Assessing Community Support for Comprehensive Sexual Health Education in High-risk Florida Schools

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ABSTRACT

Fifty percent of middle schools and 35% of high schools in Hillsborough County, Florida, serve students at high-risk for teen birth and sexually transmitted infections. This study assessed the desired type of sexual health education (SHE), content, and support for SHE from residents in the districts. Descriptive and bivariate statistics were used to analyze 314 survey phone interviews with adults, and thematic analysis was used to analyze eight focus groups with 104 youth living in the high-risk school districts. Survey results showed strong community support for comprehensive SHE with human anatomy and reproduction and HIV and sexually transmitted disease as the most supported contents for both middle (93%, 98%) and high school (93%, 97%). However, 38% of adults surveyed agreed that providing information about how to obtain and use contraception would cause teens to be more sexually active. Themes from the focus groups included an acknowledgement of a teen pregnancy problem and perils, support for comprehensive SHE, and a lack of contraception knowledge. In conclusion, adults and youth expressed support and need for comprehensive SHE in their schools. As a link between the community and schools, Hillsborough County school boards have a responsibility to convey such support.

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BACKGROUND

Sexual health education (SHE) is an important strategy for promoting healthful decision-making and preventing unintended pregnancies and sexually transmitted infections (STIs) among adolescents. Schools provide optimal opportunity and location for implementing age-appropriate SHE because they include students across the socioeconomic spectrum, reaching those who may not otherwise have access to accurate health information and services (Schalet et al., 2014). Comprehensive SHE (CSHE) is the preferred instructional approach recommended by the American Academy of Pediatrics (Breuner & Mattson, 2016), as studies show it is more effective than abstinence-only programs in decreasing rates of STIs and unintended pregnancy (Cavazos-Rehg et al, 2012; Trenholm et al., 2007). School-based CSHE involves delivering sexuality education from kindergarten through 12th grade on topics including human development, relationships, personal skills, sexual behavior, sexual health, and society and culture in a way that is age-appropriate and medically accurate (Sexuality Information and Education Council of the United States (SIECUS), 2004). Adolescents exposed to CSHE have shown sustained decreases in sexual risk-taking behavior and increases in health promotion and disease prevention (Kirby, 2007).

Comprehensive Health Education in Florida requires education within 12 component areas of community health, consumer health, environmental health, family life, mental and emotional health, injury prevention and safety, Internet safety, nutrition, personal health, prevention and control of disease, substance use and abuse, and teen dating violence and abuse (The Florida Legislature, 2016c). Schools have latitude to address SHE within those components based on local determination of appropriate curriculum to reflect local values and concerns; however, sexual abstinence is to be taught as the expected standard (The Florida Legislature, 2016a). Florida State Statute 1003.46 also allows AIDS instruction, including instruction regarding the modes of transmission, signs, symptoms, and risk factors (The Florida Legislature, 2016b). However, there is no consistency among districts and schools, and if schools provide AIDS instruction, they are expected to address the benefits of monogamous, heterosexual marriage and emphasize abstinence as a certain way to avoid pregnancy, STIs and AIDS (The

Florida Legislature, 2016b). Historically, Florida schools lag behind other states in implementing CSHE (Dodge et al., 2008) and have received funding from the federal government, private community organizations, non-profits, and churches for abstinence-only programs (Kendall, 2008; SIECUS, 2015; U.S. Department of Health, 2012). A study of Florida public school sex education programs found there is little class time afforded it, and when it is taught, most educators reported teaching the standard abstinence-only-until-marriage emphasis (Dodge et al, 2008).

Implementing CSHE in Florida is critical because the state ranked 28th in the U.S. in teen birth rate and sixth for reported cases of primary and secondary syphilis among young people aged 15-19 in 2014 (SIECUS, 2015). Similarly, in Hillsborough County, the location for this study, teen birth rates were higher than in Florida overall from 2009-2013 (Florida Department of Health, 2016). Twenty-three of Hillsborough County's 106 zip codes report teen birth rates that are higher than the national average, which is 24.2 live births per 1000 (representing the latest available average at the time of the study; Center for Disease Control, 2015). Five of the zip codes are almost double the national teen birth rate (Florida Department of Health, 2016). Thus, these zip codes were identified as "high-risk." CSHE is needed to help reduce unintended pregnancy and STI rates in these high-risk zip codes. Given the historical financial support and incentives for abstinence-only curricula in Florida, community support for CSHE is necessary to create a tension for change and encourage schools to implement and adopt it.

