

# Abstinence-Only Sex Education: Are There Effects Beyond the Realm of Knowledge, STIs, and Pregnancy?

Sylvie White and Dr. Jeff Erger ❖ Sociology ❖ University of Wisconsin-Eau Claire



## Objectives

This research takes a Feminist Theoretical perspective and investigates if the often patriarchal, essentialist, and objectivizing curriculum in Abstinence Emphasized sex education (AE) can be used as a proxy measure of state level cultural forces on gender inequality, specifically, on gendered violence and employment discrimination.

## Literature Review and Theory

- ❖ The development of 'abstinence programs' for sex education swept the United States in the 1980s (Thomson). Hegemonic masculinity plays a role in the abstinence-only classroom. Hegemonic masculinity is the systematic favoring of "male" traits and a devaluing of "female" traits. Homophobia is inherent in hegemonic masculinity, and AE ignores homosexual experiences at best, and often demonizes them. Also, in the AE classroom, female sexuality and desire is rarely addressed. Women are often shamed into silence about sexual experiences or even thoughts, because they are taught that women do not experience sexual desire. In the AE model of education, girls and women are held responsible for the regulation of male sexuality. This approach relieves men of the need to control their own behavior. The shift of responsibility makes it difficult for both young women and young men to become self-governing "in their intimate and reproductive lives as adults" (McClain). Comprehensive Sex Education (CSE), on the other hand, allows open discussion amongst students and educators and works to address various elements of sexuality.
- ❖ Much research has been done on AE, usually focused on the effectiveness of such programs compared to no sex education and CSE, which includes discussions of condoms and other risk reduction techniques. In 2007 the Federal Government ordered a study which found that these programs are, "...no more likely than control group youth to have abstained from sex and, among those who reported having had sex, they had similar numbers of sexual partners and had initiated sex at the same mean age." (Trenholm et. al.). A meta-analysis of 66 CSE and 23 AE programs showed benefits of CSE on knowledge and behaviors, but no positive effects from AE (Chin et. al.). Increasing emphasis on abstinence is positively correlated with teenage pregnancy and birth rates, even when controlling for socioeconomic status, teen educational attainment, ethnic composition of the teen population, and availability of Medicaid waivers for family planning services in each state (Stanger-Hall and Hall). Those receiving CSE are more likely at first sex to use any contraception, less likely to have an age-discrepant partner, and that for females in CSE condom use at first sex was significantly more likely (Duberstein and Maddow-Zimet.) Some of these programs employ "virginity pledges" which have been shown to reduce contraception use by one third once sexually active, not reduce STD infection rates, increase oral and anal sexual activity 4 to 6 fold, and increase STD rates in communities where more than 20% of students have taken such a pledge (Bearman and Bruckner, 2001, 2004, 2005). Virginity pledges and other program components in AE have been shown to emphasize women's role as gatekeeper of sexual behavior and as mother and spouse to be "natural", emphasizing women as objects to be controlled by the men in their lives, reinforcing patriarchal relations (McClain; Thompson).
- ❖ One central claim in Feminist theory is that the essentialist argument that women are "naturally" as they are is a major form of oppression (Ritzer.) AE curricula do this, often likening girls who have multiple sexual partners to chewed gum (and thus spoiled), and constructing females as baby making machines devoid of any hint of sexual pleasure. We test whether or not AE programs are a signal that larger scale cultural forces are shaping many parts of society based on an essentialist gender assumption. To do this, we compared how variations in sex education in states correlates with changes in macro level state outcomes, using one economic outcome and one crime outcome.

- ❖ In terms of causality, we do not assume either a direct or indirect effect of AE on gendered inequality. However, we would expect a more direct causal link to sexual violence than to economic inequality, as the curricula in sex education directly focuses on sexuality at the nature of women and men.

