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ABORTION ATTITUDES AND SUBJECTIVE RELIGIOSITY:  
EXAMINING A FOURFOLD TYPOLOGY

by

CHRISTOPHER GUIDO  
B.A. Florida Gulf Coast University, 2013

A thesis submitted in partial fulfillment of the requirements  
for the degree of Master of Arts  
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## ABSTRACT

This is an exploratory study that examined the relationship between religious persons and attitudes toward legal abortion. This study presented a fourfold typology of respondents: (1) pro-choice, but not religious, (2) pro-choice and religious, (3) pro-life, but not religious, and (4) pro-life and religious. This study looked for characteristics of respondents in these categories. As previous research was examined on the relationship between religion and abortion attitudes, the question on what social characteristics make up the four categories of pro-choice and pro-life respondents was examined. Findings showed that social characteristics of respondents varied across categories of subjective religiosity and attitudes toward legal abortion typology. Recommendations were made for future research to utilize this data to continue exploring the relationship between social attitudes towards abortion alongside a person's religiosity.

## TABLE OF CONTENTS

LIST OF TABLES.....	iv
CHAPTER ONE: INTRODUCTION.....	1
CHAPTER TWO: LITERATURE REVIEW .....	3
Religious versus Secular Perspectives on Attitudes Toward Legal Abortion.....	3
Sociodemographic, Attitudinal, and Behavioral Influences on Attitudes toward Abortion.....	7
Gender and Race .....	7
Gender and Religiosity .....	9
Race and Religiosity.....	11
Education, Income, Marital Status and Age.....	12
CHAPTER THREE: METHODS .....	13
Operationalizing the Four-fold typology. ....	13
Social Characteristics of Respondents.....	14
Educational attainment:.....	14
Total Family Income: .....	15
Sex and Marital Status: .....	15
Race of respondent: .....	15
Confidence in the Scientific Community:.....	16
CHAPTER FOUR: ANALYTIC STRATEGY.....	17
CHAPTER FIVE: RESULTS.....	19
CHAPTER SIX: DISCUSSION.....	27
Strengths and Limitations:.....	29
Future Research and Conclusions: .....	30

## LIST OF TABLES

Table 1: Univariate Descriptive Statistics and Frequencies.....	18
Table 2: One Way ANOVA - EDUCATION .....	20
Table 3: One Way ANOVA - INCOME .....	21
Table 4: One Way ANOVA - AGE .....	22
Table 5: Cross Tabulation - SEX.....	23
Table 6: Cross Tabulation – MARITAL STATUS.....	24
Table 7: Cross Tabulation – RACE/ETHNICITY .....	25
Table 8: Cross Tabulation – CONFIDENCE IN SCIENTIFIC COMMUNITY .....	26

## CHAPTER ONE: INTRODUCTION

The debate over if abortion should be legal is far from over, especially with it being an intense talking point on political agendas. With the Supreme Court ruling of *Roe V. Wade*, women have the right to an abortion until the fetus is viable outside the womb. To combat this legality, legislators are passing laws in states across the country designed to restrict access to abortions (Guttmacher Institute, 2015). These laws target regulation of abortion providers and are referred to as TRAP laws. They are methods used to counter act and chip away at the *Roe V. Wade* decision (Guttmacher Institute, 2015) (Baum, White, Hopkins, Potter and Grossman, 2016). Policies such as banning abortions after a fetal heartbeat is detectable (North Dakota), requiring doctors who perform abortions to have admitting privileges at local hospitals (Texas), mandating 48-72 hour waiting periods excluding weekends and holidays (South Dakota), and cutting funding to family planning services (Ohio) are all abortion restrictive policies (Guttmacher Institute, 2015). This research will examine attitudes of the American public towards abortion as a legal right for women.

Over the past several decades, research has documented the relationship between attitudes toward legal abortion and a wide range of sociodemographic, attitudinal, and behavioral factors (e.g., Burdette, Hill, & Myers, 2015; Gay, Ellison, & Powers, 1996; Marsiglio, 1977). Of particular interest here is the relationship between subjective religiosity and abortion attitudes. Of all the social determinants of abortion attitudes, religion is considered to be one of the strongest (see Gay, Ellison, & Powers, 1996). This is particularly true since a number of religious denominations/family of denominations (e.g., the Catholic Church, Evangelical

Protestants) have taken strong positions against legal abortion (Jelen & Wilcox, 2003).

However, the arguments against abortion have been shifting from explicitly religious to more secular points of view in recent years. That is, arguments against abortion are also illustrated through commonly understood scientific influences rather than theological ones. This is not to say that those who are pro-life are no longer religious, but rather creates the aspect that if scientific arguments are used rather than theological ones, there is the potential for people to identify as pro-life and not religious. Such a position would be interesting to identify, as they would fall outside the realm of what has already been determined about the social predictors of being pro-life.

This study is exploratory and examines the relationship between religious persons and attitudes toward legal abortion. This study presents a fourfold typology of respondents: (1) pro-choice, but not religious, (2) pro-choice and religious, (3) pro-life, but not religious, and (4) pro-life and religious. I am looking for characteristics of respondents in these categories. This research aims to examine previous research on the relationship between religion and abortion attitudes and raise the question on what social characteristics make up the four categories of pro-choice and pro-life respondents.

