

Ethnic Diversity, Religion, and Opinions toward Legalizing Abortion: The Case of Asian Americans

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Over the past four decades, abortion has remained the most controversial domestic issue in the US. Public opinion toward legalizing abortion has been sharply divided yet stable according to several major surveys. This study examines how religion and other important factors affect Asian Americans' views toward abortion. Data are from the National Asian American Survey 2008 and multivariate analyses are used to examine whether religion exerts a mediation effect and explore attitudinal differences among six major Asian American groups. Results show that Asian Americans resemble the broader society in their opinions toward the abortion issue in that a documented sharp division exists among Asian American respondents. Groups ranked by the level of support for legal abortion are: Japanese, Chinese, Asian Indians, Korean, Filipino/a, and Vietnamese Americans. OLS regression analyses show that religiosity mediates the impact of religious affiliation on opinions toward abortion for Asian Americans who are non-Catholic Christians. Among Asian American who are Catholics, only a partial mediation effect is observed in the analysis. Analysis conducted for each Asian American group shows that different factors exert varying degree of influence in the opinion toward legalized abortion. Thus, an interaction effect of religion and ethnicity is found. Implications concerning ethnic diversity, religion, and opinions toward abortion are discussed in the paper.

Keywords: Asian Americans, abortion, public opinion, religion, religiosity

Introduction

Since the passing of the landmark *Roe v. Wade* decision in 1973 that legalized abortion, the abortion debate has become the most contentious domestic issue in the US (Barkan, 2014; Fried, 2008). Over the years, numerous aspects in the abortion controversy have galvanized the public who are divided over each particular issue in the debate. Specifically, from the mid-1970's to the 2000's, the public was divided, to a varying degree depending on exceptions, over the ban on different types of elective and traumatic abortions (Ray, 2003). Data from the General Social Survey (GSS) show that the public is evenly divided when abortion is elective due to family poverty, the preferable size of a family, and a pregnant woman's marital status. In contrast, the general public in the US are less ambivalent in their support of traumatic abortion including abortion resulting from rape or incest, abortion resulting from defects in the fetus, and abortion performed to safeguard the mother's health due to pregnancy complications (Smith & Son, 2013). Some observers recently noted that the abortion issue will continue to galvanize the general public so long as the issue remains both a symbolic and political one. Recently, Texas' decision to introduce state-imposed restrictions on abortion providers further illustrate the cultural and political fault line that reflects the division between rights advocates and opponents (Liptak, 2016). Four decades after abortion was legalized, the abortion issue remains as controversial as ever.

Despite the contentious nature of the abortion debate, public opinion toward legalizing abortion in the past decades has been stable according to several major opinion surveys. For example, Gallup Polls show that the percentage of American adults in 2014 who were pro-choice was 47% and the percentage pro-life was 46% (Gallup, 2014). Similarly, in the studies from 1995 to 2016, the percentage of American adults who favor legalization of abortion hovers around 50% whereas those who oppose is 45% (Pew Research Center, 2016). General Social Survey (GSS) also shows a similar pattern (Smith & Son, 2013). Previous studies on opinions toward legalizing abortion show that several factors hold consistent impact on Americans' attitudes toward this controversial issue (Aydin, 2012; Lafer & Aydin, 2012; Tolba, 2018). These factors include age, education, income, religiosity, region of residence, and political ideology. Gender was found not to be a significant factor and the lack of a gender difference was attributed to a suppression effect of religiosity in a

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recent study using GSS data (Barkan, 2014). Despite the stability of public opinions on abortion issues, changing demographics in the US may potentially alter the traditional alignments in the debate (Jelen & Wilcox, 2003; Shaw, 2003; Yigit & Tatch, 2017). As the population continues to shift toward the urban cores, as women's status continues to rise by way of higher attainment in education and a higher degree of labor force participation, and as more immigrants continue to enter the US, especially immigrants from countries with a traditional and prohibitive view of abortion, the public opinions toward abortion may change to reflect these long-term social and demographic trends.

Background Religion and Abortion

Scholars have noted that the division over the abortion debate is a reflection of a deep-seated cultural divide in the US. The division represents differences in people's views toward morality and the limitation of personal freedom. At the heart of such a divide, religion has played a central role in the abortion debate over the years in the US. Further, it is religiosity, in addition to religious denomination, that serves as a prism through which narrowly defined sexual morality issues such as abortion are examined (Hoffmann & Johnson, 2005). Such a division can be discerned by contrasting positions held by different religious groups. The Roman Catholic Church has maintained a strong position in preserving life under all circumstances. The "consistent life ethic" entails an unequivocal and prohibitive position regarding all forms of abortion (Unnever, Bartkowski, & Cullen, 2010). The abortion controversy has also energized Protestant Fundamentalists and subsequently mobilized its followers who have channeled their moral outrage into political movements aimed at banning abortion both at the local and national levels. The realignment of political affiliation on the part of pro-life Christian groups has been attributed to the division over the abortion issue (Hoffmann & Johnson, 2005). As a contrast, Americans who do not attend church services, who are mainline Protestants, and those who are agnostic or atheists are more supportive of legal abortion than their conservative and pious counterparts.

There is a very clear pattern from various opinion surveys regarding the role of religion in the abortion debate. American Catholics and conservative Christians including fundamentalists and evangelicals are much more likely to oppose legal abortion compared to their counterparts belonging to different faiths (Cook, Jelen, & Wilcox, 1992). The evidence from previous opinion surveys is clear (Pew Research Center, 2017). In general, frequency of church attendance is positively correlated with a prohibitive view of abortion. That is, regardless of denomination, people who attend church service more frequently are more likely to oppose abortion. Church-goers who strongly believe that the sanctity of life should prevail over the right to choose are more likely to have their faiths and attitudes reinforced by other members in the same religious institutions. These findings suggest the importance of analyzing the effects of religious affiliation and religiosity separately as they may exert differential impact on one's attitudes.

The impact of religion on people's views toward abortion is apparently strong but not absolute. Petersen (2001) found that an interactive effect exists between religion and education in a way that the impact of religion can be neutralized by education. While education has a modest liberating effect on the view of abortion among religious conservatives (Brooks, 1999), the effect of education among religious liberals is strong. That is, unlike their conservative counterparts, educated and religious liberals are less likely to oppose abortion. There is also an interactive effect between education and church attendance in that a weaker liberating effect from education is found among frequent church goers than among their infrequent counterparts regarding anti-abortion opinions. Further, among infrequent church attenders, there is little interaction effect between education and religion regarding opinions toward abortion. This is because "...infrequent attenders...generally lack significant integration into religious communities that support the conservative stance" (Petersen 2001, p.200). The effect of religion on opinion toward abortion can be moderated by other critical factors that shape people's moral universe.