Purpose

The study purpose was to gauge support for SHE in the high-risk zip codes in Hillsborough County and to assess the community's knowledge of teen pregnancy in their community and perceived outcomes of CSHE instruction. To do this, NextGen Alliance, a not-for-profit organization with the mission of preventing teen pregnancy, conducted interviews and focus groups in the community with the support of the University of North Florida Public Opinion Research Lab.

METHODS

This mixed methods study was conducted in two phases: (1) quantitative survey with adults and (2) focus groups with youth living in the high-risk zip codes. The University of North Florida Institutional Review Board approved all procedures and materials. Adult participants provided oral consent to participate while consent from the guardians of youth and assent from the youth themselves was also provided.

Phase 1 - Survey Participants and Procedure

Adults, at least 18 years old, living in Hillsborough County, FL, participated in a survey during the fall of 2015 regarding their views on SHE in their local middle and high schools using computer assisted telephone interviewing (N=314). A sample of the polling universe was selected using random-digit-dialing of local landline and cellphone numbers. Individuals were selected by being the first qualified participant to respond. The data were weighted by age, gender, race, and education to the 2014 American Community Survey estimates for adults in Hillsborough County, FL. The regions selected for participation spanned 13 middle schools and 23 high schools within the high-risk zip codes.

Measures

Survey questions (Table 1) were designed to gauge perceptions of topics typically included in CSHE programs and were derived from mutual discussion and agreement among partners.

Perceptions of SHE supports, type of SHE and content. Respondents indicated whether they would allow their child to participate in grade-level sex education at their school (yes, no, not sure). The question was also adapted to say, "if you had a child in school" for those without children currently in school. All participants were then asked to state the type of sex education curriculum they would most likely support (abstinence only, abstinence-based, CSHE, sex education should not be taught) and to rate their level of support for type of sex education content for middle and high-school (strongly support, somewhat support, somewhat oppose, strongly oppose), including pressure to have sex; talk to parents; anatomy and reproduction; HIV; abstinence; birth control; condom use; and gender and sexual orientation.

Perceptions of teen pregnancy and SHE outcomes. Six questions asked respondents to rate their agreement (strongly agree, somewhat agree, somewhat disagree, strongly disagree) concerning statements about their beliefs about teen pregnancy and possible outcomes of sex education.

Perceptions of SHE responsibility. Three questions asked about perceptions of responsibility to prevent teen pregnancy from the community, schools, and religious institutions (strongly agree, somewhat agree, somewhat disagree, strongly disagree).

Demographics

Participants' gender, race, Hispanic ethnicity (yes/no), age, highest grade level, and presence of school-aged children were measured.

Data Analysis

Statistical Software Package for the Social Sciences (SPSS) 23 was used to calculate descriptive

statistics and explore bivariate associations between demographic characteristics and selected perceptions. Associations were estimated using logistic regression. Odds ratios are reported for the statistically significant findings.

Phase 2 - Focus Group Participants and Procedure

Eight focus groups with 104 students in the high-risk zip codes were conducted in 2015 with 12-15 participants in each; six groups with mixed gender, one group all girls, and one group all boys. Participants were recruited from four local teen programs that serve at-risk youth in the high-risk zip codes. Administrators from the programs were contacted to request permission to recruit student participants and conduct focus groups at their agency. After permission was granted, NextGen employees distributed consent forms to youth to take home to guardians and collected them. Those children who returned guardian consent and gave assent participated.

Focus groups were conducted at each of the four agencies during after-school hours and lasted about one hour. Two facilitators trained in research methods moderated the focus groups. Each focus group was audio recorded and transcribed. Participants received $25 for their time.

Measures

Focus group questions were designed to understand youths' views on SHE content, teen pregnancy, and barriers to CSHE and are listed in Table 2. Content covers the basic CSHE components.

Data Analysis

Two researchers applied a thematic approach using the constant comparative method on the data to uncover themes related to each category of questions. In constant comparison analysis, data are analyzed by individual group, which allows the researcher to assess if themes emerging from one group also emerge from other groups to determine when theoretical saturation occurs (Glaser & Strauss, 1967).

