Distribution Agreement

In presenting this thesis as a partial fulfillment of the requirements for a degree from Emory University, I hereby grant to Emory University and its agents the non-exclusive license to archive, make accessible, and display my thesis in whole or in part in all forms of media, now or hereafter now, including display on the World Wide Web. I understand that I may select some access restrictions as part of the online submission of this thesis. I retain all ownership rights to the copyright of the thesis. I also retain the right to use in future works (such as articles or books) all or part of this thesis.

Amanda Kamalapuri

April 8th, 2015

Religion and Crime: Understanding Crime in Indian Villages

by

Amanda Kamalapuri

Christina DePasquale Adviser

Economics

Christina DePasquale

Adviser

Andrew Francis

Committee Member

Ellen Idler

Committee Member

2015

Religion and Crime: Understanding Crime in Indian Villages

By

Amanda Kamalapuri

Christina DePasquale

Adviser

An abstract of a thesis submitted to the Faculty of Emory College of Arts and Sciences of Emory University in partial fulfillment of the requirements of the degree of Bachelor of Arts with Honors

Department of Economics

2015

Abstract

Religion and Crime: Understanding Crime in Indian Villages By Amanda Kamalapuri

The rate of crimes against women in India, a predominantly Hindu nation, has increased steadily over the past decade. The Hindu religion encourages a worldview of *ahimsa*, or non-violence, as well as a respect towards women. Thus, it is interesting to consider the current trends of crimes against women occurring in India. This paper's objective is to analyze crimes against women in Indian villages through the lens of religion. I evaluate the effect of religious affiliation, religious practice, and neighborhood characteristics on different types of crimes committed in villages. I examine these variables at the individual, household, and village level. I find that household level participation in religious groups, as well as village-level availability of religious groups, are important in deterring views and experiences of crime in Indian villages.

Religion and Crime: Understanding Crime in Indian Villages

By

Amanda Kamalapuri

Christina DePasquale

Adviser

A thesis submitted to the Faculty of Emory College of Arts and Sciences of Emory University in partial fulfillment of the requirements of the degree of Bachelor of Arts with Honors

Department of Economics

2015

Acknowledgements

I would like to thank Professor DePasquale for her help and guidance with my thesis and Professor Francis-Tan for his tremendous assistance and encouragement throughout the Honors Program. A special thanks to Professor Idler for taking the time to be a part of my committee. Finally, a big thanks to my parents and friends for their support.

Table of Contents

I. Introduction	1
II. Previous Literature	4
III. Describing the Setting: Hinduism & Crime in India	7
IV. Data	9
V. Empirical Specification	14
VI. Results and Discussion	16
VII. Conclusion	19
VIII. References	21
IX. Tables and Figures	24
X. Appendix	30

I. INTRODUCTION

The topic of religion and crime has been widely studied in the United States (Baier & Wright, 2001). Studies have had a range of focuses, from adolescent to adult subjects, and from victimless crimes, such as drug use, to those on the more serious end of the spectrum, such as murder or rape. Overall, most studies suggest a slightly deterrent effect of religion or religiosity on crime (Heaton, 2006 and Sturgis &Baller, 2012). Individuals in the U.S. and of the Christian faith have been the main focus for many studies. Fewer conclusions, however, have been made in understanding new regions and religions.

The Hindu religion encourages a worldview of *ahimsa*, or non-violence, as well as a respect towards women demonstrated by the worship of various goddesses and strong feminist symbolism in literature. Thus, it is interesting to consider the current trends of crimes against women occurring in India, a predominantly Hindu nation¹. Rape crimes in particular have been a direct focus of the Indian community today because of trends in underreporting and insufficient punishment.

The objective of this paper is to analyze the perception of crime, specifically crimes against women in Indian villages through the lens of religion. Previous literature has demonstrated that there is substantial evidence to support the deterring effect of religion on crime in the U.S (Baier & Wright, 2001). My research aims to investigate this claim in a previously unexplored cultural context: that of Indian villages. I evaluate the effect of religious affiliation, religious practice, and neighborhood characteristics on different types of crimes, such as theft and the harassment of girls, committed in the village. I examine these variables at the individual, household, and village level. This paper examines if religious participation (at the individual,

¹ The rate of crimes against women has steadily increased over the past decade; with a total of 309,546 reported in 2013—almost a 30% increase from the previous year (National Crime Records Bureau).

household, and village level) effects the perception of different crimes when in the village. This draws upon findings related to the Antiasceticism Hypothesis, which claims that religious participation, or religiosity, is more effective at deterring minor, victimless forms of crime or deviance than it is at deterring serious forms of crime that have a victim (Sturgis & Baller, 2012). In other words, this paper examines if the Hindu religion with its non-violent way of life, has a greater effect on deterring negative perceptions of crime that occur in the village than other religions observed in the study.

In my analysis, I use Ordinary Least Squares (OLS), specifically a Linear Probability Model (LPM), to examine the effect of religious affiliation and religious participation (individual and household) on perceptions of the harassment of girls and theft. I also look at the availability of religious and social organizations at the village level. I find that household level participation of religious groups, as well as village-level availability of religious groups, is important in deterring negative views and experiences of crime in Indian villages. Affiliation with the Hindu religion did not have a significant impact on deterring views or experiences of crime.

I contribute to the related literature by examining regions and religions often overlooked. Previous work in this field has focused on religion and crime in the United States, specifically the strength of the religious affiliation of Christians. This paper fills a gap in the knowledge of religious participation and crime by incorporating an analysis of India and eastern religions such as Hinduism, Jainism, and Buddhism. This paper develops a different measure of religiosity than those used in previous studies, and, in turn, demonstrates the complexity of addressing religions outside of a Western context.

II. PREVIOUS LITERATURE

Theoretical Literature

In Juvenile Delinquency: Causes and Control, authors Agnew and Brezina describe four main theories in their study of delinquency in adolescents; theories can be translated to adult offenders, as shown in Sociological Theory: Past to Present (Cullen, Agnew, Wilcox 2014). First, Strain Theory argues that criminality is caused by stressful events or conditions. Second, Social Learning Theory states that individuals who commit crimes do so because they are associated with others who present beliefs favorable to criminality, model criminal behavior, and reinforce criminal views. Essentially, individuals find justification for their offenses. Third, Control Theory argues that delinquency occurs because of weak social controls including those of direct controls, stakes in conformity, beliefs regarding crime, and self-control. Finally, Labeling Theory claims that those who are already labeled as 'delinquent', or 'criminals' are often rejected or harmed, leading to an increase in the likelihood of committing more crime by growing strain, reducing control and increasing the chance of social learning for crime (Agnew & Brezina, 2012).

