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HIV Stigma Within Religious Communities in Rural India

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Walden University
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Abstract

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MBA, La Sierra University, 2003

BBA, East Tennessee State University, 2000

Dissertation Submitted in Partial Fulfillment

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Doctor of Philosophy

Clinical Psychology

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Abstract

This study was conducted to gain a better understanding of HIV/AIDS-related stigma within religious communities in rural Gujarat, India. This study used the hidden distress model of HIV stigma and the HIV peer education model as conceptual frameworks to examine a rural population sample of 100 participants. Regression analysis was conducted to test if school education had a moderating effect on the relationship between illness as punishment for sin (IPS) and HIV stigma. Religiosity was tested for mediating effects on the relationship between early religious involvement (ERI) and HIV stigma. The results of this study indicated that single unemployed men under the age of 28 were more likely to relate religiosity, IPS, and ERI to HIV stigma. Furthermore, education did not significantly moderate the relationship between IPS and HIV Stigma, and religiosity also did not mediate the relationship between ERI and HIV stigma. However, an additional mediation analysis showed that IPS did mediate the relationship between religiosity and HIV stigma in this study. The results of this study suggested that HIV/AIDS awareness programs may need to focus on young unemployed men because they may be the most susceptible to stigmatic thinking. It can be concluded that IPS was a major contributor in the proliferation of HIV stigma for participants in this study. Further research is needed to understand how belief in an authoritarian God could increase IPS, and how education initiatives may aid in decreasing IPS among inhabitants. This study strived to add to the existing body of knowledge and help improve the lives of those infected with HIV in rural parts of India.

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Dedication

This study is dedicated to the all the people living with HIV/AIDS in rural parts of Gujarat, India. I hope that this study will in some way be used to better the lives of those infected and provide them with the solace of treatment, love, and respect that we all take for granted. I would also like to dedicate this work to my loving family who has supported me through every letter of every word in this document. I could not have completed nearly 2 years of the most intense research and analysis of my life without them. I dedicate this study to my parents who are from Gujarat, India and came to United States to provide a better life for me and my brothers. I also dedicate this study to my loving wife who has provided me with guidance and intellectual motivation to pursue my dreams of higher learning. I know in my heart that I can never repay you all for what you do, but I hope to always be appreciative for the blessings I receive.

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Chapter 1: Introduction to the Study

People living with HIV/AIDS (PLHAs) have struggled to preserve their health and fight the physical ailments of the disease. While the physical symptoms may be overwhelming, the psychological distress could significantly deplete the quality of life for PLHAs (Nyblade et al., 2013). One of the biggest psychological stressors may have been living with the stigma that society places on people who contract the disease. HIV related stigma has been a globally recognized barrier to accessing HIV prevention programs and treatment services (Nyblade et al., 2013). However, there have been few attempts to create and implement programs around the world to reduce social stigma against PLHAs (Nyblade et al., 2013).

One of the reasons for insufficient stigma reduction programs has been the lack of brief standardized stigma measures that can be globally implemented. Cultural diversity within nations has created substantial hurdles in seeking a comprehensive understanding of stigma and developing measurements (Nyblade et al., 2013). The levels of stigma may vary from nation to nation based on political and socioeconomic factors. Furthermore, within nations, there may be even greater differentials in stigma levels based on language, traditions, and religiousness (Nyblade et al., 2013).

Socioeconomic, political, and cultural factors have been becoming increasingly important for HIV/AIDS programs and treatment. The impact of these factors on HIV treatment in healthcare settings and support for PLHAs had become undeniable (Gari et al., 2013). HIV related stigma has been a global constant that impacts the quality of life for PLHAs, regardless of their country of residence. However, PLHAs in low income

developing nations such as India may face greater challenges because of the level of stigma in healthcare systems, social services, and institutions (Gari et al., 2013).

One of the major influencing factors on stigma levels within institutions and overall social attitudes has been religion (Johnson, Li, Cohen, & Okun, 2013). For some people, religion provides the most guidance for appropriate thinking and behavior. Religious people develop a worldview that is molded by religious doctrine, and the type of worldview people have may enhance or diminish HIV related stigma (Johnson et al., 2013). It has become vital to understand the relationship between religion and stigma because it may make a significant difference in the quality of life for PLHAs living India (Johnson et al., 2013).

India has approximately 1.23 billion people, and the National AIDS Control Organization (NACO, 2014) of India estimated that nearly 5 million of these individuals were living with the HIV in 2014. Adult prevalence was nearly 0.31%, but children less than 15 years old account for 3.5% of the total infected population (NACO, 2014). Individuals between the ages of 15 and 49 represent nearly 83% of the infected population in India, and women account of approximately 39% of that subgroup (NACO, 2014).

While PLHAs can be found throughout the country of India, most of the epidemic is concentrated in a few industrialized states in the south, west, and north-east. Nearly 55% of the HIV outbreak is in the southern states of Andhra Pradesh--500,000 PLHAs, Maharashtra--420,000 PLHAs, Karnataka--250,000 PLHAs, and Tamil Nadu--150,000 PLHAs (NACO, 2014). The western and north-eastern states of West Bengal, Bihar,

Uttar Pradesh, and Gujarat can claim another 22% or 100,000 PLHAs each (NACO, 2014).

The Government of Gujarat (GOG, 2013) described the state as having pockets of industrial growth in urban areas such as in the city of Ahmedabad, which has been the commercial capital of the state. However, most of the state has been predominantly comprised of rural agricultural communities. Nearly 60% of the population of Gujarat lives in villages and small towns spread throughout a total of 26 districts (GOG, 2013).

The state of Gujarat recognizes a total of 18,618 villages, compared to only 242 towns (GOG, 2013). Southern Gujarat is comprised mostly of villages where people live a traditional agricultural lifestyle. Religious traditions are important to these communities, which may play a significant role in the presence of HIV stigma in the region. A better understanding of the relationship between religion and HIV stigma in rural parts of Gujarat, India was the goal of this study (GOG, 2013).

In the following sections of this chapter, the underlying research on the history of the topic will be presented. The background research will establish the foundation for this study by identifying the gap in knowledge and providing theoretical support. The research problem will be clearly stated, and the purpose of the study will be explained to justify conducting the research. Research questions and hypotheses on specific variables to be tested will be presented to clarify the purpose of the study. Then the nature of the research design will be discussed along with foreseeable assumptions and limitations.