## Methods

State requirements for sex education curricula were collected, and variables created indicating whether the curriculum included requirements for Abstinence Emphasis, birth control methods, ways to avoid coercion, condoms (for STI prevention, as opposed to as birth control), sexual orientation in a positive/neutral/negative manner, medical accuracy of information, cultural appropriateness of information, presence or exclusion of religious materials, discussing sexual activity within the context of marriage only, discussing sex in negative terms as related to consequences, healthy decision making, and family communication skills.

Rape rates (per 100,000 population) were gathered from the Uniform Crime Report of the Justice Department, 1990-2010, for all 50 states. Change scores were calculated using the data from years 1990 and 2010.

State level pay gaps for full time workers were gathered from the Bureau of Labor Statistics, and change scores calculated to determine how much that gap had grown or narrowed over the time period 2000-2010.

Data analysis was performed in SPSS using multiple linear regression, including dummy variables where appropriate.

## Results

Variables for birth control methods, ways to avoid coercion, condoms (for STI prevention, as opposed to as birth control), sexual orientation in a positive/neutral/negative manner, medical accuracy of information, cultural appropriateness of information, presence or exclusion of religious materials, discussing sexual activity within the context of marriage only, discussing sex in negative terms as related to consequences, healthy decision making, and family communication skills all had no significant relationship to either changes in rape rates over time nor to changes in the gender pay gap over time. Inclusion of these variables in multiple regression analysis (as control variables) did not alter the main findings in terms of significance levels or variance explained in any appreciable way. We therefore do not report these more complex models.

We found no relationship between AE/non-AE in a state and the change in the gender pay gap in that state over time, but we do find that abstinence education is significantly associated with a decrease in rapes reported to police of over 11 per 100,000 beyond the general declining trend of such reports nationally.

Table 1: Statistical Models

	Dependent Variables	
	Model 1: Change in Rape Rates, 1990-2010	Model 2: Change in Gender Pay Gap, 2000-2010
intercept	-2.676 (2.416)	4.568 (.761)
Abstinence Emphasis Curriculum	-11.288** (3.416)	1.304 (1.076)
<b>R<sup>2</sup></b>	.227	.030

(Unstandardized regression coefficients are reported in the table, standard errors are in parentheses. \*\* = p<.01; For model 1, Abstinence Emphasis Curriculum, p = 0.002)

Not only did the effect of AE on changes in pay gap fail to reach significance, but the model barely accounts for any of the variance between states in such changes. However, states with AE in place do show a greater decrease in reported rapes, and the model with this single variable accounts for 22.7% of the between state variance in changes in reported rapes over time.

## Discussion

Interpretations of this research need to take into account the issues with our data and methods, issues that require caution. First, as we use states as the unit of analysis, regression coefficients cannot be used to make statements about the USA as a whole. For example, it would appear from Model 2 that the gender wage gap increased 2000-2010, but more properly we would say that more states (not more people) saw an increasing gender wage gap over that time.

Second, we used reported forcible rapes in Model 1, and we need to keep in mind that reported violence is different from committed violence, and reports to the police underestimate victimization rates.

Finally, we do not specify any direct, detailed causal model, nor do we test one. We do use time series data, so we can infer that there might be a causal effect, but the broad brush nature of our measures makes such an interpretation highly tenuous. Given that we find no effect of the sex education curricular details to have significant effects, we believe this makes our assumption that AE is a proxy measure of other forces to have some support. If the details of curricula mattered, we would see that as indication a more direct causal process was involved.

## Conclusions

Overall, the data suggest that there is no relationship between the gender pay gap and abstinence only education, but there is a relationship between AE and the reported rape rate in a state. We suggest this might show a decrease in reporting in Abstinence-Only states rather than an actual decrease in sexual assaults. The patriarchal nature of AE could be causing women to feel more shame and responsibility for sexual assaults against them, and therefore they might be less likely to report them to police. This would be consistent with Feminist theory, at least in the case of the two states that showed the greatest increase in rape over time: North and South Dakota. Over the 20 year time period analyzed, these states have seen a huge economic boom in resource extraction, leading to an influx of men relocating and working in such occupations. Given the small and ethnically homogeneous population of these states, and the influx of "outsiders" we speculate that rapes are more likely reported in this state as they fit the idea (promoted by some politicians and other figures) of "legitimate rape". If "they" are attacking "our" women, it is not the women's fault. Women who report such attacks might be treated better, or expect to be treated better, by law enforcement and other powers of the patriarchy, as they have not violated gendered behavioral expectations.