Religion responds to all of these theories in some way. Religion addresses the Social Learning Theory because religious involvement and participation in religious practices increases the chance of an individual being exposed to models that reinforce conformity rather than delinquency. Involvement in religious practices may also reduce strain because religious communities provide support. Religious participation may also lower the likelihood of an individual being labeled as a criminal, as he or she might be perceived as "good." Religion has an especially significant impact with regards to the Control Theory; that is, religion may increase direct control—"religion may instill a fear of the supernatural" and a "punishment by God," a focus of Hirschi and Stark's (1969) 'hellfire' hypothesis. Religion also affects one's stake in conformity. For instance, individuals bond with others through religious groups and communities, perhaps changing their position in society. In response to internal control, religion helps to teach individuals about beliefs that condemn criminality and teach self-control. As evidenced by the literature presented, religion might have a significant impact on crime and it is important to consider theories that attempt to explain this relationship.

Empirical Literature

There is a large amount of empirical literature on the topic of religion and crime. Many have studied adolescents (Hirschi & Stark, 1969; Jang, Bader & Johnson, 2008; Pirutinksy, 2014), while others have studied adults (Evans, Cullen, Dunaway & Burton 1995; Grasmick, Kinsey & Cochran, 1991; Heaton, 2006; Reisig, Wolfe & Pratt 2012; Sturgis & Baller, 2012). Other studies have also focused on specific crimes, to better understand the Antiasceticism Hypothesis (Stack & Kanavy, 1983; Sturgis & Baller, 2012). Most studies have a combination of these features.

i. Defining 'Religiosity'

The strength of one's religious identity, or 'religiosity' does not have a consistent definition throughout the literature referenced in this paper. Some researchers simply ask how often individuals attend religious organization meetings. Others ask additional questions regarding individuals' beliefs on how important their religion is in their daily lives (Evans, Cullen, Dunaway & Burton, 1995). Barro and McCleary (2003) use data from the World Values Survey and International Social Survey Programme to present an encompassing view of the term 'religiosity'. Questions ask about weekly and monthly attendance at a place of worship, as well

as belief in some sort of after-life². These questions provide an enhanced view of one's religiosity and overall religious participation. This paper attempts to combine questions regarding religious affiliation, religious participation, and religious availability at the village level to better encompass an individual's religious identity.

ii. The Antiasceticism Hypothesis

The Antiasceticism Hypothesis, or the 'type of crime hypothesis' argues that religiosity is more effective at deterring minor, victimless forms of crime or deviance than it is at deterring serious forms of crime that have a victim (Sturgis & Baller, 2012). This hypothesis is important to consider as it can help better understand the reasoning behind religion's influence on various types of crimes.

² A detailed list of the questions is included in Appendix 1.

III. DESCRIBING THE SETTING: HINDUISM & CRIME IN INDIA

India is a diverse country, with over 29 states and 14 official languages, representing more than 1.23 billion of the world's population (The World Factbook). In 2001, a majority of the population was Hindu (80.5%), while Muslim (13.4%), Christian (2.3%), Sikh (1.9%) and Other (1.8%) communities represented a minority of the population still consistent with religious distribution today³

It is important to understand the basic concepts of the Hindu religion to better enhance the narrative presented in this paper. The Hindu vision of the world is "cyclical", governed by the law of action and reaction, known as karma (Anderson & Young, 2010). Individuals are responsible for their own actions and there are no shortcuts involved. There are three paths towards attaining a release from this cycle (also known as *moksha*): the path of knowledge, the path of action, and the path of devotion. A combination of these paths is considered religious practice, which eventually leads to *moksha*. Hindus strongly believe in the path of nonviolence, or *ahimsa*, promoted by their ancestors (Armstrong, 2014). In the path to achieving *moksha*, an individual must realize the idea of *ahimsa*, thus being forbidden to kill or injure another creature (Armstrong, 2014). Hindu traditions have a strong emphasis on the respect of all individuals and the surrounding environment.

Hinduism's view of women is another essential topic to understand. Hinduism provides a rich sense of female symbolism (Anderson & Young, 2010). Hinduism shows women in a variety of different capacities through the forms of goddesses. For example, women are depicted as the provider of fertility and purity, as the dutiful wife, or as the great warrior queen (Anderson & Young, 2010)⁴.

³ The World Factbook used 2001 census data from India and was last updated on June 22nd, 2014.

⁴ Sri-Lakshmi, Sita and Durga

It is clear that the female figure is important in the Hindu religion. Given this, it is surprising to observe the current trends in crimes against women reported in India. The National Crime Records Bureau (NCRB) is the official body that reports crimes in India. The NCRB is the attached office of Ministry of Home Affairs (MHA) for the Government of India. Its mission is to empower the Indian police with information technology to help modernize the police force. It gathers information on incidences and rates for all types of crimes: crimes against women, property and violent crime, to name a few. The NCRB collects incidences and rates of crime by state, district and major cities. It has been collecting data on crime since 1953.

The NCRB data includes the Indian Penal Code's (IPC) definition of crimes against women. The IPC defines crimes against women as rape, kidnapping and abduction, homicide for dowry, torture, assault, insult on modesty, and the importation of girls from foreign countries⁵. The NCRB combines the crimes listed above into the category of "Crimes against Women" when recording crime data.

Figure 1 shows two different crimes (crimes against women and robbery crimes) reported by the NCRB. Though the number of crimes is not comparable because of the combined definition of crimes against women, it is still interesting to see the increase in the number of crimes against women while robbery crimes have stayed stable. This is a curious comparison which this paper aims to analyze, specifically by looking deeper into the Antiasceticism Hypothesis.

By analyzing crimes in India, this paper will be able to expand research not only by region, but by religion as well. Examining crime and religion in an Eastern context helps this paper approach religiosity and religious participation in a new way.

⁵ Exact references from the IPC are given in Appendix 2.

