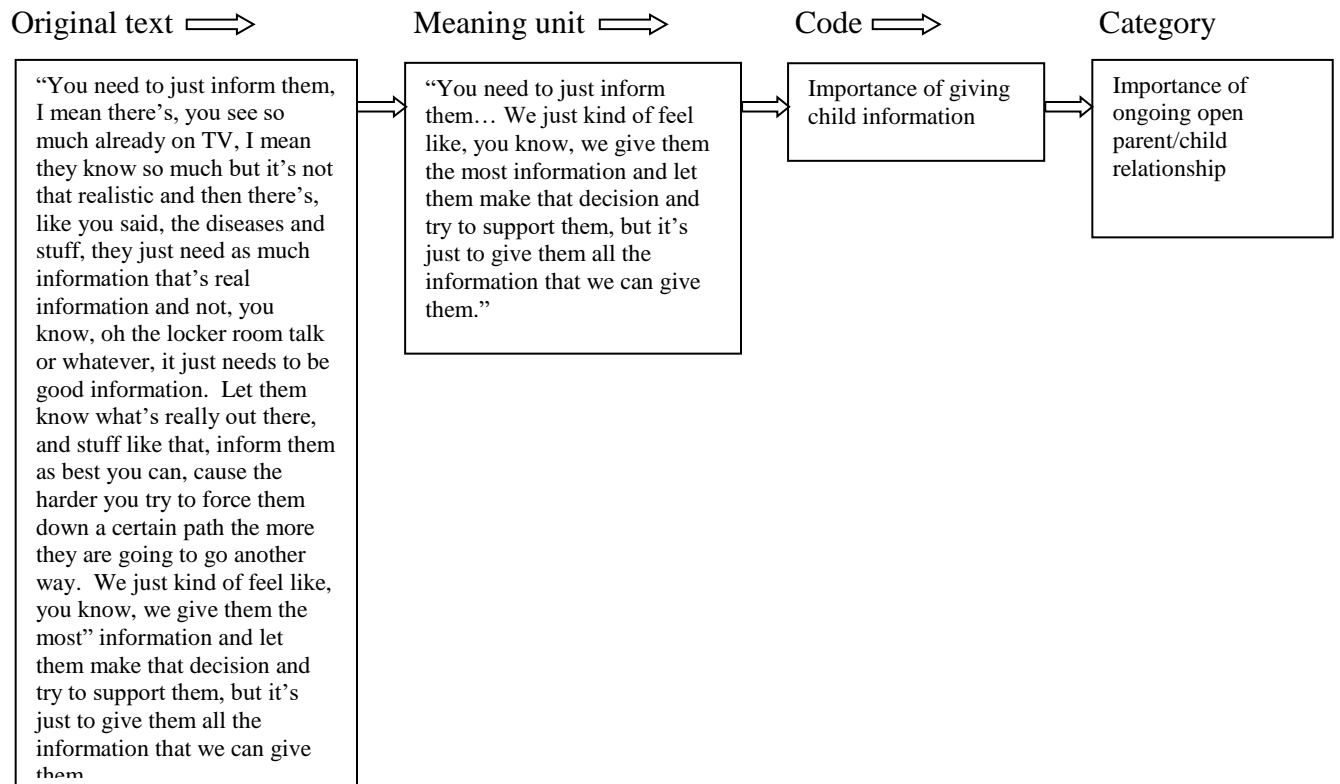
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Figure 1

Example of coding process used



Adapted from: Graneheim, U. H. & Lundman, B. (2004). Qualitative content analysis in nursing research: concepts, procedures, and measures to achieve trustworthiness. *Nurse Education Today*, 24, 105-112

Table 1

Themes and corresponding categories

Themes	Categories
1. Influences and challenges to having sexually related discussions	<p>Category 1a: Child’s developmental readiness as a guide for sexually related discussions</p> <p>Category 1b: Father’s experience learning about sexually related content</p> <p>Category 1c: Acknowledging parental challenges</p>
2. Teaching content and rules guiding sexuality	<p>Category 2a: Teaching consequences and personal responsibility for behavior</p> <p>Category 2b: Parental role in teaching content related to intimate relationships</p> <p>Category 2c: Vulnerability of girls</p> <p>Category 2d: Accessing sexual education resources</p> <p>Category 2e: Encouraging comfortableness with human body</p>
3. Establishing open family communication to support sexuality discussions	<p>Category 3a: Importance of ongoing open parent/child relationship</p> <p>Category 3b: Fathers’ advice to other fathers</p> <p>Category 3c: Mothers communicate sexual health content to daughters</p>

Appendix

Interview Guide

Where did you grow up?

