Religion and Sex: An Analysis of Whether Religious Views Affect Beliefs About Sex Subul Bari

Does the strength of one's religious preference affect their views on topics related to sex? Those with strong religious preference will have more conservative views about topics related to sex. Those with weak/no religious preference will have more liberal views on topic related to sex.

Introduction

Religious beliefs very commonly influence politics in the United States of America, and this is seen as a problem by many that needs to be solved (Wald & Calhoun-Brown, 2014). Alongside, topics related to sex are viewed as political (Wald & Calhoun-Brown, 2014). This can mean that there is possibly a relationship between religion and beliefs about sex. The question that comes to mind, and that I will be exploring in this paper is: does the strength of one's religious preference affect their views on topics related to sex? My hypothesis is that the strength of religious preference will influence beliefs about topics related to sex. More specifically, I hypothesize that those with stronger religious preference will be more conservative when it comes to such topics and those with weak/no religious preference will have more liberal views about topics related to sex. To study this research question, I focus on three different topics: views on premarital sex, views on sex education being taught in public schools, and methods of birth control being available to teens between the ages of 14 and 16 without their parents' approval.

In relation to views on premarital sex, my hypothesis is that those that consider themselves religious will be against the act of premarital sex. For public school students being taught sex education, my prediction is that those with strong religious views will be less in favour of this notion. Lastly, with respect to methods of contraception being available to teenagers between the ages of 14 and 16 without their parents' approval, those that consider themselves religious will be against this.

Methods

Participants

The data for this study was taken from the General Social Survey of 2012 (GSS) (Smith et al., 2014). This is a publicly available dataset that was collected by the National Opinion Research Center (NORC) at the University of Chicago (Smith et al., 2014). A sample size of 1955 participants were included of N = 1974 participants (age range: 18-89 years, $M_{\rm age} = 48.19$ years, $SD_{\rm age} = 17.69$ years, 1088 females and 886 males). The sample was noninstitutionalized English and Spanish speaking adults living in the United States and was representative of the country. When asked about their political views, of n = 1874 participants, participants' mean score was 4.06 on a scale of 7, with a standard deviation of 1.45. The score 4.06 corresponds most closely to "moderate" meaning they were not extremely liberal, nor extremely conservative. Political views may affect participants views on topics related to sex. The sample taken has no extreme preference for either extreme liberalism or conservatism.

Procedure

Participant selection

The 2012 GSS was conducted with a full probability sample design which is acknowledged to be superior (Smith et al., 2014). The participants were selected through an exhaustive and multistep process. To reduce the chance of sample biases mostly caused by not-at-homes (bias that the respondent being home may be correlated to the topic of research), the interviewers were instructed to interview people strictly after 3 p.m. on weekdays or during the weekends or holidays (Smith et al., 2014). The initial quota sampling was based on sex, age, employment status (Smith et al., 2014). The areas where sampling was to be taken place (Primary Sampling Units) were Standard Metropolitan Statistical Areas (SMSAs), which are areas where residents are connected by social and economical factors, and non-metropolitan counties that were a part of NORC's initial sample (Smith et al., 2014). These areas were classified based on region, age, and race prior to selection. Following this, selections were made within Primary Sampling Units (PSUs) on the basis of block groups (BGs) and enumeration districts (ED) that were stratified based on race and income prior to being selected (Smith et al., 2014). An enumeration district is the area that a single census taker is responsible for. Blocks were then selected where five people responded per block on average (Smith et al., 2014). At this level, it was important to have approximately the same number of male and female respondents. There were additional requirements put in place for both. Women selected should have the right proportion of employed and unemployed women in a location (Smith et al., 2014). Men selected should have the right proportion of men under 35 and over 35 in a location. These requirements were put in place after past experience where it was learned that employed women and men under the age of 35 are harder to find at home for the interviewing process. Ultimately, 1974 participants provided with enough information to be included in the sample (Smith et al., 2014).