IV. DATA

Dataset

This paper uses data from the 2005 India Human Development Survey (IHDS), a nationally representative, multi-topic survey of 41,554 households in 1,503 villages and 971 urban neighborhoods across India. The survey was jointly organized by researchers from the University of Maryland in conjunction with the National Council of Applied Economic Research in New Delhi. Five questionnaires were used to collect information on the individual, household and village levels. This paper uses data from the Education and Health, Household, and Village questionnaires. A summary of the questionnaires is presented in Table 1.

The IHDS survey was chosen for two main reasons: the availability of the data and the timing of the survey. While the World Values Survey had useful measures of religiosity, the sample size was too small for a thorough empirical analysis. Instead, I used variables from the IHDS data and attempt to reproduce the religious variables represented in the World Values Survey. The IHDS data set was also used because of the timing of its survey. According to Figure 1, the number of crimes against women began growing more rapidly around 2003. Since the IHDS survey was conducted in 2005, this presented a unique opportunity to analyze crimes against women at the beginning of the steady increase in the number of crimes.

The specific dataset used in this paper is a subset of the original dataset described above. This dataset is limited to married women aged 15 to 49 years of age who had a spouse present at the time of the interview and had completed the women's survey. These specifications reduced the number of observations used to 30,950 individual entries. These additional specifications are beneficial to this paper because of the focus on women respondents. This emphasis on women gives a stronger perspective on the religious view of women in the household and their views of crime in the household and village. Demographic statistics are given in Table 2.

Dependent Variables

The two main dependent variables are the question regarding harassment of girls and theft which are described below. These dependent variables attempt to compare different types of crime experienced at the household level and how village crimes are perceived by members of the household. The crime variables are not direct numbers of crime, but rather perceptions of how often crime occurs in the household and the village. Thus, the crime questions are used as proxies for crime occurrences within the village. Analysis of these two variables will be used to investigate not only the effect of religion on an individual's experience and view of crime, but the Antiasceticism Hypothesis as well. These variables are summarized in Table 3 and Table 4.

i. Harassment of girls

This question addresses the harassment of unmarried girls in the village. It is especially important to analyze this question because of current news of crimes against women in India today. The increase in press coverage of the topic demonstrates that it is an issue that must be addressed immediately. Though this variable is a varied interpretation of the term 'crimes against women' described earlier in the paper, it still provides some sense of the violence or harassment against women and girls that occurs in the village. It is the best measure within the constraints of the dataset.

ii. Theft

This question addresses the occurrence of theft in the household of the surveyed individual. It is important to include this variable because it is used as a comparison of crimes

against women to further analyze the Antiasceticism Hypothesis. It is also useful because it is a crime that directly occurs in the household, and is not a perception of crime in the village.

iii. Getting along and Conflict

The variables regarding conflict, how village members get along, attacks, and break-ins are not the main dependent variables analyzed in this paper because of the ambiguity of the questions. The phrasing of the questions were a bit obscure at times, and answers did not provide direct rates or numbers of crimes. However, regressions for these variables are given in Appendix 3 and Appendix 4.

Independent Variables

The independent variables try to encompass different parts of religious participation and incorporate the idea of social groups. The religious questions were grouped together in an attempt to replicate the questions from the World Values Survey questions described earlier in the paper. A combination of religious affiliation, individual and household religious practice, as well as the availability of religious organizations in the village help to describe an individual's overall religious participation.

i. Religions Affiliation

Religious affiliation is one of the main variables of interest. The head of the household reported their religion, which could be: Hindu, Muslim, Christian, Sikh, Buddhist, Jain, Tribal, "Other" and "None." The omitted variable for the regression analysis was the variable corresponding to the Christian affiliation. This variable was chosen to demonstrate how eastern religions (specifically Hinduism) compare to Christianity, the religion that was a common focus of studies in the U.S.

ii. Religious Practice

The variables used to demonstrate individual-level religious practice included questions that asked if the individual practiced the ghungat (also known as the purdah or pallu). Elizabeth H. White in *Purdah* (1977), explains that the Purdah's literal meaning is a curtain, but in practice it is the act of wearing a veil by a woman. Purdah is a term that is used to designate the practice of secluding women from men outside of the family. It is most popular among Muslim populations, but it is also seen in certain Brahmin castes in India. The purdah is described as a "complex of customs based on the concept of family honor, and designed to maintain the sexual purity of women" (White 1977). While the purdah does seem oppressive at times, women themselves are not completely against separating from the veil and the restrictions that come with it. This variable was included to indicate an individual's level of participation in religion.

The second variable measuring the individual level of religious participation is an indicator for whether anybody in the household belongs to a religious or social group or festival society. This variable is a proxy for religious participation and it helps show religious participation at an individual level in the household.

iii. Mahila Mandals

Mahila mandals are traditionally local organizations for women. They are "informal community level associations of women who come together." There are Mahila Mandals in both urban and rural villages. For women, Mahila Mandals provide a type of support network that is outside of the household. Women gather together during religious festivals, births, deaths, weddings and local functions for help and support (Das 2000). In Das' (2000) work, she examines if Mahila Mandals are traditional associations that are known to reduce gender

inequality. They have also been known as movements for resistance, allowing women to enter the public domain (Das 2000).

Though Mahila mandals are viewed more as a social group, it is still important to consider its religious ties, as it provides women with a type of spiritual outlet. An indicator for whether an individual belongs to a Mahila Mandal is included to demonstrate another form of religious participation. Mahila Mandals allow women to meet in a safe place for possible religious functions.

iv. Village Availability

Village-level variables are only available for rural residents in the sample, thus reducing the number of observations to between 19,163 and 19,261 depending on the dependent variable used in the regression. Though the sample size is smaller, it is still important to consider certain religious and social occurrences in rural places because these might be the only access some individuals have to religious groups or Mahila Mandals. The questions asked at the village level are quite close to the individual level questions that ask about religious groups and Mahila Mandals. However, the village-level variables address the notion of the availability of these groups rather than participation in them.

v. Other control variables

I also control for education and income due to their direct effect on the surveyed individual knowledge of certain crimes (especially crimes against women). Additionally, income may effect an individual's access to religious ceremonies, gatherings, and other types of religious outlets. Summary statistics for these independent variables are presented in Table 5 and Table 6.