Background

Current research on the dynamics of stigma suggests that it aids in establishing barriers to treatment within the healthcare system. Rural parts of southern Gujarat have had few designated clinics and hospitals for HIV treatment, and the stigma that resides within the community directly impacts the quality of care provided (Patel et al., 2012). This stigma barrier discourages individuals to get tested and seek medical care, but it also interjects bias and prejudice on the part of doctors, nurses, and staff who work at the facilities (Patel et al., 2012). In this manner, stigma has shown to have a direct effect on the physical wellbeing and care for patients who are fighting for their lives (Patel et al., 2012).

To further emphasize the disastrous influence of stigma, researchers have suggested that an underlying issue that has been rarely addressed is the quality of training provided to healthcare workers (Katira, Dutt, Tolia, & Chatterjee, 2007). Many nurses, staff, and other lower level healthcare staff have insufficient knowledge of HIV and are poorly trained in treatment procedures (Katira et al., 2007). While doctors may have been appropriately trained, most of the work is done by poorly trained lower level staff. This lack of training might have led to greater prejudice, bias, and stigma levels (Katira et al., 2007).

The effects of HIV related stigma in healthcare settings may be an indication of how stigma affects other social institutions such as religion, education, and government. If healthcare, which should ideally be free of stigma against patients, has shown to be so heavily influenced by stigmatized thought, then other institutions may also suffer

(Kotecha et al., 2012). Social institutions have played a vital role in either diminishing stigma or perpetuating it, and HIV awareness programs must take this into account (Kotecha et al., 2012). One example of this has been the role schools play in providing sex education and HIV awareness to adolescent children. In Vadodara city in Gujarat, India, recent assessment of boys and girls in Grades 6 to 12 indicated that sex education in schools was inadequate (Kotecha et al., 2012).

The primary sources of sex education for the children were schoolbooks, television, teachers, friends, and parents. Ranked by order of importance, schoolbooks and teachers were a greater source of information than parents or even friends (Kotecha et al., 2012). While only one-third of the boys and one-fourth of the girls had heard of contraception, two-thirds of both boys and girls were familiar with modes of HIV transmission (Kotecha et al., 2012). Though this may seem optimistic, it still means that one-third of maturing adolescents were unfamiliar with HIV and how it was transmitted (Kotecha et al., 2012). In a country such as India where HIV has been a serious concern, proper sex education through schools, religious organizations, government facilities, or healthcare clinics can be lifesaving.

The rural part of southern Gujarat is comprised of communities that are traditionally Hindu, so individuals get their values and beliefs from religious leaders and community elders. While there has been substantial research on stigma and intervention programs catering to urban settings, the rural populations were far less understood (Fung et al., 2007). Furthermore, specific high risk populations such as commercial sex workers

in major cities and long distance truck drivers have been studied extensively (Fung et al., 2007).

Intervention programs that focused on unprotected sex and needle sharing were effective in the sex industry for urban areas (Fung et al., 2007). However, similar intervention programs have not yet been replicated for hard to reach rural areas that present greater challenges. Rural areas have been not only difficult to reach due to logistics and lack of resources, but they shy away from addressing issues of prostitution and HIV (Fung et al., 2007). This left a significant gap in the current research when it comes to assessing the influence of stigma in rural religious communities (Fung et al., 2007). Expanding upon the research on HIV in rural areas of India could help to create interventions that are specifically designed to cater to those most in need.

The importance of understanding the relationship between religion and stigma is that religion provides guidelines for worldviews and appropriate behavior to its followers (Johnson et al., 2013). In examining the effectiveness of HIV interventions initiated by faith based organizations (FBOs), the importance of incorporating FBOs in awareness programs was recognized (Granger & Price, 2009). For example, religious constraint on sexual promiscuity could be a potential asset for minimizing the spread of HIV (Granger & Price, 2009). However, further research is needed in understanding how FBO funded intervention programs impact the spread of HIV stigma and the treatment of PLHAs (Granger & Price, 2009). Religious communities add a greater complexity to implementing HIV intervention programs, especially in rural areas where education is poor and supernatural beliefs are widespread (Granger & Price, 2009).

Religion could be used as a prosocial motivator if individuals view their God as a benevolent deity. This perspective may even help in curbing stigma levels in the community through sympathy and social awareness movements (Johnson et al., 2013). However, the opposite effect was observed if the perspective was of an authoritarian God who punishes souls for their misdeeds and high-risk behaviors (Johnson et al., 2013). An authoritarian God perspective could not only create social stigma but perpetuate it exponentially like an out-of-control infection (Johnson et al., 2013). For this reason, the dynamics of religious belief and its influence on stigma in rural communities must be better understood (Johnson et al., 2013).

Current research on PLHAs in India is a vast array of knowledge that spans the spectrum of expertise from bio-medical to sociology. Nevertheless, HIV associated stigma was just recently beginning to be addressed in rural parts of states such as Gujarat, India. Perceptions of PLHAs regarding barriers to treatment in Gujarat suggested that logistical, financial, and social challenges prevented access to treatment (Patel et al., 2012). An evaluation was conducted on the impact of training on HIV stigma and practices on male healthcare workers in the northern Gujarat city of Rajkot (Katira et al., 2007). The analyses discovered that 83.5% of male hospital workers assumed that HIV infection mostly spreads through mosquito bites, which is a false assumption (Katira et al., 2007).

Problem Statement

There has been a significant lack of research and understanding of HIV stigma in rural areas of Gujarat, India. The state of Gujarat has approximately 100,000 people

living with HIV, and their quality of life depends upon healthcare and social support (NACO, 2014). Traditional value systems based on Hindu religious practices were prevalent in the rural area around the small town of Anaval. Anaval is located within the predominantly agricultural area of southern Gujarat, and understanding how religious factors related to HIV stigma is crucial for the wellbeing of PLHAs.

Introduction of Variables

Current research falls short in understanding how a particular religious construct of illness, called illness as a punishment for sin (IPS) relates to the stigmatization of PLHAs. IPS is defined as the perception of illness being a result of one's own fault for having sinned or having poor character and is one of three religious concepts missing from current research on HIV stigma (Holt et al., 2009). Two other constructs, religiosity and early religious involvement (ERI), have not been examined in the context of HIV stigma. Religiosity is defined as the intensity of belief in religious practices and ideology (Cohen, Shariff, & Hill, 2008).

For the sake of this study, religiosity is a universally applicable construct that is not confined to any specific doctrine or religious belief system. Using the word *intensity* to define religiosity emphasizes neutrality in terms of moral stature. The word intensity should not convey any form of judgment of good and bad or positive and negative polarities in this study. Instead, intensity should be perceived as a measure of how deeply an individual believes in their religion, their level of emotional attachment, and overall intention to follow religious practices. Therefore, participants in this study who may be intensely religious should not be labeled as good or bad based upon only this one

attribute. ERI is defined as the frequency of participation in religious activities and the importance of religion to the family of individuals during childhood (Mattis, Fontenot, & Hatcher-Kay, 2003).