What was it like growing up for you to talk/communicate with your parents?

How long have you lived here?

At home, who is the primary communicator with your son/daughter?

If I were to ask your son/daughter, what would they say it's like to communicate with you?

Tell me about the types of topics you and your son/daughter talk about:

Tell me about a time when your son/daughter surprised you with a question or conversation topic:

When you were growing up who did you talk to about more sensitive topics, like dating and sex?
What were those experiences like for you?

Is your son/daughter dating? What does dating look like at your house?

In your view, what does talking about sex with your son/daughter mean?

What do you feel is a father's role in talking to their children about sex?

Tell me about an experience you have had talking with your son/daughter about sex?

What prompted you to talk to your son/daughter about sex?

What influences how you talk to your son/daughter about sex?

What information/resources are you using to guide your conversations about sex?

What additional information do you feel would benefit your discussions about sex?

What advice would you give to fathers of younger children regarding conversations about sex?

Other thoughts or comments that you have not shared that you would like to regarding this topic?

Appendix F

Comprehensive Examination III

Survey of Health Educators:
Involving Parents in Sexuality Education
Kylea Shoemaker
Comprehensive Examination 3
University of Kansas Medical Center
Therapeutic Science

Abstract

Parents and health educators are influential sources of adolescent sexuality information. Research suggests a need for collaboration among parents and health educators in providing comprehensive sexuality knowledge. To identify methods health educators use to involve parents in public school-based sexuality discussions, we distributed a survey among the Kansas Association for Health, Physical Education, Recreation and Dance (KAHPERD) email list. Twenty-six participants completed the 25 item web-based survey. Using Spearman Rank Order Correlation Coefficients, we found good to excellent correlations among various curriculum topics that participants believed should involve parent participation. Using REDcap data, we identified the percentage of methods used to communicate, educate, and involve parents in sexuality discussions, with 52% of participants reporting not involving parents in sexuality discussions at school. Participants report various sexuality curriculum topics should involve parental participation; however, a mismatch exists between belief and teaching practice.

Keywords: health educator, parent-child communication, adolescent sexuality, sexuality education

Sexuality is a critical component of healthy development for all youth (Shtarkshall, Santelli, & Hirsch, 2007). Across their lifespan, a person develops a sense of their sexuality by understanding both hidden and overt messages learned from parents, family members, educators, peers, and various media sources. This “sexual socialization” process provides an individual the opportunity to develop personal ideas, beliefs, and values from family and other social contexts (Secor-Turner, Sieving, Eisenberg, Skay, 2011; Shtarkshall et al., 2007). Acknowledging both the familial and social influences on sexuality (e.g., school, peers, and community) is a vital component of sexuality education (Shtarkshall et al., 2007).

Families and schools are two major influences on adolescents’ sexual behaviors (Grossman, Frye, Charmaraman, & Erkut, 2013). Parents and family members can help adolescents become healthy sexual adults by providing information about sex and encouraging responsible decision-making (Miller, Kotchick, Dorsey, Forehand, & Ham, 1998). Adolescents who have already initiated sexual intercourse report that next to peers, parents provide the greatest source of information about sex (Secor-Turner et al., 2011). Parents influence their children’s beliefs about sexual relationships by communicating cultural and religious values, and behavioral expectations (Shtarkshall et al., 2007). For example, Secor-Turner and colleagues (2011) found that both ninth and twelfth grade level students had a decreased risk for pregnancy when parents provided sexuality information.

Generally, parents accept their dual roles as providers of sexuality information and behavioral expectations. Several studies find that parents believe they should be their child’s primary source of sexuality information, followed by educators (Jordan, Price, & Fitzgerald, 2000; Lagus, Bernat, Bearinger, Resnick, & Eisenberg, 2011; Walker, Rose, Squire, & Koo, 2008). Despite this reported belief, many parents express challenges associated with

communicating sexually related content to their children. Particularly, they report a lack of confidence and feelings of embarrassment when discussing sexuality content with their children (Walker, 2001; Walker et al., 2008). As a result, this uneasiness limits the amount and type of information parents share with their children, placing the children at risk for negative sexual health outcomes (e.g., exposure to sexually transmitted infections (STIs), adolescent pregnancy, etc.) (Miller et al., 1998).