## CHAPTER TWO: LITERATURE REVIEW

### Religious versus Secular Perspectives on Attitudes Toward Legal Abortion

On January 22, 1973 the Supreme Court came to a decision in the case of Roe V. Wade, and struck down abortion restriction laws across the country. Forty-four years later, in 2017, the future legality of abortion is still debated and ultimately remains uncertain. The uncertainty lies in our Supreme Court justices, appointed by the president, and confirmed by congress who are all elected by the current electorate.

Throughout my research on similar studies, views on abortion vary significantly by religion, race, education, income, and generation, while no research has looked in depth at all these characteristics in relation to abortion attitudes based off subjective religiosity. The existing literature examined focuses on the relationship between religiosity and abortion rights, beliefs systems of abortion politics, consequences of attitudes toward abortion, and social attitudes towards equal rights.

The arguments against abortion have been shifting from being explicitly religious to more secular in the years since Roe V. Wade (Jelen & Wilcox, 2003). Arguments against abortion from religious institutions are now illustrated through commonly understood scientific arguments rather than theological ones. Shiri Noy and Timothy O'Brien (2016) analyzed how public perspectives on science and religion map onto public attitudes about a wide range of social, political, and economic issues (including abortion). They found that individuals oriented toward either science or religion hold differing attitudes in nearly every domain investigated. While individuals whose world views incorporate both science and religion have different



attitudes than those oriented toward one or the other, calling this a “third perspective” not located on a conventional liberal-conservative spectrum (Noy & O’Brien, 2016). This change in arguments from theological to secular coincidentally comes at a time when religious affiliation is at an all-time low in our society (Pew Research Center, 2015). Some of this change may have to do with age. Younger generations (i.e., the millennial cohort) are the least likely to affiliate with religious institutions and hold more liberal political attitudes in general. However, Jelen and Wilcox (2003) report that those who do remain religious, show a decline in pro-choice attitudes among Protestants and a clear pro-choice trend among younger Catholics (Jelen & Wilcox, 2003). They cite this difference as being attributable to differential trends in church attendance; being that younger Protestants are attending religious services more frequently than their elders, while with younger Catholics, their church attendance has dropped dramatically. They find that of those who are attending church, their views on abortion become more oppositional. However as stated earlier, if the public discussion of legal abortion comes to emphasize issues of science rather than theology, why should church attendance or subjective religiosity continue to matter as we research public perception of abortion, especially if our understanding of religion’s influence is incomplete (Michael Emerson, 2006)? Jelen and Wilcox (2003) found that there is a disjunction between the public face of the abortion issue and individual-level socialization by religious bodies. These apparently disparate findings suggest the possibility that religiously defined subcultures are important agents of socialization on the abortion issue and that popular understanding of the issue does not necessarily reflect elite-level discourse (Jelen & Wilcox, 2003).

One of the ways public discussions of abortion attitudes has become linked with science rather than theology is through the discourse of political debates. As politicians stand to relate to voters their message must be adaptable and easily comprehensible. However, Craig, Kane and Martinez (2002) note how research has recognized that voters simultaneously hold positive and negative attitudes about political issues, including abortion. When someone's beliefs concerning an attitude are in conflict with one another, the person could be described as being ambivalent (Craig, Kane, & Martinez, 2002). Craig, Kane and Martinez set out to focus on this very aspect, focusing on the nature of abortion and political attitudes in an effort to demonstrate that these attitudes are more complex than traditional models showcase. They utilized a quantitative study based on a cross-sectional survey conducted by the Florida Voter Survey organization, which conducted two statewide telephone polls in March of 1998 and January of 1999. They were able to showcase that voters do possess simultaneous positive and negative feelings towards abortion, on both the pro-life and pro-choice sides of the debate. For Pro-life voters, questions about whether to permit abortions under "traumatic" circumstances (life of the mother is in danger, rape, or incest) were found to be more difficult and led to higher levels of ambivalence. For pro-choice voters, questions about whether to permit abortions under "elective" circumstances (e.g., the mother is not financially stable, the mother does not want any more children) present higher decision difficulty. Craig, Kane and Martinez (2002) were able to conclude that voters who are at the "extremes" of their beliefs occasionally find themselves conflicted.

When we discuss religion, politics, and abortion, what does this say about our current electorate- the electorate that is seeing a decline in religious affiliation and political

participation? The legislated future of abortion will be in the hands of younger generations (i.e., Generation X and the Millennials), and with the current voter divide and ambivalence on the legality of abortion, the issue is just as important as ever. During the era of *Roe v. Wade* in 1973, the debate was largely framed around the emerging women's movement and related issues such as birth control and gender equality in the home and workplace. These frames favored the pro-choice position, as public support for abortion rights slightly increased. By 1990, after the *Webster v. Planned Parenthood* decision, states were given significantly more authority to restrict abortion, shifting the public debate to focus on "popular" abortion restrictions. By the 2000s, these popular restrictions have grown to succeed in closing several abortion providing clinics across the United States (Guttmacher Institute, 2015).

