UNIVERSITY OF OKLAHOMA

GRADUATE COLLEGE

WHO IS THE CULPRIT?
IS IT RELIGION OR PATRIARCHAL TRADITIONALISM THAT JUSTIFIES
PHYSICAL VIOLENCE?

A THESIS
SUBMITTED TO THE GRADUATE FACULTY
in partial fulfillment of the requirements for the
Degree of
MASTER OF ARTS

By
RAFIA JAVAID MALLICK
Norman, Oklahoma
2021

WHO IS THE CULPRIT?

IS IT RELIGION OR PATRIARCHAL TRADITIONALISM THAT JUSTIFIES

PHYSICAL VIOLENCE?

A THESIS APPROVED FOR THE

DEPARTMENT OF SOCIOLOGY

BY THE COMMITTEE CONSISTING OF

Dr. Trina Hope, Chair

Dr. Mitchell Peck

Dr. Meredith Worthen

I dedicate this thesis to my parents Javaid Mallick and Farzana

Javaid, who has been an enormous influence in my life. I would

never have written this thesis had it not been for who I am today,

so my parents and family deserve a special thanks for their

support during this whole process.

Acknowledgments

A warm thanks go to my thesis advisor, Dr. Trina Hope of the Department of Sociology at the University of Oklahoma, who has always been a great inspiration, providing guidance, encouragement, and wisdom throughout the journey through the master's degree.

I would also like to take this opportunity and thankfully acknowledge my committee members. I want to pay gratitude to Dr. Mitchell Peck, who consistently offered his statistical expertise and provided great assistance with data analysis. I also want to thank Dr. Meredith Worthen for her insightful and valuable advice. I truly appreciate their help and encouragement, and I thank you both for serving on my committee.

I would also like to thank Dr. John Carl for his continuous mentorship and motivation throughout this process and my master's program. Thank you to all the faculty, staff, and other graduate students in the Department of Sociology at the University of Oklahoma. I would like to appreciate my closest friends, Melissa Maxey, Andrea Hamilton, Leslie Miller, Jackie Switzer, and Dorothy Na-Yemeh. They are like my family and have always provided motivation and support in the past few years.

Table of Contents

List of Tables

Table of Figures

Abstract

Around the world, violence is considered a substantial social, political, religious, and health issue. To understand violence in a society, it is essential to consider the processes that validate such behaviors. Validation is based on the rationalization process utilized by people and the mechanisms that support it. This study focuses on two such mechanisms: religion and patriarchal traditionalism. Religion is often blamed for inciting violence worldwide and is also confused for supporting social and cultural traditions in constructing perceptions that justify violence. Some religions also support patriarchal traditions, where men are taught to have power and women are told to act as subordinates. This research examines the effects of religiosity, patriarchal traditionalism, and their interactions on the justification of physical violence.

This study uses Wave 6 (2010-2014) World Value Survey (WVS) data from the United States. The main hypotheses of the research are that religiosity lowers the probability of individuals' justification of physical violence, and patriarchal traditionalism has a positive relationship with the justification of physical violence. Ordered logistic regression is used to test the hypotheses. This research fills in the literature gap by looking at the effects of religious belief, religious practice, patriarchal traditionalism, and the interaction of the two on the justification of physical violence.

Results reveal that religiosity does have a negative impact on the justification of physical violence, and patriarchal traditionalism does have a positive role in justifying physical violence. The interactions show that the effects of religious belief and religious practice on justifying

violence are more substantial for those who score higher on the patriarchal traditionalism scale. Therefore, it can be concluded that patriarchal traditionalism moderates the relationship between religiosity and views justifying physical violence.

Introduction

Whether based on political, social, religious, or economic goals, violence is one of the significant social problems in the world today. Violence is the act of willingly harming another person and is often characterized as unjust (Bufacchi 2005). Some studies suggest that individuals may justify violence against others because they are socialized under cultural norms that rationalize such behavior (Anderson & Umberson 2001; Flood & Pease 2009).

Rationalization is at the core of the process for justifying or not justifying violent behaviors. This raises questions about the possible factors that drive this process. One explanation is put forward by Differential Association/Learning Theories, which assert that violent and other deviant/criminal behaviors are learned and not inherited (Sutherland 1939; Akers and Jensen 2003). Individuals learn such behaviors from various social institutions, which expose individuals to definitions favorable or unfavorable to deviant behaviors. According to learning theories, the choices that individuals make between criminal and non-criminal pathways are based on the balance between the definitions of deviant behaviors available to them compared to the law-abiding ones. If the balance of associations results in more definitions favorable to law violation than unfavorable, individuals are more likely to engage in deviant behavior.

Another explanation for violence is mechanisms of social control. Hirschi (1969) argued that both external and internal controls predict criminality. He defined four types of social bonds that tie individuals to society: attachment, commitment, involvement, and belief. The theory proposes that individuals tend to conform to socially accepted behaviors and deviate

1

from criminal behaviors because of the social bonds they have with institutions, including family, peers, religion, and more. Conformity is the glue that puts constraints on individuals and discourages anti-social/deviant behaviors.

These explanations of the rationalization process behind the justification of physical violence are the focus of this research project. Using both control theories and learning theories as broad theoretical frameworks allows us to understand better two critical factors that the existing literature puts forward as potential determinants of justification of physical violence -- religion and patriarchal traditionalism.

On the one hand, religious affiliation, belief, and practice influence levels of social control. Religion may teach individuals values and norms that encourage the development of control. Additionally, being more involved in religious activities and groups may create social bonds that act as constraints and deter deviant behavior.

On the other hand, patriarchal traditionalism provides a cultural value system that individuals learn through observation, communication, modeling, and imitation. These learned definitions, attitudes, and behaviors result from environmental and social factors and may increase justification of physical violence, particularly violence towards women and children, but also towards other men. This brings us to the research questions this study seeks to address:

- Does religiosity predict justification of physical violence?
- Does patriarchal traditionalism predict justification of physical violence?
- How do patriarchal traditionalism and religiosity interact to justify physical violence?

Theoretical Framework

Globally, violence is a significant social, political, and health problem (Ishida et al. 2010; Krantz et al. 2005). It has adverse consequences on the physical and mental health of its victims (Ford-Gilboe et al. 2009; Stein and Kennedy 2001), and can result in social issues such as homicides (McLaughlin, O'Carroll, and O'Connor 2012), suicides (Devries et al. 2011; Gold et al. 2012), and other social well-being problems (Beccaria et al. 2013).

The literature defines violence in two ways: minimalistic conception of violence (MCV) and comprehensive conception of violence (CCV) (Bufacchi 2005). The former is defined as an intentional force or harm caused to another person, while the latter violates rights. Previous literature defines violence as the use of physical force that damages, injures, dishonors, violates, or destroys people or things (Riga 1969). For this research, violence is also defined as the use of physical force with the intent of harming others.

The relationship between the perpetrator and victim of violence is not that straightforward, as the community also plays a significant role as a bystander. For example, family members or outsiders may witness violence within the household, or someone being bullied in public. Their reaction and response have consequences for the strength and breadth of violence in society. The response of others is an essential factor in whether the violence will be stopped at that time and deterred from happening again. Therefore, while often ignored, the community is an essential element in the occurrence of violence. If the community justifies the violent act, it is more likely to reoccur, but if it is condemned, then the probability of violence is more likely to be reduced (Waltermaurer 2012).

This justification achieved through the generalized attitudes of society is part of the rationalization process. This process is supported by the learned values and norms that result in the analysis and rationalization of the actions of the perpetrator and the victim. Contextualizing the process of justification of violence through criminological literature, two explanations come to the front: control theory and differential association/learning theory. For this research, the effects of religiosity will be viewed through the lens of control theories. In contrast, the effects of patriarchal traditionalism will be viewed through differential association/learning theories. Figure 1 in Appendix B presents a simple model outlining the relationships between the variables of interest. The discussion of the theoretical approach begins with the literature exploring the relationship between religiosity and deviance, delving more deeply into a control theory explanation for such findings.

Religion, Deviant Behaviors, Violence, and Crime

Religion is a significant factor in the lives of individuals and can have positive or negative impacts on lives and life decisions (Krauss et al. 2012, Mason et al. 2007, Puffer et al. 2012, Robbins & Francis 2010, Smith & Denton 2005). Research has suggested that religious activities (e.g., praying, volunteering at church) exert socially positive effects, constraining anti-social/deviant behaviors. Research has found that engagement in religious services, more frequent religious attendance, and importance of religion in life result in lower levels of deviance, sexual debut at a later age, reduction in risky behaviors (like, drinking, smoking, drug abuse), better health outcomes, improved educational achievement and attainment, and higher involvement in civic activities (Cotton et al. 2006, King & Boyatzis 2015, Pearce & Denton 2011, Smith & Denton 2005, Smith & Snell 2009, Yonker et al. 2012).

Smith (2003) defined a comprehensive theoretical framework explaining how religion shapes outcomes for adolescents. He identified three key elements of religious influence: moral orders, learned competencies, and social and organizational ties. Firstly, he argued that religion provides a value and normative system that individuals internalize, and this moral order regulates the behaviors through self- and social control. The moral directives and beliefs provided by religion construct a context where behaviors are shaped according to gratifying divine authority (McCullough & Willoughby 2009; Smith 2003; King & Boyatzis 2015). Religious beliefs also define purity and virtue, which guides individuals' behaviors (Pearce, Uecker, and Denton 2019). Hirschi and Stark (1969) explained that religion provides normative guidelines and role models to adolescents to act as deterring factors and generate social control mechanisms.

Smith (2003) argues that religion offers skills and knowledge to adolescents that help them improve their well-being and life outcomes. These may be associated with involvement in religious organizations, like talking in front of congregations (Dill 2017) and going on missions (Beyerlein et al. 2011, Trinitapoli & Vaisey 2009). Religion can also provide a support system and coping strategies to deal with stressful and emotional situations (Smith 2003; King & Boyatzis 2015). Lastly, religion's organizational and social ties offer social capital such as network building, resources, and opportunities (Smith 2003; King and Furrow 2004). These social ties provide emotional and informational support and act as mechanisms of social control and supervision (Smith 2003; King & Boyatzis 2015). Clearly, the past literature on religiosity and deviance suggests a pro-social effect, one that suggests causal mechanism relating to social control.

Religiosity and Justification of Physical Violence Through the Lens of Control Theories

Control theory is embedded in the socialization discourse, which proposes that the process of socialization teaches individuals in a society to act in ways that are accepted by society. These norms and rules, if followed by the individuals, control their behaviors. Thus, control theories emphasize the quality of the socialization process that ingrains these controls in individuals.

Travis Hirschi had the most influence on the development of control theories. His research was built on Durkheim's (1895) explanation of the role of social integration and regulation in society. Durkheim argued that deviance is inevitable in society, and society without it is abnormal. He believed that deviance is an essential and natural phenomenon, as it helps maintain stability and aids in defining the moral boundaries within societies. These boundaries are upheld by controlling human behaviors through simple disapproval or punishment.

For Durkheim, social integration and social regulation were essential to maintaining social order and control in society. He defined social integration as an attachment to society. He claims that when individuals are connected to society, they tend to follow social expectations and ignore their purely self-interested desires. However, when there is a lack of integration, the individual does what is in his/her own best interest (Durkheim 1895). Along with social integration, individual behavior is also controlled through external forces like social regulations. According to Durkheim, norms and rules established and followed regulate societies. These social order regulations put a limit on the undesirable behaviors of individuals. He explained

that societies with ineffective norms experience chaos or the state of anomie and that deviant behaviors were more likely to be prevalent in anomic societies (Durkheim 1897).