Discomfort with discussing sexuality is a potential reason why parents favor school-based programs that address comprehensive sexuality education (Eisenberg, Bernat, Bearinger, & Resnick, 2008; Lagus et al., 2011; Walker et al., 2008). Comprehensive sexuality education may include information on abstinence, contraception, gender identity/roles, human development and reproduction, body image, healthy relationships, pregnancy, sexual orientation, safe sex practices, and sexual attitudes and values (Implementing Sex Education, 2014). Within the public school environment, health educators teach skills which encourage students of all grade levels to engage in activities that promote the maintenance and improvement of health related behaviors (e.g., aging, substance abuse, sexuality, etc.); this teaching role may be combined as physical/health education teacher (SHAPE America, 2016). Health educators are the main providers of sexuality education within the public school setting, as educators provide technical information regarding sexual behaviors, puberty, and reproduction during middle and/or high school health education courses (Teitelman, Bohinski, & Boente, 2009). Health educators also provide guidance that results in positive health outcomes for youth (Shtarkshall et al., 2007), such as practice with decision making skills to prevent unprotected sex and information about accessing condoms and contraceptives (Kirby, 2007).

Despite the positive benefits of sexuality education, students often report that sexuality education provided in the classroom setting lacks emotional context and application to personal experiences (Teitelman et al, 2009). Similarly, health educators express a mismatch between what they believe they should teach and what they are asked to teach, citing a variety of structural barriers (i.e., financial resources, curriculum, school policies, etc.) associated with these challenges (Eisenberg, Madsen, Oliphant, & Sieving, 2013). Furthermore, little time is directly spent focusing on sexuality education with students receiving an average of just over three hours in elementary school, six hours in middle school, and eight hours in high school (Future of Sex Education Initiative, 2012).

Considering the challenges associated with parent-child communication about sexuality and barriers to school-based sexuality education, collaboration between health educators and parents is necessary to provide comprehensive sexuality education (Eisenberg et al., 2008; Secor-Turner et al., 2011; Shtarkshall et al., 2007; Walker et al., 2008). To address the need for collaboration, this study used a statewide sample of public school teachers to explore how health educators are involving parents in sexuality education discussions and coursework. A better understanding of health educators' actual experiences collaborating with parents provides information that enhances content among existing sexuality education curricula and may inform decisions about the development of future sexuality education. Specific research questions address the following: 1) Is there a relationship between sexuality topics currently involving parental participation and topics teachers believe should include parental participation? 2) Is there a relationship between sexuality topics teachers are currently teaching and the areas in which they currently seek parental participation? 3) How do health education teachers communicate, educate, and involve parents in sexuality discussions? and 4) Are there differences

in how teachers seek parental involvement in sexuality education from varying geographic areas (i.e., frontier, rural, densely-settled rural, semi-urban, and urban)?

METHOD

Participants

We recruited sexual health educators through contact information for the professional group provided by the Kansas Association for Health, Physical Education, Recreation and Dance (KAHPERD) email list. KAHPERD promotes healthy and active lifestyles within the state (KAHPERD, 2016) and maintains an active, protected email list of the state's licensed health educators. Across the state there are approximately 600 members of the KAHPERD, this includes college students, kindergarten through 12th grade educators, post-secondary faculty, and retired teachers; however, a more specific numerical breakdown of groups is not available (V. Worrell, personal communication, August 19, 2014). Those individuals currently teaching grades 6-12 were asked to participate.

Twenty-six participants (7 male, 19 female) completed portions of the survey. Of those participants, physical education teacher (n= 9) and combined health/physical education teacher (n= 14) composed the majority of participants' primary teaching assignment. All but one of the survey participants, from an accredited private school, listed public school as the primary setting where they provide sexuality education. The majority of participants taught sexuality education most frequently to 6th-9th grade levels. Geographically, participants reported teaching in rural (36%), urban (32%), semi-urban (24%), and densely-settled rural (8%) areas in the state.