Religions and Ethnicity

Recent studies concerning opinions toward abortion show that the intersection of religion and racial/ethnic diversity play a significant role in shaping respondents' views. Not much difference exists between whites and blacks, but significant differences were found between Hispanics and non-Hispanics with the former holding a clearly more negative view toward legalizing abortion than all other racial and ethnic groups (Carter, Carter, & Dodge, 2009; Pew Research Center, 2016). Within Hispanic groups, religious factors are important in explaining varying degree of opposition among different Hispanic groups. It was discovered that Hispanic Protestants, affiliated with conservative Christian groups, are the most anti-abortion among all religious backgrounds. Among other Hispanic groups, they are also more likely to support a total

ban on abortion (Ellison, Echevarria, & Smith, 2005). Not surprisingly, committed Catholics are also more likely to be anti-abortion than other Hispanics with different religious backgrounds. Among Hispanic respondents, a subgroup variation was reported regarding opinions toward abortion. Mexican and Puerto Rican Americans are more likely to oppose abortion than Americans of Cuban origin. Within each Hispanic subgroup, differences also exist. Non-attending Mexican Americans who are Catholics are more supportive of abortion than religiously unaffiliated respondents. Also, Puerto Ricans who are Catholics are less likely to support a total ban on abortion than respondents who are religiously unaffiliated. In contrast, Puerto Ricans who are committed Protestants tend to favor both a total and a partial abortion ban compared to other Latino/a subgroups. Hispanics, as a group, hold different views toward abortion and their views are also affected by religion in a nuanced way (Ellison et al., 2005). Attitudes and opinions toward abortion is influenced by an interactive effect of religion and ethnicity.

Using religious schemas as the core theoretical framework, Bartkowski, Ramos-Wada, Ellison, and Acevedo (2012) found that a robust interaction effect exists among ethnicity, religiosity, and attitudes toward abortion in a national probability sample consisting of about 4,000 self-identified Latino respondents. Religious schemas serve as a cognitive system that provides a moral interpretive framework and enables individuals to take actions accordingly. Latino conservative Protestants who attend church services regularly are the most opposing to legalized abortion when compared to Catholics who regularly attend church services and religiously unaffiliated respondents. The study concludes that Latino respondents should not be understood as a monolithic bloc both in religiosity and preferences in social policy including abortion. Religious schemas are "...a product not only of one's faith tradition, but are influenced by racial-ethnic heritage" (Bartkowski et al., 2012, p.355). Opinions toward abortion for Latino respondents reflect both their diverse religious views as well as their own unique ethnic experience.

Religion, Abortion, and Asian Americans

In a recent study, Min and Jang (2015) confirm that there is a high level of religious diversity among Asian Americans. In the survey included in the study, five major Asian American groups (Chinese, Filipino, Indian, Korean, and Vietnamese) are asked about their affiliation with a religious institution and church attendance. More than 80 percent of Filipino/a Americans identify themselves as Catholics. Close to 80 percent of Indian Americans report either Hinduism or Sikhism as their religions (69% and 11%, respectively). Nearly 60% of Korean Americans are Protestants. Over one in five Vietnamese choose Catholicism and close to half identify Buddhism as their current religion. Surprisingly, nearly three out of four Chinese American respondents choose "no religion" when asked about their current religion. The authors attribute this particular response to the fact that most Chinese Americans, especially new immigrants, practice folk religions which is not one of the choices in the survey. Regarding church attendance, pious Asian Americans who are Christians tend to attend church services more frequently than their American counterparts. Of all five groups, Korean Americans who are Protestants have the highest degree of church attendance in that more than half of Korean American respondents report going to church more than once a week. This contrasts with a very low level of attendance on the part of Chinese Americans who are Buddhists; more than half of them seldom or never attend services in temples. Compared to their less devout counterparts, Asian Americans who are more involved in religions, especially ethnic churches, tend to forge a stronger ethnic identity and receive a wide range of services from their respective churches. Asian Americans, as a whole, represent a "mosaic of faiths" and show a different degree of religious involvement in their respective faith (Also see Pew Research Center, 2012).

Surveying previous literature on attitudes toward abortion issues reveals that not much research has been done to explore and explain ethnic differences among Asian Americans who were often grouped together in major opinion surveys. Given the relatively small proportion in the US population compared to other major racial and ethnic groups, it is a rational and pragmatic design to include a small group of Asian Americans in major nationwide opinion surveys. However, as the size of Asian Americans continues to increase, especially in states such as California, Illinois, New York, and Texas, aggregating all Asian Americans into one single group runs the risk of glossing over significant differences among the fastest growing racial ethnic group in the US (Kitano & Daniels, 2000). According to the 2010 Census, Asian Americans account for about 6% of the population in the US, a rapid increase compared with data from the previous census. Census data also show that Asian Americans are made up of a great multitude of ethnicities, languages and dialects, religious preferences, socioeconomic statuses, and different immigration patterns (Carothers & Parfitt, 2017; U.S. Bureau of the Census, 2012). Whether such diverse backgrounds may affect how Asian Americans view the abortion issue is yet to be tested. Given the centrality of religion that

fundamentally influences how abortion is viewed, it stands to reason that different Asian Americans' views on abortion should also be influenced by their respective religious affiliations and varying degree of religiosity.

Hypotheses

Based on the review of previous literature, this study aims to examine two specific impacts that religion may have regarding Asian Americans' opinions toward legalizing abortion. Previous studies clearly indicate that religion shapes people's views toward abortion, thus, a mediating effect on the part of religion should be observed among Asian Americans. Specifically, degree of religiosity, instead of religious affiliation will exert a mediation effect. Also, based on studies surveying Asian Americans' religious practices and other studies examining ethnic differences in religious practices, religion may interact with ethnicity and thus have a varying degree of impact on opinions toward abortion.

Hypothesis 1: Religiosity will mediate the impact of religious affiliation on opinions toward legalized abortion.

Hypothesis 2: Religion and ethnicity will interact in shaping Asian Americans' views toward abortion.