Durkheim's work (1895; 1951) on the relationship between conformity and religiosity gained much scholarly attention (Hirschi & Stark 1969; Lombroso 1911; Pearce & Haynie 2004; Weber 1905). Following in the footsteps of Durkheim, Travis Hirschi (1969) developed a contemporary social control theory model. His theory focuses on explaining why individuals do not commit crime. He explained that weakened or broken social bonds lower the levels of constraints on individuals, which increases the risk of deviant behavior. These bonds can include relationships with family, peers, school, religion, and many others. He claimed that social bonds between individuals and broader society are of four types: attachment, involvement, commitment, and belief. These elements of the bond described by Hirschi can easily be applied to the potential restraining effects of religiosity.

According to Hirschi (1969), attachment is an emotional form of the bond which results in greater social integration. Religious affiliation can result in greater attachment to conventional others, including parents, religious groups (e.g., congregations), and even peers. Individuals may feel connected and internalize the shared norms and values supplied by religion and its teachings. This attachment may produce feelings of shame and guilt, which are internal controls influenced by external environments (Nye 1958) after a deviant act. These feelings place one's conscience in the bond of attachment, where the individual will refrain from deviant behavior because of fear of losing emotional ties to others. Conversely, if attachment bonds are weak or broken, individuals may feel isolated and alienated, resulting in aggressive and deviant behaviors (Hirschi 1969).

The second form of the social bond discussed by Hirschi (1969) was involvement. He expressed that "idle hands are the devil's workshop" (Hirschi 1969: 187). He asserted that along with the commitment to high aspirations, it is important that individuals are involved in conventional activities, so they have less time on their hands to be involved in deviant behavior. Indulging in deviant behavior (like violence) does not take much time, and a minor deviant incident is enough to label an individual a delinquent or deviant. Therefore, Hirschi believed that it is essential for adolescents to participate in conventional activities (Hirschi 1969). Thus, being involved in conventional activities like frequently going to church or being involved in a religious community could result in fewer opportunities for engaging in violent behavior, along with decreased chances of justifying negative/anti-social behaviors.

Hirschi described the bond of commitment as a rational one, which is regular engagement in the traditional activities and setting goals for oneself. The goal determination and the desire to achieve it limit deviant behavior and deviate from the expected path to achievement. The rationale behind the bond of commitment is that the individual will conform to the norms of society due to the fear of consequences (Hirschi 1969). Religion and involvement in a religious community may act as deterring factors. The more someone is committed to religious beliefs and practices, the more they lose by engaging in deviance, including violence (and its justification).

Lastly, Hirschi identified belief as a form of the social bond. He defined belief as acceptance of the validity of the rules of society. He clarified that individuals vary in their acceptance and compliance with the laws of society – i.e., some believe that the law applies to them and some do not. His focus is not on the morality of the norms but on the general

existence and confidence in the rules. Religion provides these moral explanations and the distinction between right and wrong. Hirschi explains that individuals who conform to the norms of society are less likely to engage in deviant behavior than their counterparts (Hirschi 1969). Nevertheless, there will be individuals who believe in the rules and laws of the society but use neutralization techniques (Sykes and Matza 1957) to justify violating them.

Sykes and Matza (1957) emphasized that individuals from all social classes are bound to some extent to follow the dominant social value system executed by social institutions of society, but that neutralization techniques help them justify their deviant behaviors and free them from social value commitments. They identified five techniques, including denial of responsibility, denial of injury, denial of the victim, condemnation of the condemners, and appeal to higher loyalties (Sykes and Matza 1957). These techniques validate deviant behavior, allowing the individual to deny responsibility for the act altogether. They believe that the act was in response to a previous one, assume that the act was not harmful, justify himself/herself as a victim, and believe that the act was not for him/her, but for someone else, carried out for loyalty. The techniques of neutralization provide individuals with tools to rationalize their own or others' deviant behaviors (Sykes and Matza 1957).

Contextualizing religious teachings and practice within the control theory framework leads to the research question concerning the role of religion in justifying violence. Based on the literature discussed above, religion is one of the organized processes that shape daily routines and aids in reducing overall deviant behaviors and controlling behavior by morally sanctioning it (Schreck et al. 2007). It aids in deterring such behaviors and develops explanations for not justifying such behaviors.

Past research identifies religiosity in two different forms: belief (Saroglou 2011) and practice (Benda and Toombs 2000; Pettersson 1991). It indicates that religious practice, often defined by religious attendance, prayer frequency, and other religious group involvements, is inversely related to both violent crime and support/justification of physical violence (Benda and Toombs 2000; Pettersson 1991; Muluk, Sumaktoyo, and Ruth 2013). Other research also indicated a positive relationship between service attendance and crime rate at the aggregate level (Myers 2012). It was also noted that the frequency of prayer might have a stronger negative relationship to violence and hostility than the aggregate effect of attendance, prayer, and reading of holy scripture (Wright and Young 2017). Because this study is viewing religiosity through the lens of control theory, it hypothesizes that:

Hypothesis 1: Higher religious practice predicts lower scores on the

justification of physical violence

Another dimension of religiosity is the importance and belief in religion (Saroglou 2011). Belief in religion is strongly associated with the importance of religion in one's life, which then impacts the application and utilization of religious teaching in everyday life (Worthington 1988; Worthington Jr. et al. 2003). This means that someone who considers religion as important to them would be more likely to conform to the teachings, and their actions will be altered based on them. The relationship between religious belief and justification of violence is not well studied. The literature suggests an inverse relationship between religious beliefs and aggressive behaviors (Schumann et al., 2014). Belief in supernatural powers and the concept of life after death creates positive and negative sanctions that regulate the moral behaviors of individuals

(Johnson 2011; Johnson & Krüger 2004). To further assess the relationship between religious belief and justification of violence, the study hypothesizes:

Hypothesis 2: Stronger religious beliefs predict lower scores on the justification of physical violence

Religion is not always viewed as a protective factor against violence, however. It is also considered a culprit that could potentially incite violence (Armstrong 2014; Dawkins 2003; Harris, 2005; Helminiak 1997; Munson, 2005; Thomson, 2009; Wellman & Tokuno, 2004; Cavanaugh 2007). Researchers suggest that association with conservative religious denominations can produce the opposite effects – leading to higher rates of deviant and violent behaviors, lower educational attainment (Beyerlein 2004, Darnell & Sherkat 1997, Fitzgerald & Glass 2012, Sherkat & Darnell 1999, Uecker & Pearce 2017), rise in risky behaviors like unwanted pregnancies, and sexually transmitted diseases (Pearce & Davis 2016, Regnerus 2007).

Ginges, Hansen, and Norenzayan (2009) found that higher frequency of religious attendance predicted a greater likelihood of suicide attacks among Palestinian Muslims, while the increased frequency of prayer did not have the same effect. Religion and the beliefs it imparts tend to reinforce patriarchal values (Bartkowski 1997), as some denominations may endorse the idea that decision making power should be left to men, and teach women to be obedient and submissive (Levitt and Ware 2006). Religious beliefs can justify violence and legitimize intimate partner violence perpetrated by men (Renzetti et al. 2017). This relationship between religion and deviant behavior varies in terms of offense type, religious denomination, and context of research sample (level of the salience of religion) (Benda 1995; Stark &

Bainbridge 1996). The constructivist approach argues that religion might cause violence, but the relationship is ambiguous (Hasenclever and Rittberger 2000). Clearly there is the possibility that the effects of religion may depend on what specific values the religion endorses. If some religions promote traditional patriarchal values, they may be associated with a greater likelihood of endorsing violence.

Patriarchy and Violence

Patriarchy is an essential tool for analysis when discussing domestic or even public violence (Hunnicutt 2009; Walby 1989). In patriarchal societies, the gender order shows that men tend to dominate women with respect to power, wealth, and social position, but not all women face the same oppression and not all men enjoy the same domination over women (Risman & Davis, 2013).

Masculinity is defined in comparison to femininity and is associated with many characteristics a man should hold. David and Brannon (1976) defined the rules of establishing masculinity. The four themes defined in their book *The Forty-nine percent majority: The male sex role* are: "No Sissy Stuff," "The Big Wheel," "The Sturdy Oak," and "Give 'Em Hell!". These themes identified notions that a man needs to possess to be considered masculine. Firstly, a man associating with anything remotely feminine is prohibited. Secondly, masculinity is measured by the success, power, and admiration of others, achieved through wealth, fame, and status in society. Another aspect of masculinity is linked with rationality, toughness, and self-reliance. A man is expected to show strength but no emotions and weakness. Lastly, men must show aggression, violence, and daring, even if fear and reason suggest otherwise.

Connell's (1995) concept of normative masculinity further explains that these characteristics are socially expected of men, and they strive to live up to them. He also argues that the idea of being male is not something natural but socially constructed. Research acknowledges four forms of masculinity: hegemonic, complicit, marginalized, and subordinate masculinities (Connell, 1995; Evans et al., 2011; Tseole and Vermaak 2020; Connell and Messerschmidt 2005). Hegemonic masculinity is the dominant form of masculinity that encompasses qualities like heterosexuality, whiteness, toughness, and emotional suppression (Connell, 1995; Evans et al., 2011). On the other hand, complicated masculinity is a passive form of masculinity where men lack some of the qualities of hegemonic masculinity and do not actively display or challenge it (Connell, 1995; Evans et al., 2011; Tseole and Vermaak 2020). Marginalized masculinity is a subculture of hegemonic masculinity, where men often lack physical strength but still display dominance (e.g., disabled men) (Connell, 1995). Lastly, subordinate masculinity is the total opposite of hegemonic masculinity, where men display feminine characteristics, such as physical weakness and emotional expression (Connell, 1995). One of the important works by Pascoe (2011) explains the use of the word "fag", which is not used to express homosexuality, but the opposite of hegemonic masculinity. She utilizes the concept of compulsive heterosexuality to explain that boys tend to use aggression and violence to authenticate their masculinity. She also points out that masculinity and sexuality is based on two important components of male dominance and female subordination.

In patriarchal societies, men are culturally expected to utilize alternative means of masculinity, including violence. Messerschmidt (1993) explained how different groups of males tend to achieve masculinity through involvement in different types of crimes. Men who

conform with the social order display accommodating masculinity, but those who work against it demonstrate oppositional masculinity. Young middle-class men who are enrolled in schools engage in masculinity differently, as they serve subservient to the teachers at school. However, outside school, they rebel against social order through involvement in minor theft and vandalism. While working-class men, who do not achieve success in academics, lean towards more aggressive behavior and rebel and oppose social order (Messerschmidt 1993). Masculinity is easier to achieve but is highly fragile. The threats and fear of being compared to women and acquiring any feminine characteristics would degrade their manhood (Kimmel 1994).

Willer et al. (2013) argue that threats to masculinity often result in more extreme displays of masculinity. Adler's notion (1910) of "masculine protest" (a response to feelings of insecurity or inferiority) and Freud's notion (1898) of "reaction formation" (the tendency of individuals to react in opposite often extreme, when suggested to possess socially unacceptable traits) are somewhat embedded into the construction of masculinity in societies. This threat to masculinity could be due to gender performance accountability. Thus, men tend to justify violence in such situations (Willer et al. 2013; Kimmel 1994). Thus, the study hypothesizes:

Hypothesis 3: Strong patriarchal traditionalism predicts higher justification of physical violence

Patriarchal Traditionalism and Justification of Physical Violence Through the Lens of Learning Theories

The theoretical framework of patriarchy within the social learning theory is used as a theoretical framework in this study to explain the interrelationship between learned violent behavior, its justification, and the power dynamics that mediate the relation. Social learning

theories suggest that criminal or violent behavior is learned in interaction within primary

groups, such as family members, peers, and other members connected through social activities.