RESULTS

Participant characteristics for both Phase 1 (N = 314) and Phase 2 (N = 104) are presented in Table 3. In phase 1, most participants were female (62%), white (60%), earned more than a high school education (72%), and were not parents (66%). In phase 2, most participants were female, (58%), African-American (80%), and similarly split among grades 8-12, with slightly less representative of grade 10.

Phase 1

Perception of support for SHE and topics. As Table 1 shows, most participants would allow their children to participate in SHE (81%) and would most likely support comprehensive sex education (62%). Most respondents supported (strongly or somewhat) all topics, including peer pressure, talking with parents, anatomy, and reproduction, HIV/STIs, abstinence, birth control, condom use, gender, and sexual orientation for middle- and high school sex education curriculum (78%-98% support range).

Perceptions of teen pregnancy and SHE outcomes. Most respondents who answered the questions wanted teens to get more information about both abstinence and birth control and condoms (82%). They agreed (strongly or somewhat) that teen pregnancy is an important problem in Hillsborough County (91%) and disagreed (strongly or somewhat) that it is okay for teens to become parents if they want to (89%). Whereas the majority agreed that teens who are having sex should be able to get birth control and condoms (91%), 38% believed that providing information about how to obtain such services will encourage teens to have sex. The majority did agree that providing information about how to obtain and use birth control and condoms would encourage them to make safer choices (89%).

Perceptions of SHE responsibility. Overall, participants indicated that religious leaders (75%), schools (83%), and the greater community (94%) should be doing more to help prevent teen pregnancy.

Bivariate Associations

Table 4 details the bivariate relationships between demographic characteristics and selected respondent perceptions. Only those demographic characteristics significantly associated with at least one perception are shown in the table. The significant associations were age, Hispanic ethnicity, education, and gender. Similarly, in addition to the six perceptions shown in Table 4, we also considered participant perceptions regarding the willingness to support CSHE teen pregnancy as an important problem, whether teens should have access to birth control and condoms, religious leaders and groups should do more, and the community should do more, but these five items were not significantly associated with any of the demographic characteristics and are not reported.

Results of bivariate analyses indicate that compared to people who are 50 years old or older, those who are younger have nearly three times the odds of agreeing (strongly or somewhat) that providing teens with information encourages safer sex choices (OR=2.83, 95% CI: 1.33-6.04) and nearly twice the odds of allowing their child (if they have a child or if they did have a child) to participate in school sexual health education (OR=1.94, 95% CI: 1.10-3.42). Similarly, compared to non-Hispanics,

those who identified as Hispanic had more than twice the odds of agreeing (strongly or somewhat) that schools should be doing more (OR=2.61, 95% CI: 1.17-5.80). However, compared to non-Hispanics, Hispanics had lower odds of disagreeing that it is okay for teens to be parents (OR=0.29, 95% CI: 0.24-0.62) and disagreeing that information encourages teens to engage in sex (OR=0.52, 95% CI: 0.31-0.86). When considering education, the opposite is true. Compared to those with a high school education or less, those with more than a high school education had greater odds of disagreeing that it is okay for teens to be parents (OR=3.24, 95% CI: 1.55-6.76) and information encourages sex (OR=1.82, 95% CI: 1.10-3.01). Lastly, compared to male participants, females had more than twice the odds of believing teens should get more information about both abstinence and birth control (OR=2.31, 95% CI: 1.27-4.19).

Phase 2

Three overarching themes regarding youths' views on the need and desire for CSHE emerged: (1) Acknowledged perception of teen pregnancy problem and perils, (2) CSHE support by youth in the community, and (3) Lack of knowledge about contraceptives.

Theme 1: acknowledged perception of teen pregnancy problem and perils. Youth in all groups believed teen pregnancy is a problem in Hillsborough County. In discussion, most identified perceived hardships of being a teen parent, including interference with career and school, dropout dads, government programs that do not provide enough financial support, and the burden of family who would need to compensate. Follow-up questioning of whether they believe teens use contraceptives/condoms to protect from pregnancy resulted in a predominant response of "at least part of the time." Groups discussed many reasons for irregular contraceptive/condom use, and many participants (boys and girls) believed boys were less likely to use condoms because they "do not feel right." Other reasons included allergies to latex**,** impulsiveness due to hormones, lack of knowledge of condoms, and the problem of going through parents to get contraceptives. Some females believed some girls "have a desire to have a baby" and the media tend to glamourize teens who have babies.