Methods Data

This paper analyzed data from the National Asian American Survey 2008 (Wong, Ramakrishnan, Lee, & Junn, 2011). As the main purpose of the survey was to examine the role Asian Americans played in the 2008 presidential election, many questions were about the respondents' political behaviors and attitudes. Between August 12, 2008 and October 29, 2008, telephone interviews were conducted with a nationally representative sample of self-identified Asian or Asian American adults (1,350 Chinese, 1,150 Asian Indian, 719 Vietnamese, 614 Korean, 603 Filipino, and 541 Japanese). The survey also collected information about personal immigration experiences in the United States and other socio-demographic statuses. The respondents had a choice of the following eight languages during the interview to complete the survey: English, Cantonese, Mandarin, Korean, Vietnamese, Tagalog, Japanese, and Hindi. The response rate was 47%. We weighted the data to reflect the balance of various demographic statuses in each ethnic group (i.e., gender, nativity, citizenship status, and educational attainment) and the proportion of these national-origin groups within each state.

Measures

Attitude toward legalization of abortion was the dependent variable in this study. Respondents were asked to rate 1 (strongly disagree) to 5 (strongly agree) on this statement: "Abortion should be legal in all cases." Therefore, the higher number indicated more supportive opinion toward legalizing abortion. A series of socio-demographic variables were used to predict the attitude toward legalized abortion. Self-identified political ideology was measured as conservative (1), moderate (2), and liberal (3). Religion was measured by three variables to capture different dimensions in the construct provided by the dataset. Religiosity was measured by the frequency of attending a place of worship. The response ranged from 0 (never) to 5 (at least every week). Two types of religious affiliation variables were used in this study. First, a dichotomized variable was constructed to compare Catholic respondents versus their non-Catholic counterparts (Catholics). Second, another dichotomized variable was used to compare non-Catholic Christians versus their non-Catholic non-Christian counterparts (Non-Catholic Christians). This study also included various individual and familial characteristics as the predictors of an attitude toward abortion. Age was measured in years, and gender was a dichotomized variable (1=female and 0=male). Education and income represented the respondent's socioeconomic status. Education level was based on respondent's highest degree attained, which ranged from 1 (primary/grammar school), 2 (some high school), 3 (high school graduate), 4 (some college), 5 (college graduate), and 6 (graduate/professional degree). Respondent's pre-tax household income obtained in the previous year ranged from 1 (up to \$20,000) to 8 (\$150,000 and over). Family structure was captured by the number of children under eighteen in the household (0 = no kids to 10 = ten or more kids) and marital status (1=married and 0=not married). Regional differences were examined using region of residence in the United States; a resident of southern states was coded as one (reference group 0 = resident of non-southern states). Finally, two variables were used as proxies to immigrant experiences. Foreign-born individuals (=1) were compared to those who were born in the United States (=0). An English proficiency variable was constructed by combining two variables: respondents' self-assessment of their speaking and

reading skills in English. The resulting variable ranged from 0 (=lower proficiency) to 8 (=higher proficiency).

Analytical Strategy

First, we hypothesized that religiosity would mediate the impact of religious affiliation on the attitude toward abortion. Figure 1 describes the three required conditions that need to be met to establish a mediation effect on the part of religiosity (Baron & Kenny, 1986). The first step regresses attitude toward abortion, the dependent variable, on the independent variable, religious affiliation, to confirm that there is a significant correlation. Since religious affiliation is measured by two different variables (Catholics and non-Catholic Christians), each one is entered into the equation separately. The second step regresses the mediating variable, religiosity, on the independent variable, religious affiliation to verify that the latter has a significant impact on the former. Finally, in the third step, attitude toward abortion is regressed on both religious affiliation and religiosity to test whether a mediation effect exists. If the relationship between religious affiliation and attitude toward abortion becomes insignificant when controlling for religiosity, the hypothesized mediation is statistically demonstrated. These three steps in Figure 1 are aligned with the three models in the subsequent Ordinary Least Square (OLS) analysis demonstrated in Table 2.

Figure 1 about here.

The second hypothesis stated that religion and ethnicity would interact in shaping Asian Americans' views toward abortion. We argued the importance of separating religious affiliation and religiosity in analyzing their impact on attitudes toward abortion. Therefore, we ran two types of sub-sample analyses for each of the six Asian ethnic groups: Asian Indian, Chinese, Filipino/a, Korean, Japanese, and Vietnamese. We first examined the impact of affiliation with Christianity on attitude toward abortion separately for each Asian ethnic group (Table 3) and then investigated the impact of religiosity on the attitude for each Asian ethnic group (Table 4). The results were compared across the ethnic groups to assess the interaction effects.

Results Descriptive Results

This study aims to examine multi-dimensional differences among six Asian American groups in their attitudes toward legalized abortion. Table 1 shows descriptive statistics for all variables examined in this study. The dependent variable is a survey item concerning respondents' opinions toward legalized abortion. By combining those who opposed and those who favored with varying degrees of intensity, the percentages of respondents holding opposite views are 42% and 44%. In comparison to results from other major surveys concerning the abortion debate, Asian Americans, as a group, resemble the broader society in their opinions toward the abortion issue in that a sharp division also exists among Asian American respondents. To detect differences among six major Asian American groups, an analysis of variance (ANOVA) procedure was carried out and the results showed a significant level of difference among different groups in their opinions toward legalized abortion². Groups ranked by the level of support for legal abortion are: Japanese, Chinese, Asian Indians, Korean, Filipino/a, and Vietnamese Americans. Further analysis shows that two thirds (69%) of Vietnamese Americans hold a negative view toward abortion whereas only less than one in four (22%) of Japanese Americans disapprove of legal abortion. Another interesting contrast shows that more than half of Chinese Americans (56%) support legal abortion, but only 33% of Filipino/a Americans approve of legal abortion. Americans of various Asian descents clearly hold different views toward abortion. Results from both Table 1 and the ANOVA analysis undoubtedly show that ethnicity matters among Asian Americans regarding their opinions toward abortion.

Table 1 about here.