The main argument of learning theory is that the pathway an individual might take is based on

the balance between the criminal and conforming definitions learned.

Within the learning theory framework, Sutherland's (1939) Differential Association

Theory suggests that if individuals are exposed to an excess of definitions favorable to law

violation, they would be more likely to deviate from normative conduct and adopt

violent/deviant behavior. The availability of favorable definitions for deviant behavior results in

a higher probability of justifying such acts. Such interactions produce shared understanding,

norms, values, and beliefs based on which, in most cases, individuals act contrary to the values

and expectations of the larger society.

Sutherland's theory was further expanded by Akers and Jensen (2003), who focused on

differential associations with others that expose individuals to definitions concerning the

appropriateness and inappropriateness of law violation. Thus, the four elements of these

exposures are priority, duration, frequency, and intensity (Akers and Jensen 2003). Higher

priority relationships of longer duration, frequency, and intensity are more likely to influence

norms/definitions that may justify deviant/criminal behaviors.

Viewing the potential influences of patriarchal attitudes through the lens of differential

association/learning theories enables us to consider how religiosity and patriarchy might

intersect. On the one hand, religion generally teaches peace-making and forbids harming others

(Cejka and Bamat, 2003; Coward and Smith, 2004; Schlack, 2009). On the other hand, some

may rely on religious definitions to justify their violent behavior, especially intimate partner

violence (Douki et al. 2003; Koch and Ramirez 2010; Nason-Clark 2004). This leads to how religiosity and patriarchal views may interact in their effects on the justification of violence, especially violence towards women and children, but also violence against other men to assert their masculinity (Connell and Messerschmidt 2005; Khan, 2006). If one adheres to a religion that promotes patriarchal values, does that change the restraining effects of religion? To understand these potential interacting effects, this study poses the following question: will individuals highly religious and highly patriarchal be *more* likely to justify physical violence? Or does religiosity help "tame" the potentially anti-social effects of patriarchal traditionalism?

Hypothesis 4(a): Highly religious and highly patriarchal individuals are more likely to justify physical violence

Hypothesis 4(b): Religious belief and religious practice tend to tame the anti-social effects of patriarchal traditionalism on justification of physical violence

Methods

Data and Sample

This study uses data from cross-national scientific samples of individuals undertaken in the World Value Survey (WVS). WVS is a representative survey collecting data on human beliefs and values, conducted in more than 120 countries (including poor and rich), and covers almost 94 percent of the world's population. This project was started in 1981 by Professor Ronald Inglehart from the University of Michigan (USA) and his team. This survey is conducted every five years, and since its inception, seven waves have been administered.

The World Value Survey project aims to analyze the variation in the values, beliefs, and norms across nations. National teams of social science researchers come together to conduct and implement the WVS in their respective countries. The data from participating countries are reported back to the headquarters in Stockholm, Sweden, and made publicly available two years later.

This study uses the data from Wave 6 (2010-2014) and only utilizes the United States of America sample. The survey has 384 variables. Table 1 lists all the variables that are used in this study. The sample for the USA data originally consisted of 2,232 participants. The category for "no answer" for the three items used to create the justification of violence scale (dependent variable) was coded as missing data. Thus 72 cases (0.31%) were dropped.

Furthermore, the independent and control variables had 216 missing values for the cases (10% of data) dropped. The final sample total was 1,949 participants. The descriptive statistics for the independent variable can be found in Table 2.

Dependent Variable

Justification of Physical Violence

The dependent variable is the justification of physical violence[1]. This variable was based on three items (see Table 1), asking respondents if they justify wife-beating, parents beating their children, and violence against others. Each item was measured on a scale of 1 through 10, where 1 is 'not justified' and 10 is 'always justified'. Combining these items would result in 3 as the lowest value, which means that the respondent answered all items as not justified. The

---

[1] World Value Survey (WVS) collects data on values people hold about various issues and not specifically their behavior. Although, justifying certain behaviors could result in individuals practicing it themselves as they perceive them as permissible and tolerant (Fletcher 2000).

highest value is 30, which means the respondent answered the three items as always justified.

A principal component analysis was run to identify the number of factors using eigenvalues and analyze the loadings for each item on the factors. One factor was identified using the KI method (Ledesma and Valero-Mora 2007) with an eigenvalue of 2.283, and all three items had a factor value of more than 0.80. The scale range is 3-30, with a Cronbach alpha of 0.830. The distribution of the scale is highly positively skewed (see Figure 1).

Independent Variables

Religiosity

The data contain nine items measuring religiosity and are listed in Table 1. The items were measured using different ordinal categories; thus, all the items were standardized before creating the scales. It is an important step, as all the items used were on different scales and cannot be compared or computed together. In this scaling technique, the values are centered around the mean with a unit standard deviation. The mean of the distribution becomes zero, and the values are distributed on unit standard deviation. Thus, all the items used to form a scale will be on the same unit scale. The items measure traditional beliefs and practices concerning the importance of religion in life (independent of religious attendance), whether someone considers her/himself religious, importance of God in life, belief in God and hell, whether religion is given preference over science, membership in religious organizations, religious service attendance, and frequency of praying.

A principal component factor analysis was run on these items to identify the number of factors using eigenvalues and analyze loadings for each item. Two factors were identified using the KI method (Ledesma and Valero-Mora 2007) with eigenvalues of 5.476 and 1.022. Based on

the literature (Potvin and Sloane 1985) and factor loadings, the two measures were defined as religious belief and religious practice. The items selected for each scale had factor loadings of 0.50 or greater, and the alpha coefficients for each scale were well within the acceptable range (Nunnally and Bernstein 1994).

The first scale, labeled "religious belief," measures traditional beliefs concerning the importance of religion in life (independent of religious attendance), whether someone considers themselves religious, importance of God in life, belief in God and hell, and whether religion is given preference over science. The scale is constructed using standardized items; therefore, its range is -12.75044 to 5.041794, with a Cronbach alpha of 0.889. The histogram of the sample distribution for religious belief shows slight negative skewness (see Figure 2).

The second scale, labeled "religious practice," consists of three items about membership in religious organizations, religious service attendance, and prayer frequency. The scale was created using standardized items; therefore, it varies between -4.108 and 3.573, with a Cronbach alpha of 0.862. The histogram of the sample for religious practice shows a u-shaped distribution (see Figure 3). For both scales, negative values indicate low religiosity, and positive values indicate high religiosity.

Patriarchal Traditionalism

Patriarchal Traditionalism is another independent variable in this study. This variable was created from three indicators (see Table 1). Respondents were asked if they agreed or disagreed with patriarchal values such as, men make better political leaders than women; a university education is more important for boys than girls; and lastly, men make better business executives than women. Each item was measured on an ordinal scale of 1 through 4, where 1 is

'Strongly Agree' and 4 is 'Strongly Disagree.' The items were reverse coded so that higher scores reflect traditional patriarchal views. A factor analysis was run on the three items to generate a scale. One factor was identified using the KI method (Ledesma and Valero-Mora 2007) with an eigenvalue of 2.216, and all three items had a factor value of more than 0.80. The scale ranges from 0 and 9 and has a Cronbach alpha of 0.821. The histogram of the sample distribution for patriarchal traditionalism shows slight positive skewness (see Figure 4).

Control Variables

Age

O'Connor et al. (2001) argue that the relationship between aggression and age is understudied. Previous research suggests a strong curvilinear relationship between crime and age. The relationship is bell-shaped, which means that offending is prevalent in late childhood, peaks in the late teens, and starts to decline in the 20s (Hirschi and Gottfredson 1983; Stolzenberg and D'Alessio 2008). Prior studies show that crime and violence tend to decrease with age (Archer 2000). Beirne (1987) discusses Quetelet's theory, which stresses the decline in physical strength with age, Wilson and Moore's (1979) emphasis on sexual competition acting as a way of displaying aggression other than physical violence. The research also highlights that younger children lack verbal expression, thus rely on physical violence to express aggression (Björkqvist, Lagerspetz, and Kaukiainen 1992; Toldos 2005). Thus, with the increased age, individuals are less likely to engage in physical violence (Toldos 2005). Past research also suggests that adolescents are more likely to accept physical violence, and with age, the justification of physical aggression increases (Fares et al. 2011). Therefore, age was added as a control variable to this study. Age is a continuous variable ranging from 18 to 93, with a mean

of 49.15 and a standard deviation of 16.89. Age was included as a variable of interest because it may relate to the justification of physical violence. As the older someone might get, they might be more mature and less likely to justify violence.

Sex

Previous literature suggests more aggressive behaviors being common among men than women, although controlling for the magnitude and direction of sex differences and the type of aggression being studied (Bettencourt and Miller 1996; Knight, Fabes, and Higgins 1996). Men are also reported to be more instrumental (imposing control) in expressing their aggression, compared to women who are more expressive (losing self-control) in displaying aggression (Archer and Parker 1994; Campbell and Muncer 1987). Sex differences exist between justification levels, as males tend to justify violence more than females in various situations and aggressive acts (Harris 1991; Ramirez, Andreu, and Fujihara 2001).

The studies have indicated that males are more likely to report physical violence than females, who prefer aggressive verbal expressions (Ramirez 1991; Ramirez 1993). Males are also reported to justify gender violence as a response and display of power (Toldos 2005). The research also points out that girls tend to express social and verbal aggression rather than physical forms of violence. Thus, sex was added as a control to the model to study the effects of religiosity and patriarchal traditionalism on the justification of physical violence (Fares et al. 2011). Sex is a dichotomous variable, with male and female response categories; approximately 49 percent of the respondents are male.

21

Educational Level, Employment Status, and Income

Past research has considered the effects of education level, employment status, and income level on the justification of domestic violence (Serrano-Montilla et al. 2020). Lack of education among victims and offenders is highly correlated with physical violence (Rickert et al. 2002). Additionally, the difference in occupational status and income between victims and offenders increases the likelihood of physical violence in families. The employed and high-earning income Individuals, especially women, are more likely to report violence to the police (Rickert et al. 2002; Serrano-Montilla et al. 2020). Other researchers have also controlled for education level, income, and socioeconomic status when studying the relationship between religiosity and justification of intimate partner violence (Jung and Olson 2017).

Educational level has seven possible response categories: No Formal Education, Incomplete primary school, Complete primary school, Incomplete secondary school: technical/vocational type, Complete secondary: technical/vocational type, Incomplete secondary school: university-preparatory type, Complete secondary: university-preparatory type, Some university-level education, without a degree, and University-level education, with the degree. The educational level variable was also dichotomized to Less than college and Some college or more. Anyone with some university-level education, without a degree, and university-level education, with a degree, were coded as some college or more, and the remaining categories were coded as Less than college. Approximately 60 percent of the sample respondents have some college or more.

Employment status has eight possible response categories: Full-time employee (30 hours a week or more), Part-time employee (less than 30 hours a week), Self-employed,

Retired/pensioned, Housewife not otherwise employed, Student, Unemployed, and Other. This variable was dichotomized as well, with full-time, part-time, and self-employed individuals coded as employed and the remaining categories coded as not employed. Approximately 57 percent of the respondents in the sample are employed.

The World Value Survey provides income data in 10 groups, representing the income decile system specific to the country. Although this system has often been criticized for misrepresenting country-level income distribution, the analysis is constrained by the data. Respondents who earn above-median are classified above the fifth decile. It is a normally distributed variable with a mean of 5.187 and a standard deviation of 1.879. The education level, employment status, and level of income influence may impact violent behaviors and their justification.