V. EMPIRICAL SPECIFICATION

I use the following model to analyze the effect of religion on crime in a village:

 $Crime_h = \beta_0 + \beta_1 Religious Affiliation_h + \beta_2 Religious Practice_{ih}$

+ $\beta_3 Religious Group Level_v + \beta_4 Education_i + \beta_5 Income_h + \theta + \mu_{ihv}$

Where $Crime_h$ represents the dummy variable for household level occurrences of different types of crime, $ReligiousAffiliation_h$ represents the religion of the head of the household, $ReligiousPractice_{ih}$ represents the dummy variables of individual and household level of religious practice, $VillageAvailability_v$ represents the dummy variable describing if the village has religious and social groups for citizens to participate in, $Education_i$ and $Income_h$ are control variables at the individual and household levels, and θ are village and district-level fixed effects, dependent on the variables in each regression.

I use a Linear Probability Model (LPM) in this paper. There is a fair amount of discussion on whether to use the LPM or the Logit or Probit models for regressions that include binary dependent variables, as is the case in this analysis. Proponents for the Logit or Probit models argue that the LPM is biased, and that the Logit and Probit models can overcome this problem. In response, however, the LPM will be the better suited in understanding marginal effects as well as the coefficients of the variable, two important factors of running regressions⁶.

The use of village and district-level fixed effects (used in two separate regression equations) helps control for those factors that may be constant across individuals. These fixed effects are included because many of the villages and districts had similar characteristics that

⁶ The logit or probit models of regression would have been more helpful had the questionnaires included individuals that had actually committed the crimes described. The coefficients from these types of regressions would have been more valuable to interpret from a logit or probit model because of their focus on the likelihood of a certain outcome. The LPM model offers similar regressions as the logit and probit models, as well as an easier format to interpret coefficients. The LPM is also more useful for further regressions using instrumental variables, a key factor in analyzing religion and crime, as they could be reversely causal than what is examined in this paper.

need to be accounted for, such as size of the village and certain similarities in socioeconomic characteristics. Using village-level fixed effects omits the village-level variables regarding the availability of religious groups and Mahila Mandals described below. To account for this omission, two different regressions are run: one with village-level fixed effects and no village-level questions, and one with district-level fixed effects that does include village-level questions. The second regression includes a smaller sample size because the village-level questions were only asked to the rural population.

To test the Antiasceticism Hypothesis, each regression has two different dependent variables, both relating to crimes that the household has faced. One question is directed at the harassment of girls, and the other addresses theft and robbery. Both are described later in this paper. Exact regression equations are shown in Appendix 5.

VI. RESULTS AND DISCUSSION

Village-Level Fixed Effects

Most of the religious affiliation variables had a negative impact on the harassment of girls in the village as viewed by the survey respondents (Table 7). It is important to remember that this is in comparison to Christian respondents, as this was the omitted variable. Results show that there could be some negative correlation between religious association and crime, but most variables were not at a significant level to achieve a strong conclusion. The Jain religious affiliation was the only religious affiliation to have a significant (at the 1% level) impact; demonstrating that Jain respondents were 9.8% less likely than Christian respondents to see girls being harassed in their village.

Having a member of the household belonging to a Mahila Mandal reduces the chances that the respondent does view the harassment of girls in her village by 1.4%, significant at the 5% level. It is interesting to see that involvement in a Mahila Mandal is more significant than an individual belonging to a religious group. While there are some religious ties to belonging to a Mahila Mandal, it is still mostly a social group, demonstrating that a view or experience of crime could be less likely in social situations rather than religious ones.

With the variable regarding the experience of theft in the household, most of the religious affiliation variables still had a negative impact, but not at a significant level. The Buddhist religion was the only affiliation to experience a negative impact (by 3.5% percentage points) at a significant (10% level) of experiencing a theft in the household.

It is curious to see that an individual in the household belonging to a religious group increases the chances of the household experiencing a theft by 1.7%, significant at the 1% level. It is interesting to see that by being *more* religious, a household is experiencing *more* crime. This

could be pointing towards a different type of phenomenon regarding crimes with religious motives or other types of religious conflict. Had it been available, it would have been interesting to analyze the situation further and identify the exact location of the village to better understand the types of religious groups in that area and to see if there is any conflict.

It is important to acknowledge that the dependent variables were based on the survey respondents' *perceptions* of crime. This means that there were no direct or exact numbers of the crimes occurring the village, nor were details of the severity of the crimes given. For example, those individuals that might be living on the 'right' side of a religious conflict might not experience much crime because of their power or status in the village, a factor that is difficult to determine. Overall, most of the religious variables did have some sort of negative impact on the amount of crime viewed as well as the crime experienced, yet not at a significant level.

District-Level Fixed Effects

Most of the religious affiliation variables had demonstrated that respondents viewed less harassment of girls in their village than their Christian counterparts (Table 8). However, none of these variables were significant. It was interesting to see that the non-religious affiliation was the only affiliation to have a significant (at the 1% level) impact; demonstrating that respondents who did not associate with any religion were 88.9% more likely than Christian respondents to see girls being harassed in their village⁷. Having a household member belonging to a Mahila Mandal lowered the chances of a survey respondent viewing the harassment of girls in the village as being "often" by 2.7% (significant at the 1% level). The availability of a religious

⁷ While this may contribute to the effect of religion and social control theory, it is important to note that there were only three respondents that identified 'None' as their religious affiliation. Thus, this variable might only have a significant impact because of the few number of observations and similar answers among these respondents.

group in the village lowered the chances of a survey respondent viewing the harassment of girls in the village often by 1.8% (significant at the 1% level). This is important to consider because it demonstrates that there is a possibility that a stronger village-level presence of religious outlets could prevent individuals from experiencing crimes against women, specifically harassment of girls in this data. It is also important to note that belonging to a Mahila Mandal in a rural area (results from the district-level) had a more significant deterring impact on an individual's perception of the harassment of girls than it did of individuals in the entire sample. This could demonstrate that Mahila Mandals might have a greater impact in rural areas.