Interview process

The participants were interviewed in person and were asked questions related to several different items. Interviews were about 1.5 hours in duration and specifically asked participants to answers questions related to 49 variables that measured general demographic data (e.g., age, marital status, income, etc.) as well as general social attitudes (e.g., views on capital punishment,

belief in afterlife, views on legalization of marijuana, etc.) (Smith et al., 2014). For questions like "what is your age?", participants could simply state a number. For questions like "what is your sex?", participants answered with either 1 (male) or 2 (female). For most questions, participants were to respond to each question by indicating on a card with a scale of 1 to 7, with each number corresponding to different responses. For example, 1 could mean strong belief, 2 could mean somewhat strong belief, 3 could mean not very strong belief, and so on (Smith et al., 2014).

Materials

This dataset used contained 49 variables as mentioned before. The variables used for the purpose of this study are: RELITEN (strength of religious preference), PREMARSX (views on premarital sex between a man and a woman), SEXEDUC (views on sex education in public schools), and PILLOK (views on methods of birth control being available to teens between the ages of 14 and 16 without parents' approval). Each variable is talked about separately in the following sections:

RELITEN

Strength of religious preference was measured on a response scale with 1, 2, 3, 4, and 8, and was our independent variable. The participants were asked "would you call yourself a strong [RELIGIOUS PREFERENE] or a not very strong [RELIGIOUS PREFERENCE]?" (Smith et al., 2014). 1 corresponded to "strong", 2 corresponded to "somewhat strong", 3 corresponded to "not very strong" and 4 corresponded to "no religion." 8 meant "don't know." The responses were recorded for all 1974 participants (Smith et al., 2014). Those who did not answer were recorded as 9 and inapplicable was recorded as 0. For our study, we recoded the responses of 0, 9 and 8 as NA. These responses were not included in our analysis. We further recoded our response to make them categorical and to add levels to our independent variable. All responses of 1 and 2 on the response scale were recoded into "strong" and all responses of 3 and 4 were recoded into "weak/none." All relevant descriptive statistics for RELITEN can be found in the Appendix A in Table 1.

PREMARSX

Views on premarital sex were recorded similar to RELITEN. The responses were measured on a scale with 1, 2, 3, 4, and 8. The question was "there's been a lot of discussion about the way morals and attitudes about sex are changing in this country. If a man and woman have sex relations before marriage, do you think it is always wrong, almost always wrong, wrong only sometimes, or not wrong at all?" (Smith et al., 2014). On the scale, 1 corresponded to "strongly agree", 2 corresponded to "agree", 3 corresponded to "disagree" and 4 indicated "strongly disagree." 8 meant "don't know." Those who did not answer were recorded as 9 and inapplicable was recorded as 0. After recording the responses of all 1974 participants, the responses of 0, 8, and 9 were recorded into NA and were excluded from our analysis. All relevant descriptive statistics for PREMARSX can be found in the Appendix B in Table 2.

SEXEDUC

Views on sex education in public schools were measured on a smaller scale, with 1, 2, and 8. The question was "Would you be for or against sex education in the public schools?" (Smith et al., 2014). For "favour" participants answered 1. To indicated "oppose" participants responded with 2. 8 corresponded to "don't know." Those who did not answer were recorded as 9 and inapplicable was recorded as 0. As for previous variables, the responses of 0, 8, and 9 were recorded into NA and were excluded from the analysis. All relevant descriptive statistics for SEXEDUC can be found in the Appendix B in Table 2.

PILLOK

Beliefs about methods of birth control being accessible to teens between the ages of 14 and 16 without parents' approval were also recorded on a scale with 1, 2, 3, 4, and 8. Participants were asked, "Do you strongly agree, agree, or strongly disagree that methods of birth control should be available to teenagers between the ages of 14 and 16 if their parents do not approve?" (Smith et al., 2014). The responses were 1 = strongly agree, 2 = agree, 3 = disagree, 4 = strongly disagree, and 8 = don't know. Inapplicable and no responses, as well responses of 8 were recoded into NA and were excluded from the analysis. All relevant descriptive statistics for PILLOK can be found in the Appendix B in Table 2.