Materials

We used the Research Electronic Data Capture (REDCap) (Harris et al., 2009), a web-based application system, to create and manage the web-based form of the survey. We adapted portions of our survey from an existing supplemental sex education survey developed by

Eisenberg and colleagues (2013), which focused on sexuality topics health educators taught and felt should be taught, as well as barriers associated with teaching sexuality topics among middle and high school health teachers in Minnesota. Eisenberg and colleagues developed survey items through literature review and findings from sexuality educator focus groups. Researchers established survey validity through content review among health educators in neighboring states and survey pilot feedback (Eisenberg et al., 2013).

As part of our study's survey, we adapted content from the Eisenberg and colleagues (2013) study, to obtain input on parental involvement in sexuality curriculum, and developed new survey questions by a review of current literature. An inter-professional group reviewed the completed survey questions for content and construction. Two experts, with knowledge in survey development and health related content, independently reviewed the survey. We used feedback from both the inter-professional group and expert review to develop the final survey. The final survey consisted of 25 questions, with the majority of responses being multiple choice options and two questions involved narrative responses (see Appendix for paper version of the final survey).

Procedures

This survey study received approval from the Institutional Review Board Human Subjects Committee, after which researchers emailed a letter of invitation to participate, researcher contact information, and the survey link to the executive director of KAHPERD. The executive director, who maintains the professional group email list for the organization, distributed the initial letter and survey link to the KAHPERD professional membership email list, as well as a reminder follow-up email one month later.

All email communications were confidential and no researcher had direct access to individual email addresses. Individuals who decided to participate in the survey did so by

following the provided survey link. Participants anonymously completed the survey voluntarily and responses contained no personally identifiable information. We collected only basic demographic information including gender, grade level taught, primary teaching assignment, number of years in teaching assignment, and geographic area of employment.

RESULTS

Using IBM SPSS Version 23, we calculated Spearman Rank Order Correlation Coefficients to explore the relationship between sexuality topics currently involving parental participation and topics teachers believe should include parental participation. We found good to excellent correlations (Portney & Watkins, 2015) with values above .75 between topics that teachers believe should involve parental participation and other curriculum topics that should involve parental participation. For example, participants reported the topic of anatomy should involve parental participation and this correlated highly ($r_s = .902$) with sexual violence as a topic participants also believed should involve parental participation (see Table 1).

We also calculated Spearman Rank Order Correlation Coefficients to identify the relationship between sexuality topics teachers are currently teaching and the areas in which they currently seek parental participation. We found a moderate to good relationship (i.e., values .50 to .75) between currently teaching the topic “abortion” and currently seeking parent participation for the topic “puberty” ($r_s = .513$, $p < .01$). A fair relationship (i.e., values .25 to .50) was found between currently teaching the topic “teen parenting” and currently seeking parent participation for the topic “healthy relationships” ($r_s = .422$, $p < .05$). We also found a fair relationship between currently teaching “other topics” and currently seeking parent participation for the topic “STDs” ($r_s = .435$, $p < .05$).

Using data reports available through REDCap, we identified the percentage of methods health educators used to communicate, educate, and involve parents in sexuality discussions. Table 2 lists the percentage of methods used to communicate with parents and provide parents educational materials. Regarding parental involvement in sexuality discussions, health educators mostly do not (52%) involve parents in sexuality discussions at school; when they do, the educators use student assignments (44%) followed by guest lecturer and parent-child education meeting (8% for each strategy).

To explore differences in how teachers seek parental involvement in sexuality education from varying geographic areas (i.e., frontier, rural, densely-settled rural, semi-urban, and urban) we completed Multiple Analysis of Variances (MANOVA). We collapsed geographic regions into two groups, one comprised of frontier, rural, and densely-settled rural, with semi-urban and urban in the other group. We found no statistically significant differences in how geographic regions seek parental involvement.

DISCUSSION

Parents play a vital role in educating adolescents on topics related to forming healthy sexual relationships and sexuality (Secor-Turner et al., 2011; Shtarkshall et al., 2007). Our findings indicate that health educators acknowledge this important role that parents play in sexuality education. However, our findings also indicate there is a disconnect between health educators' beliefs that various sexuality topics should involve parent participation and the actual practice of seeking parent participation.