Marital Status

Opinions towards domestic violence may vary for formerly and currently married women, as they are more likely to experience such violence (Yount and Li 2009). Past research suggests that married individuals are more likely to justify violence, primarily because of disobedience (Serrano-Montilla et al. 2020). Therefore, marriage was used as a control variable in this study. Marital status has six possible outcomes in the sample: Married, living together as married, Divorced, Separated, Widowed, and Single. This variable was dichotomized to Currently married and Currently not married, where married and living together as married was combined as currently married. The rest were coded as not married. Approximately 67 percent of the participants in the sample are currently married.

Analytical Strategy

In this study, the variable of interest (justification of violence) is ordinal. Because the scale measuring justification of violence was computed using ordinal items, the resulting scale is ordinal. The justification of violence can be ordered from always unjustified to always justified, but the exact distance between categories is unknown. The suitable model for dealing with such ordinal variables is an ordered logit (OLOGIT) model (Gujarati 2003, Greene 2000, Long 1997, Clogg and Shihadeh 1994, McCullagh and Nelder 1989). Approaches such as ordinary least square regression (OLS) and linear estimation are not appropriate for ordinal dependent variables (Long 1997). Thus, this study uses ordered logistic regression (OLOGIT) modeling to estimate the effects of the primary independent variables (religious belief, religious practice, and patriarchal traditionalism), along with other control variables, on the justification of violence.

Before running the ordered logistic regression to test the effects of religious belief, religious practice, and patriarchal traditionalism on the justification of physical violence, the assumptions for the model were tested. The OLOGIT regression makes four key assumptions[2] about the underlying data. Firstly, the dependent variable is ordinal. Secondly, the independent variables are continuous or categorical. These two are satisfied as the justification of violence (dependent variable) is an ordinal scale, and the explanatory variables also satisfy the second assumption.

---

[2] https://statistics.laerd.com/spss-tutorials/ordinal-regression-using-spss-statistics.php

The third assumption is that there is no multicollinearity among independent variables. It is important to note that the correlation between non-continuous variables cannot be calculated, therefore inter-correlation is being used as a rough estimation for testing the collinearity assumption. To account for the possibility that multiple independent variables are correlated, the variance inflation factors using collinearity statistics were examined. Table 3 shows collinearity statistics for religious belief, religious practice, patriarchal traditionalism, and other control variables. None of the VIF values are over 3, implying no collinearity problem for these variables. Additionally, the tolerance values are all more than 0.1, which would also indicate no collinearity problem.

The fourth assumption is that the odds are proportional, which means each independent variable is consistent across different thresholds (splits between each pair of categories of the dependent variable), which means the variables would affect the odds of the outcome variable regardless of the threshold. To test this assumption, the likelihood-ratio test of proportionality of odds across response categories. The test results are significant (p-value = 0.00), with a chi-square (216) value of 379.75. The Brant test results are shown in Table 4. The statistically significant test means that the hypothesis of proportional odds is rejected, and the assumption is not met. The proportional odds assumption is debated, and research suggests that violation of this assumption is not fatal and is rarely ever met. This assumption may be rejected because of the large number of independent variables in the model (Brant 1990), large sample size (Allison 1999; Clogg and Shihadeh 1994), or there is a continuous independent variable in the model (Allison 1999). Thus, even with the violation of the proportional odds assumption, the ordered logistic regression is the best model to run.

Results

Table 5 shows the estimation of the parameters for OLOGIT models analyzing the effects of religious practice, religious belief, patriarchal traditionalism, and demographic control variables on the justification of physical violence, presented in odds ratios.

Model 1 in Table 5 examines the effects of religious belief and the demographic control variables on the justification of physical violence. It shows that higher scores on the religious belief scale reduce the odds of justifying physical violence (OR=0.979, p-value<0.05), supporting Hypothesis 2. Among the demographic variables, age, sex, and income also show significant relationships with the justification of physical violence. An increase in age results in lower justification of physical violence and males tend to justify violence more than women. With an increase in income level, individuals are more likely to justify physical violence.

Model 2 in Table 5 looks at the effects of religious practice and the demographic control variables on the justification of physical violence. Higher scores on the religious practice scale reduce the odds of justifying physical violence (OR=0.949, $p < 0.01$), supporting Hypothesis 1. Age, sex, and income also show a significant relationship with the justification of physical violence.

Model 3 in Table 5 considers the simultaneous effects of religious belief and religious practice on the justification of physical violence. Adding both religiosity variables into the model resulted in non-significant results for religious belief, while religious practice maintained significance, decreasing the justification of physical violence (OR=0.948, p<0.05). The

demographic variables remain similar in strength, direction, and significance as previous

models.

Model 4 in Table 5 examines the effects of religious practice, religious belief, and

patriarchal traditionalism on the justification of physical violence while controlling for

demographic variables. The relationship between religious belief and justification of physical

violence is not significant, similar to Model 3. The significance of the relationship between

religious practice and justification of violence is lower than the previous model but still exerts a

significant negative effect (OR=0.946, p-value<0.05). The odds of justifying physical violence

increases (OR = 1.210, p-value<0.001) for those scoring higher on the patriarchal traditionalism

scale. Age, sex, and income still have a significant relationship with the justification of physical

violence.

Model 5 in Table 5 assesses the effects of religious belief, patriarchal traditionalism, and

the interaction term[3] between the two independent variables, along with the demographic

variables. It is interesting that after adding the interaction between religious belief and

patriarchal traditionalism in the model, the main effects of religious belief lost significance,

while patriarchal traditionalism is still significant. The interaction term is significant, suggesting

---

[3] The Editor's comments (Mustillo, Lizardo, and McVeigh 2018) published in the
American Sociological Review (ASR) few years ago suggested, "The case is closed: don't use the
coefficient of the interaction term to draw conclusions about statistical interaction in
categorical models such as logit, probit, Poisson, and so on." They also suggested ways of
studying interactions in the same paper. One of the recommendations was to use predicted
probabilities, instead of odds ratios. Following the suggestion, the main and interaction effects
are examined in the next three models but are explained by graphical representation using
predicted probabilities.

that the effects of religious belief on the justification of physical violence are moderated by patriarchal traditionalism.

Similarly, Model 6 in Table 5 studies the effects of religious practice, patriarchal traditionalism, and the interaction term between the two independent variables, along with the demographic variables. In this model, adding the interaction effects resulted in the loss of significance for the religious practice main effects. Patriarchal traditionalism's main effects are still significant. The interaction term for religious practice and patriarchal traditionalism is significant (p-value<0.05), suggesting a moderating effect of patriarchal traditionalism on the relationship between religious practice and justification of physical violence. Thus, models 5 and 6 suggests that we can accept part of hypothesis 4(b), that patriarchal traditionalism does moderate the relationship between religious practice and justification of physical violence.

Model 7 in Table 5 considers the main effects of religious belief, religious practice, and patriarchal traditionalism, and the interaction effects of the independent variables, along with demographic controls on the justification of physical violence. The main effects of religious belief, religious practice, and the two interactions are all not significant in the model. Patriarchal traditionalism has a significant inverse effect on the justification of physical violence (OR=1.206, p-value<0.001). This suggests that hypothesis 4 is inconclusive and further research is needed.

The Akaike Information Criterion (AIC) and Bayesian Information Criterion (BIC) were also calculated to identify the best model. Both criteria have their benefits and drawbacks. AIC selects models based on frequentist-based inference (Akaike 1974) and puts more stress on model performance, thus selects complex models. BIC selects models based on the maximum

likelihood estimation framework (Stone 1979) and penalizes the complex models more. Lower

AIC and BIC show a better fit model. Comparing AIC and BIC values for the models in Table 5,

Model 6 has the lowest AIC (6170.812) and BIC (6360.364) values; this is the best-fitted model.

To enhance understanding of the interaction effects on the dependent variable,

additional analyses were run with a dichotomized justification of physical violence measure.

The original scale of the justification of physical violence varied from 3-30, so 3 was coded as

zero, (not justified) and scores of 4 to 30 were coded as 1 (justified). Patriarchal traditionalism

was also categorized into three groups; low, medium, and high, based on cumulative frequency

(see Table 6).

Figure 5 graphs the interaction effects of religious belief and patriarchal traditionalism

(categorical) on the justification of physical violence (binary). As scores on the religious belief

scale increase, justification of physical violence decreases for all three levels of patriarchal

traditionalism. Those who score highest on patriarchal traditionalism also score highest on the

justification of physical violence scale. The steepness of the slope indicates that the effects of

religious belief are most substantial for those who score highest on patriarchal traditionalism.

Thus, religious belief exerts a stronger negative effect on extremely patriarchal traditionalists.

Figure 6 graphs the interaction effects of religious practice and patriarchal traditionalism

on the justification of physical violence. The results mirror those in Figure 5 – the effect of

religious practice on the justification of physical violence is steeper for those scoring highest on

patriarchal traditionalism. The gaps between the three levels of patriarchal traditionalism are

smaller at the high end of religious practice than at the low end. Thus, the religious practice

also exerts stronger negative effects on highly patriarchal traditionalists.

Discussion and Conclusion

Research on the role of religion in justifying violence is somewhat mixed. Some studies find positive/pro-social effects (McCullough & Willoughby 2009; Smith 2003; King & Boyatzis 2015), while others suggest that religion reinforces patriarchal and traditional values, where men enjoy more power and women are taught to be submissive (Nason-Clark 2004). Research suggests that conservative religious denominations and their teachings often result in higher levels of deviant behaviors and lower levels of educational achievements (Beyerlein 2004, Darnell & Sherkat 1997, Fitzgerald & Glass 2012, Sherkat & Darnell 1999, Uecker & Pearce 2017). The current research utilized a control theory framework to theorize the role of religiosity in justifying physical violence, hypothesizing that religion creates a system where both belief and involvement act as social constraints and therefore act as controls on deviant behavior.

Consistent with the proposed hypotheses, the analyses presented here confirmed that religious belief and importance exert strong negative effects on justifying violence. It suggests that belief in supernatural power (God), hell, and the importance of normative structures defined by religion create an environment that is fruitful restraint when it comes to violence, and that religious practice may cultivate control through strong social bonds such as commitment to religion, involvement in religion, and religious attachment. Thus, the research at hand shows that religiosity has a strong inverse effect on justifying physical violence, perhaps through fear of punishment and positive reinforcements (McCullough & Willoughby 2009; Smith 2003; King & Boyatzis 2015; Pearce, Uecker, and Denton 2019; Hirschi and Stark 1969).

The study also analyzes the effects of patriarchal traditionalism on the justification of

physical violence using the learning theory framework. Following the previous literature (Willer

et al. 2013; Kimmel 1994), the current research also shows that high patriarchal traditionalism

results in higher levels of justifying physical violence. Construction and application of

hegemonic masculinity imply the use of power, aggression, and violence (David and Brannon

1976; Connell, 1995; Connell and Messerschmidt 2005). Thus, the current study follows

previous work and demonstrates that the patriarchal values tend to increase justification of

physical violence.

The interaction effects of patriarchal traditionalism and religiosity on the justification of

physical violence have been understudied. Past studies have explored the effects of religiosity

and patriarchal traditionalism separately on incitement and justification of violence, but have

failed to study them together, including how they may interact. This research fills in the

literature gap by looking at the effects of religiosity based on belief and practice, patriarchal

traditionalism, and the interaction of the two on the justification of physical violence. As

predicted, patriarchal traditionalism is associated with a greater likelihood of justifying physical

violence, regardless of religiosity, but also interacts with religiosity. The gap between the most

and the least patriarchal respondents is significantly smaller among the most religious. Put

another way, the effects of religiosity on the justification of violence are strongest for those

scoring highest on patriarchal traditionalism. So, while patriarchal attitudes allow individuals to

justify violence, those effects are weaker when religiosity is high (Cejka and Bamat, 2003;

Coward and Smith, 2004; Schlack, 2009).