Previous research has concluded that religiosity, especially intense, active individual involvement, is associated with attitudes toward possible reasons for abortion. Harris and Mills (1985) proposed a theory of value conflict, suggesting that physical and social reasons evoke conflicting values of self-determination and responsibility for others. General Social Survey data from 1974 – 1982 were used to explain part of the relationship between religious involvement and abortion attitudes. They argued that since these values are differentially emphasized both by religious groups and by degrees of involvement with religion, the "elective affinity" between values and abortion reasons not only explains part of the empirical relationship between religion and abortion attitudes but also suggests an intervening mechanism by which religion influences decisions regarding abortion (Harris & Mills, 1985).

## Sociodemographic, Attitudinal, and Behavioral Influences on Attitudes toward Abortion

### Gender and Race

Dugger (1991) noted that we know little about the characteristics of Black women's abortion attitudes prompting Lynxwiler and Gay (1996) to delve into this research aspect further, examining the structure of Black women's support for legal abortion across two decades. They noted that even though comparative studies of Black and White women have begun to emerge, no research has examined the structure of Black women's abortion attitudes over time (Lynxwiler & Gay, 1996). Citing the acute and problematic changes that have been documented among Black populations during the 1980s, it is likely that the antecedents of Black women's abortion sentiments have been altered in significant ways (Lynxwiler & Gay, 1996). They found mixed support for those who argue that structural location variables, not gender outlooks, were the critical determinants of abortion support in a cross sectional study over time. The impact of education, employment, and parity were associated with Black women's abortion attitudes in only one-time period. Of the most significant findings in their research was that the impact of religious affiliation on Black women's abortion attitudes during the 1980s. In the 1980-time period, the impact of Black Protestant affiliation increases when measures of sex and family values are introduced (Lynxwiler & Gay, 1996). This indicates that these attitudinal values are related to Black women's affiliations with Black Protestant denominations, meaning a positive association with the pro-choice stance. In light of this association, Black Protestant churches appear to be developing a more relaxed position on abortion (Lynxwiler & Gay, 1996). They conclude that they can only speculate as to what the structure of Black women's support for legal abortion has undergone.

Previous studies have concluded that opponents of legal abortion are more likely to report traditional/conservative views regarding premarital sex, ideal family size, homosexuality, and women's roles (Blake 1971; Legge 1983; Mileti & Barnette 1972; Secret, 1987, Lynxwiler & Gay, 1994). Religious affiliation and various measures of religiosity also contribute to the formation of abortion attitudes (Harris & Mills, 1985; Wilcox, 1990; Lynxwiler & Gay, 1994). Lynxwiler and Gay noticed that the nature of the relationship between race and abortion attitudes has received sparse attention and noted that public opinion surveys as far back as 1965 have indexed that Blacks hold significantly less support for legal abortion than Whites (Lynxwiler & Gay, 1994). However, abortion ratios show that Black women have legal abortions at twice the rate of White women, prompting the research into the impact that the contradictory findings have for conceptualizing abortion attitudes and race. They used the 1972 and 1988 GSS data to examine race differences in abortion attitudes and organized race by gender and childbearing status, producing six categories: Black childbearing females (44 years and younger), White childbearing females (44 years and younger), older Black females (45 years and older), older White females (45 years and older) Black males, and White males, while White childbearing women made up the comparison group in their analysis. Lynxwiler and Gay (1994) found that Black and White childbearing women exhibit no significant net effect differences in their support for legal abortion between 1972 and 1988. Lynxwiler and Gay note how the high abortion rates of Black women no longer stand in contrast to the findings that they are less supportive of legal abortion than Whites. Among Black and White women who are most likely to become candidates for abortion, there is no significant difference in their pro-choice stance, and compared to Whites, the higher abortion rates of Black women are not confounded by low

support for legal abortion (Lynxwiler & Gay, 1994). They suggest after their analysis that Black and White women's support for legal abortion shifts over their life course. Lynxwiler and Gay conclude that more attention must be devoted to explicating the similarities and differences that underlie abortion attitudes not only between but also within categories of race.

Carter and Dodge (2009) evaluated trends in abortion attitudes by race and gender pulling data from the GSS to compare shifts in abortion attitudes of White and Black males and females over a four-decade period. As previous research has concluded, they found gender to be the strongest predictor of abortion attitudes, with White and Black males maintaining more conservative attitudes than their female counterparts. They found that initially white males and females appear more liberal in their views toward abortion, but over the four-decade period black females became more liberal in the late 1980s. Interestingly, black males were consistently more conservative in their attitudes over the four-decade time period.

### Gender and Religiosity

Recent research has studied the changing influence of religion by investigating questions about trends in religious group differences in attitudes toward issues relating to gender, abortion, and sexuality over the past three decades (Bolzendahl & Brooks, 2005). Bolzendahl and Brooks found that two different issues showed evidence of growing group based differences: sexuality and abortion. Similar research (Barkan, 2014) has analyzed the gender differences in religiosity to help explain the lack of gender difference in abortion attitudes. Barkan (2014) used religiosity as a suppressor variable for the theoretically expected relationship between gender and support for legal abortion. Barkan was able to confirm the

hypothesis that the expected gender difference in support for legal abortion emerges when religiosity is controlled in multivariate analysis. Through these findings, Barkan was able to conclude that religiosity is indeed suppressing women's greater support for legal abortion.