Our results show good to excellent correlations between topics that should be taught, yet, those correlations did not carry over into seeking parent participation. For example, results indicate a fair correlation between currently teaching teen parenting and seeking parental participation for healthy relationships, yet there was not a significant correlation between

currently teaching teen parenting and seeking parent involvement for teen parenting. Thus, there is not consistency between teaching a topic and seeking parent involvement for the same topic. Previous research, (Eisenberg, et al., 2008) indicates there is a discrepancy between parents' views of comprehensive sexuality education and what is actually taught in school-based sexuality education programs. Further, Eisenberg and colleagues (2013) indicated that structural barriers, such as school policies, curriculum, and finances, contribute to the difference between educators' beliefs and practices. Results from our study further add to the body of research indicating there is a mismatch between both the views of health educators and parents and structural barriers affecting school-based sexuality education.

Sexuality education programs that provide support to both school and parent-based sexuality education are important to adolescents' healthy development (Grossman, Tracy, Charmaraman, Ceder, & Erkut, 2014). Health educators believe they should teach topics such as media influence, sexual violence, contraception, and teen parenting in connection to the other topics, and believe parents should be involved in these topics. However, not all health educators currently teach these topics; we do not know how parental activities affect these topics since we only surveyed the health educators. Encouraging family participation broadens the scope of sexuality education programs and provides the needed structure and resources to parents and teens that might avoid conversations about sexuality topics (Grossman et al., 2013).

Parents want to be involved in sexuality discussions (Legus et al., 2011). However, our findings indicate that parents are often not provided the opportunities to participate in the sexuality content addressed at their child's school with 52% of participants, in our study, reporting not involving parents in the school-based sexuality curriculum. Of the teachers that did report involving parents, parental involvement was sought most frequently through student

assignments. Utilizing approaches that foster parental involvement through established assignments may be a strategy that increases family involvement by providing a means for parents to share their values with their children (Grossman et al., 2013).

Similarly, providing parents with additional sexuality education materials can reduce the discomfort that parents may feel when discussing sexuality content with their children (Walker et al., 2008). Participants in our study reported using a variety of methods to provide educational materials to parents (see Table 2). Most frequently teachers reported using a newsletter and class website; however, forty percent of the participants also indicated that they used no method to provide parents with additional sexuality education materials. As research suggests, parents need to be provided with educational materials (Lagus et al., 2011; Walker et al., 2008) as this could increase parental knowledge on the sexuality topics being discussed at school, thereby alleviating parental lack of sexuality content knowledge as a potential barrier to parent-child sexuality discussions. Health educators are in a position to provide parents such information through school-based sexuality curriculums by offering educational materials, beyond student assignments, that can contribute to parent-child sexuality discussions (Grossman et al, 2013).

Due to our limited number of participants within one state, we cannot make generalizations that apply to the majority of educators. Given the small sample size of this study, results may be an artifact of the data collected, with few responses in a topic area creating statistically significant correlations. Additionally, comparisons cannot be made to student or parental perceptions regarding the roles that parents can provide in sexuality education as this study only surveyed health education teachers. Despite these limitations, our findings provide insight into health educators' approaches to involving parents in sexuality discussions happening at school.

IMPLICATIONS FOR FUTURE RESEARCH

Future research should utilize a larger, multi-state sample to determine if different patterns emerge. A larger, more diverse sample would allow for further generalization of results across varying geographic regions. Additionally, research using a qualitative approach may provide more depth of information and offer greater insight into health educators' personal teaching experiences than what is available through a survey approach.

Future research should focus on identifying information that could lead to more applicable and meaningful sexuality curriculums which may result in healthier long-term outcomes for adolescents. Secor-Turner and colleagues (2011) previously examined the relationship between various sources of sexuality information (e.g., parents, peers, siblings) and sexual risk outcomes (e.g., pregnancy, number of sexual partners, etc.). To expand on the available literature, future research may involve examining adolescent student perceptions of parental involvement within various sexuality topics.

Considering the adolescent perspective may offer insight into specific sexuality topics students' view as most important, which topics might involve parents, and strategies to involve parents in school-based sexuality discussions/curriculum. As students are the receivers of the sexuality curriculum provided to them, considering their perceptions may offer greater implications for the development of sexuality curricula. Research that considers the perceptions of health educators, parents, and students may better inform sexuality education decision makers and result in sexuality curricula that meets the immediate and life-long needs of adolescents.

