18-Dec-2018

Dear Dr Harris:

Thank you for the submission of your manuscript # JOSH-07-18-RA-293 entitled ""People are Gonna Have Sex. You Can't Stop It. So Might as Well Teach 'em": Adolescent Opinions on the Debate Surrounding AOUM and CSE" to the Journal of School Health.

The review of your manuscript has been completed, and I regret to inform you that the manuscript was not accepted for publication. Information concerning the decision of the peer review panel not to accept the manuscript is found at the bottom of this letter.

Thank you for considering the Journal of School Health for the publication of your research. I hope the outcome of this specific submission will not discourage you from the submission of future manuscripts.

Sincerely,

Dr. Robert McDermott
Editor in Chief
rjmcdermott@ashaweb.org

Reviewer(s)' Comments to Author:

Reviewer: 1

Comments to the Author
This was an interesting attempt to bring the perspectives of students into the ongoing national debate on sex education.
BACKGROUND:
- Reference 10 does not say that school-based health education is cost-effective.
- Abstinence-plus and CSE are not necessarily equivalent. Authors would be better off explaining what the components of each type they are looking at are, rather than relying on names that change over time. For example, the abstinence field has shifted recently to the term risk avoidance.
- The authors should consider using a reference from the Future of Sex Ed consortium to explain CSE, rather than relying on reference 11. http://www.futureofsexed.org/documents/josh-fose-standards-web.pdf
- There are a number of places in this section where the use or absence of commas makes it very difficult to understand the authors' meaning (e.g., paragraph beginning with Currently, comma after "comprehensive topics", whole sentence beginning with Rather.
METHODS:
- I would not consider data collected from 1 "rural, Midwestern high school" to be representative of Indiana (as it says in the abstract) any more than I would consider it to be representative of the US.
- It is critical that the reader be provided with information about the current mandatory sex education unit in this high school. There is only one school so the current education should be able to be described clearly. At this point, we do not even know if it falls under the AOUM or CSE categories designated by the authors.

- Participant criteria say that to be eligible students had to have completed or be enrolled in sex ed. However, the tables include students who have not in their totals. if they aren't eligible, they should be removed (and you can say you received X # of ineligible survey responses. There is absolutely no reason ineligible students should have been included in focus groups.)
- Under procedure it says that 91 participants completed the survey and 46 agreed to the focus groups. The total number of eligible students was only given as approximately 650. The actual number eligible should be given. The response rate with 650 is only 14%. This is a significant problem for generalizing from these results, even to this one high school. This is a very low response rate and should, at a minimum, be addressed in the limitations. As for the focus groups, did all 46 participate? Were only those who completed the survey eligible? If not, what was the overlap if known?

RESULTS:
- I found the inclusion of single survey results buried in the sections of the themes odd and difficult to follow. Not that it cannot be done this way, but most readers will expect to hear about the survey results separately from the focus groups.
- In the fourth line from the bottom of "it [sic] just a culture thing" the authors have misstated the percent unprotected from pregnancy, leaving out the students who said they used birth control pills, IUDs, or other long-acting contraceptives.

DISCUSSION:
- it would be good to also discuss the importance of helping students develop more realistic norms. Clearly, these students think "everyone is doing it" whereas the survey data, if considered a reliable estimate, would point to only about half ever having had sex.

Reviewer: 2

Comments to the Author
Pg 6, indicates number of participants who reported being "sexually active." How did authors define "sexually active" for the purpose of this study?

Reviewer: 3

Comments to the Author
Abstract
- A bit nontraditional to include superscript references in an abstract (and that particular sentence would be better suited to the introduction, in fact)
- Conclusion sentence (starting “Students want information…”) is a bit wordy and awkwardly written

Introduction
- First sentence doesn’t make sense. “Adolescent sexual health” isn’t a problem in and of itself. Poor decisions? Poor curriculum? What specific part of adolescent sexual health is problematic? I know what you MEAN, but it’s not worded clearly.
- Second sentence: STD rates are second highest among 13-19 year olds in Indiana? Or the 13-19 year old STD rates in Indiana are the second highest among that demographic in the US? Unclear what you mean based on the current wording.
- Consider using STI instead of STD
- “Curricula” is a plural noun, so make sure that your verbs match appropriately (e.g., should be “Such curricula DO not teach…”
- p. 3: Sentence beginning “However, some opponents…” is syntactically flawed. Consider splitting

the sentence into two.

- p.3: Sentence beginning “Currently, sex education…” should have a semicolon, not a comma, after the word “mandatory”; additionally, the comma after “topics” should be removed (no punctuation is necessary)
- The sentence beginning “With findings that…” doesn’t make sense. The first part of the sentence seems to indicate that teachers would prefer teaching more comprehensive topics but then goes on to note that they DON’T prefer those topics. Consider rewording for clarity.
- “Rather than teaching more comprehensive topics, it seems to best impact students’ sexual…” doesn’t make sense. No clue what “it” means in this sentence.
- The last paragraph prior to “Study purpose” has confusing sentence structure and word choice. Please revise for clarity.

