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Support for Comprehensive Sexuality Education: Perspectives from Parents of School-Age Youth

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Abstract

Purpose: Controversy about school-based sexuality education in public schools has continued over the past decade, despite mounting evidence that comprehensive sexuality education effectively promotes sexual health and that parents support these programs in public schools. The present study replicates and expands upon previous findings regarding public views on school-based sexuality education.

Methods: One thousand six hundred five parents of school-age children in Minnesota responded to telephone surveys in 2006–2007 (63% participation rate), including items regarding general sexuality education, 12 specific topics, the grade level at which each should be taught, and attitudes toward sexuality education.

Results: The large majority of parents supported teaching about both abstinence and contraception (comprehensive sexuality education [CSE]; 89.3%), and support was high across all demographic categories of parents. All specific sexuality education topics received majority support (63.4%–98.6%), even those often viewed as controversial. Parents believed most topics should first be taught during the middle school years. Parents held slightly more favorable views on the effectiveness of CSE compared to abstinence-only education, and these views were strongly associated with support for CSE (odds ratio $[OR]_{CSE} = 14.3$; $OR_{abstinence} = 0.11$).

Conclusions: This study highlights a mismatch between parents' expressed opinions and preferences, and actual sexuality education content as currently taught in the majority of public schools. In light of broad parental support for education that emphasizes multiple strategies for prevention of pregnancy and sexually transmitted infections (including abstinence), parents should be encouraged to express their opinions on sexuality education to teachers, administrators, and school boards regarding the importance of including a variety of topics and beginning instruction during middle school years or earlier.

Keywords: Sex education; Parents

Controversy about school-based sexuality education in public schools has continued over the past decade, fueled in part by the 1998 Social Security Act (Section 510) that provided $50 million in annual grants for abstinence-only education—specifically, teaching that abstinence is the only effective way to prevent pregnancy and sexually transmitted infections (STIs) and providing no information about other prevention methods. Language in the Act specifies that funds cannot be used to discuss contraceptives, except to describe and emphasize their failure rates [1,2]. Evidence suggests that abstinence-only education policies have changed the nature of sexuality education in the United

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States [2]. For example, the Centers for Disease Control and Prevention's School Health Policies and Programs Study found that 92% of middle schools and 96% of high schools taught abstinence as the best way to avoid pregnancy, transmission of HIV/AIDS, and STIs [3]. Although this may be an appropriate starting point for sexuality education, only 21% of middle school teachers and 55% of high school teachers also taught the correct use of condoms, despite the fact that 34% of adolescents report having had sexual intercourse by the 9th grade, and 63% by the 12th grade [4].

The focus on abstinence-only messages has expanded over time: from 1995 to 2002, the proportion of youth who received formal abstinence-only education increased from 9%–24% among males and 8%–21% among females; simultaneously, the proportion receiving education about birth control fell from 81%–66% among males and 87%–70% among females [5]. A 2000 study found that almost one in four sex education teachers had been told *not* to teach about contraception in their sexuality units [6]. Consequently, approximately one-quarter to one-third of adolescents had not received any formal instruction about birth control methods.

Mounting evidence demonstrates the effectiveness of comprehensive sexuality education (CSE)—that is, education that includes abstinence as the best prevention strategy, but also provides medically accurate information about contraceptives and condoms—in promoting abstinence along with protective behaviors. Two recent reviews of CSE programs included only those with evaluations that met strict criteria for scientific rigor. Few abstinence-only program evaluations met these criteria; of these, none were found to delay initiation of sexual intercourse [7,8]. Newly released evidence from a rigorous review of federally funded abstinence-only programs, sponsored by the Department of Health and Human Services, found that although these programs may lead to improvements in several psychosocial variables (e.g., intentions to remain abstinent, social norms supportive of abstinence, and perceived consequences of premarital sex [9]), youth in the programs were no more likely than controls to abstain from sex, and among those who were sexually active, they had similar numbers of sexual partners and the same mean age of sexual debut [10].