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Table 1

Relationship of sexuality topics teachers believed should involve parental participation and other curriculum topics that should involve parental participation

Topics that should involve parental participation	Other curriculum topics that should involve parental participation	Spearman Rank Order Correlation Coefficients (r_s)
Anatomy	Sexual Violence	.902**
Puberty	Contraception	.768**
	Media Influence	.804**
	Sexual violence	1.000**
Healthy Relationships	Media Influence	.891**
	Sexual Violence	.902**
Interpersonal Communication	Teen Parenting	.703**
	Sexual Violence	.703**
Abstinence	Contraception	.843**
	Teen Parenting	.910**
	Sexual Violence	.723**
STDs	Contraception	.768**
	Media Influence	.804**
	Sexual Violence	1.000**
Contraception	Teen Parenting	.768**
	Sexual Violence	.768**

**Spearman rank order correlation coefficient values are significant at $p < .01$

Table 2

The percentage of methods health educators used to communicate with parents and provide parents educational materials

Method	Communication with parents	Educational materials provided to parents
Newsletter/Pamphlet Sent Home	72%	44%
Telephone	12%	12%
Class Website	20%	16%
Online Discussion Board	4%	4%
Parent Information Meeting	8%	12%
No Method Used	8%	40%
Other	16%	4%

*Health educator participants listed using an opt out letter and a letter describing the sexuality curriculum as items that fell within the Other method.

**Percentages do not equal 100 as participants were given the option to select multiple methods.

Appendix *Survey*

Teachers and parents play important roles in providing sexual health information to our young people; however, limited research exists that examines current teachers' perspectives regarding school-based sexuality education. The following questions are part of a study to learn about Kansas teachers' experiences with sexuality education, as well as to identify methods that are currently being utilized by teachers' to involve students' parents in sexuality education. All of your answers will be kept strictly confidential.

The following questions refer to teaching **human sexuality**. Please think about all the human sexuality topics you teach (such as abstinence, healthy relationships, sexual decision-making, pregnancy prevention, STDs and HIV/AIDS) when responding to these questions.

Completion of the survey should take approximately 10 minutes, but you are free to stop at any time. You are not required to complete this survey. Survey responses are anonymous and no personally identifiable information will be reported. Please answer each question as honestly as you can, there are no right or wrong answers. By completing the survey you are consenting to participate in this study. If you have questions regarding this research study, please contact Kylea Shoemaker at kshoemaker2@kumc.edu. This research study has been reviewed and approved by the Institutional Review Board (IRB) at the University of Kansas Medical Center. For questions regarding your rights as a research participant, or if you have complaints, concerns, or questions about the research you may contact the University of Kansas Medical Center Institutional Review Board at humansubjects@kumc.edu, 913-588-1240.

If you currently teach human sexuality content to students in middle and/or high school settings, please complete the survey below. Thank you!

-
1. 1. Please select the category that best describes the geographical area in which you teach sexuality topics:
 - Frontier: less than 6 people per square mile
 - Rural: 6 to 19 people per square mile
 - Densely-settled rural: 20 to 39 people per square mile
 - Semi-Urban: 40 to 149 people per square mile
 - Urban: 150 or more people per square mile
 2. Are you:
 - Male
 - Female

3. What is your primary teaching assignment?
- Health Education Teacher
 - Physical Education Teacher
 - Sexual Health Education Teacher
 - Combined Health/Physical Education Teacher
 - Other: _____
- How many years have you been in this teaching role? _____ years
4. You primarily provide sexuality education to students who are:
- Male
 - Female
 - Both gender groups
5. What grade levels do you most often teach content regarding human sexuality?
 ____6th ____7th ____8th ____9th ____10th ____11th ____12th
6. In your pre-service academic training, did you receive any of the following to prepare you to teach human sexuality? (mark all that apply)
- Basic information about human sexuality (e.g. facts about anatomy, HIV/AIDS, contraceptives)
 - Specific methods for teaching human sexuality (e.g. teaching strategies, delivering content to students)
 - Opportunities to practice teaching human sexuality with youth (e.g. as part of your student teaching)
 - Opportunities to review existing curricula regarding human sexuality
 - Training on how to effectively teach sensitive topics in the classroom
 - Training on how to communicate effectively with parents regarding sexuality education
 - Training on how to advocate effectively for sexuality education (e.g. talking with parents, administrators, district officials or other policy makers)
 - Other: _____
7. Aside from your formal academic training, have you received any additional training (coursework, workshops, or conferences) to prepare you to teach human sexuality?
- No
 - Yes
- If yes, please describe: _____