Whole Sample Analyses: Asian Americans in General

To test whether religiosity has a mediating effect as stated in Hypothesis 1, three models were employed as diagramed in Figure 1 and demonstrated in Table 2. Results in model 1 shows that both religious affiliation variables have a statistically significant impact on attitude toward abortion. There is a negative and

² An ANOVA table is available upon request.

statistically significant correlation between both variables measuring religious affiliation and the dependent variable concerning attitude toward abortion. Respondents who are Christians including Catholics and non-Catholic Christians are less likely to support legalized abortion after controlling other variables. The first condition to establish a mediation effect specified in Figure 1 is fulfilled. Results in model 2 show that there is a robust correlation between Catholics and Religiosity, measured by the frequency of church attendance. A similarly strong correlation also exists between non-Catholic Christians and church attendance. Respondents who are Catholics as well as non-Catholic Christians are more likely to attend church services compared to their non-Catholic and secular counterparts. The second condition specified in Figure 1 is also fulfilled. Finally, results in model 3 show that after controlling for religiosity, measured by frequency of church attendance, the relationship between non-Catholic Christians and an unfavorable attitude toward legalized abortion is no longer significant. Thus, a full mediation effect is obtained as specified in Figure 1. In contrast, this full mediation effect of religiosity is not observed between Catholics and the dependent variable. In model 3, the regression coefficient for Catholics remains significant, albeit less robust compared to what it was in model 1. Therefore, a partial mediation effect is observed for Asian Americans who are Catholics. In other words, for Asian Americans who are Christians and are opposed to legalized abortion, their opposition to legalized abortion is explained fully by their degree of piety, measured by frequency of church attendance. Their opposition to legalized abortion is explained less by their religious affiliation, but more so by the degree of religiosity. The partial mediation observed among Catholics suggests that Asian Americans who are Catholics remain somewhat steadfast in their opposition to legalized abortion even after controlling for the degree of religiosity. In sum, a mediation effect of religion is observed for Asian American respondents who are Christians but only partially for Catholics, singled out as a separate group.

Results in model 1, which contains responses from all Asian American survey participants, also show that besides religious variables, certain factors also matter in influencing respondents' opinions toward legalized abortion. In rank order of magnitude (Beta coefficient), the following factors are significant: political self-identification, being foreign-born, income level, living in the southern region of the US, and the number of children in the household. Asian Americans who identify themselves as conservative, are born in a foreign country, reside in the south, have lower income, and have more children in the household are more likely to oppose legal abortion than their counterparts with contrasting backgrounds. This pattern in large part is consistent with what has been concluded in previous literature concerning attitudes toward abortion. One noteworthy exception is that age is not a significant factor for Asian American respondents. In contrast, most of the nationwide surveys have shown that age is a robust predictor in attitudes toward abortion (See for example Pew Research Center, 2016).

Table 2 about here.

Sub-Sample Analyses by Ethnicity

A multivariate analysis is required to examine whether different Asian American groups are influenced by various factors including religion regarding their attitudes toward legalized abortion³. To test an interaction effect between ethnicity and religion regarding Asian Americans' opinions of abortion, separate analyses are conducted for six different Asian American groups. Because the analysis is carried out with a reduced sample size for each group—each of which also tends to exhibit similar characteristics—a multicollinearity issues becomes a challenge for this study. Ideally, the same set of variables is used throughout the study, but the strategy becomes untenable because of a high variance inflation factor (VIF) caused mostly by a strong correlation among three religion-related variables. This is true among most Asian American groups, and the severity of multicollinearity calls for a pragmatic solution. To deal with the VIF issue, both Catholics and non-Catholic Christians were grouped into a single category and a new dichotomized variable was entered into the equation. Also, to circumvent the multicollinearity problem, the new religious affiliation variable and religiosity variable were entered into the equation separately, thus producing two contrasting regression results. Results in Tables 3 and 4 show the Ordinary Least Square (OLS) results for such an approach.

In both Table 3 and Table 4, all models regress the following predictors against the dependent variable: age, gender, education, household income, number of children in the household, marital status, southern residence, foreign-born status, English proficiency, and political self-identification. Religious affiliation, the newly dichotomized variable, is included in Table 3 and religiosity Table 4. The following

³ A correlation coefficient table for all variables is also available upon request.

group-by-group comparison is based on a liberal-conservative continuum that was demonstrated in the ANOVA results discussed earlier.

Japanese Americans. Only two factors have a consistent and statistically significant impact on attitudes toward abortion: political self-identification and gender. Female Japanese Americans and self-identified liberals are more in favor of legal abortion than their male and conservative counterparts. Japanese Americans who are Christians are more likely to disapprove of abortion (See Table 3), but religiosity has no significant impact (See Table 4). It is noteworthy to point out that only among Japanese Americans, does gender exhibit a substantive impact on the dependent variable after holding other variables constant. This pattern is observed in both tables.

Chinese Americans. Similar to their Japanese American counterparts, political self-identification exerts the most impact on the opinions toward abortion. Gender is a significant predictor only when religious affiliation is factored in the equation and the magnitude is weak as shown in Table 3. Both religious affiliation and religiosity are significant factors. Chinese Americans who identify themselves as liberal, non-Christians, and seldom attend religious services favor legalized abortion.

Indian Americans. Age is the only statistically significant factor and the magnitude is moderate: younger Americans of Indian descents are more favorable toward legalized abortion than their seniors. Religious variables exert no significant impact after controlling other factors.

Korean Americans. Two significant and moderate factors are English proficiency and household income as shown in Table 4 which includes religiosity in the equation. Respondents with Korean descents who are more proficient in English and have higher household income are more likely to favor abortion.

Filipino/a Americans. Table 3 shows that, in descending rank order of magnitude, the following factors have significant influences in shaping opinions toward abortion for this group: age, foreign-born status, political self-identification, and number of children in the household. When religiosity replaces religious affiliation as shown in Table 4, a strong and statistically significant impact is observed. Americans of Filipino/a descents who attend religious services frequently, are older, are born outside of the US, have more children in the household, and self-identify as conservative are more likely to oppose abortion. Another noteworthy finding is that the variance explained by the statistical model for Filipino/a Americans in Table 3 and 4 is the highest among all six groups. This suggests that factors included in the model hold more explanatory power than do they for other Asian American subgroups.

Vietnamese Americans. Table 3 shows that, in descending rank order of magnitude, significant factors include: education, household income, age, political self-identification, southern residency, and being Christians. In Table 4, religiosity becomes the most salient and statistically significant factor among all variables included in the equation. The direction of each significant variable in both tables does not deviate from patterns reported in other groups. A noteworthy finding is that only in this group does the southern residency variable appear to influence respondents' opinions toward abortion regardless which religion variable is used in the analysis. That is, Vietnamese Americans living in the south oppose abortion in a statistically significant way that suggests an interaction effect among region, ethnicity, and attitudes toward abortion (Scheitle & Hahn, 2011). The implication for this finding is interesting but is beyond the scope of the present study.