Simon and Alaa Abdel-Moneim (2010) explored gender differences in opinions regarding controversial social issues, including the issue on abortion. They aimed to explore issues where gender makes a clear difference, where it does not only hold an important role as other factors such as race and political affiliations, and where considerations of gender need to be combined with other personal attributes in order to understand their real impact (Simon & Abdel-Moneim, 2010). They found that a majority of people who say that religion is very important in their lives believe that abortion should either be illegal or legal only under limited conditions (Simon & Abdel-Moneim, 2010). Most people who say that religion is not important in their lives believe that abortion should be legal in all or most circumstances. They found that women usually expressed stronger feeling toward abortion and are much more likely to say it could be a factor in their vote. A Pew Center survey of 2003 that found that 33% of women say they strongly oppose more restriction on abortion, compared with 26% of men. The survey went on describe that 19% of women strongly favor greater restrictions, compared with 15% of men (Simon & Abdel-Moneim, 2010). When politics become involved, 59% of these men who do not view this as a voting issue say they would vote for a candidate who disagrees with them on this matter, as long as a majority of their views still aligned (Simon & Abdel-Moneim, 2010). Of eligible voters polled during the 2008 presidential election, no significant gap was found between men and women on the issue of abortion, 49% who identified as pro-choice were

men, while 50% were women. Respectively, 46% who identified as pro-life were men, while 43% were women (Simon & Abedel-Moneim, 2010).

### Race and Religiosity

As previous research has noted, race and abortion attitudes reveal significant variation. However, Gay and Lynxwiler (1999) noted how recent research indicated that this pattern has diminished. They examined abortion attitudes using the GSS to compare race difference in abortion attitudes along three measures of religiosity: affiliation, attendance at religious services, and Biblical literalism. They discuss how increased religiosity is linked to decreased support for abortion and that African Americans are more pro-choice than White Americans when measures of church attendance and Biblical literalism are included. They note that educational attainment, political views, community size, and family income remained significant predictors of pro-choice attitudes on abortion while married respondents were less likely to support legal abortion (Gay & Lynxwiler, 1999). Previous research has also concluded that expressions of religion such as frequent church attendance and affiliation with Catholic and conservative Protestant churches are associated with a conservative stance (Woodrum & Davison, 1992; Welch et al. 1995; Davis & Robinson, 1996; Peterson, 2001). Interestingly, Carter, Carter and Dodge (2009) found that although education has consistently been related to increased support for abortion (Wilcox, 1992; Cochran et al. 1996; Gay & Lynxwiler, 1999; Peterson, 2001), women's attitudes appear more affected by education than men's. Recent surveys of college students are starting to show increased ambivalence and opposition on abortion, with frequent church attendance diminishing the effect of education on abortion attitudes (Carter et. al, 2009).



### Education, Income, Marital Status and Age

In regards to additional social demographic characteristics such as age, (Lynxiwler & Gay 1994; Bennett et. al, 1997; Jones & Jerman, 2013; Heller et. al, 2016), marital status, and income (Carter et. al, 2009), previous research has shown a possible link in the way these attributes may affect abortion attitudes when coupled with religiosity. Through previous research, conservatism and age has had a consistent positive relationship, however, current research shows age becoming less of a predictor of abortion attitudes, (Carter et. al, 2009). As previously mentioned by Wilcox, support for abortion is increasing amongst younger persons (the millennial cohort), however they are not changing their overall attitudes on the subject. Further research shows older people tend to have more pro-choice attitudes towards abortion than younger people when other factors are controlled (Carter et. al, 2009).

This study is an exploratory study of the relationship between sociodemographic characteristics of individuals and a typology of subjective religiosity and attitudes toward legal abortion. The study uses a four-fold typology to examine the social characteristics of respondents across the four categories. As presented earlier, the four categories are (1) pro-choice, but not religious, (2) pro-choice and religious, (3) pro-life, but not religious, and (4) pro-life and religious.

## CHAPTER THREE: METHODS

The data used in this study are from the 2014-2016 General Social Survey (GSS). The GSS is a nationally representative survey of noninstitutionalized American adults. The total sample size of the combined surveys is 5136. Since the analyses use a series of bivariate statistical tests, the sample size for each statistical test varies. This dataset is appropriate to use as it asked participants questions about religiosity, abortion attitudes, and varying socio-demographic variables.

### Operationalizing the Four-fold typology.

Two items from the GSS are used to operationalize the four-fold typology of subjective religiosity and attitudes toward legal abortion. The first item addresses subjective religiosity and is measured by a question tapping the importance of religion in their everyday lives. The question in the GSS is: "To what extent do you consider yourself a religious person? Are you..." The possible responses to this question are (1) very religious, (2) moderately religious, (3) slightly religious, and (4) not religious at all. The decision was made to use "very religious" and "moderately religious" responses to indicate being religious. "Slightly religious" responses were eliminated from the analysis. The second item taps attitudes toward legal abortion. These attitudes are measured by the following question: "Tell me whether or not you think it should be possible for a pregnant woman to obtain a legal abortion if the woman wants it for any reason?" Valid responses are "yes" and "no." "Not applicable," "don't know," and "no answer"

responses for both of these questions were omitted from the analysis. The operationalization of the typology through the use of these two questions is described below.