8. In your opinion, compared to other health units you teach, human sexuality is:
- The most important unit you teach
 - More important than many other units
 - No more or less important than other units
 - Less important than many other units

9. In a typical school year, how many hours do you spend teaching your human sexuality unit for a given course?
_____ hours
10. During the last term you taught human sexuality, did you spend more of your time on any of the following activities than for other units that you teach? (mark all that apply)
- Talking with parents
 - Addressing students' personal questions and concerns
 - Correcting inaccurate information
 - Managing the classroom
 - Developing/updating lesson plans
 - Other: _____
- If you marked any of the above, please estimate how much *more time* you spent on these additional activities for teaching human sexuality: _____ hours
11. If you are using a commercially available sexuality curriculum, please list the curriculum program name: _____
12. If not using a commercially available sexuality curriculum, how do you organize your sexuality education curriculum and lesson plans?
- Developed on your own
 - Developed by educational staff
 - Developed by school district
 - Developed in collaboration with community health agency
 - Other: _____
13. Do you have guest speakers teach any content related to human sexuality?
- No
 - Yes
- If yes, for which of the following reasons do you include guest speakers? (mark all that apply)
- To introduce my students to resources in the community
 - To provide a balanced presentation (i.e. multiple perspectives on controversial issues)
 - To provide the most up-to-date information
 - To protect my school or my principal
 - I'm not very comfortable teaching this content
 - My students are more receptive to guest speakers
14. Thinking about the grade you teach *most often*, what content and skills: (mark all that apply)

	do you <i>currently</i> teach?	do you think <i>should be</i> taught?	do you <i>currently</i> seek parental participation?	do you think <i>should include</i> parental participation?
Anatomy				
Puberty				
Healthy relationships				
Interpersonal communication				
Abstinence				
STDs, including HIV				
Contraceptive methods				
Adoption				
Teen parenting				
Abortion				
Sexual orientation				
Media influence				
Sexual violence, including dating violence				
Other				

15. Does your current sexuality curriculum include parental participation in sexuality education?

- No
- Yes
- I do not know

16. What methods do you use to communicate with parents regarding sexuality content taught at school? (mark all that apply)

- Newsletter/Pamphlet sent home
- Telephone
- Class website
- Online discussion board
- Parent information meetings
- No method used
- Other: _____

17. What methods do you use to provide parents with educational materials regarding sexuality topics discussed at school? (mark all that apply)

- Newsletter/Pamphlet sent home

- Telephone
 - Class website
 - Online discussion board
 - Parent information meetings
 - No method used
 - Other: _____
18. How often do assignments seek input/participation from parents? (mark all that apply)
- Daily
 - Weekly
 - Monthly
 - Never
 - Other: _____
19. In what ways do you involve parents in sexuality discussions happening at school? (mark all that apply)
- Student assignments
 - Guest lecturer
 - Attending sexual health presentations
 - Parent-child education meetings
 - Parent education meeting
 - None
 - Other: _____
20. Describe experiences you have had involving parents in sexuality discussions at school:
21. Describe barriers/challenges you perceive, or have experienced, in involving parents in sexuality discussions at school:
22. Do you teach human sexuality differently from the way you would like to because of any of the following? (mark all that apply)
- Lack of time
 - Lack of financial resources
 - Lack of curriculum
 - Concerns about parents' responses
 - Concerns about students' responses

- Concerns about religious influences
- Concerns about responses from administration or district
- School or district policy regarding human sexuality content
- None of the above
- Other: _____

23. What kinds of policies or standards do you think are beneficial for you in teaching human sexuality? (mark all that apply)

- A sexuality education course requirement for state licensure of health teachers
- A school board policy
- A comprehensive sexuality education bill passed by the state legislature
- Regularly updated, age-appropriate district-wide health education standards
- Support from state teachers' union
- Health requirements for high school graduation
- Having no specific policy
- Other: _____

24. Are you aware of other teachers in your school who teach human sexuality content?

- No
- Yes

If yes, please list the subject areas in which human sexuality content is taught:

25. Please list any additional information, not asked in the survey, regarding the teaching of human sexuality to middle and high school age students:

Thank you for completing this survey!

Portions of this survey were adapted from:

Eisenberg, M. E., Madsen, N., Oliphant, J. A., & Sieving, R. E. (2013). Barriers to providing the sexuality education that teachers believe students need. *Journal of School Health, 83(5)*, 335-342

Have a nice day!