Table 3 about here.

Table 4 about here.

Discussion and Conclusion

Findings from this study indicate that a distinctive difference in opinions exists among ostensibly homogeneous Asian Americans regarding legalized abortion. Asian Americans, as a group, differ sharply in this controversial domestic issue. An almost identical percentage of Asian Americans (42% disagree vs. 44% agree) hold opposing views of legal abortion. Regarding the abortion controversy, Asian Americans are a microcosm of the mainstream American society that has been sharply divided over the past decades. Among six different Asian American subgroups, opinions also evidently differ from one group to another: Japanese American are the most favorable to legalized abortion, whereas Vietnamese Americans hold the least favorable attitudes.

Results in this study also show that religion appears to play a significant and nuanced role in shaping Asian Americans' opinions toward abortion. Results in Table 2 show that religiosity, measured by the frequency of church attendance, mediates the impact of Christianity on opinions toward abortion in a nuanced way. That is, Asian Americans who are non-Catholic Christians clearly oppose legal abortion, but such a statistical significant correlation disappears when religiosity is introduced in the equation. Thus, a full

mediation effect of religiosity exists among Asian Americans who are non-Catholic Christians. Results in Table 2 also show that only a partial mediation effect was observed among Asian American who are Catholics. That is, after introducing religiosity into the calculation, the negative coefficient for Catholics remains significant in model 3, although not as strong as what was observed in model 1. Catholic Asian Americans disapprove of legalized abortion and their opposition is only slightly mediated by the degree of religious devotion.

Looking across all six models in Tables 3 and 4 as well as results in model 1 from Table 2, a few noticeable patterns emerge. First, with the exception of Japanese Americans, gender appears to be a non-factor for most Asians after controlling for religiosity and other factors as demonstrated in Tables 3 and 4. In other words, only among Japanese Americans does a suppression effect exist which is consistent with a recent study that shows that the impact of gender is suppressed by religiosity (Barkan, 2014). That is, the reason why gender may appear not to affect opinions toward legalized abortion is because women are more religious than men and people with a high degree of religiosity and a stronger religious identity are more likely to oppose legal abortion. Further studies are warranted to examine why only among Japanese Americans is gender suppressed by religiosity. One possible explanation is that Japanese Americans are more likely to be native-born Americans compared to other Asian American subgroups. Therefore, as a result of a higher degree of acculturation in mainstream society, Japanese Americans are more likely to exhibit similar traits as their counterparts of other races and ethnicities in the mainstream American society.

Second, comparing all six Asian American groups, it appears that the most consistent and impactful factor is political self-identification with the exception of Asian Americans of Indian and Korean descent. The fact that there is no significant impact from political self-identification for both groups may be associated with the observed R-square in the model which is about 7% for Indian Americans and less than 3% for Korean Americans. This suggests that the model used in the OLS analysis is a poor fit to explain how both groups view the abortion issue. It is possible that other important factors, not included in the model, influence their opinions toward abortion.

Third, religion, especially church attendance, is significant in shaping Asian Americans' views of abortion in an expected fashion. However, not all Asian Americans are affected by religion the same way. Religious attendance is significant for only three groups: less so Chinese, but more importantly for Filipino/a and Vietnamese Americans. As a recent phenomenon, the introduction of evangelical Christianity to Chinese immigrant communities may align some Chinese Americans with conservative Christians in holding a prohibitive view toward abortion (Kim, 2004; Yang, 1998). In contrast, the influence of Catholicism remains salient for Filipino/a and Vietnamese in forming their views of abortion.

Among Chinese Americans who hold a Buddhist view of death and rebirth as a cycle, it is possible that abortion is not considered as a life ethic issue as compared to Catholic and Christian conservatives. In the same vein, Chinese Americans who practice folk religions and ancestor worship, may also hold a cyclical view of life and death, thus forgoing a moralistic view of abortion. Evidence from previous studies also suggest that abortion was officially promoted and implemented as a pragmatic solution to population control in both mainland China and Taiwan, two main origins of emigration to the US (Smolin, 2010); therefore, immigrants from these two countries may not see abortion strictly as a moral and religious issue. Regarding the abortion issue, a moral universe that centers around religion for other ethnic Asian groups may not be the same for Chinese Americans. The void then, for Chinese Americans, is filled by a more mundane orientation such as political self-identification.

Results from this study clearly indicate that Asian Americans, as a group, differ significantly in their views toward legalized abortion, one of the most contentious social issues in the US. It is thus reasonable to speculate that such a divergence of opinions may also exist among Asian Americans in their attitudes toward other controversial social issues (CARE, 2011; Campaign for College Opportunity, 2015). The rich diversity among Asian Americans is rooted in the unique immigration history and cultural heritage of each ethnic group, which subsequently shapes each group's experience in collectively becoming the fastest growing racial minority in the US. The variation among six major Asian American groups concerning legalized abortion reflects not only such diversity but also a potential realignment in the abortion debate along racial and ethnic lines.

With globalization aided by technological advancement, the degree of ethnic and racial heterogeneity is increasing not only in the United States, but also in other counties (Ahmed, 2016; Corona et al., 2017; Inceli, 2015; Kaya, 2015; Ozfidan & Burlbaw, 2016). Racial and ethnic diversity can engender both cultural and economic revival as currently witnessed in many parts of the world. Unfortunately, it can also become the fault line that sharply divide a society. A better appreciation of the benefits and complications

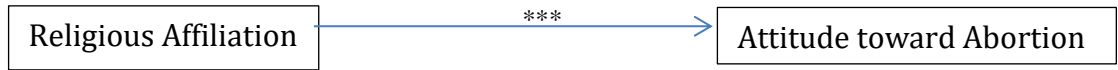
of racial and ethnic diversity will enhance the degree of mutual appreciation from all sectors in a society. Future public opinion research capable of addressing the issue of ethnic diversity will produce nuanced insights into how the public views and deal with controversial social issues including abortion.