HIV stigma is a dimensional construct that impacts the lives of PLHAs in multiple ways. HIV stigma is defined as comprehensive stigmatization that is accumulated from the dimensions of labeling, negative attribution, distancing, status loss, and controllability. Labeling is assigning damaging attributes to HIV/AIDS while negative attribution suggests character flaws and bad judgment in those living with the disease. Distancing is when people would prefer to stay away from PLHAs or wish for those who are infected to be kept apart from the general population. Status loss suggests that PLHAs have lost social status in the community while controllability is the belief that contracting the disease could have been prevented (Bresnahan & Zhuang, 2011).

The gap in current research indicated that there was insufficient understanding of how religiosity may mediate the relationship between ERI and HIV stigma. Finally, it was important to discover if school education may be a moderator in the relationship between IPS and HIV stigma. Furthermore, current interventions mostly ignored rural areas of India due to low literacy, gender inequality, and cultural taboos that presented an overwhelming challenge (Van Rompay et al., 2008). Religious communities in rural parts of India may have played a pivotal role in HIV prevention or further complicated implementation through perpetuating established stigma. The problem was that there was a gap in the current research when it comes to understanding how religion relates to HIV stigma in rural areas of Gujarat, India. Unless this dynamic relationship becomes well-

known, intervention and awareness programs for rural areas may be set up for failure. In this study, I aimed to fill this significant gap in the literature by evaluating the relationship between specific religious constructs and stigma against PLHAs in rural Gujarat, India.

Purpose of the Study

The purpose of this study was to identify significant relationships between certain religious constructs and HIV stigma. Specifically, I evaluated if education was a moderator between perception of IPS and HIV stigma. The role of religiosity as a mediator for the relationship between ERI and dimensions of HIV stigma was also assessed.

Research Questions and Hypotheses

RQ1: Does education moderate the relationship between IPS and HIV stigma?

$H1_0$: Education does not moderate the relationship between IPS and HIV stigma.

$H1_1$: Education does moderate the relationship between IPS and HIV stigma.

RQ2: Does religiosity mediate the relationship between ERI and HIV stigma?

$H2_0$: Religiosity does not mediate the relationship between ERI and HIV stigma.

$H2_1$: Religiosity does mediate the relationship between ERI and HIV stigma.

Theoretical Foundation

A theoretical model of assessing dimensions of HIV stigma was recently adapted by Steward et al. (2008) for application in India. The authors built upon Scambler's (1989) hidden distress model of HIV stigma, which states three different ways individuals experience stigma and emphasizes the importance of stigma management in

local communities (Steward et al., 2008). This multidimensional model of HIV stigma was modified for application in Southern India, and the results establish a framework for future studies.

The Indian model suggested that experiences of discrimination (enacted stigma) were prominent but not as often reported to authorities or protested against by PLHAs (Steward et al., 2008). Felt normative stigma, which indicated the perceived level of stigma, was the main guiding factor in motivating PLHAs to avoid disclosing their HIV status (Steward et al., 2008). Furthermore, PLHAs were affected by stories of how other HIV positive individuals were treated in the community, which was labeled as vicarious stigma. The authors also discovered that PLHAs also varied in their level of acceptance of HIV stigma as legitimate, which is a form of internalized stigma (Steward et al., 2008).

The application of a multidimensional model of HIV stigma in India established a framework for understanding how forms of stigma relate to each other and to cultural constructs in India. Cultural factors such as religion and implications to PLHAs in rural areas were further grounded in the framework provided by the HIV peer education model (Van Rompay et al., 2008). The HIV peer education model was developed to empower rural communities in India that have low literacy rates and lack awareness about HIV (Van Rompay et al., 2008). The peer education model was based on the theoretical framework of Rothman and Tropman's model of community organization but was fine tuned to be applicable for HIV stigma intervention programs in rural India (Van Rompay et al., 2008). The model's conceptual framework states that change within communities

was brought about through the participation of individual members of the community (Van Rompay et al., 2008).

Existing social networks within the community should be empowered to identify and solve their own issues to promote the wellbeing of the collective group (Van Rompay et al., 2008). Using the community organization framework as a guide, the HIV peer education model provided cues for intervention programs that were specifically applicable to marginalized populations. Most HIV awareness programs in India avoided reaching out to the rural areas because of the presenting challenges (Van Rompay et al., 2008). Poor HIV knowledge, low literacy, gender inequality, dispersed population, and cultural taboos discouraged many HIV awareness programs from entering rural India (Van Rompay et al., 2008). This avoidance of rural communities in states such as Gujarat led to the creation and propagation of HIV stigma. Working within the conceptual framework of the multidimensional HIV stigma model and HIV peer education model, in this study, I assessed the significance of relationships between education, religion, and dimensions of HIV stigma (Steward et al., 2008; Van Rompay et al., 2008).

Nature of the Study

This study was conducted employing quantitative methodology in order to describe relationships between variables. Participants were selected to form a population sample that was an ideal representation in order for the results to be generalizable. The aim of this study was to create a population sample that was equally representative of male and female individuals who are at least 18 years old. There were no preset excluding factors for level of education, but participants were required to be able to read

and follow verbal commands in the local language of Gujarati. The participant pool was selected from villages around the small town of Anaval in southern Gujarat, India.

During the participant selection process, informed consent was collected from each participant and confidentiality issues were addressed. Then all the participants were given a demographic questionnaire that collected data on background information. All the participants were then administered the following battery of measurements:

- Self report measure of religiousness (Cohen et al., 2008).
- Early religious involvement (Mattis et al., 2003).
- Illness as punishment for sin (Holt et al., 2009).
- Dimensions of stigma scale (Bresnahan & Zhuang, 2011).

Assumptions and Limitations

Certain assumptions have been made in regards to the design of this study, and as with any research endeavor, there are genuine limitations. It was assumed that education would be effectively evaluated as a moderator between the relationship of religious perception of illness as punishment for sin and dimensions of HIV stigma (Bresnahan & Zhuang, 2011; Holt et al., 2009). It was also assumed that religiosity would be adequately measured as a mediator between the relationship of early religious involvement and dimensions of HIV stigma (Bresnahan & Zhuang, 2011; Cohen et al., 2008; Mattis et al., 2003).

While designing this research, there was an underlying assumption that each of the variables would be measured appropriately through valid and reliable scales of measure. Administration of the survey questionnaires would occur in what was assumed

to be a location that provided an appropriate environment to conduct the study free of any bias or challenges. Furthermore, it was assumed that the participants would be pooled from a representative population allowing for test results to be generalizable (Creswell, 2009).