The four-fold typology is created through a combination of the subjective religiosity and attitudes toward abortion questions. First, individuals who report that a woman has a right to a legal abortion and are not religious at all are categorized as “pro-choice, but not religious.” Second, those who report that a woman should have a right to a legal abortion and reports being very religious or moderately religious are categorized “pro-choice and religious.” Third, respondents who report that a woman should not have a right to a legal abortion and are not religious at all are categorized as “pro-life, but not religious.” Fourth, respondents who report that a woman should not have a right to a legal abortion and report being very religious or moderately religious are categorized as “pro-life and religious.”

## Social Characteristics of Respondents

### Educational attainment:

In the GSS, responses for educational attainment range from 0 to 20 years and are in years of school completed. For years 0 through 12, educational attainment is assumed to be from “no school” to “completing high school”. As it may take some students longer than the standard four years to get their bachelor’s degree or shorter than the standard two years to receive a master’s degree, the years after completing high school become more subjective. For this research, we will make the assumption that degrees were received in standard time for each respondent.

#### Total Family Income:

In the GSS, separate scales are used for 2014 and 2016. A twenty-five-point scale is used for 2014, and a twenty-six-point scale is used for 2016. In order to combine the two scales, the codes were reconciled to percentages. Hence, the lowest score is coded 0 and the highest score is coded 100. Respondents who refused, or answered “Don’t Know,” were excluded from the analysis.

#### Age of respondent:

In the GSS, responses for age range from “18,” which is coded (18) to “89 or older,” coded to (89). Every subsequent year is coded accordingly to the chronological age of the respondent. Respondents who answered “Don’t Know” or “No Answer” were excluded from the analysis.

#### Sex and Marital Status:

Sex is coded to represent male and female respondents. Three categories are used to measure marital status. Married and widowed respondents are combined in one category, divorced and separated respondents are combined in one category, and the third category represents never married respondents.

#### Race of respondent:

Two items in the GSS are used to identify race or ethnicity of respondents. Using the items for “race” and the item for Hispanic self-identification, three categories are created to represent White, Black, and Hispanic respondents. All others are omitted from the analysis.

### Confidence in the Scientific Community:

Finally, a question that taps the level of confidence a respondent has in the scientific community is treated as a nominal variable with three response categories. The responses are: (1) a great deal of confidence, (2) only some confidence, and (3) hardly any at all.

## CHAPTER FOUR: ANALYTIC STRATEGY

The analytic strategy is to perform a series of bivariate analyses to examine variation across the typology. The analysis features tables for the descriptive statistics (means and standard deviations) and a series of bivariate tables. The tables show a series of Oneway analysis of variance tests (a scaled variable is examined) and Chi-square tests (when both variables are discrete/nominal/categorical). As noted earlier, the sample size varies depending on the particular bivariate analysis.

Table one shows the means and standard deviations (SD) of each scaled variable and the frequencies and percentages for the categorical/nominal variables. The table shows that the mean for education is 13.68 years with a standard deviation of 2.99, the mean for total family income is 54.72 with a standard deviation of 30.69, and the mean for age of the respondents is 49.26 years with a standard deviation of 17.58. As noted in the methods, family income is rescaled to percentages in order to standardize the two different scales. Table 1 also shows the distribution of respondents across the subjective religiosity by abortion attitude typology. Prochoice not religious respondents comprise 19.6% of the sample, prochoice and religious make up 23.3%, prolife not religious make up 8.3% of the sample, and prolife and religious comprise the remaining 48.8% of the sample. Roughly 45% of the sample is male and 55% is female. Over half of the sample is married or widowed, another 20.4 % are divorced or separated, and 27.3% have never been married. Table 1 also indicates that white respondents make up 68.9% of the sample, black respondents make up 16.4% of the sample, and Hispanic respondents comprise the remaining 14.7% of the sample.

Table 1: Univariate Descriptive Statistics and Frequencies

Variables	N	%	M	SD
<i>Scaled Variables</i>				
Educational Attainment	5153		13.68	2.99
Family Income (rescaled to percentages)	4810		54.72	30.69
Age	5136		49.26	17.58
<i>Categorical/Nominal Variables</i>				
Subjective Religiosity by Abortion Attitude Typology				
Prochoice not Religious (PC/NR)	491	19.6		
Prochoice and Religious (PC/R)	582	23.3		
Prolife not Religious (PL/NR)	208	8.3		
Prolife and Religious (PL/R)	1220	48.8		
Respondent's Sex				
Male	2313	44.9		
Female	2840	55.1		
Marital Status				
Married or Widowed	2696	52.4		
Divorced or Separated	1049	20.4		
Never Married	1403	27.3		
Race/Ethnicity				
White	3550	68.9		
Black	843	16.4		
Hispanic	760	14.7		
Confidence in the Scientific Community				
A Great Deal of Confidence	1395	41.7		
Only Some Confidence	1710	51.1		
Hardly Any Confidence	239	7.1		

## CHAPTER FIVE: RESULTS

A series of Oneway analysis of variance tests was conducted on the variables for education, income and age and showcase the mean differences between each category of the typology and its associated variable. In a Oneway ANOVA, the F statistic test whether the treatment effects are all equal, meaning that there is no difference in the means of the typology being compared. The F statistic for education, income, and age demonstrate that there is a significant difference in means for each test. The next three tables display the means for each category of the typology. A least significant difference post hoc test (LSD) was performed for each bivariate analysis. The post hoc results are not shown but are described below.