The irony of the controversy around sexuality education in public schools is the incompatibility between current federal policies and prevailing opinions among adults and youth. Several recent peer-reviewed studies have demonstrated extensive support for CSE [11–15]. In studies of attitudes of the general population of adults [12,13,16], registered voters [11], and parents [14,15], upward of 80% favor sexuality education that includes both abstinence and prevention messages. Interestingly, youth themselves have been asked relatively infrequently about their views on school-based sexuality education. One qualitative study found that students valued an open and straightforward presentation of comprehensive information [17]. More recently, a survey by the National Campaign to Prevent Teen Pregnancy found that 56% of adolescents themselves want to receive more information about both abstinence and birth control/protection, and an additional 9% wish for more information about birth control/protection [16].

The present study replicated and expanded upon previous findings regarding public views on school-based sexuality education in four ways. First, this study focused on parents of school-aged children rather than a general sample of adults, thereby targeting key stakeholders in educational policy. Second, previous studies with parents have been conducted in the Southern and Western United States. To our knowledge, this is the first in-depth exploration of parents' views in the upper Midwestern region. Concurrent findings among these three studies could suggest greater generalizability of parental views on sexuality education across the United States. Third, this study went beyond most previous studies by asking detailed questions on the content of sexuality education to identify specific topic areas parents would like to have taught at each grade level. Finally, this study assessed attitudes toward sex education and explored their associations with support for CSE, which has not been reported previously.

Methods

Sampling design

Data came from a telephone survey of parents of school-age children throughout Minnesota. Telephone number lists were obtained from Genesys Sampling Systems, with the goal of maximizing the number of households with children and youth in the sample. The sampling frame was stratified to achieve equal representation from Minnesota's eight legislative districts.

Study investigators developed the telephone survey instrument through a systematic review of items that have been used in various state and national surveys of parents [11,15,18]. A preliminary version of the instrument was reviewed by experts in adolescent health and survey methodology. Extensive pilot-testing of a revised version with 28 eligible parents resulted in several minor changes in question wording, order, and survey length to minimize respondent burden and maximize question clarity.

Data collection

Data were collected from September 2006 to March 2007 by trained interviewers at the University of Minnesota's Center for Survey Research in Public Health, using a computer-assisted telephone interview program. Completion of the telephone interview implied consent to participate. The University if Minnesota's Institutional Review Board approved all study protocols. The average length of time to complete the survey was 18 minutes.

Out of 3,640 calls made, 2,546 resulted in contacts with an eligible household. Households were considered eligible if they had at least one child age 5–18 and a parent or guardian able to complete the survey in English or Spanish. All contacts were initiated in English, with Spanish follow-up scheduled as needed; one survey was completed in Spanish. One thousand six hundred five parents completed the survey, resulting in a 63% participation rate. Twenty-four percent refused participation, and an additional 12% could not be reached to complete the interview after eligibility was determined.

Measures

One item was used to assess overall views on school-based sexuality education. Parents were asked if they thought ". . . teenagers should be taught: (a) only about abstinence: that is, not having sex until marriage; (b) about both abstinence and how to prevent pregnancies and sexually transmitted infections; or, (c) "sex education should not be taught in schools at all." An additional 12 items measured support for teaching specific sexuality education topics in public schools, including reproductive anatomy, pubertal development, importance of healthy relationships, communication skills, pregnancy and birth, parenting responsibilities, reasons for abstaining from sex, pregnancy prevention, STIs, sexual orientation, sexual abuse, and abortion. Each item included yes/no response options, and "yes" responses (indicating they believed the topic should be taught) were followed by a question regarding the earliest grade level at which that particular topic should be taught. Parents could name a specific grade, which was then recorded as early elementary (K–2), older elementary (3–5), middle school (6–8), or high school (9–12). Elementary grade levels were combined for use in the present study.

Ten items were used to assess parents' attitudes and beliefs about abstinence-only education and comprehensive sexuality education. Each block of questions began with a definition of abstinence-only education or CSE, followed by the relevant questions. The blocks were rotated so that half the participants received the block of abstinence items first, and half received the CSE items first. For both types of education, parents were asked how effective they believed the method was at preventing HIV/AIDS, preventing pregnancy, and getting students to delay intercourse. Parents were also asked how effective they believed abstinence-only education was at getting students to postpone sex until marriage, and whether they agreed or disagreed that students in abstinence-only classes were less likely to use contraceptives if they were to have sex. Additionally, parents were asked how effective they felt CSE was at getting students to use contraception if they did have sex, and whether they agreed or disagreed that CSE classes caused more students to have sex. The five abstinence-only items ($\alpha = .82$) and five CSE items ($\alpha = .76$) were combined into scales for use in analysis; higher scores indicated more positive beliefs about each type of education.