Methods

- p. 5: No comma needed after “Students also completed”
- Why were not all of the SEES sections reported in the present study?
- Need an explanation of consent procedure. Need an explanation of IRB oversight of the study, especially working with underage population. I know it’s at the end of the manuscript, but a brief description of the consent (assent?) process would be useful to readers.
- So, you used focus groups to dis/confirm quantitative findings? This would be a sequential explanatory design. You should discuss the reasoning behind the study design you chose.
- Remember that the word “data” is plural

Results

- The results seem to indicate, based on participant quotes, that the school is currently teaching AOUM education; yet, in your introduction, you seem to indicate that Indiana allows CSE curriculum as long as abstinence is stressed first. It’s unclear whether the students in this particular high school (which itself might be a bit of an outlier in Indiana) are learning from an AOUM curriculum or a CSE curriculum that emphasizes abstinence (of which there are many). This information is critical to know because it will necessarily filter the participants’ responses.
- If the design is sequential explanatory (as you seem to describe), then your qualitative findings were used to help explain your survey findings. Yet, you don’t describe the survey findings at all in the results outside of linking to Table 3.
- Additionally, were there any interesting trends in terms of behavior (e.g., condom use at last intercourse, alcohol or drugs before intercourse, etc.) based on demographics (like age, orientation, ethnicity, etc.)? I know 91 isn’t a huge sample, but it’s large enough to run some inferential testing. I know your RQs are not written in a way to make inferences, so I’m not sure if the findings are being split into two manuscripts or whether you just chose not to create hypotheses based on your quantitative data; at the very least, though, you should explain how your qualitative findings either proved or disproved your quantitative findings—otherwise, this isn’t really presented as a “mixed methods” study.

Discussion

- Discussion of the ELM warrants more attention. You’re discussing (seemingly) the central route for information processing, as opposed to the peripheral route. I do think your results support that commentary; however, you’ve not linked the discussion to your results nor have you discussed the ELM in sufficient detail.
- On p. 12 you mention that “sexual intercourse is a norm.” Given that commentary, it would probably be beneficial to include some sort of discussion about (descriptive) social norms. 2015 Indiana YRBS data show that 41.7% ever had sexual intercourse, yet students report that “most” of their peers

have sex. Your sample, of course, was higher than the state norm, so the descriptor “most” might be more accurate. That said, students tend to perceive much higher rates ofa multitude of behaviors (sexual activity, smoking, alcohol use, etc.) than the data show. A social norms discussion seems warranted.

- Direct quotes need page numbers
- Opinions included at the end of p.12 and p.13 are not necessarily appropriate for a research study and would seem better suited for a commentary piece
- Another limitation is that you admitted that the school from which you chose your sample might be an “outlier” compared to the rest of the state. How might that affect your participants’ responses? How might that affect their perception of peer norms?
- Another limitation is that your findings are not necessarily generalizable to other high school students—either in the US or even in Indiana, perhaps.

Reviewer: 4

Comments to the Author
This article appears to be methodologically sound, with the interview questions being written in an unbiased manner. However, a bias towards comprehensive sex education programs does appear to exist. It is found in the choice ofevidence presented on the strengths and weaknesses of abstinence only until marriage sex education and comprehensive sex education. The studies cited of "proponents of AOUM sex education", references 19 and 20, are not written by proponents of abstinence education. Douglas Kirby is not a proponent of either AOUM not CSA. The other article, entitled "The Case for Comprehensive Sex Education" is clearly not written by a proponent of AOUM sex education. The study does cite some articles on AOUM sex education, and some of these studies would be better candidates for citing research by proponents of sex education. For example, the study cited by Weed & Ericksen (reference #11) states on page 3, "In fact, the research evidence indicates that CSE (comprehensive sex education) has essentially been ineffective in U.S. school classrooms and has produced a concerning number of negative outcomes. For evidence for AE, though limited, looks more promising." The research cited in this article would likely demonstrate the the abstinence proponents' point of view better than the references currently cited.

Additionally, in the abstract on page 1, under the conclusions, the second sentence states: "Students want information that is relevant, realistic, and reliable..." when it should probably more accurately state "Indiana students want information..." or "Study student participants want information..." A big leap is being made in this sentence that the Indiana students participating in this study are representative enough to speak for students across the entire country or even larger.

On page 3, line 40, "most instructors avoid teaching comprehensive topics such as condom and contraceptive use." This phrase is also subtly biased towards CSE. These aren't "comprehensive" topics, they are "comprehensive sex education" topics. Abstinence proponents would argue that their approach is more complete than CSE approaches, as they espouse a "risk avoidance" as opposed to a "risk reduction" approach. Avoiding a risk is a more comprehensive strategy than just seeking to reduce a risk. A different choice of wording seems appropriate here.

Another major potential weakness of this study is that it asks youth what they think is best for them. It studies participants as early as the age of 13. Developmentally, these youth are not necessarily the best people to ask in what is best for them, as any parent will likely tell you. Adolescents are much more

prone to risky behavior than adults, hence they can't drive until they are 16 and their car insurance rates are higher than older adults. As the study states on page 6, line 19, "Adolescents live in a sexually active culture" and that "sex is so commonplace" (line 45) that it is conceivable that adolescents are incapable of seeing another way. In short, there may be a valid reason why no study has been published on sex education asking the point of view of adolescents.

The last sentence of the article prior to the discussion (page 11, line 22) states: "So you may as well just tell them how to do it safely, so they don't screw over their entire life." Condoms do not have a 100% success rate and they do not protect against STDs, and due to both of these facts teens could use condoms and still "screw over their entire life." It is unclear what quotes might have been gathered from teens in favor of abstinence education that did not make it into the article. If seems like if the article was truly seeking to present a balanced perspective, it would include quotes from teens endorsing each side of the debate and weigh the merits of arguments on each side.