Table two shows the means for the Oneway ANOVA for educational attainment with the prochoice not religious, prochoice religious, prolife not religious and prolife religious typology. The analysis is statistically significant with an F value of 63.351. The table shows that the mean educational attainment for prochoice not religious is 15.13 with a standard deviation of 2.762, the mean for prochoice and religious is 14.10 with a standard deviation of 2.919, the mean for prolife not religious is 13.15 with a standard deviation of 2.815, and the mean for prolife and religious is 13.10 with a standard deviation of 2.965. The grand mean is 13.73. The post hoc test reveals that all means are significantly different except for respondents who identify as prolife and religious and prolife not religious. In general, Table 2 shows that prochoice respondents have a higher level of education than those identifying as prolife.



Table 2: **One Way ANOVA - EDUCATION**

	N	Mean	Std. Deviation
Prochoice Not Religious	491	15.13	2.762
Prochoice and Religious	582	14.10	2.919
Prolife Not Religious	208	13.15	2.815
Prolife and Religious	1220	13.10	2.965
Totals	2501	13.73	3.010
F=63.351, P<.000			

Note: A least significant difference (LSD) post hoc test was performed on all mean differences. All differences were statistically significant at the .05 level except the mean difference between Prolife Not Religious and Prolife and Religious respondents.

Table three shows a Oneway ANOVA for income and is statistically significant with an F value of 17.628. The table shows that the mean family income for prochoice not religious is 62.498 with a standard deviation of 29.237, the mean for prochoice and religious is 57.916 with a standard deviation of 30.083, the mean for prolife not religious is 50.953 with a standard deviation of 30.943, and the mean for prolife and religious is 51.977 with a standard deviation of 30.307. The grand mean is 55.207. The post hoc tests indicate that all means are significantly different except for respondents who identify as prolife and religious and prolife not religious. In general, Table 3 shows that prochoice respondents have higher incomes than those identifying as prolife.

Table 3: **One Way ANOVA - INCOME**

	N	Mean	Std. Deviation
Prochoice Not Religious	479	62.4975	29.23764
Prochoice and Religious	539	57.9160	30.08299
Prolife Not Religious	202	50.9535	30.94346
Prolife and Religious	1127	51.5773	30.30743
Totals	2347	55.2068	30.41438
F=17.628, P<.000			

Note: A least significant difference (LSD) post hoc test was performed on all mean differences. All differences were statistically significant at the .05 level except the mean difference between Prolife Not Religious and Prolife and Religious respondents.

Table 4 shows the Oneway ANOVA for age and is statistically significant with a F value of 42.973. The table shows that the mean age for prochoice not religious is 44.70 with a standard deviation of 16.600, the mean for prochoice and religious is 52.08 with a standard deviation of 16.772, the mean for prolife not religious is 43.40 with a standard deviation of 16.229, and the mean for prolife and religious is 53.36 with a standard deviation of 17.872. The grand mean is 50.52. The post hoc tests reveal that most mean differences are statistically significant. However, there are mean comparisons that are not significant. First, prochoice not religious and prolife not religious are not significantly different, and second, prochoice religious and prolife religious are not significant.

Table 4: **One Way ANOVA - AGE**

Typology	N	Mean	Std. Deviation
Prochoice Not Religious	490	44.70	16.600
Prochoice and Religious	579	52.08	16.772
Prolife Not Religious	208	43.40	16.229
Prolife and Religious	1213	53.36	17.872
Totals	2490	50.52	17.672
F=42.973, P<.000			

Note: A least significant difference (LSD) post hoc test was performed on all mean differences. Most mean differences are statistically significant at the .05 level. However, the mean difference between Prochoice Not Religious and Prolife Not Religious as well as the mean difference between Prochoice and Religious and Prolife and Religious are not statistically significant.

By reviewing the Pearson Chi-square statistic for the crosstabulation of the typology variable and the variables of sex, marital status, race and confidence in scientific community, each model was statistically significant. In these test, a p-value of less than .05 is considered to be statistically significant. The significant level was .000 for each analysis. A total sample size of 5,136 was reduced for each variable as not all respondents were asked these particular questions or they did not answer the questions. In addition, as described in the methods section, the operationalization of the typology excludes some responses.

Table 5 appears to indicate that more males are more Prochoice Not Religious and Prolife Not Religious than females. While females are more Prochoice Religious and Prolife Religious than males. We perceived this finding by comparing our observed count against the expected count for each typology and whether the respondent was male or female. For both

Not Religious typologies, there were more men who identified than females, while there were more females who identified for either Religious typology.