Future research is needed to expand on this tentative finding. We suggest that measures of victimization as opposed to reports be used. While we could not use the National Crime Victimization Survey for our analysis as it does not report state level data, it does report data at the Metropolitan Statistical Area (MSA) level of aggregation. This, combined with a census of rape crisis centers, women's shelters, and other organizations that serve women who have been victimized in those MSAs seems like it would allow more strict tests of any causal influence of AE on the treatment of women. This would also allow measurement of curricular structure and content at the school district level. While labor intensive, such a project seems warranted given our findings.

## Sources

Bearman, P.S. and Bruckner, H. (2001), Promoting the Future: Virginity Pledges and First Intercourse. *American Journal of Sociology*, 106(4): 859-912.

Bearman, P.S. and Bruckner, H. (2005), After the Promise: The STD Consequences of Adolescent Virginity Pledges. *Journal of Adolescent Health*, 36(4): 271-278.

Bearman, P.S. and Bruckner, H. (2004), The Relationship between Virginity Pledges in Abstinence and STD Acquisition in Young Adults. *Pediatrics of the National STD Prevention Conference*, Philadelphia, PA, March 2004, 10.

Chen, Helen, Theresa Ann Siga, Pecky Elder, Steven L. Mincer, Reid K. Christofferson, Veronique Judith Hely, R. Worthington, Qing Xinyi, Dennis B. Eklund, Matt Griffin, Stella C. Chiu, Susan C. Brice, Irene Erickson, Jennifer S. Calvert, Jeffrey H. Peltis, Robert L. Johnson, Juan M. Roth, Seth M. New, Lisa M. Rones, and John Santoli. "The Effectiveness of Group-Based Comprehensive Sex Education and Abstinence Education Interventions in Preventing or Reducing the Risk of Adolescent Pregnancy, Unintended Pregnancy, HIV, and Sexually Transmitted Infections: The Adolescent Research to Guide Us Community Preventive Services." *American Journal of Preventive Medicine* 42.3 (2012): 272-84.

Chilver, L., and Hoffman, S. (2010), *Consequences of Sex Education on Youth and Young Adult Sexual Behaviors and Outcomes*. *Journal of Adolescent Health* 51, 333-336.

McClain, Linda C. "SOCIAL ASPECTS OF FEMINIST SEX EDUCATION: IN LIGHT OF THE SEXUALITY CRITIQUE OF LEGAL FEMINISM." (Branche) p.41 in: pag. Branche eds. *Branche University*. Web 3 Dec. 2014. <http://www.branche.edu/wordpress/wp-content/uploads/2014/08/04-10-15-1711/pms/pms\_0244608.pdf>

Ritzer, George. *Sociological Theory*, 4<sup>th</sup> Edition, 2010. McGraw-Hill, New York.

Singer, Neil OF. *Not Now (2011) Abstinence-Only Education and Teen Pregnancy Rates: Why We Need Comprehensive Sex Education in the U.S.* PLOS ONE. 6(10): e24655. doi:10.1371/journal.pone.0244608

Thomson, Rachel. "Moral Pledges and Public Health Programs: The Recent Politics of Sex Education." *Feminist Review* 48 (1994): 45-60. JSTOR. Web. 02 Nov. 2014. <http://www.jstor.org/stable/1385108>

Trenholm, Christopher. *Impact of Four Title IX Section 510 Abstinence Education Programs: Final Report*. Princeton, NJ: Mathematica Policy Research, 2007. <http://www.mathematica-princeton.com/mathematica/pubs/510report/510report.pdf>

## Acknowledgments

This research was supported in part by the University of Wisconsin—Eau Claire Office of Research and Sponsored Programs *Summer Research Experiences for Undergraduates* Grant.