The results of demographic control variables in the models are consistent with the previous literature. With the increase in age, the individuals are less likely to justify violence (Hirschi and Gottfredson 1983; Stolzenberg and D'Alessio 2008; Archer 2000). The study shows that men tend to justify physical violence more than females (Archer and Parker 1994; Campbell and Muncer 1987; Harris 1991; Ramirez, Andreu, and Fujihara 2001).

The prior research suggest that more educated individuals are less likely to engage in violence (Rickert et al. 2002), although in this study the relationship is not significant in any models. Past studies suggest that employed individuals and women from high socioeconomic status are more likely to report violence to the police (Rickert et al. 2002; Serrano-Montilla et al. 2020), which can be interpreted as they are less likely to justify violence. The result from this study shows that the rise in income level increases the chances of justifying physical violence, while employment status is not significant. The previous studies did identify that married individuals are more likely to justify domestic violence, but in the current study marital status is not significant.

Overall, this research takes a unique approach to the justification of physical violence, using the idea of rationalizations based on religion and patriarchy to explain why some people justify physical violence, yet others do not. The major takeaways from this research are that religiosity, especially religious practice, has a negative effect on justification of physical violence, although patriarchal traditionalism tends to promote justification of physical violence.

Limitations and Future Directions

While the results presented here are informative, there are limitations to the study. The analysis only utilizes the World Value Survey data for the United States of America from 2010 to

2014, so future research should expand the analysis to compare different nations and time periods to study the effects of religiosity and patriarchal traditionalism on the justification of physical violence. This will elucidate the comparisons between countries dominated by more conservative religious affiliations and denominations and those dominated by more liberal ones and more religious vs. more secular societies, as well as changes over time.

One of the significant limitations of the US data is that the survey questions do not allow fine distinctions between denominations (e.g., Southern Baptists vs. Catholics). A critical unanswered question is whether the effects of religiosity on the justification of physical violence differ across religious affiliations and denominations. It would be interesting to see the difference in religiosity for the different Christian denominations, as the level of conservatism/emphasis on patriarchal values differs across these groups varies.

The data at hand was limited to the questions asked to the respondents, thus restricting the analysis for this research. While this research used control theory as the framework for understanding possible mechanisms explaining the pro-social effects of religion on the justification of violence, it did not include measures testing these assumptions. Data that allow tests of the mediating effects of social control would help to answer questions about causal mechanisms. It also used learning theory to model effects of patriarchal traditionalism on justification of physical violence, but the data did not allow testing of these mechanisms. Additionally, the survey included a limited number of justification of violence items, and since it is a "values" rather than a behavioral survey, did not include actual measures of violence.

Despite the shortcomings, this study still answered important questions relating to religiosity, patriarchal traditionalism, and justification of physical violence. The analysis showed

that religiosity had potent pro-social effects on highly patriarchal traditionalists, those who otherwise score highest on the justification of violence. Thus, religiosity does make a difference, and it makes more of a difference for individuals who are highly patriarchal traditionalists. Since, religion has a strong influence on individuals' opinions and views, this could work as a system of teaching pro-social activities and creating safer environments. This is an important finding and can be used as a call for action. In light of these findings, religious communities are encouraged to de-emphasize patriarchal and traditionalist values to help reduce the justification of physical violence.

References

Adler, Alfred. 1910. "Inferiority Feeling and Masculine Protest." P. Basic Books in The Individual
    Psychology of Alfred Adler: A Systematic Presentation in Selections from His Writings.
    New York.

Akaike, H. 1974. "A New Look at the Statistical Model Identification." IEEE Transactions on
    Automatic Control 19(6):716–23.

Akers, Ronald L., and Gary F. Jensen. 2003. Social Learning Theory and the Explanation of Crime:
    A Guide for the New Century. Transaction.

Allison, Paul D. 1999. Logistic Regression Using SAS: Theory and Application. 2nd edition. Cary,
    N.C: SAS Institute.

Anderson, Kristin L., and Debra Umberson. 2001. "Gendering Violence: Masculinity and Power
    in Men's Accounts of Domestic Violence." Gender & Society 15(3):358–80.

Archer, John. 2000. "Sex Differences in Aggression between Heterosexual Partners: A Meta-
    Analytic Review." Psychological Bulletin 126(5):651–80.

Archer, John, and Sarah Parker. 1994. "Social Representations of Aggression in Children."
    Aggressive Behavior 20(2):101–14.

Armstrong, Karen. 2014. "The Myth of Religious Violence." The Guardian, September 25.

Bartkowski, John P. 1997. "Debating Patriarchy: Discursive Disputes over Spousal Authority
    among Evangelical Family Commentators." Journal for the Scientific Study of Religion
    36(3):393–410.

Beccaria, Gavin, Lisa Beccaria, Rhonda Dawson, Don Gorman, Julie A. Harris, and Delwar
Hossain. 2013. "Nursing Student's Perceptions and Understanding of Intimate Partner
Violence." Nurse Education Today 33(8):907–11.

Beirne, Piers. 1987. "Adolphe Quetelet and the Origins of Positivist Criminology." American
Journal of Sociology 92(5):1140–69.

Benda, Brent B. 1995. "The Effect of Religion on Adolescent Delinquency Revisited." Journal of
Research in Crime and Delinquency 32(4):446–66.

Benda, Brent B., and Nancy J. Toombs. 2000. "Religiosity and Violence Are They Related after
Considering the Strongest Predictors?" Journal of Criminal Justice 14.

Bettencourt, B. Ann, and Norman Miller. 1996. "Gender Differences in Aggression as a Function
of Provocation: A Meta-Analysis." Psychological Bulletin 119(3):422–47.

Beyerlein, Kraig. 2004. "Specifying the Impact of Conservative Protestantism on Educational
Attainment." Journal for the Scientific Study of Religion 43(4):505–18.

Beyerlein, Kraig, Jenny Trinitapoli, and Gary Adler. 2011. "The Effect of Religious Short-Term
Mission Trips on Youth Civic Engagement." Journal for the Scientific Study of Religion
50(4):780–95.

Björkqvist, Kaj, Kirsti M. J. Lagerspetz, and Ari Kaukiainen. 1992. "Do Girls Manipulate and Boys
Fight? Developmental Trends in Regard to Direct and Indirect Aggression." Aggressive
Behavior.

Brant, Rollin. 1990. "Assessing Proportionality in the Proportional Odds Model for Ordinal
Logistic Regression." Biometrics 46(4):1171–78.

Bromley, David G., and J. Gordon Melton. 2002. Cults, Religion, and Violence. Cambridge

University Press.

Bufacchi, Vittorio. 2005. "Two Concepts of Violence." Political Studies Review 3(2):193–204.

Campbell, Anne, and Steven Muncer. 1987. "Models of Anger and Aggression in the Social Talk

of Women and Men." Journal for the Theory of Social Behaviour 17(4):489–511.

Cavanaugh, William T. 2007. "Does Religion Cause Violence?" Harvard Divinity Bulletin 35(2):1–

18.

Cejka, Mary Ann, and Tomás Bamat. 2003. Artisans of Peace: Grassroots Peacemaking among

Christian Communities. Maryknoll, N.Y.: Orbis Books.

Clogg, Clifford C., and Edward S. Shihadeh. 1994. Statistical Models for Ordinal Variables. SAGE

Publications.

Connell, R. W., and James W. Messerschmidt. 2005. "Hegemonic Masculinity: Rethinking the

Concept." Gender & Society 19(6):829–59.

Connell, Raewyn. 1995. Masculinities. Berkeley: University of California Press.

Cotton, Sian, Kathy Zebracki, Susan L. Rosenthal, Joel Tsevat, and Dennis Drotar. 2006.

"Religion/Spirituality and Adolescent Health Outcomes: A Review." The Journal of

Adolescent Health: Official Publication of the Society for Adolescent Medicine

38(4):472–80.

Coward, Harold G., and Gordon S. Smith. 2004. Religion and Peacebuilding. Albany: State

University of New York Press.

Darnell, Alfred, and Darren Sherkat. 1997. "The Impact of Protestant Fundamentalism on

Educational Attainment." American Sociological Review 62:306–15.

David, Deborah Sarah, and Robert Brannon. 1976. The Forty-Nine Percent Majority: The Male

Sex Role. Addison-Wesley Publishing Company.

Dawkins, Richard. 2003. A Devil's Chaplain: Reflections on Hope, Lies, Science and Love. Boston:

Houghton Mifflin.

Devries, Karen, Charlotte Watts, Mieko Yoshihama, Ligia Kiss, Lilia Blima Schraiber, Negussie

Deyessa, Lori Heise, Julia Durand, Jessie Mbwambo, Henrica Jansen, Yemane Berhane,

Mary Ellsberg, and Claudia Garcia-Moreno. 2011. "Violence against Women Is Strongly

Associated with Suicide Attempts: Evidence from the WHO Multi-Country Study on

Women's Health and Domestic Violence against Women." Social Science & Medicine

73(1):79–86.

Dill, LeConté J. 2017. "'Wearing My Spiritual Jacket': The Role of Spirituality as a Coping

Mechanism Among African American Youth." Health Education & Behavior 44(5):696–

704.

Douki, S., F. Nacef, A. Belhadj, A. Bouasker, and R. Ghachem. 2003. "Violence against Women in

Arab and Islamic Countries." Archives of Women's Mental Health 6(3):165–71.

Durkheim, Emile. 1895. The Rules of Sociological Method. New York, NY: Free Press.

Durkheim, Emile. 1951. Suicide, a Study in Sociology. Glencoe, IL: Free Press.

Evans, Joan, Blye Frank, John L. Oliffe, and David Gregory. 2011. "Health, Illness, Men and

Masculinities (HIMM): A Theoretical Framework for Understanding Men and Their

Health." Journal of Men's Health 8(1):7–15.

Fares, Natalia E., Martin Ramirez, José M. Cabrera, Fernanda Lozano, and Fernando Salas. 2011. "Justification of Physical and Verbal Aggression in Uruguayan Children and Adolescents." The Open Psychology Journal 4(1):45–54.

Fitzgerald, Scott T., and Jennifer L. Glass. 2012. "Conservative Protestants, Early Transitions to Adulthood, and the Intergenerational Transmission of Class." Pp. 49–72 in Religion, Work, and Inequality. Bingley, UK: Emerald Group.

Fletcher, George P. 2000. Rethinking Criminal Law. Cary, UNITED STATES: Oxford University Press, Incorporated.

Flood, Michael, and Bob Pease. 2009. "Factors Influencing Attitudes to Violence Against Women." Trauma, Violence, & Abuse 10(2):125–42.

Ford-Gilboe, Marilyn, Judith Wuest, Colleen Varcoe, Lorraine Davies, Marilyn Merritt-Gray, Jacquelyn Campbell, and Piotr Wilk. 2009. "Modelling the Effects of Intimate Partner Violence and Access to Resources on Women's Health in the Early Years after Leaving an Abusive Partner." Social Science & Medicine 68(6):1021–29.

Freud, Sigmund. 1898. "The Neuro-Psychoses of Defense." in The Standard Edition of the Complete Psychological Works of Sigmund Freud. Vol. 3. London, UK: Hogarth.

Ginges, Jeremy, Ian Hansen, and Ara Norenzayan. 2009. "Religion and Support for Suicide Attacks." Psychological Science 20(2):224–30.

Gold, Katherine J., Vijay Singh, Sheila M. Marcus, and Christie Lancaster Palladino. 2012. "Mental Health, Substance Use and Intimate Partner Problems among Pregnant and Postpartum Suicide Victims in the National Violent Death Reporting System." General Hospital Psychiatry 34(2):139–45.