A number of demographic and personal characteristic were also measured, including gender, race (white, black or African American, Asian, American Indian, or some other race; dichotomized as white/nonwhite for analysis), Hispanic ethnicity, religious background, Born Again Christian, child(ren) attending public school, respondent education level (high school or less; vocational, technical, or business school; some college or associate's degree; bachelor's degree; graduate school), political orientation (five categories from very conservative to very liberal), and annual income level (five categories from <$20,000–$100,000 or more).

Data analysis

Chi-square tests were used to detect differences in levels of support for CSE across demographic and personal characteristics. Multiple logistic regression was used to estimate the odds of supporting CSE (vs. abstinence-only or no school-based sexuality education, combined) across the range of beliefs about CSE and abstinence-only education (simultaneously), controlling for demographic characteristics that were significantly related to CSE support in bivariate analysis. Analyses were conducted using SAS version 9.1.

Results

Characteristics of the sample

The majority of parents in this study were female (72.6%), and of white (96.1%), non-Hispanic (98.2%) race/ethnicity. Approximately half (54.6%) reported a Protestant religion and 32.0% were Catholic; over one-third of Protestants/Catholics identified as Born Again Christians. Most parents had children in public schools (85.2%), and about half of parents had completed college (33.9%) or an advanced degree (15.6%). Parents were well-distributed across the spectrum of political orientation, and most parents reported household incomes above $60,000 per year. Additional details of the sample are shown in Table 1.

Support for comprehensive sexuality education

When asked what they believed teenagers should be taught in school, the overwhelming majority of parents favored teaching both abstinence and other strategies for pregnancy prevention (89.3%). Slightly under 10% supported only abstinence-only education, and 0.9% believed sexuality education should not be taught in schools at all.

As shown in Table 2, support for comprehensive sexuality education was high across all groups and typologies of parents. Significant differences emerged across religious groups, Born Again status, public/private school status, political orientation, and income. However, even among

Table 1
Characteristics of the parent sample (n,%)

	N	%
Total	1,605	100.0
Female	1,165	72.6
White	1,543	96.1
Hispanic	29	1.8
Religion		
Protestant	865	54.6
Catholic	507	32.0
Other/no religion	211	13.3
Born again (among Protestants, Catholics)	497	36.4
Public school	1,367	85.2
Education		
High school or less	228	14.2
Vocational/tech/business school	196	12.2
Some college or associate's degree	387	24.1
Bachelor's degree	544	33.9
Graduate school	250	15.6
Political orientation		
Very conservative	163	10.3
Somewhat conservative	463	29.4
Middle of the road	518	32.9
Somewhat liberal	311	19.7
Very liberal	121	7.7
Income		
<$20,000	14	0.9
$20,000–<$40,000	116	7.6
$40,000–<$60,000	334	21.8
$60,000–<$100,000	584	38.1
$100,000 or more	486	31.7

groups that might be considered likely to object to CSE in schools, a majority were still supportive of CSE (e.g., Catholics, 92.3%; Born Again Christians, 83.2%; politically "very conservative" parents, 50.6%).

The majority of parents supported the inclusion of all the specific sexuality education topics in our survey. Less controversial content received almost universal support (e.g., reproductive anatomy, 98.6%; parenting responsibilities, 95.9%), although the more controversial topics of sexual orientation (66.6%) and abortion (63.4%) still received majority support (Table 3). For almost all topics, parents who believed the subject should be taught indicated instruction should begin during the middle school years (grades 6–8). The main exception was puberty development, which a majority believed should begin during elementary school (57.3%), and abortion, for which the largest proportion of supporters believed high school was the appropriate timing for instruction (50.2%).