Data collection methods were heavily scrutinized to assure that the resulting information was free from bias, prejudice, or personal interest on part of the researcher (Creswell, 2009). To avoid bias, prejudice, or personal interest on my part, all test administration and data collection were conducted in strict accordance to guidelines provided by the institutional review board (IRB). Furthermore, it was assumed that participants were honest in answering the survey questionnaires as well as diligent in completing all the necessary information. Data were recorded and stored in what was assumed to be a confidential manner preventing any loss of private information. Participants were treated fairly in accordance to ethical codes of conduct, and it was assumed that they would truly be safe while participating in the study (Creswell, 2009).

It was assumed that time needed to collect data may have been limited by the cultural sensitivity of the local community and unwillingness of participants to complete testing. At this point, it was not known how the difference in language and translation of instruments could limit the research methodology. Since HIV was acutely associated with sexual practices, there was a concern about getting women and even some men to participate in what may be considered as taboo. The severity of the taboo perception was also unknown, and it may have limited how much support local leaders provided for participant turnout.

In this study, I assumed that after the research was evaluated, there would be a new understanding of how religious constructs relate to HIV stigma levels in rural India. However, the lack of significant research in this area in Gujarat, India may have been a limitation for the literature review and establishing a framework for this study. A new understanding of how religion and stigma were related did not provide guidance as to how HIV prevention methods could be developed. Future scholars and social advocates need to advance the knowledge of this study to be applicable in reducing stigma levels and enhancing the quality of life for PLHAs.

Significance of the Study

This study has a significant impact on the existing knowledge by providing a better understanding of HIV stigma and religion in rural India. HIV related stigma is a commonly researched topic, but it had not been looked at in a manner that gauges the moderation and mediation effects among education, religion, and HIV stigma in a rural Indian community. Specifically, current research fell short in assessing the impact of ERI, IPS, and religiosity on the proliferation of HIV stigma.

The first reported infection of HIV in India was in 1986, and since then, the deadly virus has infected nearly 5 million people in the most populous democratic nation in the world (Agoramoorthy & Minna, 2007). According to Parker and Aggleton (2003), effective social change must incorporate all relevant constructs into a practical intervention design that can be tested on the most appropriate population. Beeker, Guenther-Grey, and Raj (1998) emphasized the importance of mobilizing local communities towards HIV awareness in order to inject effective social change. In order to

mobilize communities towards effective social change, this study increases the existing field of knowledge on how religion and education relate to stigma. For those in the rural religious communities of Gujarat, India, this study may have been a comprehensive blueprint for HIV stigma research.

Summary

In the modern era, HIV has become a crippling disease that not only destroys the individual infected but also paralyzes the family and impacts the greater community. However, what has made this even worse is the associated stigma that spawns out of a belief system and spreads from one mind to another as a cognitive virus. The stigma associated with HIV has the ability to destroy an individual's emotional, mental, and physical wellbeing, resulting in a poor quality of life or even death. Severe forms of stigma can impede individuals from getting tested for HIV and discourage the infected from seeking treatment. Furthermore, stigma in some parts of the world has destroyed the families of those infected by damaging relationships and exiling them from the community. Stigma induced fear has led to suicidal ideations on the part of the oppressed and encourage violence and prejudice in society.

One of the most severe outbreaks of HIV was concentrated in various pockets of the Indian subcontinent. Due to the lack of education and resources as well as widespread corruption, addressing the issue of HIV in India has been difficult. The last few decades has seen an influx of research on HIV in general and even on the stigma associated with it. However, most of this research was conducted by western institutions, and interventions have also been liberally applied to western nations. Current researchers

have indicated a gap in the understanding of how certain dynamics within India create and spread stigma against PLHAs. The majority of the research on HIV stigma conducted in India has focused on urban settings and high risk populations such as sex workers and long distance truck drivers.

Conservative Hindu populations who live in the rural areas of India have not been thoroughly investigated to assess the relationships between their belief systems and stigma. In an attempt to fill this gap in the research and further the field of knowledge, I investigated HIV stigma within a religious community in rural India. An understanding of how religiousness, ERI, and perception of IPS relate to stigma would help the immediate community and further the field of knowledge. Future scholars, researchers, and social advocates should use this new knowledge to develop more effective interventions and awareness programs. The ultimate goal of this study was to help reduce the creation and spread of stigma towards PLHAs while empowering local communities.

In Chapter 2, I explore the research that has been conducted on HIV related stigma. The implications of this form of stigma around the world and in India will be presented through the review of current literature. In the next chapter, I will then evaluate studies that have looked at how religious beliefs relate to HIV stigma. Finally, research on India's cultural complexity and rural religious traditions will be examined. Chapter 3 will provide a guide for the design and execution of this research study. Data collection methods will be outlined in detail with regard for ethical conduct. Evaluation of the collected data and preservation of data integrity will also be presented.

Chapter 2: Literature Review

In order to understand the significance, limitations, and justification for the study, it was important to review the literature of those who have worked on the same topic. In this chapter, I provide a comprehensive description of the work that other researchers have done on HIV related stigma from a global perspective and how the stigma impacts PLHAs in India. HIV related stigma may be intimately related to several social constructs, and one of the variables studied in the current literature was religion.

In this review, I examined recent work conducted on the relationship between religion and HIV related stigma in a variety of cultures. Furthermore, discussion on the current state of HIV in the country of India was evaluated. This discussion involved literature that examined how HIV related stigma has impacted various states throughout the country, including the state of Gujarat. Finally, the influence of religion on sexual behavior, treatment participation, and intervention programs will be discussed to examine how it related to HIV stigma.

To understand the importance of conducting this study, the impact of HIV stigma on the quality of life for PLHAs will be presented throughout this chapter. The literature review is presented in accordance with the variables evaluated in this study. IPS was evaluated through a review of how high-risk behaviors are used to justify stigmatization of health related illness. Research regarding socioeconomic conditions and financial prosperity are presented to understand the significance of education. Finally, literature on the role of religion in HIV stigma is discussed with both pros and cons of religiosity and early religious involvement.

Illness as Punishment for Sin (IPS)

High-Risk Behaviors

HIV related stigma is not equally projected by society across all populations. There are certain minorities such as men who have sex with men (MSMs) within populations who have to face even greater amounts of stigma than their neighbors (Wolf, Alison-Surdo, Kapesa, & Castor, 2013). In an analysis of studies on PLHAs in nations of Sub-Sahara Africa, the understanding of how critical of a barrier stigma has been for MSMs was brought to light (Wolf et al., 2013). The governments of these nations and institutions show complacency and general lack of empathy for PLHAs who were also MSMs. The homosexual lifestyle of these PLHAs is uncomfortable to address for many policy makers, healthcare practitioners, and HIV program facilitators (Wolf et al., 2013).