Theme 2: CSHE support by youth

Youth across groups believed that schools should teach more sex education than they currently do. Several commented that they do not have faith in their teachers to educate because teachers "are misinformed themselves," meaning they do not trust their teachers' knowledge of the subject, teachers do not teach the emotional components of sex or the potential negative outcomes of it, and "skip through it" or do not go into enough depth on important topics.

The most requested topic for CSHE was pregnancy prevention, including birth control and types of contraceptives. Participants wanted to know "all the choices girls have for contraception," and many females wanted to know "[How] do you get the boy to get tested?" Information regarding the skills necessary for negotiating sex and the psychological and "relationship" problems that happen after sex were also desired. In addition, participants indicated a desire to talk about the types of STIs, signs and testing of STIs/HIV.

One reason youth felt CSHE is needed is because they currently use outside sources as their primary sources of sex/sexual health information. A clear dichotomy existed between where youth obtain information and who they believe should be responsible for providing it. Individuals across groups most commonly believed parents should provide the information, followed by teachers, doctors, and scientists who "know and study" the topic. However, the sources by which they receive most information about sexual health topics were consistent: friends, media, television, and the Internet (e.g., pornography, sexual websites, Google).

Youth in all groups reported parents often wait too long to talk to them about sex or do not talk about the topics they desire. When asked in follow-up what parents are most likely to talk to them about, little consistency existed. Responses included "telling nothing," "doing it when you are comfortable," not feeling pressure to have sex, making sure to use protection/be prepared, and "don't do it" or "wait." Gender roles were also passed on, including perception that females who have sex will get a bad reputation and are the ones to get diseases**.** Follow-up questioning of the reasons parents wait too long to talk about sex elicited statements about religious background, parents "don't really want to know", and it is "awkward" for parents to have the discussion. When asked the proper time to talk about sexual health to young people, responses ranged from age 10-18, but most youth were supportive of talking in middle school, especially before puberty and initiation of sexual activity.

Theme 3: lack of knowledge about contraceptives. Youth were not well versed in contraceptive options, believed several myths about contraceptives, and lacked education regarding their use. The three most common contraceptive methods mentioned across groups were: condoms, female pill, and the "shot" (Depo-Provera). Plan B, the patch, Long-Acting Reversible Contraception (LARC, e.g. contraceptive implants), and the Nuva ring were rarely mentioned. Several had heard of an intrauterine device (IUD) but reported it associated with many side effects, including weight gain, irregular periods, cancer,

infertility, and lack of STI protection. Many wanted more information about types of birth control.

Many individuals across groups considered condoms and birth control as the best way to prevent teen pregnancy. Testing was also predominantly mentioned as protection in groups, with a few believing knowing one's partner and being with the right partner afforded protection.

DISCUSSION

The goal of the study was to gauge support for SHE in high-risk zip codes in Hillsborough County and to assess the community's knowledge of teen pregnancy and perceived outcomes of CSHE instruction. Overall, results indicated strong support for SHE education by community members. Support was exceptionally high among women and those under 50 years old.

Support for CSHE, as a comprehensive medically accurate subject, was evidenced by both youth and adults. The most strongly supported content for both was human anatomy and reproduction in middle and high school. Youth also desired more knowledge and instruction about contraception types, uses, and access, which was especially mirrored among our adult female sample. This is important, as many believed their peers are already sexually active, which correlates with national statistics showing that by sixth grade, 1 in 10 are sexually experienced, indicating that CSHE programs need to be in place by middle school (Peskin et al., 2011).

There is also a need to encourage medically accurate CSHE in these schools because many youths in our sample acknowledged that their primary source of sex information comes from the media, including pornography. Research shows that the media glamorize sex and show inconsistent use of contraceptives – two factors that encourage teens to become sexually active early in their adolescence (Collins, et al., 2004). Cultivation theory can be a useful theoretical framework for future work with these youths to understand the messages about sex acquired from the media and the resulting cultivated attitudes toward sex that may have been incorrectly construed from the media to plan tailored CSHE message content.

This study also revealed that some youth felt they do not trust their teachers' knowledge and opinion on the topic of sex, even though they recognized teachers as being important resources. Research indicates teachers may feel uncomfortable and lack confidence to talk to their students about sexual issues, especially if they are not formally trained (Dodge et al, 2008). For this reason, CSHE in these schools should include normative campaigns with peers in addition to teacher-led instruction, as research suggests that people are more likely to change their attitudes and behaviors if they believe the messenger is like them and faces the same concerns and pressures. Additionally, numerous studies have demonstrated that peers influence youth's health behaviors (Sloane & Zimmer, 1993; Milburn, 1995).