Beliefs about the effectiveness of CSE and abstinence-only education

Parents' beliefs about the impact of CSE and abstinence-only education were mixed, but were slightly more supportive of CSE based on reports of perceived effectiveness/impact (Table 4). A majority of parents believed CSE classes were "somewhat effective" in getting students to use contraception if they did have sex (72.1%), preventing HIV/AIDS (69.8%), preventing pregnancy (73.1%), and getting students to wait until they were older to have sex (57.7%). The remainder of parents were split between believing CSE was "very effective" and "not effective" in these areas. Most parents disagreed that "CSE caused more students to have sex." In contrast, parents' views were divided between believing abstinence-only education was "somewhat effective" and "not effective" in preventing HIV/AIDS, preventing pregnancy, and getting students to postpone sexual activity. A slight combined majority strongly agreed (19.1%) or agreed (36.0%) that students in abstinence-only classes were less likely to use contraceptives when they

Table 2
Support for comprehensive sexuality education (N = 1605)[a]

	%
Total	89.3
Gender	$\chi^2 = 0.8$, NS
Female	89.7
Male	88.2
Age group	$\chi^2 = 3.0$, NS
30s and under	91.0
40s	89.4
50s and over	86.7
Race	$\chi^2 = 1.1$, NS
White	89.5
Nonwhite	85.3
Ethnicity	$\chi^2 = 0.0$, NS
Hispanic	89.7
Non-Hispanic	89.3
Religion	$\chi^2 = 7.9$, $p = .020$
Protestant	87.5
Catholic	92.3
Other/no religion	90.1
Born again (among Protestants, Catholics)	$\chi^2 = 30.7$, $p < .001$
Yes	83.2
No	92.8
Public school	$\chi^2 = 57.5$, $p < .001$
Yes	91.7
No	75.1
Education	$\chi^2 = 0.7$, NS
HS or less	89.5
Vocational/tech/business school	90.8
Some college or associate's degree	88.6
Bachelor's degree	89.3
Graduate school	89.1
Political orientation	$\chi^2 = 324.7$, $p < .001$
Very conservative	50.6
Somewhat conservative	86.6
Middle of the road	96.5
Somewhat liberal	97.7
Very liberal	100.0
Income	$\chi^2 = 12.7$, $p = .013$
<$20,000	100.0
$20,000–<$40,000	84.5
$40,000–<$60,000	86.5
$60,000–<$100,000	88.8
$100,000 or more	92.6

[a] The chi-square test of association compares the proportion of parents supporting CSE across levels of each sociodemographic variable.

Table 3
Support for specific sexuality education topics, and grade level at which subject should first be taught (%)

	No	Yes	Earliest grade (among "yes" responders)		
	Total	Total	K–5 (elementary)	6–8 (middle school)	9–12 (high school)
Reproductive anatomy	1.4	98.6	50.2	43.7	6.1
Puberty	2.3	97.7	57.3	40.9	1.9
Healthy, responsible relationships	7.1	92.9	30.6	51.8	17.6
Assertiveness skills	7.1	92.9	16.0	70.7	13.3
Pregnancy, birth	8.2	91.8	13.1	58.6	28.3
Responsibilities of raising children	4.1	95.9	8.2	51.5	40.3
Reasons for *not* having sex	2.4	97.6	14.7	69.1	16.2
Pregnancy prevention	8.7	91.3	7.1	64.3	28.6
STIs	5.4	94.6	7.3	60.9	31.9
Sexual orientation	33.4	66.6	13.2	59.3	27.5
Sexual abuse	2.6	97.4	34.1	46.0	19.9
Abortion	36.6	63.4	4.5	45.3	50.2

STIs = sexually transmitted infections.

became sexually active. When assessed by scale scores, the mean "positive-beliefs about CSE" score was 2.1, which was significantly higher than the mean "positive beliefs about abstinence-only education" of 1.7 (range 1–3; 3 = *most positive beliefs*; $t = -25.4$, df = 3,088, $p < .001$).