References

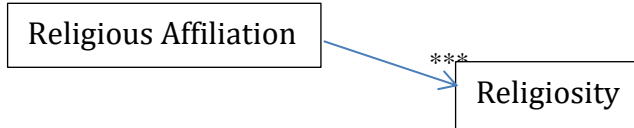
- Ahmed, M. (2016). Ethnicity, identity and group vitality: A study of Burushos of Srinagar. *Journal of Ethnic and Cultural Studies*, 3(1), 1-10.
- Aydin, H. (2012). First-Generation Turkish Immigrants' Perceptions on Cultural Integration in Multicultural Societies: A Qualitative Case Study. *US-China Educational Review B*, 2(3), 326-337.
- Barkan, S. E. (2014). Gender and abortion attitudes: Religiosity as a suppressor variable. *Public Opinion Quarterly*, 78(4), 940-950. Retrieved from <http://dx.doi.org/10.1093/poq/nfu047>
- Bartkowski, J. P., Ramos-Wada, A. I., Ellison, C. G., & Acevedo, G. A. (2012). Faith, race-ethnicity, and public policy preferences: Religious schemas and abortion attitudes among U.S. Latinos. *Journal for the Scientific Study of Religion*, 51(2), 343-358. Retrieved from <http://dx.doi.org/10.1111/j.1468-5906.2012.01645.x>
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51, 1173-1182. <http://dx.doi.org/10.1037/0022-3514.51.6.1173>
- Brooks, J. G. (1999, December 30). In search of understanding: The case for constructivist classrooms. [Review of the book, by C. Halpern]. *American Journal of Qualitative Research*, 1(1), 32-36.
- Campaign for College Opportunity. (2015). *The state of higher education in California: Asian American, Native Hawaiian, Pacific Islanders*. Retrieved from https://www.collegecampaign.org/wp-content/uploads/2015/09/2015-State-of-Higher-Education_AANHPI2.pdf
- Carter, J. S., Carter, S. K., & Dodge, J. (2009). Trends in abortion attitudes by race and gender: A reassessment over a four-decade period. *Journal of Sociological Research*, 1(1):1-17. Retrieved from <http://dx.doi.org/10.5296/jsr.v1i1.156>
- Corona, R., Velazquez, E., McDonald, S. E., Avila, M., Neff, M., Iglesias, A., & Halfond, R. (2017). Ethnic labels, pride, and challenges: A qualitative study of Latinx youth living in a new Latinx destination community. *Journal of Ethnic and Cultural Studies*, 4(1), 1-13.
- Ellison, C. G., Echevarria, S., & Smith, B. (2005). Religion and abortion attitudes among U.S. Hispanics: Findings from the 1990 Latino national political survey. *Social Science Quarterly*, 86(1), 192-208. <http://dx.doi.org/10.1111/j.0038-4941.2005.00298.x>
- Fried, M. G. (2008). Thirty-five years of legal abortion: The US experience. *IDS Bulletin*, 39, 88-94. Retrieved from <http://dx.doi.org/10.1111/j.1759-5436.2008.tb00467.x>
- Gallup. (2014). *US still split on abortion: 47% pro-choice, 46% pro-life*. Retrieved from <http://www.gallup.com/poll/1576/Abortion.aspx>
- Hoffmann, J. P., & Johnson, S. M. (2005). Attitudes toward abortion among religious traditions in the United States: Change or continuity? *Sociology of Religion*, 66(2), 161-182. <http://dx.doi.org/10.2307/4153084>
- Inceli, O. (2015). The Perceptions of English Teachers to the SIOP® Model and Its Impact on Limited English Proficiency. *Journal of Ethnic and Cultural Studies*, 2(1), 15-28.
- Jelen, T. G., & Wilcox, C. (2003). Causes and consequences of public attitudes toward abortion: A review and research agenda. *Political Research Quarterly*, 56(4), 489-500. Retrieved from <http://dx.doi.org/10.1177/106591290305600410>
- Kaya, Y. (2015). The opinions of primary school, Turkish language and social science teachers regarding education in the mother tongue (Kurdish). *Journal of Ethnic and Cultural Studies*, 2(2), 33-46.
- Kim, K. C. (2004). Chinatown or uptown? Second-generation Chinese American protestants in New York City. In P. Kasnitz & J. H Mollenkopf (Eds.), *Becoming New Yorkers: Ethnographies of the new second generation* (pp. 257-279). New York, NY: Russell Sage Foundation.
- Kitano, H., & Daniels, R. (2000). *Asian Americans: Emerging minorities*. New York, NY: Pearson Publication.
- Lafer, S. & Aydin, H. (2012). Educating for Democratic Societies: Impediments. *Journal of Social Studies Education Research*, 3(2), 45-70.
- Liptak, A. (2016, June 27). Supreme court strikes down Texas abortion restriction. *The New York Times*. Retrieved from <https://www.nytimes.com/2016/06/28/us/supreme-court-texas-abortion.html>
- Min, P. G., & Jang, S. H. (2015). The diversity of Asian immigrants' participation in religious institutions in the United States. *Sociology of Religion*, 76(3), 253-274. <http://dx.doi.org/10.1093/socrel/srv025>