Most youth in our sample expressed a desire to talk more to their parents and trusted adults about sex and sexual health. CSHE in these schools can and should be used to complement parental discussion about sex rather than replace it. Several studies show that although parents and guardians are the first and most influential sex educators for their children, many young people report needing additional guidance (American Public Health Association, 2016). Parents rarely provide the type of information that school sex health programs do, especially pertaining to STIs, unintended pregnancy and adolescent health promotion (Ott, Rouse, Resseguie, Smith, & Woodcox, 2011; Santelli, DiClemente, Miller, & Kirby, 1999). Interventions where trained facilitators present one-hour sessions over several weeks to parents at their place of work to build parents' knowledge, comfort, and confidence in discussing sex with their children have proven efficacious and may be adapted to address parents in these high-risk zip codes (Ladapo et al, 2013).

Whereas community support for CSHE was evident, we uncovered areas for educational opportunity in the high-risk zip codes to correct misconceptions, including improving adults' understanding of teen pregnancy in their community and improving the knowledge that providing information about contraceptive access does not increase sexual activity, especially for Hispanics and those with a high school or lesser education. In fact, some studies have shown that CSHE that includes frank discussion about contraception is associated with a decrease in vaginal intercourse and reports of teen pregnancy (Kohler, Manhart & Lafferty, 2008). There was also a little less agreement that providing CSHE encourages safer sex choices among those 50 and older. Future work should assess this population's statistical knowledge concerning teen pregnancy rates, risks, and prevention in comparison to actual statistics. Again, cultivation theory can be used to understand differences in adults' knowledge of teen pregnancy statistics and resulting attitudes toward pregnant teens that may be cultivated from inaccurate media transmission of ideas (Bryant & Zillman, 2002).

Our findings indicated 83% of adults in the high-risk districts felt schools should be doing more to help prevent teen pregnancy. Hispanics felt especially strong about their schools' role. After the family home, schools are a primary place for the development of young people (CDC, 2015). Schools provide opportunity to educate young people about health and sexuality before they initiate health risk

behaviors, and in the process, can help young people establish healthy behaviors that endure into adulthood (Shalet et al., 2014). Schools are also important venues for fostering positive self-concept and agency around sex, sexuality, and relationships (Schalet et al., 2014).

Based upon the study findings, NextGen Alliance will work to convene a community-school partnership to encourage a district-wide policy for CSHE. The goal of the partnership and resulting policy will be to decrease unintended teen pregnancy in Hillsborough County. This partnership is built upon research indicating that instituting school district policies mandating high-quality sex education through an academic-community partnership can increase adolescent SHE access (Fagen, Stacks, Hutter, & Syster, 2010). However, given Florida's history of abstinence-only funding and conservative ideology, mobilizing community support for CSHE is important, and partnerships may be pivotal to implementation (Kesterton & Cabral de Mello, 2010). NextGen Alliance will oversee the adoption of strategic goals to educate parents and the community about teen pregnancy in the Hillsborough County community. They also plan to train parents, relatives, foster parents, case managers, and entrusted adults to have honest conversations with their children about love, sex, and positive relationships. Committee members can initially train and educate adults at school PTA meetings. Attendance at PTA meetings will also allow for the identification of opinion leaders who are influential in the community who can be trained to lead education sessions with other groups of entrusted adults. Additionally, the inclusion of the community in such strategies as the training of parents, relatives, foster parents, case managers, and entrusted adults to have honest conversations with their children can build a tension for change to strengthen schools' desire to implement successful CSHE. A youth advisory committee has been established so that youth may help disseminate CSHE education on social media platforms. Community-based programs that use multiple interpersonal and societal communication approaches are effective in mobilizing support and improving health promotion (Merzel & D'Afflitti, 2003).