Stigma towards this marginalized population is a powerful barrier to change and quality of life. For this reason, MSMs in Sub-Sahara African nations with high HIV infection risks require HIV testing and counseling for stigma management (Taegtmeyer et al., 2013). In nations such as Kenya, MSMs should be provided with counseling that addresses risk reduction, stigma management, and coping mechanisms (Taegtmeyer et al., 2013). Social support through counseling MSMs can help them to better manage their lives and cope with social pressures. However, leaders of local communities and national policymakers should stop feeling uncomfortable about addressing MSMs and take action to reduce stigma against them (Taegtmeyer et al., 2013).

In other parts of Sub-Sahara Africa such as Tanzania, women are unable to negotiate the use of condoms with their partners (Exavery et al., 2012). Many parts of the

world are populated by communities where gender inequality is traditionally accepted. When women are not viewed as equals in decision making, it is difficult for them to refuse sexual acts where condoms are not used (Exavery et al., 2012). In Tanzania, the knowledge of how condoms can protect against HIV transmission is widely embedded in both men and women. However, an examination of over 2,500 sexually active women in three districts of Tanzania suggested that only 22% of them used a condom during their last sexual experience (Exavery et al., 2012). The critical factor in the successful negotiation of condom use was the level of confidence in women (Exavery et al., 2012). Women who were confident about being able to negotiate condom usage were also far more likely to have sexual experiences with the protection of condoms (Exavery et al., 2012).

High-Risk Behaviors in India

HIV stigma, and particularly the feeling that PLHAs got what they deserved, may in part be attributed to high risk behaviors such as drug injection and unprotected sex. Stigma against PLHAs is closely related to sexual practices in India where communities argued that the behavior of PLHAs ultimately resulted in their infection (Mishra et al., 2014). This viewpoint diminished sympathy for the condition of PLHAs and reduced social support as well as tax payer funding for treatment and intervention programs (Mishra et al., 2014).

Three stigmatized high risk behaviors were recently evaluated in India to gain a better understanding of the association between high risk behaviors and HIV (Mishra et al., 2014). Over 1,000 PLHAs in India were examined according to their engagement in

sharing needles for drug injection, sexual practices with casual partners, and inconsistent condom usage with regular partners (Mishra et al., 2014). What was concerning was that over 25% of participants had shared needles while 40% had at least one casual sexual partner (Mishra et al., 2014). Furthermore, 65% of those who had casual sexual partners reported inconsistent use of condoms (Mishra et al., 2014). Individuals who shared their drug needles were more likely to use condoms inconsistently with both casual and regular sexual partners (Mishra et al., 2014). This should concern communities in India because it makes it difficult for intervention and awareness programs to earn sympathy for PLHAs. Behaviors that are high risk for HIV infection need to be addressed and measures need to be taken to reduce such activities.

Another group of community members who find it difficult to get sympathy from the community are sex workers. Female sex workers in India may be culturally and religiously stigmatized for contracting and spreading the HIV virus (Nuken, Kermode, Saggurti, Armstrong, & Medhi, 2013). In Nagaland, India, a relationship has recently been discovered between the HIV status of sex workers and their usage of alcohol and condoms (Nuken et al., 2013). In an examination of nearly 500 sex workers, 1 out of every 10 was infected with the HIV virus. The infected sex workers were more likely than the noninfected to consume alcohol on a daily basis (Nuken et al., 2013).

The reason why alcohol consumption made a difference was that HIV positive sex workers who consumed alcohol daily only had a 46% condom usage rate. However, HIV positive sex workers who did not drink alcohol on a daily basis used condoms 79% of the time (Nuken et al., 2013). The association between alcohol consumption and condom

usage among HIV positive sex workers was a social dilemma that should be discussed by society. If interventions, healthcare, and HIV education are not provided for the sex industry, it may impair all other community awareness programs. Drugs, alcohol, and sex should be discussed in open forums, and national leaders must provide greater support for these individuals instead of blaming them for their inevitable downfall (Nuken et al., 2013).

High-risk behaviors such as drug injection, alcohol consumption, or unprotected sex may seem to be the obvious actions to blame for HIV transmission, but in India, most HIV infections are spread through married couples (Marfatia, Naik, Singhal, & Naswa, 2013). Transmission through heterosexual intercourse among married couples was overlooked in stigma research because of the focus being on the more socially taboo high-risk behaviors. To understand the phenomena of inter-marital transmission in Gujarat, India, several married couples were evaluated for precautions taken during sexual intercourse such as condom use (Marfatia et al., 2013). While the couples were selected based on at least one partner being HIV positive, it was discovered that in 60% of couples, both partners were HIV positive (Marfatia et al., 2013). Among couples where both partners were HIV positive, the rate of condom use was 29%, but among couples where just one partner was HIV positive, the rate of condom use was still just 47% (Marfatia et al., 2013).

The protection of the HIV negative partner should be a priority for the family unit and especially the married couples themselves. Marital intercourse between HIV positive and HIV negative partners is increasingly becoming the most prevalent way of virus

infection. One of the reasons for this is that condom usage among married couples is deemed unnecessary and inconvenient (Marfatia et al., 2013). This may be due to the assumption that condoms are primarily for pregnancy prevention, leading many infected individuals to have unprotected sex with their spouse. Therefore, sexual practices that were viewed as high-risk or taboo such as homosexuality, prostitution, and premarital sex may be surpassed by traditional marital intercourse as the primary concern for HIV infection in India (Marfatia et al., 2013).

Stigma Towards Illness

HIV related stigma diminished the quality of life for PLHAs, and the best way to see that was to examine how quality healthcare was impaired by stigma (Naidoo, Singh, & Lalloo, 2013). PLHAs need community support and good healthcare, but when stigma infiltrated established institutions such as religion and healthcare, there were grave consequences. In a comparative analysis of stigma in healthcare settings in Brazil, India, and South Africa, a commonality among healthcare practitioners was identified (Naidoo et al., 2013). When PLHAs were admitted for intensive care, the decision making process of healthcare providers was not based on policies or guidelines but instead was subject to their individual biases (Naidoo et al., 2013). In emergency settings, practitioners often had to make important decisions and many times this was left up to their own knowledge and experience. In the above mentioned nations, many practitioners lacked adequate knowledge of HIV and therefore acted with prejudice towards PLHAs during treatment (Naidoo et al., 2013).