Results

Analysis plan

Since we looked at three dependent variables to explore our broad research question, three separate analyses were conducted. The first analysis looked at the relationship between strength of religious preference and views on premarital sex. The second analysis looked at the strength of religious preference and views on sex education being taught to public school students. The third and final analysis was conducted to observe the relationship between strength of religious preference and views on methods of birth control being available to teenagers between the ages of 14 and 16 without parents' approval. All three of these variables helped in understanding better if the strength of one's religious preference has any affect on their views on topics related to sex. The three dependent variables were to be looked at with respect to the independent variable which was strength of religious preference (levels: strong and weak/no religious preference). The analyses were conducted in RStudio, and the following packages were used: tidyverse, lsr, plotrix, and psych.

Analysis 1

As mentioned earlier, the first analysis conducted was to observe the relationship between strength of religious preference and views on premarital sex. The independent variable was RELITEN (strength of religious preference) which further had two levels: strong religious preference and weak/no religious preference. The dependent variable for this analysis was PREMARSX (views on premarital sex). The dependent variable was on the interval scale of measurement and the independent variable was categorical. To analyze this relationship, an independent samples *t*-test was run in RStudio. It was found that there was a significant main effect of participants' strength of religious preference on views on premarital sex such that participants were expected to be more against the concept of premarital sex if they had strong religious preference ($\bar{x} = 2.87$) compared to those who had weak/no religious preference ($\bar{x} = 3.53$), t(1243) = -9.08, p < .001, d = 0.56. Cohen's *d* was calculated to learn the effect size of this relationship and a medium effect size was found. The mean of scores on beliefs about premarital sex per strong religious preference was found to be 2.87. The mean of scores on beliefs about premarital sex per weak/no religious preference was 1.28 and for beliefs about premarital sex per weak/no religious preference, the standard deviation was 0.91. We rejected the null hypothesis as we have found evidence that the strength of one's religious preference influences their views on premarital sex. The mean, *SD*, and standard error of PREMARSX per "strong" and "weak/none" RELITEN can be found in Table 3 under Appendix C.

Analysis 2

The relationship between strength of religious preference and views on sex education in public schools was analyzed next. The independent variable was the same as it was for the first analysis (RELITEN – 2 levels: strong religious preference and weak/no religious preference). The dependent variable was SEXEDUC (views on sex education in public schools). Prior to conducting an independent samples t-test, it was made sure that the independent variable was categorical, and that the dependent variable was on the interval scale of measurement. This was done by running the structure code for the dataset in RStudio. There was a significant main effect of participants' strength of religious preference on views on sex education being taught to public school students, such that participants were expected to be more against the sex education in public schools if they had strong religious preference $(\bar{x}=1.11)$ compared to those who had weak/no religious preference $(\bar{x}=1.06)$, t(1262)=2.97, p=.003, d=0.18. Significance was found, even though the main effect was negligible as the value of Cohen's d was very small which can be interpreted as being too small to be considered a real effect. The mean of scores on beliefs about sex education in public schools per strong religious preference was 1.11 and 1.06 per weak/no religious preference. SD = 0.31 for beliefs about sex education in public schools per strong religious preference and SD = 0.23 for of beliefs about sex education in public schools per weak/no religious preference. We fail to reject the null hypothesis as even though there is evidence that the strength of one's religious preference has an effect on their views on sex education being taught in public schools, the effect size was too small for this finding to be considered a real effect. We also found that this dependent variable was very skewed, with its skewness = 2.82. This affects our assumption of normal distribution of the sample. The mean, SD, and standard error of SEXEDUC per "strong" and "weak/none" RELITEN can be found in Table 3 under Appendix C.