Table 1. Adult Survey Questions and Results

Questions ***Perceptions of Support for SHE and Topics***	**Highest Rated Response**	**Frequency**	**Percent**
Would you allow YOUR child/children [or If you had a child in school, would you allow him/her] to participate in grade-level appropriate, sexual health education at his or her school? (N=312)	Yes	252	80.77%
Which type of sexual health education or prevention curriculum would you be MOST likely to support in Hillsborough schools? (N=303)	Comprehensive sex education	188	62.05%
Do you support children learning about each of the following topics in MIDDLE school?			
How to deal with pressure to have sex (N=310)	Strongly or Somewhat support	246	79.35%
How to talk with parents about sex & relationships (N=311)	Strongly or Somewhat support	277	89.07%
Human anatomy and reproduction (N=311)	Strongly or Somewhat support	290	93.25%
HIV and sexually transmitted diseases (N=311)	Strongly or Somewhat support	289	92.93%
Abstinence from sexual activity (N=310)	Strongly or Somewhat support	278	89.68%
Contraceptives or birth control (N=311)	Strongly or Somewhat support	249	80.06%
Condom use (N=311)	Strongly or Somewhat support	253	81.35%
Gender and sexual orientation issues (N=309)	Strongly or Somewhat support	240	77.67%
Do you support children learning about each of the following topics in HIGH school?			

How to deal with pressure to have sex (N=313)	Strongly or Somewhat support	296	94.57%
How to talk with parents about sex & relationships (N=312)	Strongly or Somewhat support	303	97.12%
Human anatomy and reproduction (N=313)	Strongly or Somewhat support	306	97.76%
HIV and sexually transmitted diseases (N=313)	Strongly or Somewhat support	305	97.44%
Abstinence from sexual activity (N=309)	Strongly or Somewhat support	287	92.88%
Contraceptives or birth control (N=314)	Strongly or Somewhat support	290	92.36%
Condom use (N=314)	Strongly or Somewhat support	293	93.31%
Gender and sexual orientation (N=307)	Strongly or Somewhat support	267	86.97%
Perceptions of teen pregnancy and SHE outcomes			
Do you wish that teens were getting more information about abstinence, more information about birth control and condoms, or more information about both? (N=302)	More information about both	248	82.12%
It is OK for teenagers to become parents if they want to (N=304)	Disagree strongly or somewhat	271	89.14%
Teen pregnancy is an important problem in Hillsborough County (N=251)	Agree strongly or somewhat	229	91.24%
Teens who are having sex should be able to get birth control and condoms (N=304)	Agree strongly or somewhat	276	90.79%
Providing information about how to obtain and use birth control and condoms encourages teens to have sex (N=305)	Disagree strongly or somewhat	189	61.97%
Providing information about how to obtain and use birth control and condoms encourages teens to make safer choices (N=307)	Agree strongly or somewhat	273	88.93%
Perceptions of SHE responsibility			
Religious leaders and groups should be doing more to help prevent teen pregnancy (N=295)	Agree strongly or somewhat	222	75.25%
Schools should be doing more to help prevent teen pregnancy (N=304)	Agree strongly or somewhat	253	83.22%
Our community should be doing more to help prevent teen pregnancy (N=299)	Agree strongly or somewhat	280	93.65%

IMPLICATIONS AND LIMITATIONS

Our findings present several intertwined implications for those working to improve the state of CSHE and teen pregnancy rates in Hillsborough County. Whereas the data reflect those with characteristics typical of high pregnancy areas, mainly poverty, which is highly correlated with teen pregnancy (Kearney & Levine, 2012), the study's value to decision makers in the community stems precisely from the usefulness of hearing from the voices of those most affected. There is a need for more research that begins with the voices of those affected because assessment of their attitudes and experiences helps inform care providers (PLoS Medicine, 2007; Walker, Steinfort, & Keyler, 2015). Community members saw a problem in their community they believed schools could help alleviate. Their responses also demonstrated a gap between perception and reality of teen pregnancy statistics in the community.

The community's unified voice builds a tension for change that has implications for school board members who are charged with providing a critical link between public schools and the community. Although there may always be a vocal minority on either side of an issue, school boards should incorporate the community's views when making decisions about what students should know and be able to do (Kramer-Sterling, 2017; Center for Public Education, 2017).

Table 2. Focus Group Guide

Facilitator's Questions
1. Do you think teen pregnancy is a problem here in Hillsborough County?
2. Do you think most teens use contraceptives or condoms to help prevent STDs/HIV and pregnancy? (Why or why not?)
3. What are the best ways to prevent teen pregnancy and STDs/HIV?
4. What are the contraceptives you are most familiar with?
5. Do you think your school should teach more, less, or the same amount of sexual health education as they currently do?
6. What specific sexual health topics would you like your school to teach more about, if any?
7. Where do teens your age get information about sex and sexual health topics like pregnancy, STDs/HIV and healthy relationships?
8. Who do you believe should talk to teens about sex and sexual health?
9. How old should teens be when adults start talking with them about sex and sexual health?
10. Do you feel your parents talk with you enough about sex and sexual health?