HIV related stigma was a social plague, but when it was fundamentally rooted within healthcare settings, it became unbearable for PLHAs. One way of overcoming this barrier was to open the channels of communication between patients and practitioners (Steiner, Finocchario-Kessler, & Dariotis, 2013). Well educated practitioners who understood the nature of HIV should have been less authoritarian and more compassionate with PLHAs in order to form a partnership (Steiner et al., 2013). This was especially true when it came to discussing how HIV spreads and educating patients about how to avoid infecting their loved ones. Furthermore, the patient's quality of life should be discussed openly allowing for communication about sexual practices and social acceptance (Steiner et al., 2013). However, the problem at hand was that many nations around the world have HIV related stigma embedded in their hospitals, schools, governments, and places of religious worship.

In parts of South Africa, prejudice and discrimination had a direct negative impact on the social life, occupation, and health of PLHAs (Dos Santos, Kruger, Mellors, Wolvaardt, & Van der Ryst, 2014). In an assessment of stigma experienced by PLHAs, it was found that internalized stigma was a prominent experience for patients. Many PLHAs blamed themselves for the stigma that they experienced in society and felt as if they did something wrong and were being punished for it (Dos Santos et al., 2014). This problematic internalized stigma was accompanied with discrimination in institutions such as hospitals, which made patients avoid participating in treatment (Dos Santos et al., 2014). The greater concern was that this was an area of the world with a high prevalence of HIV infections and therefore in need of greater social awareness of the disease. The

fact that social and institutional stigma against PLHAs persisted in highly infected areas was an extraordinary challenge for global stigma reduction programs (Dos Santos et al., 2014).

Stigma Towards Illness in India

There were several variables that were closely related to HIV stigma. Specifically, mental health issues such as depression and not fully adhering to HIV treatment protocol could impair the physical wellbeing of PLHAs (Jeyaseelan et al., 2013). Furthermore, when individuals did not disclose their positive HIV status, there was an increase of HIV infection rate and lack of access to treatment centers (Jeyaseelan et al., 2013). Since India is currently ranked as the second highest in HIV infected population, it is crucial to examine the quality of life for PLHAs in India and how to create effective interventions accordingly (Jeyaseelan et al., 2013). By its nature, stigma creates unnecessary hardship and suffering in the lives of PLHAs and undermines efforts towards HIV prevention and treatment (Ekstrand, Ramakrishna, Bharat, & Heylen, 2013). The power of stigma was exponentially increased when PLHAs had to experience it from their very own doctors and nurses in hospitals (Ekstrand et al., 2013).

Recently, over 300 doctors, nurses, and ward staff of both government and private hospitals in Mumbai and Bengaluru were evaluated for stigma against PLHAs (Ekstrand et al., 2013). The results indicated that stigma levels were high for all positions, in both government and private settings. Most of the participants were willing to prohibit infected females from giving birth and felt that PLHAs who were infected through unprotected sex or drug injection got what they deserved (Ekstrand et al., 2013).

What may have been more alarming was that there was a positive relationship between position level and level of stigma. The more educated and high positioned doctors within the hospitals reported greater levels of stigma than less educated and low level positioned ward staff and nurses (Ekstrand et al., 2013). One of the reasons for this was that a key driver for stigma was the frequency of contact with PLHAs. Doctors had the least amount of contact or time spent with PLHAs in comparison to nurses and ward staff (Ekstrand et al., 2013). HIV transmission misconceptions and blaming PLHAs for misconduct leading to infection were also important in creating and perpetuating stigma in healthcare settings (Ekstrand et al., 2013). As the above mentioned study highlights, simply providing HIV transmission education and information was not enough to reduce stigma. Doctors of major hospitals in the most modernized cities in India exhibited greater levels of stigma against PLHAs than their less educated assistants.

A commonality in many research studies was that HIV was related to the onset of psychological disorders, and these disorders may have been the result of social stigma associated with the disease (Barua, Sharma, & Basilio, 2013). One alarming issue that was brought to light in a recent study in India was that the fear of facing stigma may be even greater than the stigma itself (Barua et al., 2013). Even though only about a quarter of the participants actually faced social stigma, they all tried keeping their HIV positive status a secret, and about half of them completely avoided public gatherings with friends and family (Barua et al., 2013).

The reason for their initial hesitance in revealing their HIV positive status was revealed in the fact that almost half of them were rejected by their friends and family as a

result of the disease (Barua et al., 2013). HIV status revelation among participants was also accompanied by psychological distress. Female participants were the most affected as indicated by their level of depression being double than that of male participants (Barua et al., 2013). Social stigma was therefore a catalyst for psychological disorder in PLHAs whether they actually face stigma or not.

The psychological disorders and social stigma associated with HIV not only affected PLHAs but also their immediate families. Many times when individuals were infected with HIV, the spouse had to step in as the primary caretaker, which placed the spouse in the line of fire (Latha & John, 2012). The line of fire in this context was the exposure to social stigma related to HIV and issues of depression and mood disorders (Latha & John, 2012). To better understand the burden of caretakers, wives of HIV infected husbands in India were evaluated for their experiential stigma and depressive symptoms (Latha & John, 2012). The results indicated that intervention programs needed to incorporate spouses and immediate family to help cope with stigma and treat psychological disorders. In most cases, PLHAs looked to their spouses and family members for support and encouragement to fight the disease. However, if the spouse or caretaker was not healthy, then it exponentially diminished the potential quality of life for PLHAs.

Education

Socioeconomic Concerns

HIV related stigma may have been greater for those individuals who experience socioeconomic disadvantage and community-level inequality (Lim et al., 2013). These

individuals were more likely to engage in high-risk behavior such as having unprotected sex or injecting drugs through shared needles. These high-risk behaviors significantly increased the chances of being infected with the HIV virus, and the resulting stigma may have been greater for these individuals (Lim et al., 2013).

In Vietnam stigma levels for people infected through injection of drugs has persisted over time due to social pressures (Lim et al., 2013). Studies indicated that stigma was a product of economic power differences, and in developing nations such as Vietnam, China, and India economic power struggles were steadily increasing (Lim et al., 2013). In a study examining experienced stigma among drug injecting PLHAs, the influence of inequality in education was brought to light (Lim et al., 2013). Stigma against PLHAs who were drug users in Vietnam persisted over time mostly due to perceived inequality in education (Lim et al., 2013). If stigma reduction programs were destined to be successful they should have incorporated education equality within developing nations.

One of the reasons that HIV infections among people who inject drugs may have fallen in developed nations was because of the success of clean needle/syringe exchange programs and substance abuse treatment centers (Samo et al., 2013). However, these services have either not been implemented or have not been as successful in developing nations such as Pakistan (Samo et al., 2013). On the contrary, some cities in Pakistan have seen a substantial increase in prevalence of HIV infection among people injecting drugs (Samo et al., 2013).