In regards to theft in the household, at the individual level, the practicing of Purdah increased the chances that the survey respondent experienced a theft by 1% (significant at the 5% level). This could be due to religious crimes and religious conflict. Religious conflict occurs between Hindus and Muslims India today and the practicing of the Purdah, a predominantly Muslim ritual, could be a signaling characteristic, thus marking individuals as possible targets of theft. The availability of a religious group at the village level lowered the chances of a survey respondent experiencing theft by 1.1% (significant at the 1% level). It can be deduced that the village-level religious groups might be a key factor in reducing different types of crimes, as it was significant with regards to both the harassment of girls and theft in the household.

It is important again to understand that the dependent variables were asked as conclusions based on perceptions of the surveyed respondents. The inclusion of village-level variables was important; it demonstrated that group level religious behavior might have a stronger deterring effect on crime than individual religious behavior.

VII. CONCLUSION

With the recent increase in press coverage on crimes against women, there is more pressure on the Indian government to properly address the issue of crime, specifically crimes against women in India⁸. Results from this paper suggest that there is reason to pursue the understanding of religion and crime in India.

As stated earlier in this paper, the Antiasceticism Hypothesis argues that religiosity and religious participation are more effective at deterring minor, victimless forms of crime or deviance than serious forms of crime. In comparing the harassment of girls with the crime of theft, religious participation seems to have a greater impact deterring the harassment of girls than deterring theft in households. Furthermore, religious participation affected their view of a crime when a victim was involved, more than it did when the crime was victimless. Though the differences are small, it is still worth noting that the findings in this paper contradict the Antiasceticism Hypothesis. For a deeper analysis of crime, the definition of the term 'victim' should be looked at more closely. For example, if someone was robbed, does it make them less of a victim than an individual in a physical or violent crime? This distinction would have an important impact on future analysis of crime and enforcement.

When analyzing religious affiliation, the paper's results are not conclusive in determining if affiliation with Hinduism and the practicing of Hindu rituals have a stronger impact on deterring crime than the practices of other religions, specifically Christianity. Though the results are not conclusive, this is still an interesting concept to consider because it could initiate action to create various religious programs that address crime directly.

⁸ For example, *India's Daughter*, a BBC documentary (Rowlatt, 2015)

Certain methodology, like the addition of instrumental variables, could add to new conclusions that were are currently not reached. In previous studies, Heaton (2006) attempts to overcome endogeneity by using past religiosity figures as an instrumental variable. Barro and McCleary (2003) have used a country's religious stance as an instrumental variable in their study. Though these types of variables are not available in this data set, the inclusion of instrumental variables could lead to a more complete understanding of the correlation between religion and crime.

Findings on the Antiasceticism Hypothesis and religious affiliation lead not only to basic conclusions on the topic, but also to ideas for further research. One example would be to look at criminals and their motives. This adaptation of the religiosity and crime debate could provide insight into the motives and decision making process criminals take part in before committing a crime. I believe that going directly to the source of the crime, such as the criminal, could prove to be a significant step towards understanding and deterring crime.

When analyzing the results, it important to keep in mind the limitations of this dataset. The independent variables were used to imitate questions from the World Values Survey, thus they may not completely capture an individual's religiosity and religious participation. For example, questions on the frequency of practice and more detailed answers on belief would provide a better measure. Additionally, the dependent variables were mostly based on the *perceptions* of the survey respondents. Had there been more direct relations to the crime occurring in these individuals' households and villages, there would be stronger evidence in relating religion to crime. Although the data were constrained, certain conclusions could still be made from the results, and hopefully provide a path for the aforementioned research.

VIII. REFERENCES

- Agnew, Robert, and Timothy Brezina. *Juvenile Delinquency: Causes and Control*. 4th ed. New York: Oxford UP, 2012. Print.
- Anderson, Leona M., and Pamela Dickey Young. *Women & Religious Traditions*. N.p.: Oxford UP, 2010. Print.
- Armstrong, Karen. *Fields of Blood: Religion and the History of Violence*. New York: Alfred A. Knopf, Random House LLC, 2014. Print.
- Baier, Colin J., and Bradley R. E. Wright. ""If You Love Me, Keep My Commandments": A
 Meta-Analysis of the Effect of Religion on Crime." *Journal of Research in Crime and Delinquency* 38 (2001): 3-21. *Sage Journals*. Web. 1 Dec. 2014.
- Barro, Robert J., and Rachel M. McCleary. "Religion and Economic Growth across Countries." *American Sociological Review* 68.5 (2003): 760-81. *JSTOR*. Web. 2 Dec. 2014.
- Becker, Gary S. "Crime and Punishment: An Economic Approach." Journal of Political Economy 76.2 (1968): 169-217. JSTOR. Web. 26 Nov. 2014.
- Bharadwaj, Vinita. "Respect All Women, My Son." *The New York Times*. N.p., 28 Aug. 2013. Web. 2 Dec. 2014.
- Bhattacharjee, Swati. A Unique Crime: Understanding Rape in India. Kolkata: Gangchil, 2008. Print.
- Brauer, Johnathan R., Charles R. Tittle, and Olena Antonaccio. "Does Religion Suppress,
 Socialize, Soothe, or Support? Exploring Religiosity's Influence on Crime." *Journal* for the Scientific Study of Religion 52.4 (2013): 753-74. JSTOR. Web. 2 Dec. 2014.
- Cullen, Francis T., Robert Agnew, and Pamela Wilcox. *Sociological Theory: Past to Present*. 5th ed. New York: Oxford UP, 2014. Print.

- Das, Maitreyi. "Mahila Mandals in Gender Politics." *Economic and Political Weekly* 35 (2000): 4391-4395. *JSTOR*. Web. 21 Feb. 2015.
- Evans, T. David, Francis T. Cullen, Robert Gregory Dunaway, and Velmer S. Burton, Jr.
 "Religion and Crime Reexamined: The Impact of Religion, Secular Controls, and Social Ecology on Adult Criminality." *Criminology* 33.2 (1995): 195-224. *HeinOnline*. Web. 1 Dec. 2014.
- Grasmick, Harold G., Karl Kinsey, and John K. Cochran. "Denomination, Religiosity and Compliance with the Law: A Study of Adults." *Journal for the Scientific Study of Religion* 30.1 (1991): 99-107. *JSTOR*. Web. 1 Dec. 2014.
- Heaton, Paul. "Does Religion Really Reduce Crime?" *Journal of Law and Economics* 49.1 (2006): 147-72. *JSTOR*. Web. 26 Nov. 2014.
- Hirschi, Travis, and Rodney Stark. "Hellfire and Delinquency." *Social Problems* 17.2 (1969): 202-13. *JSTOR*. Web. 26 Nov. 2014.
- Jang, Sung J., Christopher D. Bader, and Byron R. Johnson. "The Cumulative Advantage of Religiosity in Preventing Drug Use." *The Journal of Drug Issues* 38.3 (2008): 771-98. *JSTOR*. Web. 1 Dec. 2014.
- "National Crime Records Bureau." *National Crime Records Bureau, Ministry of Home Affairs*. N.p., n.d. Web. 20 Dec. 2014.
- Pirutinksy, Steven. "Does Religiousness Increase Self-Control and Reduce Criminal Behavior?: A Longitudinal Analysis of Adolescent Offenders." *Criminal Justice and Behavior* 41 (2014): 1290-307. *Sage Journals*. Web. 2 Dec. 2014.