Beliefs about the effectiveness of CSE and abstinence-only education were strongly related to support for CSE, controlling for religion, Born Again status, public/private school status, political orientation, and income, as shown in Table 5. More positive beliefs about CSE were associated with approximately 14 times the odds of supporting CSE (odd ratio [OR] = 14.3, confidence interval [CI] = 7.8, 26.1), and more positive beliefs about abstinence-only education were associated with approximately one-tenth the odds of supporting CSE (OR = 0.11, CI = 0.07, 0.19). Several additional control variables also retained their association with support for CSE in the adjusted model.

Discussion

Findings from the present study indicate that a large majority of parents favor comprehensive sexuality education in Minnesota schools and support the inclusion of numerous specific topics, including those often regarded as controversial. Importantly, the "vocal minority" of parents who are often responsible for influencing school officials' decisions to employ abstinence-only curricula or forego sexuality education altogether do not appear to represent a substantial proportion of those with their religious background or political orientation; a majority of parents in all demographic categories favored CSE. Furthermore, most parents in our sample believe instruction should begin in middle school or earlier for almost all topics. These results extend previous findings from Southern [14] and Western [15] states to a relatively liberal Midwestern state, and are consistent with all reports of adults' views on sexuality

Table 4
Parents' outcome expectancies of CSE and abstinence-only education, percent in each category

	Very effective % (value = 3)	Somewhat effective % (value = 2)	Not effective % (value = 1)	Mean value (SD)
CSE				
Use contraception	16.6	72.1	11.4	2.05 (0.53)
Preventing HIV/AIDS	21.5	69.8	8.7	2.13 (0.53)
Preventing pregnancy	15.0	73.1	11.9	2.03 (0.52)
Wait until older	5.3	57.7	37.0	1.68 (0.57)
Abstinence-only				
Preventing HIV/AIDS	8.2	46.1	45.6	1.63 (0.63)
Preventing pregnancy	7.4	49.5	43.1	1.64 (0.61)
Wait until older	8.5	53.7	37.8	1.71 (0.61)
Wait until marriage	4.0	39.7	56.3	1.48 (0.57)

	Strongly agree % (value = 4)	Agree % (value = 3)	Disagree % (value = 2)	Strongly disagree % (value = 1)	Mean value (SD)
CSE—cause students to have sex	5.2	13.9	33.4	47.6	1.77 (0.88)
Abstinence only—less likely to use contraceptives	19.1	36.0	30.2	14.7	2.59 (0.96)

CSE = comprehensive sexuality education.

Table 5
Odds of supporting CSE, by parental beliefs and personal characteristics

	OR	95% CI
Positive beliefs about CSE	14.3	7.9, 26.1
Positive beliefs about abstinence-only education	0.11	0.07, 0.19
Public school (yes)	2.26	1.36, 3.76
Political orientation[a]	2.22	1.68, 2.93
Religion		
Protestant vs. "none/other"	1.76	0.77, 4.06
Catholic vs. "none/other"	2.23	0.99, 4.99
Born again vs. all others	0.95	0.55, 1.66
Income[b]	1.28	1.02, 1.61

CSE = comprehensive sexuality education; OR = odds ratio; CI = confidence interval.

[a] Odds of supporting CSE for each level of political orientation (5 = *very liberal*) compared to the next lower level of political orientation.

[b] Odds of supporting CSE for each income level (5 = *$100,000 or more*) compared to the next lower income level.

education of which we are aware in the peer-reviewed literature. (It is important to note, however, that recent findings published elsewhere have shown strong parental support for abstinence education over CSE [19]. This discrepancy is likely because of substantial differences in item wording and definitions. For example, in their recent survey of parents, Zogby International described abstinence education early in the interview as "permit(ting) an age appropriate discussion of contraceptives within the context of promoting abstinence as the healthiest choice") [20, p. 2]—a description similar to the definition of comprehensive sexuality education used in the present study and elsewhere. This convergence of findings suggests that studies of parents' views on sexuality education may be generalizable across geographic regions. The focus on parents of school-aged children also makes an important contribution, as parents specifically are critical stakeholders in health and education policy affecting children; yet their views are rarely studied explicitly [14,15,21–23].