Greene, William H. 2000. Econometric Analysis. 4th ed. New Jersey: Prentice-Hall.

Gujarati, Damodar N. n.d. Basic Econometrics. 4th ed. New York: McGraw Hill.

Harris, Mary B. 1991. "Effects of Sex of Aggressor, Sex of Target, and Relationship on
    Evaluations of Physical Aggression." Journal of Interpersonal Violence 6(2):174–86.

Harris, Sam. 2005. The End of Faith: Religion, Terror, and the Future of Reason. New York, NY:
    WW Norton & Company.

Hasenclever, Andreas, and Volker Rittberger. 2000. "Does Religion Make a Difference?
    Theoretical Approaches to the Impact of Faith on Political Conflict." Millennium
    29(3):641–74.

Helminiak, Daniel A. 1997. "Killing for God's Sake: The Spiritual Crisis in Religion and Society."
    Pastoral Psychology 45(5):365–74.

Hirschi, Travis. 1969. Causes of Delinquency. Berkeley: University of California Press.

Hirschi, Travis, and Michael Gottfredson. 1983. "Age and the Explanation of Crime." American
    Journal of Sociology 89(3):552–84.

Hirschi, Travis, and Rodney Stark. 1969. "Hellfire and Delinquency." Social Problems 17(2):202–
    13.

Hunnicutt, Gwen. 2009. "Varieties of Patriarchy and Violence Against Women: Resurrecting
    'Patriarchy' as a Theoretical Tool." Violence Against Women 15(5):553–73.

Ishida, Kanako, Paul Stupp, Mercedes Melian, Florina Serbanescu, and Mary Goodwin. 2010.
    "Exploring the Associations between Intimate Partner Violence and Women's Mental
    Health: Evidence from a Population-Based Study in Paraguay." Social Science &
    Medicine 71(9):1653–61.

Johnson, Dominic. 2011. "Why God Is the Best Punisher." Religion, Brain & Behavior 1(1):77–84.

Johnson, Dominic, and Oliver Krüger. 2004. "The Good of Wrath: Supernatural Punishment and
the Evolution of Cooperation." Political Theology 5(2):159–76.

Jung, Jong Hyun, and Daniel V. A. Olson. 2017. "Where Does Religion Matter Most? Personal
Religiosity and the Acceptability of Wife-Beating in Cross-National Perspective."
Sociological Inquiry 87(4):608–33.

Khan, Tahira S. 2006. Beyond Honour: A Historical Materialist Explanation of Honour Related
Violence. Karachi, Pakistan: Oxford University Press.

Kimball, Charles. 2009. When Religion Becomes Evil: Five Warning Signs. Revised, Updated ed.
edition. HarperOne.

Kimmel, Micheal S. 1994. "Masculinity as Homophobia: Fear, Shame and Silence in the
Construction of Gender Identity." Pp. 119–43 in Theorizing Masculinities. Thousand
Oaks, CA: Sage.

King, Pamela Ebstyne, and Chris J. Boyatzis. 2015. "Religious and Spiritual Development." Pp.
975–1021 in Handbook of Child Psychology and Developmental Sciencee:
Socioemotional Processes. Hoboken, NJ, USA: John Wiley & Sons, Inc.

King, Pamela Ebstyne, and James L. Furrow. 2004. "Religion as a Resource for Positive Youth
Development: Religion, Social Capital, and Moral Outcomes." Developmental
Psychology 40(5):703–13.

Knight, G. P., R. A. Fabes, and D. A. Higgins. 1996. "Concerns about Drawing Causal Inferences
from Meta-Analyses: An Example in the Study of Gender Differences in Aggression."
Psychological Bulletin 119(3):410–21.

Koch, Jerome R., and Ignacio Luis Ramirez. 2010. "Religiosity, Christian Fundamentalism, and Intimate Partner Violence among U.S. College Students." Review of Religious Research 51(4):402–10.

Krantz, G., T. Van Phuong, V. Larsson, N. Thi Bich Thuan, and K. C. Ringsberg. 2005. "Intimate Partner Violence: Forms, Consequences and Preparedness to Act as Perceived by Healthcare Staff and District and Community Leaders in a Rural District in Northern Vietnam." Public Health 119(11):1048–55.

Krauss, Steven Eric, Azimi Hamzah, Ismi Arif Ismail, Turiman Suandi, Siti Rabaah Hamzah, Dzuhailmi Dahalan, and Fazilah Idris. 2012. "Religious Socialization Among Malaysian Muslim Adolescents: A Family Structure Comparison." Review of Religious Research 54(4):499–518.

Ledesma, Rubén Daniel, and Pedro Valero-Mora. 2007. "Determining the Number of Factors to Retain in EFA: An Easy-to-Use Computer Program for Carrying out Parallel Analysis." Practical Assessment, Research, and Evaluation 12.

Levitt, Heidi M., and Kimberly Ware. 2006. "'Anything With Two Heads Is a Monster': Religious Leaders' Perspectives on Marital Equality and Domestic Violence." Violence Against Women 12(12):1169–90.

Lombroso, C. 1911. Criminal Man. Oxford, England: Putnam.

Long, J. Scott. 1997. Regression Models for Categorical and Limited Dependent Variables. Thousand Oaks, CA: Sage Publications.

Long, J. Scott, and Sarah A. Mustillo. 2018. "Using Predictions and Marginal Effects to Compare

    Groups in Regression Models for Binary Outcomes." Sociological Methods & Research:

    1-37

Luo, Liying, and James S. Hodges. 2020. "The Age-Period-Cohort-Interaction Model for

    Describing and Investigating Inter-Cohort Deviations and Intra-Cohort Life-Course

    Dynamics." Sociological Methods & Research: 1-47

Mason, Michael, Andrew Singleton, and Ruth Webber. 2008. The Spirit of Generation Y: Young

    People's Spirituality in a Changing Australia. Mulgrave: John Garratt Publishing.

McCullagh, P., and J. A. Nelder. 1989. Generalized Linear Models. 2nd ed. London, UK: Chapman

    and Hall.

McCullough, Michael E., and Brian L. B. Willoughby. 2009. "Religion, Self-Regulation, and Self-

    Control: Associations, Explanations, and Implications." Psychological Bulletin 135(1):69–

    93.

McLaughlin, J., R. E. O'Carroll, and R. C. O'Connor. 2012. "Intimate Partner Abuse and

    Suicidality: A Systematic Review." Clinical Psychology Review 32(8):677–89.

Meetoo, Veena, and Heidi Safia Mirza. 2007. "'There Is Nothing "Honourable" about Honour

    Killings': Gender, Violence and the Limits of Multiculturalism." Women's Studies

    International Forum 30(3):187–200.

Messerschmidt, James W. 1993. Masculinities and Crime: Critique and Reconceptualization of

    Theory. 1St Edition. Lanham, Md: Rowman & Littlefield Publishers, Inc.

Muluk, Hamdi, Nathanael G. Sumaktoyo, and Dhyah Madya Ruth. 2013. "Jihad as Justification:

    National Survey Evidence of Belief in Violent Jihad as a Mediating Factor for Sacred

    Violence among Muslims in Indonesia." Asian Journal of Social Psychology 16(2):101–11.

Munson, Henry. 2005. "Religion and Violence." Religion 35(4):223–46.

Mustillo, Sarah A., Omar A. Lizardo, and Rory M. McVeigh. 2018. "Editors' Comment: A Few

    Guidelines for Quantitative Submissions." American Sociological Review 83(6):1281–83.

Myers, David G. 2012. "Reflections on Religious Belief and Prosociality: Comment on Galen

    (2012)." Psychological Bulletin 138(5):913–17.

Nason-Clark, Nancy. 2004. "When Terror Strikes at Home: The Interface between Religion and

    Domestic Violence." Journal for the Scientific Study of Religion 43(3):303–10.

Nunnally, Jum C., and Ira H. Bernstein. 1994. Psychometric Theory. McGraw-Hill.

Nye, Francis Ivan. 1958. Family Relationships and Delinquent Behavior. New York, NY: John

    Wiley and Sons.

Oberwittler, Dietrich, and Julia Kasselt. 2014. "Honor Killings." Pp. 652–70 in The Oxford

    Handbook of Gender, Sex, and Crime. New York, NY: Oxford University Press.

O'Connor, Daryl B., John Archer, and Frederick W. C. Wu. 2001. "Measuring Aggression: Self-

    Reports, Partner Reports, and Responses to Provoking Scenarios." Aggressive Behavior

    27(2):79–101.

Pascoe, Cheri Jo. 2011. Dude, You're a Fag. Berkeley, California: University of California Press.

Pearce, Lisa D., and Shannon N. Davis. 2016. "How Early Life Religious Exposure Relates to the

    Timing of First Birth." Journal of Marriage and the Family 78(5):1422–38.

Pearce, Lisa D., and Dana L. Haynie. 2004. "Intergenerational Religious Dynamics and

    Adolescent Delinquency." Social Forces 82(4):1553–72.

Pearce, Lisa D., Jeremy E. Uecker, and Melinda Lundquist Denton. 2019. "Religion and

    Adolescent Outcomes: How and Under What Conditions Religion Matters." Annual

    Review of Sociology 45:201–22.

Pearce, Lisa, and Melinda Lundquist Denton. 2011. A Faith of Their Own: Stability and Change in

    the Religiosity of America's Adolescents. Oxford University Press.

Pettersson, Thorleif. 1991. "Religion and Criminality: Structural Relationships between Church

    Involvement and Crime Rates in Contemporary Sweden." Journal for the Scientific Study

    of Religion 30(3):279–91.

Potvin, Raymond H., and Douglas M. Sloane. 1985. "Parental Control, Age, and Religious

    Practice." Review of Religious Research 27(1):3–14.

Puffer, Eve S., Melissa H. Watt, Kathleen J. Sikkema, Rose A. Ogwang-Odhiambo, and Sherryl A.

    Broverman. 2012. "The Protective Role of Religious Coping in Adolescents' Responses to

    Poverty and Sexual Decision-Making in Rural Kenya." Journal of Research on

    Adolescence: The Official Journal of the Society for Research on Adolescence 22(1):1–7.

Ramirez, J., Jose Andreu, and Takehiro Fujihara. 2001. "Cultural and Sex Differences in

    Aggression: A Comparison between Japanese and Spanish Students Using Two Different

    Inventories." Aggressive Behavior 27:313–22.

Ramirez, J. Martin. 1991. "Similarities in Attitudes toward Interpersonal Aggression in Finland,

    Poland, and Spain." The Journal of Social Psychology 131(5):737–39.

Ramirez, J. Martin. 1993. "Acceptability of Aggression in Four Spanish Regions and a

   Comparison with Other European Countries." Aggressive Behavior 19(3):185–97.

Regnerus, Mark D. 2007. Forbidden Fruit: Sex and Religion in the Lives of American Teenagers.

   New York: Oxford University Press.

Renzetti, Claire M., C. Nathan DeWall, Amy Messer, and Richard Pond. 2017. "By the Grace of

   God: Religiosity, Religious Self-Regulation, and Perpetration of Intimate Partner

   Violence." Journal of Family Issues 38(14):1974–97.

Rickert, Vaughn I., Constance M. Wiemann, Samantha D. Harrykissoon, Abbey B. Berenson, and

   Elizabeth Kolb. 2002. "The Relationship among Demographics, Reproductive

   Characteristics, and Intimate Partner Violence." American Journal of Obstetrics and

   Gynecology 187(4):1002–7.

Riga, Peter J. 1969. "Violence: A Christian Perspective." Philosophy East and West 19(2):143–53.

Risman, Barbara J., and Georgiann Davis. 2013. "From Sex Roles to Gender Structure." Current

   Sociology 61(5–6):733–55.