Reisig, Michael D., Scott E. Wolfe, and Travis C. Pratt. "Low Self-Control and the Religiosity-Crime Relationship." *Criminal Justice and Behavior* 39 (2012): 1172-191. *Sage Journals*. Web. 02 Dec. 2014.

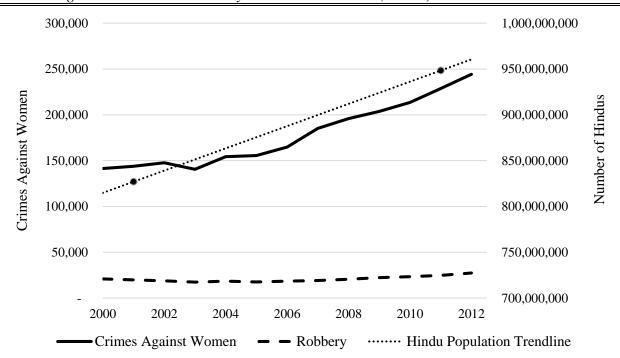
Rowlatt, Justin. "How India's ban on rape film backfired." BBC News. Web. 24 Mar. 2015.

- Stack, Steven, and Mary J. Kanavy. "The Effect of Religion on Forcible Rape: A Structural Analysis." *Journal for the Scientific Study of Religion* 22.1 (1983): 67-74. *JSTOR*. Web. 1 Dec. 2014.
- Sturgis, Paul W., and Robert D. Baller. "Religiosity and Deviance: An Examination of the Moral Community and Antiasceticism Hypotheses Among U.S. Adults." *Journal for the Scientific Study of Religion* 51.4 (2012): 809-20. *JSTOR*. Web. 2 Dec. 2014.
- White, Elizabeth. "Purdah." Frontiers: A Journal of Women Studies 2 (1977): 31-42. JSTOR.Web. 28 Feb. 2015.
- "The World Factbook." *Central Intelligence Agency*. Central Intelligence Agency, n.d. Web. 20 Dec. 2014.

The World Values Survey (2005). Retrieved from http://www.worldvaluessruvey.org

IX. TABLES AND FIGURES





Crimes Against Women and Robbery Crimes 2000 - 2012 (NCRB)

Note: A trendline was created in incorporate the Hindu population in India calculated in the 2001 census and 2011 census.

Table 1

Summary of Questionnaires Used

Questionnaire	Respondent	Variable Level
Education and Health	Female head of household	Household/Individual
Household	Head of household (either male or female)	Household
Village	Key village members	Village

Table 2

Demograp	hic	Variables
Demograp	nic	variables

Variable	Obs.	Mean	Std. Dev.	Min	Max
Household Income (Rupees)	30636	56796.72	82294.44	0.00	6520261.00
Married women in household	30950	1.3392	0.6495	1	8
Wife Education (years)	30943	4.6120	4.8152	0	15
Wife Age	30950	32.8240	7.9527	15	49

Note: The summary statistics provided vary slightly between variables due to the omission of 'Valid Blanks' and 'Valid Skips' from the survey. This occurred during dummy variable creation.

Table 3

Summary Statistics of Dependent V	ariables				
Variable	Obs.	Mean	Std. Dev.	Min	Max
People in village get along	30774	0.5440	0.4981	0	1
Conflict in village	30787	0.2858	0.4518	0	1
Theft from household	30889	0.0383	0.1918	0	1
Break-in in household	30895	0.0096	0.0974	0	1
Household member attacked	30893	0.0249	0.1559	0	1
Harassment of girls	30740	0.1198	0.3247	0	1

Note: The summary statistics provided vary slightly between variables due to the omission of 'Valid Blanks' and 'Valid Skips' from the survey. This occurred during dummy variable creation.

Table 4

Dependent variables

Question		Freq.	Percent
In this village/neighborhood, do people generally get along	Get Along	16,742	54.40
with each other or is there some conflict or a lot of conflict?	A lot and Some	14,032	45.60
In this village/neighborhood, how much conflict would you	A lot and Some	8,800	28.58
say there is among the communities/jatis that live here?	Not much	21,987	71.42
During the last 12 months, was anything stolen that	Yes	1,182	3.83
belonged to you or to somebody in your household?	No and don't know	29,707	96.17
During the last 12 months, did anyone break into your	Yes	296	0.96
home or illegally get into your home?	No and don't know	30,599	99.04
During the last 12 months, did anyone attack or threaten	Yes	770	2.49
you or someone in your household?	No and don't know	30,123	97.51
How often are unmarried girls harassed in your	Sometimes and often	3,682	11.98
village/neighborhood?	Rarely/Never	27,058	88.02

Variable	Obs.	Mean	Std. Dev.	Min	Max
Practicing Purdah	30851	0.5347	0.4988	0	1
Hindu	30950	0.8093	0.3928	0	1
Muslim	30950	0.1168	0.3212	0	1
Christian	30950	0.0281	0.1654	0	1
Sikh	30950	0.0247	0.1551	0	1
Buddhist	30950	0.0066	0.0811	0	1
Jain	30950	0.0032	0.0565	0	1
Tribal	30950	0.0105	0.1021	0	1
Others	30950	0.0006	0.0241	0	1
None	30950	0.0001	0.0098	0	1
Belong to a religious group	30911	0.1472	0.3543	0	1
Belong to a Mahila Mandal	30908	0.0763	0.2655	0	1
Village religious group	19365	0.5296	0.4991	0	1
Village Mahila Mandal	19365	0.4845	0.4998	0	1

Table 5Summary Statistics of Independent Variables

Note: Village level variables are lower because the village level questions were only asked of participants in rural villages.