Table 5: **Cross Tabulation - SEX**

		Typology				Total
		Prochoice Not Religious	Prochoice and Religious	Prolife Not Religious	Prolife and Religious	
Respondents Sex	Male					
	Observed	265	229	116	496	1106
	Expected	217.1	257.4	92.0	539.5	
	Difference	47.9	-28.4	24.0	-43.5	
	Female					
	Observed	226	353	92	724	1395
	Expected	273.9	324.6	116.0	680.5	
	Difference	-47.9	28.4	-24.0	43.5	
		Typology				Total
		Prochoice Not Religious	Prochoice and Religious	Prolife Not Religious	Prolife and Religious	
Totals	Observed	491	582	208	1220	2501
X <sup>2</sup> = 42.063, p<.001						

In table 6, Prochoice Not Religious showed differences with married/widowed respondents having fewer than expected, while never married/divorced respondents having more than expected. The Prolife Religious also showed differences with married/widowed respondents having more than expected, while never married and divorced having fewer than expected. This table shows that compared to the other respondents 1) never married respondents are more likely to be Prochoice Not Religious, 2) never married/divorced/separated respondents are more likely to be Prolife Not Religious, 3)

divorced/separated respondents are more likely to be Prochoice and Religious, and 4) married/widowed respondents are more likely to be Prolife Religious.

**Table 6: Cross Tabulation – MARITAL STATUS**

Marital Status		Typology				Total
		Prochoice Not Religious	Prochoice and Religious	Prolife Not Religious	Prolife and Religious	
Married and Widowed	Observed	209	314	97	788	1408
	Expected	276.6	327.4	116.6	687.4	
	Difference	-67.6	-13.4	-19.6	100.6	
Divorced and Separated	Observed	91	141	44	221	497
	Expected	97.6	115.5	41.2	242.6	
	Difference	-6.6	25.5	2.8	-21.6	
Never Married	Observed	191	126	66	211	594
	Expected	116.7	138.1	49.2	290.0	
	Difference	74.3	-12.1	16.8	-79.0	
Totals	Observed	491	581	207	1220	2499
X <sup>2</sup> = 118.900 p<.001						

In table 7, the main finding is there are fewer Black respondents who are Prolife Not Religious or Prochoice Not Religious than what was expected. Table 7 appears to show that compared to the other respondents 1) White respondents are more likely to be Prochoice Not Religious, 2) Hispanic respondents are more likely to be Prolife Not Religious, 3) Black respondents are more likely to be Prochoice and Religious, and 4) Hispanic or Black respondents are more likely to be Prolife and Religious.

Table 7: **Cross Tabulation – RACE/ETHNICITY**

Race/Ethnicity		Typology				Total
		Prochoice Not Religious	Prochoice and Religious	Prolife Not Religious	Prolife and Religious	
White	Observed	416	354	145	811	1726
	Expected	338.9	401.7	143.5	842.0	
	Difference	77.1	-47.7	1.5	-31.0	
Black	Observed	34	153	24	213	424
	Expected	83.2	98.7	35.3	206.8	
	Difference	-49.2	54.3	-11.3	6.2	
Hispanic	Observed	41	75	39	196	351
	Expected	68.9	81.7	29.2	171.2	
	Difference	-27.9	-6.7	9.8	24.8	
Totals	Observed	491	582	208	1220	2501
X <sup>2</sup> = 105.931 p<.001						

Table 8 appears to indicate that there are more Prochoice Not Religious respondents who have a great deal of confidence in the scientific community than expected, while there are fewer Prolife Religious respondents who have a great deal of confidence in the scientific community than expected with more than expected having only some to hardly any confidence in the scientific community. Table 8 shows that compared to the other respondents 1) respondents who have confidence in the scientific community are more likely to be Prochoice Not Religious, 2) respondents who only have some confidence in the scientific community are more likely to be Prochoice and Religious, 3) respondents who have the least confidence in the scientific community are more likely to be Prolife and Religious, and 4) for the typology of Prolife Not Religious there is no clear pattern in the respondents confidence concerning the scientific community.

**Table 8: Cross Tabulation – CONFIDENCE IN SCIENTIFIC COMMUNITY**

Confidence in the Scientific Community		Typology				Total
		Prochoice Not Religious	Prochoice and Religious	Prolife Not Religious	Prolife and Religious	
Great Deal	Observed	171	120	39	190	520
	Expected	109.0	125.3	44.0	241.6	
	Difference	62	-5.3	-5.0	-51.6	
Only Some	Observed	77	159	55	326	617
	Expected	129.4	148.7	52.3	286.7	
	Difference	-52.4	10.3	2.7	39.3	
Hardly Any	Observed	7	14	9	49	79
	Expected	16.6	19.0	6.7	36.7	
	Difference	-9.6	-5.0	2.3	12.3	
Totals	Observed	255	293	103	565	1216
	Expected					
X^2 = 86.261 p<.001						

## CHAPTER SIX: DISCUSSION

This study concludes that social characteristics of respondents vary across categories of subjective religiosity and attitudes toward legal abortion typology. The study presents a fourfold typology of respondents: (1) pro-choice, but not religious, (2) pro-choice and religious, (3) pro-life, but not religious, and (4) pro-life and religious. The characteristics of these respondents within each category not only confirms what is most frequently reported in the literature, but also represents a unique contribution.

The characteristics of the respondents who fall into the Prochoice Not Religious and Prolife Religious categories confirms what is most frequently reported in the literature. For example, as Jelen and Wilcox (2003) report, the younger generations (i.e., the millennial cohort) are the least likely to affiliate with religious institutions. This research can be confirmed as the data shows of those falling into the Prochoice Not Religious and Prolife Not Religious typology are respondents with lower chronological ages.