Analysis 3

Lastly, we ran an independent samples t-test to explore the relationship between one's strength of religious preference and their views on methods of contraception being available to teenagers between the ages of 14 and 16 without their parents' permission. For this analysis, the independent variable stayed consistent (RELITEN – 2 levels: strong versus weak/no religious preference). The dependent variable here was PILLOK (views on methods of birth control being available to teenagers between the ages of 14 and 16 without parents' approval). The independent samples t-test found a significant main effect of participants' strength of religious preference on views on methods of birth control being available to teens between the ages of 14 and 16 without parents' approval, such that participants were expected to be more against the idea of methods of birth control being available to teens between the ages of 14 and 16 without the permission of their parents if they had strong religious preference ($\bar{x} = 2.48$) compared to those who had weak/no religious preference (\bar{x} = 2.14), t(1256) = 5.38, p < .001, d = 0.33. The Cohen's d effect size was found to be small. The mean of scores on beliefs about methods of birth control being available to teens between the ages of 14 and 16 without parents' approval per strong religious preference was 2.48 and the mean of scores on beliefs about methods of birth control being available to teens between the ages of 14 and 16 without parents' approval per weak/no religious preference was 2.14. SD=1.04 for beliefs about methods of birth control being available to teens between the ages of 14 and 16 without parents' approval per strong religious preference. SD=0.99 for beliefs about methods of birth control being available to teens between the ages of 14 and 16 without parents' approval per weak/no religious preference. We reject the null hypothesis as there is evidence that the strength of one's religious preference influences their views on methods of birth control being available to teens between the ages of 14 and 16 without parents' approval. The mean, SD, and standard error of PILOK per "strong" and "weak/none" RELITEN can be found in Table 3 under Appendix C.

Summarizing results

The three independent samples *t*-test conducted provide valuable information in relation to the overall research question. Exploring different sex related topics allowed us to see how views on these topics are influenced by individual beliefs of religion.

It was found that strength of religious preference influenced participants' responses to the question of how much they agree or disagree with sexual relations between a man and a woman before marriage. Those who considered themselves more religious were more strongly opposed to the concept of premarital sex, and those who considered them less religious or not religious at all believed that premarital sex is not wrong at all. With respect to sex education in public schools, participants with strong religious preference were more against this notion. Those with weak or not religious preference were in favour of sex education being taught in public schools, however, it should be noted that the effect size for this finding was too small to be considered a significant finding. The skewness of this sample also indicated that it may not be normally distributed. Finally, we found that more religious participants were strongly against birth control being available to teens between the ages of 14 and 16 without parents' approval. Those with weak/no religious preference were in favour of this notion.

Overall, our results find evidence of religious preference influencing people's beliefs about sex related topics, specifically premarital sex, and accessibility of contraception for teens between the ages of 14 and 16 without parents' approval. With respect to sex education in public schools, we did not find strong evidence in support of our alternate hypothesis.

References

Smith, T. W., P. V. Marsden, & Hout, M. (2014). General social survey (ICPSR 35478; Version V4) [Data set]. ICPSR. https://doi.org/10.3886/ICPSR35478.v4

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Appendix A

Table 1
Descriptive Statistics of Categorical Variables

Variable	n	M	SD	Median	SE	Min	Max	Range	Skewness	Kurtosis
RELITEN	1955	2.12	1.11	2	0.03	1	4	3	0.64	-0.94

Appendix B

Table 2
Descriptive Statistics of Continuous Variables

Variable	n	M	SD	Median	SE	Min	Max	Range	Skewness	Kurtosis
PREMARSX	1255	3.07	1.22	4	0.03	1	4	3	-0.85	-0.97
SEXEDUC	1274	1.09	0.29	1	0.01	1	2	1	2.82	5.98
PILLOK	1269	2.38	1.04	2	0.03	1	4	3	0.18	-1.14

Appendix C

Table 3

Descriptive Statistics of Continuous Variables per the two Levels of RELITEN

Variable		Strong	Weak/None					
			Mean	SD	Mean	SD		
PI	REMARSX	2.87	1.28	3.53	0.91			
SI	EXEDUC	1.11	0.31	1.06	0.23			
Pl	ILLOK	2.48	1.04	2.14	0.99			