HIV risk reduction techniques in parts of the world such as Pakistan were doomed to fail from inception due to the lack of project funding and social support (Samo et al., 2013). Community awareness and participation needed to increase in order to improve the socioeconomic gap that existed between other programs and those that target HIV. Proper education and information regarding HIV transmission could decrease infection rates in developing nations as it has already done for others (Samo et al., 2013).

Another factor that played a large role in the creation and permeation of stigma was the disparity experienced by minority racial and ethnic groups (Earnshaw, Bogart, Dovidio, & Williams, 2013). Disparities in socioeconomic status and education among racial and ethnic groups had been well reported, but how stigma influences these disparities was not well known (Earnshaw et al., 2013). The stigma and HIV disparities model described the influence of social stigma on racial and ethnic disparities relating to HIV (Earnshaw et al., 2013). One of the complexities of stigma was that many PLHAs did not experience just one type of stigma at any given time (Earnshaw et al., 2013). Many individuals experienced HIV stigma, racial stigma, ethnic stigma, gender stigma, education stigma, and possibly other forms of stigma perpetuated by society.

To achieve a comprehensive body of knowledge, it is vital to understand multiple forms of stigma and how stigma severity increases based on the number of different stigmas experienced (Earnshaw et al., 2013). Empowering local communities and reducing socioeconomic gaps can help diminish the influence of stigma on HIV related disparities. Building trust among different racial and ethnic groups while forming a

singular identity can also help improve the quality of life for PLHAs (Earnshaw et al., 2013).

The importance of education and knowledge related to HIV cannot be ignored when it comes to understanding stigma and social discrimination. The association between discriminatory attitudes and underprivileged populations was highlighted in a study from Nicaragua (Ugarte, Högberg, Valladares & Essén, 2013). While assessing stigma scales among 520 participants in Leon, Nicaragua, there was significantly higher stigma level and discriminatory attitude towards PLHAs from specific subgroups within the sample population (Ugarte et al., 2013). Females, rural villagers, and people who lacked knowledge of HIV transmission rated high stigma levels towards PLHAs (Ugarte et al., 2013). Furthermore, people who did not get tested themselves for HIV and reported high perceptions of HIV risk also had high levels of discriminatory attitudes towards PLHAs (Ugarte et al., 2013). The lack of HIV information spawned stigmatic thoughts within communities, and marginalized sub-populations who were undereducated and most vulnerable.

Socioeconomic barriers not only perpetuated stigmatic thoughts but they directly impacted the quality of life for PLHAs. When evaluating the self-perceived quality of life for PLHAs, a study in Tehran, Iran found that participants who were older than 35 years of age had significantly lower scores (Razavi et al., 2012). PLHAs over 35 years old had significantly lower scores in perceived quality of life, social relationships, and religion/spirituality (Razavi et al., 2012). Furthermore, PLHAs who were unemployed

had a greater decline in their perceived quality of religious faith, social relationships, and overall quality of life (Razavi et al., 2012).

This assessment in Iran emphasized the importance of socioeconomic variables such as financial independence and employment on the quality of life for PLHAs. Individuals who were older and unemployed were at greater risk of self-perceived experience of stigma and social discrimination (Razavi et al., 2012). Therefore, support groups that focused on empowering individuals to assimilate into society and help PLHAs find employment were going to be more successful in improving quality of life.

Concerns in Rural India

The dichotomy of India was that it was a nation that identified with two socioeconomic cultures. One was the more westernized modern culture that has spawned within the major cities such as Mumbai and New Delhi, but a majority of the Indian population still lived in rural areas and adhered to ancient traditions and values. For example, the Baiga tribe of Central India was comprised of tribal men who still continue to live according to the ways of their ancestors (Saha, Saha, Sharma, & Pandey, 2013). According to the Baiga tradition, men did not view women as having equal rights in decision making or any form of equality when it came to sexual practices (Saha et al., 2013).

The prevalence of sexually transmitted diseases and HIV infections in rural areas of India could be due in part to these types of deeply rooted cultural beliefs. The women of the Baiga tribe did not seek out healthcare and were much more negligent about their mental and physical wellbeing then the men (Saha et al., 2013). On the other hand,

healthcare was also not offered to women as often as it was available to men, and on the preventive side condom use was mostly at the discretion of the tribal men (Saha et al., 2013). In tribal rural areas it may not enough to just provide HIV awareness and education, but along with that there has to be some community effort to progress societies toward healthy practices.

HIV awareness was crucial in diminishing stigmatic thoughts, especially among rural inhabitants of villages in India who lack proper education (Nebhinani, Mattoo, & Wanchu, 2012). When rural PLHAs in Northern India were evaluated to examine their level of HIV knowledge, the results were disturbingly significant for intervention design. Nearly 65% of PLHAs did not know the difference between HIV and AIDS while 75% of infected individuals were not aware of antiretroviral therapy (Nebhinani et al., 2012).

What may be even more distressing was that nearly half of the PLHAs genuinely blamed themselves for contracting the disease and reported experiencing stigma from their friends and family (Nebhinani et al., 2012). This furthers the broadly accepted claim in research that HIV education and information was vital for PLHAs in rural areas of developing nations. The lack of knowledge of how the infection spreads and possible treatment options hinders reduction of HIV infection in society and the quality of life for PLHAs (Nebhinani et al., 2012).

Stigma associated with HIV was experienced in different ways by different groups of people. One of the more vulnerable and marginalized groups within India were women who live in rural areas (Nyamathi et al., 2013). While research studies on HIV in India had increasingly focused on stigma, the experiences of rural women were still not

adequately represented in current literature (Nyamathi et al., 2013). One study that aimed to narrow this gap discovered how stigma spawned an avoidant coping mechanism among the females (Nyamathi et al., 2013). Avoidant coping increased levels of felt stigma and HIV related symptoms in the PLHAs examined by study.

The female participants used in the study were also less likely to adhere to treatment processes such as antiretroviral therapy due to their avoidant coping strategies (Nyamathi et al., 2013). In order to effectively reduce the level of stigma experienced by rural women it was vital to establish support groups that were led by peers and community leaders. PLHAs need to be advised on coping skills and more specifically how to not use avoidance as a way to cope with HIV (Nyamathi et al., 2013).

In terms of access to treatment and support groups, HIV status disclosure was an important but difficult step for PLHAs. For PLHAs living in the state of Gujarat the main reason for the hesitation in disclosure was the social stigma that was associated with HIV (Patel et al., 2013). There was a genuine fear of discrimination from friends and family along with communal blame and internalized guilt for infection (Patel et al., 2013). The barriers to disclosure followed a general stigma framework that was influenced by the culture of the society that PLHAs live in. In order to understand these barriers it was important to understand the cultural variables of the locality (Patel et al., 2013). Rural areas of states such as Gujarat, India have not been studied well enough to understand the cultural dynamics that spawned stigma and prevented HIV disclosure (Patel et al., 2013).