Robbins, M., and L. Francis. 2010. "The Teenage Religion and Values Survey in England and

   Wales: An Overview." British Journal of Religious Education (32):307–20.

Rosenthal, Lisa, and Sheri R. Levy. 2010. "Understanding Women's Risk for HIV Infection Using

   Social Dominance Theory and the Four Bases of Gendered Power." Psychology of

   Women Quarterly 34(1):21–35.

Saroglou, Vassilis. 2011. "Believing, Bonding, Behaving, and Belonging: The Big Four Religious

   Dimensions and Cultural Variation." Journal of Cross-Cultural Psychology 42(8):1320–40.

Schlack, Annemarie. 2009. The Role of Religion in Peacebuilding and Conflict Transformation -

    The Example of Interfaith Organisations in the UK. Saarbrucken: VDM Verlag Dr. Müller.

Schreck, Christopher J., Melissa W. Burek, and Jason Clark-Miller. 2007. "He Sends Rain Upon

    the Wicked: A Panel Study of the Influence of Religiosity on Violent Victimization."

    Journal of Interpersonal Violence 22(7):872–93.

Schumann, Karina, Ian McGregor, Kyle A. Nash, and Michael Ross. 2014. "Religious

    Magnanimity: Reminding People of Their Religious Belief System Reduces Hostility after

    Threat." Journal of Personality and Social Psychology 107(3):432–53.

Serrano-Montilla, Celia, Luis M. Lozano, Michael Bender, and Jose-Luis Padilla. 2020. "Individual

    and Societal Risk Factors of Attitudes Justifying Intimate Partner Violence against

    Women: A Multilevel Cross-Sectional Study." BMJ Open 10(12)

Sherkat, Darren, and Alfred Darnell. 1999. "The Effect of Parents and Fundamentalism on

    Children and Educational Attainment: Examining Differences by Gender and Children."

    Journal for the Scientific Study of Religion 38(1):23–35.

Smith, Christian. 2003. "Theorizing Religious Effects Among American Adolescents." Journal for

    the Scientific Study of Religion 42(1):17–30.

Smith, Christian, and Melinda Lundquist Denton. 2005. Soul Searching: The Religious and

    Spiritual Lives of American Teenagers. Oxford University Press.

Smith, Christian, and Patricia Snell. 2009. Souls in Transition: The Religious Lives of Emerging

    Adults in America. Oxford University Press.

Stark, Rodney, and William Sims Bainbridge. 1996. Religion, Deviance, and Social Control.

    Psychology Press.

Stein, Murray B., and Colleen Kennedy. 2001. "Major Depressive and Post-Traumatic Stress

Disorder Comorbidity in Female Victims of Intimate Partner Violence." Journal of

Affective Disorders 66(2–3):133–38.

Stolzenberg, Lisa, and Stewart J. D'Alessio. 2008. "Co-Offending and the Age-Crime Curve."

Journal of Research in Crime and Delinquency 45(1):65–86.

Stone, M. 1979. "Comments on Model Selection Criteria of Akaike and Schwarz." Journal of the

Royal Statistical Society. Series B (Methodological) 41(2):276–78.

Sutherland, Edwin Hardin. 1939. Principles of Criminology. 3d ed., rev.reset .... Chicago,

Philadelphia [etc.]: J. B. Lippincott company.

Sykes, Gresham M., and David Matza. 1957. "Techniques of Neutralization: A Theory of

Delinquency." American Sociological Review 22(6):664–70.

Thomson, J. Anderson. 2009. "Who Are We? Where Did We Come from? How Religious Identity

Divides and Damns Us All." American Journal of Psychoanalysis 69(1):22–42.

Toldos, M. Paz. 2005. "Sex and age differences in self-estimated physical, verbal and indirect

aggression in Spanish adolescents." Aggressive Behavior 31(1):13–23.

Trinitapoli, Jenny, and Stephen Vaisey. 2009. "The Transformative Role of Religious Experience:

The Case of Short-Term Missions." Social Forces 88(1):121–46.

Tseole, Nkeka P., and Kerry Vermaak. 2020. "Exploring the Influences of Hegemonic and

Complicit Masculinity on Lifestyle Risk Factors for Noncommunicable Diseases Among

Adult Men in Maseru, Lesotho." American Journal of Men's Health

14(6):1557988320958931.

Uecker, Jeremy E., and Lisa D. Pearce. 2017. "Conservative Protestantism and Horizontal

Stratification in Education: The Case of College Selectivity." Social Forces 96(2):661–90.

Walby, Sylvia. 1989. "Theorizing Patriarchy." Sociology 23(2):213–34.

Waltermaurer, Eve. 2012. "Public Justification of Intimate Partner Violence: A Review of the

Literature." Trauma, Violence, & Abuse 13(3):167–75.

Weber, Max. 1905. The Protestant Ethic and the Spirit of Capitalism. Crows Nest, Australia:

Allen and Unwin.

Wellman Jr., James K., and Kyoko Tokuno. 2004. "Is Religious Violence Inevitable?" Journal for

the Scientific Study of Religion 43(3):291–96.

Willer, Robb, Christabel L. Rogalin, Bridget Conlon, and Michael T. Wojnowicz. 2013.

"Overdoing Gender: A Test of the Masculine Overcompensation Thesis." American

Journal of Sociology 118(4):980–1022.

Wilson, R. Dale, and Noreen K. Moore. 1979. "The Role of Sexually-Oriented Stimuli in

Advertising: Theory and Literature Review." Pp. 55–61 in Advances in Consumer

Research. Vol. 06. Ann Abor, MI: Association for Consumer Research.

Worthington, Everett L. 1988. "Understanding the Values of Religious Clients: A Model and Its

Application to Counseling." Journal of Counseling Psychology 35(2):166–74.

Worthington Jr., Everett L., Nathaniel G. Wade, Terry L. Hight, Jennifer S. Ripley, Michael E.

McCullough, Jack W. Berry, Michelle M. Schmitt, James T. Berry, Kevin H. Bursley, and

Lynn O'Connor. 2003. "The Religious Commitment Inventory--10: Development,

Refinement, and Validation of a Brief Scale for Research and Counseling." Journal of

Counseling Psychology 50(1):84–96

Wright, Joshua, and Jason Young. 2017. "Implications of Religious Identity Salience, Religious

Involvement, and Religious Commitment on Aggression." Identity 17:55–68.

Yonker, Julie E., Chelsea A. Schnabelrauch, and Laura G. Dehaan. 2012. "The Relationship

between Spirituality and Religiosity on Psychological Outcomes in Adolescents and

Emerging Adults: A Meta-Analytic Review." Journal of Adolescence 35(2):299–314.

Yount, Kathryn M., and Li Li. 2009. "Women's 'Justification' of Domestic Violence in Egypt."

Journal of Marriage and Family 71(5):1125–40.

Appendix A

Table 1. List of variables for scale construction extracted from World Value Survey

Question Number/Label and Variable/Question	Type	Scale Range or Options
Dependent Variable : Justification of Violence (Please tell me for each of the following actions whether you think it can always be justified, never be justified, or something in between, using this card.)		
V208. For a man to beat his wife	Ordinal	1 (Never Justified) – 10 (Always Justified)
V209. Parents beating children	Ordinal	1 (Never Justified) – 10 (Always Justified)
V210. Violence against other people	Ordinal	1 (Never Justified) – 10 (Always Justified)
Independent Variables		
Religiosity		
V9. Religion (…, how important it is in your life. Would you say it is)	Ordinal	1 Very Important 2 Rather Important 3 Not very Important 4 Not at all Important
V25. Church or religious organization (Now I am going to read off a list of voluntary organizations. For each organization, could you tell me whether you are an active member, an inactive member or not a member of that type of organization?)	Nominal	0 Don't Belong 1 Inactive Member 2 Active Member
V145. Apart from weddings and funerals, about how often do you attend religious services these days?	Ordinal	1 More than once a week 2 Once a week 3 Once a month 4 Only on special holy days 5 Once a year 6 Less often 7 Never, practically never
V146. Apart from weddings and funerals, about how often do you pray?	Ordinal	1 Several times a day 2 Once a day 3 Several times each week 4 Only when attending religious services

		5 Only on special holy days 6 Once a year 7 Less often 8 Never, practically never
V147. Independently of whether you attend religious services or not, would you say you are	Nominal	1 A religious person 2 Not a religious person 3 An atheist
V148. Do you believe in God?	Nominal	1 Yes 2 No
V149. Do you believe in hell?	Nominal	1 Yes 2 No
V152. How important is God in your life? Please use this scale to indicate. 10 means "very important" and 1 means "not at all important."	Ordinal	1 - 10
V153 Whenever science and religion conflict, *religion* is always right.	Ordinal	1 Strongly Agree 2 Agree 3 Disagree 4 Strongly Disagree
Patriarchal Traditionalism (For each of the following statements I read out, can you tell me how strongly you agree or disagree with each. Do you strongly agree, agree, disagree, or strongly disagree?)		
V51. On the whole, men make better political leaders than women do.	Ordinal	1 Strongly Agree 2 Agree 3 Disagree 4 Strongly Disagree
V52. A university education is more important for a boy than for a girl.	Ordinal	1 Strongly Agree 2 Agree 3 Disagree 4 Strongly Disagree
V53. On the whole, men make better business executives than women do.	Ordinal	1 Strongly Agree 2 Agree 3 Disagree 4 Strongly Disagree

Table 2. Descriptive Statistics of Variables

	Mean	SD
Dependent Variable		
Justification of Violence	0.38	0.48
Independent Variables		
Overall Religiosity	-0.19	7.06
Religiosity		
Religious Belief	-0.15	2.67
Religious Practice	-0.04	1.77
Patriarchal Traditionalism	2.45	1.77
Control Variables		
Age	49.17	16.89
Sex	0.49	0.50
Educational Level	0.60	0.49
Employment Status	0.57	0.49
Income Level	5.18	1.88
Marital Status	0.67	0.47
Observations	1,949	

Table 3. Collinearity Diagnostics for Ordered Logistic Regression

	VIF	SQRT VIF	Tolerance	R-Squared
Independent Variables				
Religious Belief	2.37	1.54	0.42	0.58
Religious Practice	2.29	1.51	0.44	0.56
Patriarchal Traditionalism	1.12	1.06	0.89	0.11
Demographic Control Variables				
Age	1.13	1.07	0.88	0.12
Male	1.09	1.05	0.91	0.09
College Education	1.16	1.08	0.86	0.14
Employed	1.13	1.06	0.88	0.12
Income	1.13	1.06	0.89	0.11
Married	1.06	1.03	0.94	0.06

Mean VIF = 1.39
Observations = 1,949

Table 4. Brant Test of Parallel Regression Assumption

Variable	Chi-squared	p>chi2	df
All	370.30	0.00	216
Independent Variables			
Religious Belief	29.87	0.19	24
Religious Practice	47.60	0.00	24
Patriarchal Traditionalism	-1.43	-999.00	24
Demographic Control Variables			
Age	27.13	0.30	24
Male	29.33	0.21	24
College Education	33.50	0.09	24
Employed	32.12	0.12	24
Income	52.50	0.00	24
Married	21.53	0.61	24

Table 5. Effects of Religious Belief, Religious Practice, and Patriarchal Traditionalism on Justification of Physical Violence using Ordered Logistic Regression