When it comes to race and gender, Carter and Dodge (2009) and Lynxwiler and Gay (1994) found gender to be on the strongest predictors of abortion attitudes. The literature shows that initially white males and females appear more liberal in their views toward abortion, with black females becoming more liberal in their attitudes toward abortion in the late 1980s, however this research does not take into account a respondent's religion. However, similar research (Barkan, 2014) analyzed the gender difference in religiosity to help explain the lack of



gender difference in abortion attitudes. Barkan (2014) used religiosity as a suppressor variable for the theoretically expected relationship between gender and support for legal abortion. By using this, Barkan (2014) found that religiosity does suppress a respondent's greater support for legal abortion, specifically amongst women. The data in this research support the literature in that a respondent who falls into the typology of Prolife and Religious is more likely to be female and more likely to be black or Hispanic, independent of each characteristic. In support of the literature, the respondents who are in the typology of being Prochoice and Not Religious are more likely to be male and more likely to be white, both independent of each other.

Literature on marital status and income (Lynxiwler & Gay 1994; Bennett et. al, 1997; Jones & Jerman, 2013; Heller et. al, 2016; Carter et. Al, 2009) shows a link in the way these attributes affect abortion attitudes when coupled with religiosity. Research shows higher incomes and never married and divorced marital statuses are associated with greater support for abortion. The data in this research confirm the literature, respondents in the typology of being Prochoice Not Religious are more likely to be never married and more likely to have higher family incomes, independent of each characteristic. In contrast, respondents who are in the Prolife Religious typology are more likely to be married and more likely to have lower family incomes, independent of each characteristic.

As the literature showed, the frequently reported characteristics on abortion attitudes and religiosity fell into a common typology of Prochoice Not Religious and Prolife Religious. The unique contributions that this research provides is the characteristics of respondents who fall into the Prochoice Religious typology and the Prolife Not Religious typology. What makes the characteristics unique in these "uncommon" typologies is that they have yet to be identified in

previous research. Although each characteristic is independent of each other, the data in this research show that respondents in the Prochoice Religious typology have higher educational attainment, family incomes and chronological ages. Keeping in mind that each characteristic is independent of each other, these respondents are more likely to be female, divorced/separated, black and have only some confidence in the scientific community.

Comparatively, what's interesting to note is the prominent difference in the characteristics of the Prolife Not Religious typology. Although the characteristics are independent of each other, the data in this research show the respondents in this typology have lower education attainments, family income and chronological ages. As well (with each characteristic being independent of each other), the respondents are more likely to be male, never married, Hispanic and show no clear pattern concerning their confidence in the scientific community. What's noteworthy is the literature can help explain the characteristics when these typologies are broken down between Prochoice, Prolife and Religious, Not Religious. For example, in both Not Religious typologies regardless of the Prochoice Prolife stance, the respondents have a lower chronological age, aligning with the findings from Jelen and Wilcox (2004). As well, in both Prochoice typologies regardless of the Religious Not Religious stance, the respondents have higher educational attainments and family incomes.

### Strengths and Limitations:

The data for this research came from the 2014/2016 General Social Survey, which relies on self provided information from the respondents. Data such as Race/Ethnicity are recoded to white, Black and Hispanic for this research. Research on abortion attitudes are not uncommon,

however current up to date resources regarding the social demographics on abortion attitudes (i.e. women who have abortions) and religiosity became limited post 2010. This study adds to the literature, given that this area is currently understudied. As well, because this research utilizes the 2014/2016 GSS, (their most recent dataset) this study will be relevant for future researchers for years to come.

### Future Research and Conclusions:

Future research should continue studying social attitudes towards abortion alongside a person's religiosity. One way in which this could be done is through a qualitative study, now that the data from the research showcases who makes up the four typologies, future researchers may be able to conduct in-depth interview to answer the question of "why". Why may a respondent identify as Pro-Life but not identify as religious or identify as Pro-Choice yet identify as religious. As discussed earlier, arguments against abortion are being illustrated through commonly understood scientific influences rather than theological ones, creating the aspect that there is the potential for people to identify as pro-life and not religious. These individuals could also be categorized as being a part of the "third perspective", ones whose world views incorporate both science and religion, rather than those oriented to one or the other (Noy, O'Brien, 2016). Although this research could not test the third perspective directly, table 8 shows the relationship between typology and the scientific community, as well table 4 showcased interesting results when it came to age. For future research, a multivariate strategy could be run to find out the characteristics of who makes up these respondents, meaning that future research could examine the third perspective with better measures. Future research

could also look into other levels of abortion attitudes, such as in cases of rape or incest, as this research focused on abortion for any reason.

Most importantly to note however, is abortion is continuing to be debated amongst political figures and across political party lines, forty-four years after the supreme court made its historic ruling in Roe V. Wade. The legality of abortion remains uncertain. The uncertainty lies in our Supreme Court justices, appointed by the president, and confirmed by congress who are all elected by the current electorate. Continuing to research abortion attitudes amongst the current electorate will continue to provide insight into the future of the legality of abortion.

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