Results regarding outcome expectancies point to reasons behind support for comprehensive sexuality education. Those parents who had positive beliefs about CSE were much more likely to support the use of CSE in schools, whereas those holding positive beliefs about abstinence-only education were much less likely to support CSE. These findings were strong and highly significant after adjusting for other personal characteristics associated with support. This finding is consistent with recent evidence from Constantine et al [15] that parents favoring CSE tended to have pragmatic reasons for their opinion, particularly regarding the consequences of different types of education.

This study raises the question of a mismatch between what parents want taught in classrooms, what has evidence of effective health promotion, and what is actually taught in school-based sexuality education programs. Although information on actual teaching practices is limited, a 1999 survey of sexuality educators found that less than half (47%) of teachers in the Midwest teach that abstinence is the best method for preventing pregnancy and STIs, whereas other methods are also effective. A slightly smaller proportion (44%) taught that other methods were not effective [24]. A more recent study of Minnesota health teachers found that although most school districts report covering a range of CSE topics during the high school years (e.g., contraception, 85.1%), far fewer included crucial topics at the middle school level (e.g., contraception, 35.4%; [25]). In addition, even where such topics are covered, more detailed instruction may be lacking. For example, only 32% of teachers report that they have students practice how to use condoms correctly.

Beyond issues of content per se, there is wide variation in the number of hours of sexuality education students receive. Although the average number of hours was approximately 15 for middle school and 18 for high school, the standard deviations for these averages were approximately 18 and 21, respectively [25]. Thus, many students receive fewer than 20 hours of sexuality education in all of their middle and high school years, suggesting that many subject areas cannot be covered in sufficient detail.

Strengths and limitations

Certain limitations must be taken into consideration when interpreting these results. First, all participants resided in a single state. Although views expressed by this sample are largely consistent with those from other states, opinions of Minnesota parents may not be fully generalizable to those in other areas. Second, parents of minority race/ethnicity are underrepresented in this study; census data indicate that approximately 10% of Minnesota adults are of minority race/ethnicity, whereas our sample included only approximately 4% minorities. Research has shown that some minority groups may be mistrustful of researchers because of historical misuses of science [26], and may therefore be less likely than whites to respond to requests for a telephone interview. In addition, political attention to the issue of immigration at the time of data collection may have made Hispanic parents reluctant to participate. Importantly, however, our finding that neither race nor Hispanic ethnicity was significantly associated with support for CSE suggests that underrepresentation of these groups is unlikely to bias the results of the overall study. Third, over one-third of contacts declined to participate in the study. Although the response rate in the present study is relatively strong among modern telephone surveys (given the proliferation of call screening and blocking devices), nonparticipants may nonetheless differ systematically from participants. Unfortunately, we were not able to collect any information on refusing parents, and are therefore unable to test for bias based on parental characteristics. Finally, parents who did not have telephone service at the time of the interview and those who opt not to list their telephone number could not be included in the

survey, whereas families with multiple phone lines may have had an increased likelihood of being selected. In that the number of working phone lines at a residence may be related to socioeconomic status, it is possible that low-income families are underrepresented in this dataset.

This research also has a number of strengths. In particular, the study uses a large sample of parents drawn from all areas of the state, thus capturing views of parents in all eight legislative districts, including those from urban, suburban, and rural settings. The participation rate (63%) is also higher than what is typically achieved in modern telephone surveys, which improves our confidence in the findings. Finally, the items in our survey were taken from previous studies on this topic, thus permitting direct comparison of parents' views across studies.

Implications

Parents should be encouraged to express their views on sexuality education to teachers, administrators, and school boards regarding the importance of including a variety of topics and beginning instruction during middle school years or earlier. Educating decision makers about the demonstrated effectiveness of several evaluated CSE programs as well as the lack of support, thus far, for the effectiveness of abstinence-only curricula (as demonstrated in the Federal Mathematica evaluation [10]) may be an important strategy in broadening support and successfully adopting appropriate curricula, with the goal of assuring that young people have access to medically accurate, demonstrably effective sex education. The consistency of the opinions and preferences expressed by Minnesota parents with the results of similar surveys across the United States should make it easier for educators and advocates to challenge any assertion that most parents favor abstinence-only education and oppose comprehensive sex education. Such a claim is incompatible with these results and the results of related studies, and should not go unchallenged by those seeking to implement rigorously evaluated, effective sex education curricula for children and youth.

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