Table 3. Participant Characteristics

	Survey Participants (N=314 adults)		**Focus Group Participants (N=104 students)**	
	Frequency	Percent	Frequency	Percent
Highest Level of Education				
8th Grade			22	21.15%
9th Grade			22	21.15%
10th Grade			10	9.63%
11th Grade			22	21.15%
12th Grade			28	26.92%
Grade School (K-8)	12	3.82%		
High School (9-12)	75	23.89%		
Some College	86	27.39%		
College Graduate	81	25.80%		
Post-graduate	60	19.10%		
Gender				
Male	118	37.58%	41	39.42%
Female	196	62.42%	60	57.69%
Other			3	2.89%
Race/Ethnicity	(N=213)		(N = 92)	
White	128	60.09%	10	10.87%
African American	71	33.33%	74	80.43%
Asian	6	2.82%	1	1.10%

Native American	3	1.41%	0	--
Other[a]	5	2.35%	7	7.60%
	(N=310)			
Hispanic	92	29.68%		
School-aged Children	107	34.08%		
	Mode	Range	Mean	Range
Age[b]	50-59 age group	18-70+	15.9 years	13-18

Note.
[a] "Other" race category includes responses of Caribbean American (N=1), Hispanic and black (N=1), Multiracial (N=2), and Russian (N=1).
[b] Age was reported as a categorical variable for adult surveys with options of 18-29 (19%), 30-39 (17%), 40-49 (18%), 50-59 (20%), 60-69 (16%), 70+ (10%), and refused (0%).

Table 4. Bivariate Associations: Demographics and Respondent Perceptions

	Teens should get more information about both abstinence & birth control	**Disagree:[a] OK for teens to be parents**	**Disagree:[a] Information encourages sex**	**Agree:[b] Information encourages safer choices**	**Agree:[b] Schools should do more**	**Would allow child to participate in sex education at school**
	OR, 95% CI	OR, 95% CI	OR, 95% CI	OR, 95% CI	OR, 95% CI	OR, 95% CI
Age: Younger than 50	1.62, (0.90-2.93)	0.57, (0.27-1.22)	1.04, (0.66-1.66)	2.83, (1.33-6.04)**	1.83, (0.99-3.37)	1.94, (1.10-3.42)*
Hispanic	0.81, (0.43-1.51)	0.29, (0.24-0.62)**	0.52, (0.31-0.86)*	0.83, (0.38-1.79)	2.61, (1.17-5.80)*	0.98, (0.53-1.82)
Education: More than high school	0.78, (0.39-1.53)	3.24, (1.55-6.76)**	1.82, (1.10-3.01)*	0.78, (0.34-1.81)	0.76, (0.38-1.53)	0.72, (0.37-1.38)
Female	2.31, (1.27-4.19)**	1.74, (0.84-3.61)	1.57, (0.98-2.52)	1.39, (0.68-2.85)	0.92, (0.49--1.73)	1.06, (0.60-1.88)

Note.
* p < .05, ** p < .01, [a] Disagree strongly or somewhat, [b] Agree strongly or somewhat

With these clear results, Hillsborough school boards have a responsibility to act to support CSHE in the schools. Results also encourage a combined responsibility among practitioners, community partners and board members to show results to teachers to support more rigorous CSHE, given the historical presence of and incentive for abstinence only instruction. From our data, teachers in these high-risk districts can see that the community supports them as lead educators of their community's youth. Our study shows that several groups are especially supportive of their schools' role in teen pregnancy prevention and CSHE, particularly Hispanics and those younger than 50 years. Opinion leaders from these populations can be scouted to form academic/community partnerships to aid

teachers to deliver more candid CSHE instruction to help curb teen pregnancy rates.

As limitations, the results may not be generalizable to the overall population due to selection, social desirability, and recall biases. Additionally, we had some missing responses for a few survey questions. as typical with survey methodology. Despite limitations, the study demonstrated significant findings that can be used to advocate CSHE policy change in these historically abstinence only Florida high-risk districts.

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