Table 6

Independent Variables

Question		Freq.	Percent
	Hindu	25,049	80.93
	Muslim	3,616	11.68
	Christian	871	2.81
	Sikh	763	2.47
What is the religion of the head of household?	Buddhist	205	0.66
	Jain	99	0.32
	Tribal	326	1.05
	Others	18	0.06
	None	3	0.01
Do you practice shunget/purdeh/pellu?	Yes	16,495	53.47
Do you practice ghungat/purdah/pallu?	No	14,356	46.53
Does anybody in the household belong to a Mahila	Yes	2,358	7.63
Mandal?	No	28,550	92.37
Does anybody in the household belong to a	Yes	4,549	14.72
religious or social group or festival society?	No	26,362	85.28
Is there a Mahila Mandal in the village?	Yes	9,382	48.45
	No	9,983	51.55
Is there a religious or social/festival group in the	Yes	9,109	47.04
village?	No	10,256	52.96

	(1)	(2)
	Harass	Stolen
Hindu	-0.003	-0.010
	(0.014)	(0.009)
Muslim	-0.012	-0.007
	(0.015)	(0.010)
Sikh	-0.015	-0.011
	(0.021)	-0.014
Buddhist	0.032	-0.035*
	(0.026)	(0.018)
Jain	-0.098***	0.008
	(0.035)	(0.023)
Tribal	0.034	-0.003
	(0.025)	(0.017)
Others	0.052	-0.052
	(0.068)	(0.045)
None	0.184	-0.070
	(0.163)	(0.110)
Practicing Purdah	-0.000	-0.002
	(0.005)	(0.003)
Belong to a religious Group	0.001	0.017***
	(0.006)	(0.004)
Belong to a Mahila Mandal	-0.014**	0.002
	(0.007)	(0.005)
Education (years)	-0.000	0.000
	(0.000)	(0.000)
Household Income	-0.000	-0.000
	(0.000)	(0.000)
Constant	0.126***	0.046***
	(0.014)	(0.009)
Observations	30,309	30,457
R-squared	0.001	0.001

Table 7OLS Regressions using Village-Level Fixed Effects

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Note: The summary statistics provided vary slightly between variables due to the omission

of 'Valid Blanks' and 'Valid Skips' from the survey. This occurred during dummy variable creation.

	(1)	(2)
	Harass	Stolen
Hindu	-0.009	-0.007
	(0.017)	(0.012)
Muslim	-0.004	-0.004
	(0.019)	(0.013)
Sikh	-0.013	-0.004
	(0.025)	(0.017)
Buddhist	0.027	-0.024
	(0.031)	(0.021)
Jain	-0.147	0.063
	(0.093)	(0.064)
Tribal	0.017	0.005
	(0.024)	(0.016)
Others	0.085	-0.017
	(0.104)	(0.071)
None	0.888***	-0.020
	(0.273)	(0.186)
Practicing Purdah	-0.006	0.010**
	(0.006)	(0.004)
Belong to a religious Group	-0.004	0.003
	(0.007)	(0.005)
Belong to a Mahila Mandal	-0.027***	0.006
	(0.008)	(0.005)
Mahila Mandal in village	0.011**	0.003
	(0.005)	(0.004)
Religious group in village	-0.018***	-0.011***
	(0.005)	(0.004)
Education (years)	-0.000	0.001*
	(0.001)	(0.000)
Household Income	0.000	0.000
	(0.000)	(0.000)
Constant	0.131***	0.041***
	(0.017)	(0.012)
Observations	18,876	18,973
R-squared	0.002	0.001

Table 8OLS Regressions using District-Level Fixed Effects

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Note: The summary statistics provided vary slightly between variables due to the omission of

'Valid Blanks' and 'Valid Skips' from the survey. This occurred during dummy variable creation.

X. APPENDIX

Appendix 1

Examples of World Values Survey Questions

Questions

How important is religion in your life?

Apart from weddings and funerals, about how often do you attend religious services these days?

Do you take some moments of prayer, meditation or contemplation or something like that? Do you believe in heaven or hell?

Do you believe in some sort of after-life?

Appendix 2

Crimes Against Women defined by the Indian Penal Code (IPC)

Crimes Against Women acfinea by the matan I chai Coac (II C)	
Crime	IPC Code
Rape	Sec. 376 IPC
Kidnapping and abduction for specified purposes	Sec. 363 - 373 IPC
Homicide for dowry, dowry deaths or their attempts	Sec. 302/304-B IPC
Torture - both mental and physical	Sec. 498-A IPC
Assault on women with intent to outrage her modesty	Sec. 354 IPC
Insult to the modesty of women	Sec. 509 IPC
Importation of girl from foreign country (up to 21 years of age)	Sec. 366-B IPC

<u> </u>	(1)	(2)	(3)	(4)
	GetAlong	Conflict	BreakIn	Attack
Hindu	-0.051***	0.021	0.001	-0.002
	(0.019)	(0.019)	(0.005)	(0.007)
Muslim	-0.047**	0.002	0.003	-0.005
	(0.021)	(0.022)	(0.006)	(0.008)
Sikh	-0.030	-0.042	0.002	-0.003
	(0.028)	(0.029)	(0.007)	(0.011)
Buddhist	-0.067*	0.010	-0.013	0.002
	(0.036)	(0.037)	(0.010)	(0.014)
Jain	-0.046	0.064	0.008	-0.040**
	(0.047)	(0.049)	(0.012)	(0.018)
Tribal	-0.030	0.079**	-0.010	0.014
	(0.034)	(0.035)	(0.009)	(0.013)
Others	0.086	-0.004	0.058**	0.161***
	(0.092)	(0.095)	(0.024)	(0.036)
None	0.063	-0.025	0.002	-0.003
	(0.222)	(0.230)	(0.059)	(0.087)
Practicing Purdah	0.013*	-0.013*	0.001	-0.002
	(0.007)	(0.007)	(0.002)	(0.003)
Belong to a religious Group	-0.001	0.015*	0.006***	0.007**
	(0.008)	(0.009)	(0.002)	(0.003)
Belong to a Mahila Mandal	-0.020**	0.039***	0.002	-0.002
	(0.010)	(0.010)	(0.003)	(0.004)
Education (years)	0.001*	-0.002***	0.000	-0.000
	(0.001)	(0.001)	(0.000)	(0.000)
Household Income	0.000***	-0.000**	-0.000	-0.000
	(0.000)	(0.000)	(0.000)	(0.000)
Constant	0.579***	0.283***	0.007	0.029***
	(0.019)	(0.019)	(0.005)	(0.007)
Observations	30,341	30,354	30,463	30,461
R-squared	0.001	0.002	0.001	0.001