- National Commission on Asian American and Pacific Islander Research on Education. (2011). *The relevance of Asian Americans & Pacific Islanders in the college completion agenda*. Retrieved from http://www.apiasf.org/research/2011_CARE_Report.pdf
- Ozfidan, B., & Burlbaw, L. (2016). Perceptions of bilingual education model in Spain: How to implement a bilingual education model in Turkey. *Journal of Ethnic and Cultural Studies*, 3(1), 49-58.
- Pew Research Center. (2016). *Public opinion on abortion: Views on abortion, 1995-2016*. Retrieved from <http://www.pewforum.org/2016/04/08/public-opinion-on-abortion-2/>
- Pew Research Center. (2017). *Public opinion on abortion: Views on abortion, 1995-2016*. Retrieved from <http://www.pewforum.org/fact-sheet/public-opinion-on-abortion/>
- Petersen, L. R. (2001). Religion, plausibility structures, and education's effect on attitudes toward elective abortion. *Journal for the Scientific Study of Religion*, 40(2), 187-203. <http://dx.doi.org/10.1111/0021-8294.00050>
- Ray, J. (2003). *Gallup brain: Opinions on partial-birth abortions*. Retrieved from <http://www.gallup.com/poll/8791/gallup-brain-opinions-partialbirth-abortions.aspx>.
- Scheitle, P. C., & Hahn, B. B. (2011). From the pews to policy: Specifying evangelical Protestantism's influence on states' sexual orientation policies. *Social Forces*, 89(3), 913-34. Retrieved from <http://dx.doi.org/10.1353/sof.2011.0000>
- Shaw, G. M. (2003). The polls -- trends: Abortion. *Public Opinion Quarterly*, 67, 407-29. Retrieved from <http://dx.doi.org/10.1086/377459>
- Smith, T. W., & Son, J. (2013). *Trends in public attitudes towards abortion*. Chicago: National Opinion Research Center. Retrieved from http://www.norc.org/PDFs/GSS%20Reports/Trends%20in%20Attitudes%20About%20Abortion_Final.pdf
- Smolin, D. M. (2010). The missing girls of China: Population, policy, culture, gender, abortion, abandonment, and adoption in East-Asian perspective. *Cumberland Law Review*, 41(1), 1-65. Retrieved from <https://pdfs.semanticscholar.org/a235/0852b51871d26ed5e1c8528d708eadca6d2a.pdf>
- Tolba, N. (2018). From Rebellion to Riots. *Research In Social Sciences And Technology*, 3(2), 93-114. Retrieved from <http://ressat.org/index.php/ressat/article/view/358>
- Unnever, J. D., Bartkowski, J. P., & Cullen, F. T. (2010). God imagery and opposition to abortion and capital punishment: A partial test of religious support for the consistent life ethic. *Sociology of Religion*, 71(3), 307-322. Retrieved from <http://dx.doi.org/10.1093/soarel/srq046>
- U.S. Bureau of the Census. (2012). *The Asian population: 2010*. Washington, DC: U.S. Government Printing Office. Retrieved from <https://www.census.gov/prod/cen2010/briefs/c2010br-11.pdf>
- Wong, J., S., Ramakrishnan, K., Lee, T., & Junn, J. (2011). *Asian American political participation: Emerging constituents and their political identities*. New York, NY: Russell Sage Foundation.
- Yang, F. (1998). Chinese conversion to evangelical Christianity: The importance of social and cultural contexts. *Sociology of Religion*, 59(3), 237-57. <http://dx.doi.org/10.2307/3711910>
- Yigit, I. H., & Tatch, A. (2017). Syrian refugees and Americans: Perceptions, attitudes and insights. *American Journal of Qualitative Research*, 1(1), 13-31.

Condition 1 (Model 1): Religious Affiliation (Catholics and non-Catholic Christians) is a statistically significant predictor of the attitude toward abortion.



Condition 2 (Model 2): Religious Affiliation has a statistically significant correlation with religiosity.



Condition 3 (Model 3): Controlling for Religiosity, Religious Affiliation is no longer a significant predictor of the attitude toward abortion.



Figure 1. Mediating effect of religiosity on the relationship between religious affiliation and attitude toward abortion

Table 1

Descriptive Statistics: Proportion/Mean and Standard Deviation

Variables	All Asians		Japanese		Chinese		Asian Indian		Korean		Filipino		Vietnamese	
	Means/ Proportions	SD	Means/ Proportions	SD	Means/ Proportions	SD	Means/ Proportions	SD	Means/ Proportions	SD	Means/ Proportions	SD	Means/ Proportions	SD
Attitude toward Abortion	3.04	1.52	3.69	1.35	3.47	1.37	3.39	1.42	2.87	1.55	2.41	1.59	2.13	1.25
Disagree	.42		.22		.28		.30		.46		.60		.69	
Neutral	.14		.11		.16		.17		.13		.07		.16	
Agree	.44		.67		.56		.53		.41		.33		.16	
Age	51.50	14.17	54.45	16.90	50.89	13.39	46.19	13.37	54.28	13.55	54.19	13.64	53.13	13.53
Female (1=yes)	.40	.49	.39	.49	.46	.50	.35	.48	.40	.49	.39	.49	.37	.48
Highest Degree Attained	4.77	1.23	4.96	1.01	4.81	1.34	5.40	.92	4.69	1.13	4.83	.97	3.82	1.22
Household Income	4.71	2.21	5.47	1.82	4.45	2.21	5.94	1.91	4.32	2.06	5.06	2.09	3.35	2.02
Number of Kids Under 18	.82	1.05	.59	.90	.84	1.02	.93	1.06	.62	.90	.77	1.00	1.02	1.25
Married (1=yes)	.88	.32	.87	.34	.91	.29	.87	.34	.93	.26	.81	.39	.88	.32
Self-Identified Political Affiliation	2.09	.72	2.19	.75	2.15	.68	2.21	.67	1.83	.78	1.94	.72	2.17	.65
Foreign-born (1=yes)	.90	.31	.53	.50	.97	.16	.88	.32	.97	.16	.83	.38	.98	.13
Southern Resident (1=yes)	.20	.40	.08	.28	.13	.33	.27	.44	.27	.44	.09	.29	.33	.47
English Proficiency	6.09	2.42	7.47	1.52	5.59	2.50	7.90	.70	4.51	2.35	7.59	1.27	4.47	2.13
Christian(1=yes)	.45	.50	.27	.45	.31	.46	.06	.23	.82	.39	.95	.22	.44	.50
Catholic (1=yes)	.19	.40	.03	.17	.03	.18	.03	.16	.14	.35	.75	.43	.40	.49
Non-Catholic Christian (1=yes)	.25	.44	.24	.43	.28	.45	.03	.17	.68	.47	.19	.40	.04	.20
Religious Attendance	2.62	1.95	1.44	1.67	1.39	1.86	2.69	1.54	3.75	1.84	3.74	1.41	2.98	1.71
<i>N</i>	1910		169		484		380		349		236		292	

Table 2

OLS Regression Models Testing the Mediating Effect of Religious Attendance Between Christian Faith and Attitude on Abortion (All Asians)

	<u>Model 1</u>			<u>Model 2</u>			<u>Model 3</u>		
	<i>DV: Attitude on Abortion</i>			<i>DV: Religious Attendance</i>			<i>DV: Attitude on Abortion</i>		
	<i>b</i>	<i>SE</i>	β	<i>b</i>	<i>SE</i>	β	<i>b</i>	<i>SE</i>	β
Age	-.004	.003	-.036	.003	.003	.021	-.003	.003	-.033
Female (1=yes)	.083	.069	.027	-.081	.067	-.021	.078	.068	.025
Highest Degree Attained	.055	.031	.046	.058	.030	.038	.066 *	.031	.056
Household Income	.066 ***	.019	.092	-.012	.018	-.013	.061 **	.018	.085
Number of Kids Under 18	-.097 **	.035	-.066	.105 **	.034	.056	-.080 *	.035	-.055
Married (1=yes)	.156	.105	.037	-.331 **	.102	-.062	.112	.104	.027
Southern Resident (1=yes)	-.299 ***	.081	-.081	.268 **	.078	.057	-.268 **	.080	-.073
Foreign-born (1=yes)	-.412 ***	.103	-.100	.457 ***	.101	.086	-.332 **	.102	-.081
English Proficiency	-.002	.016	-.003	.028	.016	.035	.004	.016	.007
Self-Identified Political Ideology	.330 ***	.048	.153	-.164 ***	.046	-.060	.313 ***	.047	.145
Catholic (1=yes)	-.804 ***	.083	-.232	2.577 ***	.081	.578	-.377 ***	.101	-.109
Non-Catholic Christian (1=yes)	-.385 ***	.085	-.109	2.665 ***	.082	.562	.042	.104	.012
Religious Attendance							-.159 ***	.023	-.202
Adjusted R ²	.117			.468			.138		