	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6		Model 7	
	OR	SE	OR	SE	OR	SE	OR	SE	OR	SE	OR	SE	OR	SE
Independent Variables														
Religious Belief	0.979*	(0.009)			1.000	(0.014)	0.988	(0.014)	0.998	(0.015)			1.001	(0.024)
Religious Practice			0.949**	(0.016)	0.948*	(0.025)	0.946*	(0.025)			0.991	(0.031)	0.991	(0.048)
Patriarchal Traditionalism							1.210***	(0.034)	1.204***	(0.034)	1.203***	(0.034)	1.206***	(0.034)
Demographic Control Variables														
Age	0.977***	(0.003)	0.977***	(0.003)	0.977***	(0.003)	0.976***	(0.003)	0.976***	(0.003)	0.976***	(0.003)	0.976***	(0.003)
Male	1.908***	(0.179)	1.917***	(0.179)	1.918***	(0.180)	1.637***	(0.159)	1.616***	(0.157)	1.640***	(0.158)	1.617***	(0.157)
College Education	0.823	(0.084)	0.850	(0.086)	0.850	(0.088)	0.904	(0.094)	0.887	(0.091)	0.935	(0.095)	0.914	(0.095)
Employed	1.054	(0.105)	1.055	(0.105)	1.055	(0.105)	1.072	(0.107)	1.070	(0.107)	1.080	(0.108)	1.076	(0.108)
Income	1.085**	(0.029)	1.093***	(0.029)	1.093***	(0.029)	1.092**	(0.029)	1.082**	(0.029)	1.094***	(0.029)	1.088**	(0.029)
Married	0.854	(0.086)	0.856	(0.086)	0.856	(0.086)	0.856	(0.087)	0.860	(0.087)	0.857	(0.087)	0.863	(0.088)
Interaction Terms														
Religious Belief * Patriarchal Traditionalism									0.985**	(0.005)			0.992	(0.008)
Religious Practice * Patriarchal Traditionalism											0.975*	(0.010)	0.985	(0.015)
AIC	6221.236		6217.156		6219.155		6176.140		6172.748		6170.812		6172.284	
BIC	6399.638		6395.558		6403.132		6365.693		6362.301		6360.364		6372.986	

Observations = 1,949
Source: World Value Survey - Wave 6 (2010-2014)
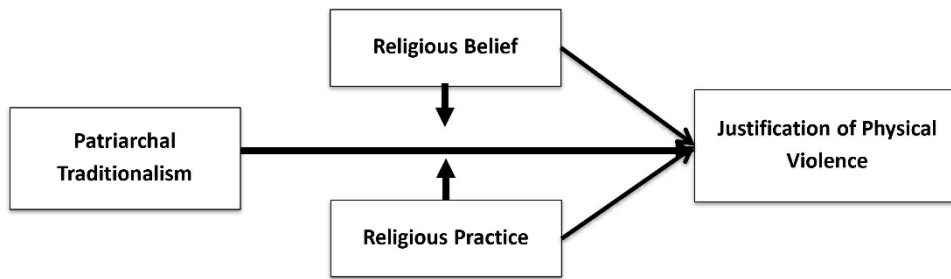* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 6. Frequency Distribution of Patriarchal Traditionalism

Patriarchal Traditionalism	Frequency	Percentage	Cumulative Frequency
0	420	21.55	21.55
1	188	9.65	31.2
2	186	9.54	40.74
3	760	38.99	79.73
4	197	10.11	89.84
5	109	5.59	95.43
6	54	2.77	98.2
7	17	0.87	99.08
8	8	0.41	99.49
9	10	0.51	100.00

Observations = 1,949

Appendix B

Figure 1. Theoretical Model
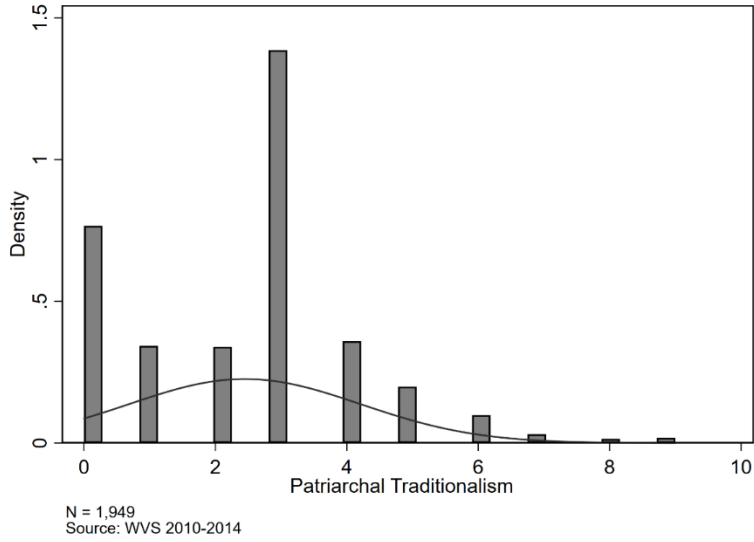

Figure 2. Histogram of Justification of Violence

Source: WVS 2010-2014
N = 1,949
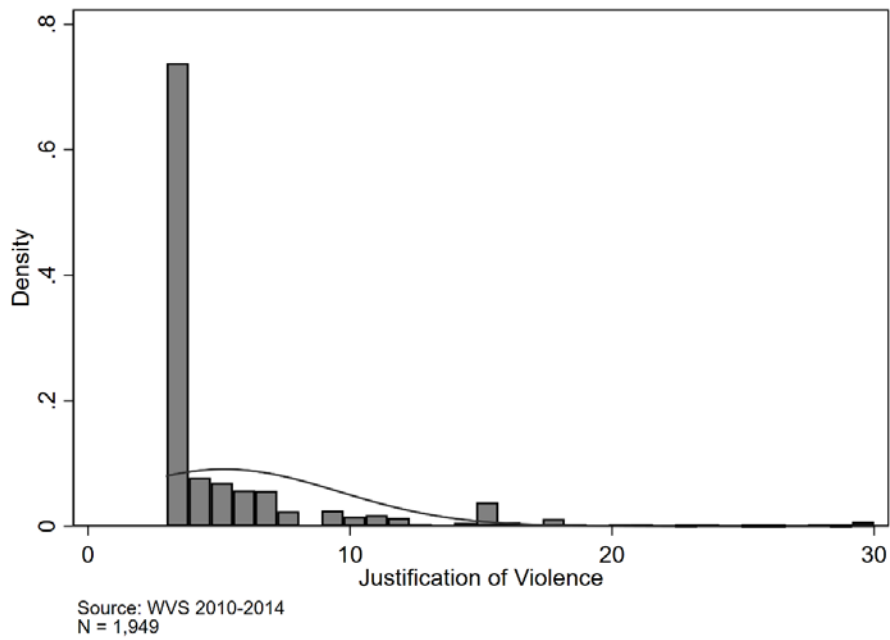
Figure 3. Histogram of Religious Belief Scale

N = 1,949
Source: WVS 2010-2014
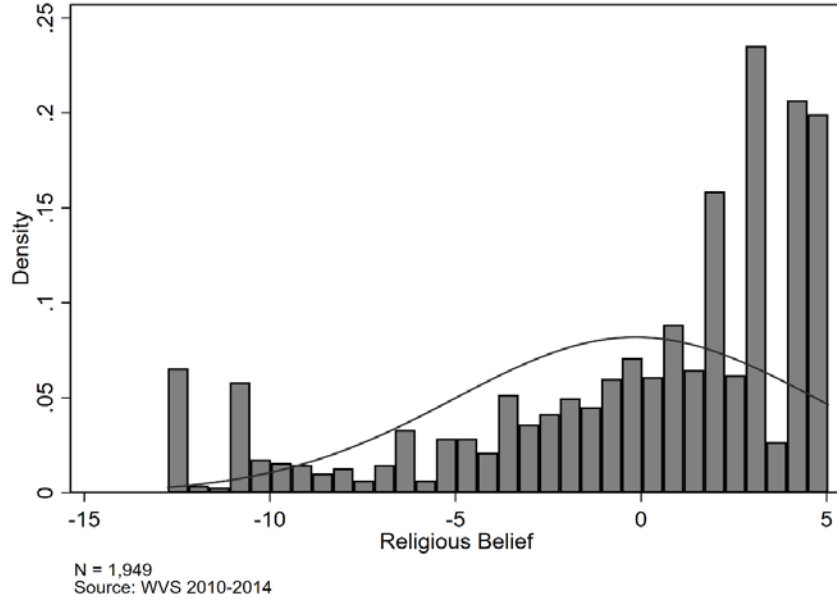
Figure 4. Histogram of Religious Practice Scale

N = 1,949
Source: WVS 2010-2014
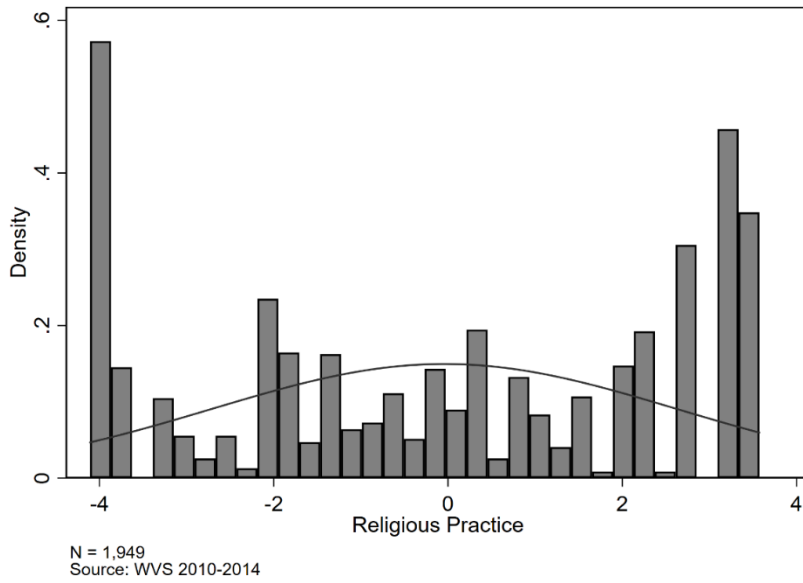
Figure 5. Histogram of Patriarchal Traditionalism

N = 1,949
Source: WVS 2010-2014

Figure 6. Predicted Justification of Violence across Respondent's Religious Belief

by Patriarchal Traditionalism

Source: World Value Survey - Wave 6 (2010-2014).
N = 1,949
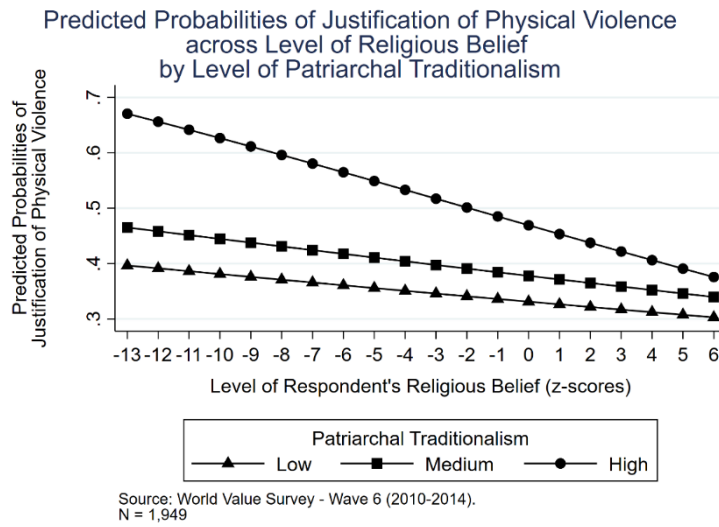
Figure 7. Predicted Justification of Violence across Respondent's Religious Practice by Patriarchal Traditionalism

Predicted Probabilities of Justification of Physical Violence across Level of Religious Practice by Level of Patriarchal Traditionalism

Source: World Value Survey - Wave 6 (2010-2014).
N = 1,949