Appendix 3 OLS Regressions using Village-Level Fixed Effects

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

OLD REFEISIONS USING DISTINCT LEV	(3)	(4)	(5)	(6)
	GetAlong	Conflict	BreakIn	Attack
Hindu	-0.078***	0.026	-0.003	0.001
	(0.025)	(0.026)	(0.006)	(0.010)
Muslim	-0.037	-0.019	-0.004	-0.010
	(0.028)	(0.028)	(0.007)	(0.011)
Sikh	-0.076**	-0.055	0.001	0.002
	(0.037)	(0.038)	(0.009)	(0.014)
Buddhist	-0.094**	0.013	-0.008	0.013
	(0.046)	(0.046)	(0.011)	(0.018)
Jain	0.025	-0.065	-0.008	-0.032
	(0.138)	(0.140)	(0.034)	(0.054)
Tribal	-0.155***	0.062*	-0.002	0.017
	(0.035)	(0.036)	(0.009)	(0.014)
Others	0.334**	-0.167	-0.003	0.140**
	(0.154)	(0.157)	(0.038)	(0.060)
None	-0.124	0.158	-0.002	-0.038
	(0.403)	(0.409)	(0.100)	(0.157)
Practicing Purdah	-0.003	-0.020**	0.000	-0.002
	(0.009)	(0.009)	(0.002)	(0.004)
Belong to a religious Group	0.006	0.026**	0.003	0.014***
	(0.011)	(0.011)	(0.003)	(0.004)
Belong to a Mahila Mandal	-0.025**	0.055***	0.002	-0.007
	(0.011)	(0.012)	(0.003)	(0.004)
Mahila Mandal in village	-0.016**	0.008	0.000	0.001
	(0.008)	(0.008)	(0.002)	(0.003)
Religious group in village	0.026***	0.014*	-0.003	-0.003
	(0.008)	(0.008)	(0.002)	(0.003)
Education (years)	0.001*	-0.003***	0.000	-0.000
	(0.001)	(0.001)	(0.000)	(0.000)
Household Income	0.000	-0.000	0.000	-0.000
	(0.000)	(0.000)	(0.000)	(0.000)
Constant	0.602***	0.292***	0.013**	0.031***
	(0.026)	(0.026)	(0.006)	(0.010)
Observations	18,913	18,916	18,977	18,975
R-squared	0.004	0.005	0.000	0.002

Appendix 4 OLS Regressions using District-Level Fixed Effects

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Appendix 5 Full Equations of Regressions Run

Equation 1: Harassment of girls with village-level fixed effects, no village level variables $\begin{aligned} Harass_{h} &= \beta_{0} + \beta_{1}Hindu_{h} + \beta_{2}Muslim_{h} + \beta_{3}Sikh_{h} + \beta_{4}Buddhist_{h} + \beta_{5}Jain_{h} \\ &+ \beta_{6}Tribal_{h} + \beta_{7}Other_{h} + \beta_{8}None_{h} + \beta_{9}Purdah_{i} + \beta_{10}BelongReligGroup_{h} \\ &+ \beta_{11}BelongMahilMandal_{h} + \beta_{12}Education_{i} + \beta_{13}Income_{h} + \theta_{v} + \mu_{ihv} \end{aligned}$

Equation 2: Theft in household with village-level fixed effects and no village level variables $\begin{aligned} Stolen_h &= \beta_0 + \beta_1 Hindu_h + \beta_2 Muslim_h + \beta_3 Sikh_h + \beta_4 Buddhist_h + \beta_5 Jain_h \\ &+ \beta_6 Tribal_h + \beta_7 Other_h + \beta_8 None_h + \beta_9 Purdah_i + \beta_{10} Belong ReligGroup_h \\ &+ \beta_{11} Belong MahilMandal_h + \beta_{12} Education_i + \beta_{13} Income_h + \theta_v + \mu_{ihv} \end{aligned}$

Equation 3: Harassment of girls with district level fixed effects and village level variables

$$\begin{split} Harass_{h} &= \beta_{0} + \beta_{1}Hindu_{h} + \beta_{2}Muslim_{h} + \beta_{3}Sikh_{h} + \beta_{4}Buddhist_{h} + \beta_{5}Jain_{h} \\ &+ \beta_{6}Tribal_{h} + \beta_{7}Other_{h} + \beta_{8}None_{h} + \beta_{9}Purdah_{i} \\ &+ \beta_{10}BelongReligGroup_{h} + \beta_{11}BelongMahilMandal_{h} + \beta_{12}VilReligious_{v} \\ &+ \beta_{13}VilMahila_{v} + \beta_{14}Education_{i} + \beta_{15}Income_{h} + \theta_{d} + \mu_{ihv} \end{split}$$

Equation 4: Theft in household with district level fixed effects and village level variables

$$\begin{split} Stolen_{h} &= \beta_{0} + \beta_{1} Hindu_{h} + \beta_{2} Muslim_{h} + \beta_{3} Sikh_{h} + \beta_{4} Buddhist_{h} + \beta_{5} Jain_{h} \\ &+ \beta_{6} Tribal_{h} + \beta_{7} Other_{h} + \beta_{8} None_{h} + \beta_{9} Purdah_{i} \\ &+ \beta_{10} Belong ReligGroup_{h} + \beta_{11} Belong MahilMandal_{h} + \beta_{12} VilReligious_{v} \\ &+ \beta_{13} VilMahila_{v} + \beta_{14} Education_{i} + \beta_{15} Income_{h} + \theta_{d} + \mu_{ihv} \end{split}$$