* $p < .05$

** $p < .01$

*** $p < .001$

Table 3

OLS Regression Models Examining the Effect of Christian Faith on Attitude toward Abortion: Sub-Sample Analyses by Ethnicities

	<u>Japanese</u>			<u>Chinese</u>			<u>Asian Indians</u>			<u>Korean</u>			<u>Filipino</u>			<u>Vietnamese</u>		
	<i>b</i>	<i>SE</i>	β	<i>b</i>	<i>SE</i>	β	<i>b</i>	<i>SE</i>	β	<i>b</i>	<i>SE</i>	β	<i>b</i>	<i>SE</i>	β	<i>b</i>	<i>SE</i>	β
Age	.011	.007	.140	-.001	.005	-.014	-.016 *	.007	-.138	.012	.008	.115	-.031 **	.009	-.263	.014 *	.007	.156
Female (1=yes)	.763 **	.228	.251	.254 *	.126	.091	-.038	.160	-.012	.086	.162	.029	-.124	.203	-.038	-.217	.152	-.083
Highest Degree Attained	.082	.108	.058	-.023	.054	-.024	.077	.080	.068	.079	.081	.063	-.121	.094	-.086	.206 *	.080	.190
Household Income	-.014	.060	-.018	.001	.035	.002	.086	.044	.109	.084	.044	.119	.038	.053	.049	.110 *	.045	.169
Number of Kids Under 18	-.234	.123	-.152	.013	.068	.009	-.042	.085	-.028	.080	.098	.050	-.302 **	.100	-.192	.040	.060	.041
Married (1=yes)	.201	.345	.046	.197	.216	.049	.054	.273	.012	.045	.098	.011	-.325	.247	-.080	-.078	.236	-.024
Southern Resident (1=yes)	-.218	.375	-.047	-.126	.163	-.035	-.262	.170	-.080	-.205	.197	-.058	-.262	.261	-.059	-.375 **	.152	-.143
Foreign-born (1=yes)	-.340	.238	-.118	.301	.237	.074	-.253	.323	-.043	.134	.323	.031	-.824 **	.270	-.214	-1.003	.326	-.246
English Proficiency	-.011	.083	-.010	.045	.027	.083	.118	.070	.104	.077	.041	.127	-.100	.077	-.085	-.010	.045	.017
Self-Identified Political Ideology	.516 **	.146	.269	.448 ***	.090	.221	.138	.122	.060	.111	.107	.058	.467 ***	.128	.213	.296 **	.113	.147
Christian (1=yes)	-.508 *	.251	-.155	-.427 **	.137	-.146	-.199	.292	-.039	-.232	.198	-.066	-.126	.483	-.015	-.320 *	.149	-.123
Adjusted R ²	.189			.079			.066			.030			.237			.192		

* $p < .05$

** $p < .01$

*** $p < .001$

Table 4

OLS Regression Models Examining the Effect of Religious Attendance on Attitude toward Abortion: Sub-Sample Analyses by Ethnicities

	<u>Japanese</u>			<u>Chinese</u>			<u>Asian Indians</u>			<u>Korean</u>			<u>Filipino</u>			<u>Vietnamese</u>		
	<i>b</i>	<i>SE</i>	β	<i>b</i>	<i>SE</i>	β	<i>b</i>	<i>SE</i>	β	<i>b</i>	<i>SE</i>	β	<i>b</i>	<i>SE</i>	β	<i>b</i>	<i>SE</i>	β
Age	.013	.007	.161	.001	.005	-.012	-.015 *	.007	-.126	.012	.008	.116	-.028 **	.009	-.238	.014 *	.006	.157
Female (1=yes)	.679 **	.225	.223	.217	.126	.078	-.070	.159	-.023	.086	.163	.029	-.038	.193	-.012	-.173	.150	-.066
Highest Degree Attained	0.08	.109	.055	-.025	.054	-.026	.110	.079	.097	.075	.081	.060	-.049	.091	-.035	.197	.078	.181
Household Income	-.023	.060	-.030	-.002	.035	-.004	.075	.044	.096	.087 *	.044	.124	.033	.051	.043	.111 *	.044	.169
Number of Kids Under 18	-.203	.127	-.132	.019	.069	.013	-.037	.085	-.025	.080	.098	.051	-.270 **	.096	-.172	.046 *	.059	.047
Married (1=yes)	.246	.349	.056	.092	.222	.023	.054	.270	.012	.035	.308	.009	-.296	.235	-.073	-.084	.230	-.026
Southern Resident (1=yes)	-.138	.377	-.030	-.108	.164	-.030	-.281	.171	-.086	-.205	.197	-.058	-.252	.249	-.057	-.312 **	.151	-.119
Foreign-born (1=yes)	-.336	.249	-.117	.368	.234	.091	-.324	.327	-.055	.140	.324	.032	-.691 **	.257	-.181	-.869 **	.323	-.213
English Proficiency	-.014	.084	-.081	.043	.028	.080	.107	.070	.094	.080 *	.041	.133	-.068	.073	-.058	-.014	.045	-.025
Self-Identified Political Ideology	.556 ***	.146	.289	.430 ***	.091	.213	.137	.137	.058	.125	.106	.065	.400 **	.126	.181	.271 *	.110	.135
Religious Attendance	-.068	.066	-.081	-.111 **	.034	-.156	-.046	.053	-.046	-.034	.042	-.045	-.293 ***	.068	-.253	-.165 ***	.044	-.214
Adjusted R ²	.173			.080			.067			.028			.305			.218		

* $p < .05$ ** $p < .01$ *** $p < .001$