In an attempt to contribute to the narrowing of this gap, recent examinations of PLHAs in Gujarat showed that most of them found out about their HIV status through

poor health, spouse's positive status, or HIV test during pregnancy (Patel et al., 2013). The lack of early testing and HIV prevention measures was another indication of how the fear of stigmatization was prompting denial or avoidance (Patel et al., 2013). More understanding and research was needed for PLHAs in Gujarat and especially for rural areas where the effects of stigma and fear of disclosure may be even greater.

Barriers to HIV status disclosure was fueled by fear of being stigmatized, but this same fear also created barriers to HIV treatment adherence in PLHAs in Gujarat (Patel et al., 2012). PLHAs that were diagnosed as being HIV positive were counseled by experts and advised to participate in HIV treatment. However, many PLHAs state that it was the insistence of family members that truly motivated them to participate in treatment and seek care (Patel et al., 2012). The adherence to antiretroviral therapy was a concern because PLHAs drop out due to social stigma associated with their participation in treatment, and economic concerns. In Gujarat, many PLHAs were isolated in rural villages and needed to commute long distances to participate in HIV treatment (Patel et al., 2012).

PLHAs state that the cost of continuing treatment was a financial burden for them when they had to prioritize giving basic needs to their children and family members (Patel et al., 2012). Research suggested that further studies needed to be done to evaluate the interactions between healthcare providers and patients in order to increase treatment adherence. Furthermore, this highlights the need for interventions to address economic concerns such as cost of treatment and logistics of commuting to treatment centers along with stigma in rural areas (Patel et al, 2012).

Religion and HIV Stigma

Religiosity and ERI

As it pertains to HIV, high risk behaviors such as unsafe sex and illicit drug use have led to infection and promote social stigma. A recent study in New Zealand tested how religion may influence these types of high risk behaviors (O'Brien, Denny, Clark, Fleming, Teevale, & Robinson, 2013). Over 3,500 students were evaluated to examine how their religious beliefs may impact their tendency to take greater risks. The participants were actively attending a church, mosque, temple, or other religious place of worship (O'Brien et al., 2013). Participants who were not sexually active had a greater connection with their place of worship, religious community, and were less likely to engage in unprotected sex (O'Brien et al., 2013).

The study also found that participants who were sexually active and also had a strong connection with their religion were more likely to engage in high risk behaviors such as unsafe sex (O'Brien et al., 2013). Therefore, sexually active participants were more likely to engage in unprotected sex regardless of their level of religious affiliation (O'Brien et al., 2013). This may have been due to an internalized conflict between their actions and beliefs, but the significance of the finding suggested that it should not be assumed automatically that religious affiliation decreases high risk behaviors (O'Brien et al., 2013).

Research literature on the relationship between religion/spirituality and health has been steadily increasing, and theories such as self-regulation have become increasingly important (Aldwin, Park, Jeong, & Nath, 2014). This importance was in the terms of

establishing a foundation for the study of how physical and behavioral health may be influenced by religious ideologies. For example, it has been well established that religiousness was acutely connected to healthier habits such as lower prevalence of smoking and alcohol consumption (Aldwin et al., 2014). Alcohol consumption, in particular, has been associated with disregard of safety including participating in high-risk behaviors that may lead to HIV infection. Religiousness was defined in this context by the number of services attended, and therefore the more services participants attend the less they were likely to smoke and drink alcohol (Aldwin et al., 2014). Regularly attending services provided social support and belonging as well as self-regulation to avoid high risk behaviors that may lead to HIV infection (Aldwin et al., 2014).

Poor mental health, specifically depression and anxiety have recently been linked to increased risk of HIV infection in young girls (Udell, Donenberg, & Emerson, 2011). Adolescent and young adult females were most vulnerable to risk of HIV infection due to their marginalized social status in some developing nations. High risk behaviors such as condom use and number of sexual partners were recently assessed in adolescents and young adult females who were sexually active (Udell et al., 2011). African American women from the Chicago area were evaluated to better understand the relationship between religiosity, mental health, and high risk sexual behavior (Udell et al., 2011).

What was interesting was that participants were more likely to use condoms during sex when their mothers had higher religiosity. The influence of religion while growing up had a positive effect on condom use but had no effect on the number of sexual partners (Udell et al., 2011). On the other hand, the number of sexual partners

increased among participants who had anxiety/depression and exhibited rule breaking behavior, while those with aggression had fewer partners (Udell et al., 2011).

HIV related stigma can not only affect the physical wellbeing of PLHAs but may be far more debilitating to their mental health and psychological wellbeing (Hall & Gjesfjeld, 2013). In order to improve the quality of life for PLHAs in rural areas, it may be necessary to empower clergy and religious leaders to provide counseling (Hall & Gjesfjeld, 2013). Mental conditioning of individuals has shown to affect their ability and willingness to seek treatment, participate in support groups, and take preventive measures (Hall & Gjesfjeld, 2013). In a broader sense, established institutions such as religious churches and temples should serve as counseling centers to help inhabitants in rural areas to cope with mental illness and societal pressures (Hall & Gjesfjeld, 2013). Therefore, successful interventions that aim to improve the quality of life for PLHAs should partner with local religious leaders to help those who otherwise would not have access to mental healthcare.

HIV can impact how an individual relates to being made in the image of God (Streets, 2013). To be more specific, a religious believer may have to face challenging internal conflicts that effect their self-esteem and perceived value in the community (Streets, 2013). This is especially true when PLHAs of a congregation or religious community experienced HIV related stigma from within their own religious sect (Streets, 2013). Listening to certain sermons on Sunday morning could make PLHAs feel marginalized and not accepted by the church (Streets, 2013).

In a recent study in South Africa, community church leaders were encouraged to participate in HIV awareness programs and pastors were educated in counseling PLHAs (Streets, 2013). This was done as a social awareness project to minimize the stigma that PLHAs feel when attending their local church and listening to sermons (Streets, 2013). Therefore, it was vital to understand that while religious organizations could be the greatest advocates for stigma reduction they can also be the hive for breeding stigmatic thought.

Organized religious institutions had substantial resources such as man power and monetary assets that could be used for lasting social change. However, stigma against HIV prevented many organizations from investing or even participating in awareness and prevention programs (Kang, Chin, Behar, & Li, 2013). This crippling effect of institutionalized stigma was not just isolated in any one religion or religious denomination, but instead it had infected organizations regardless of their religious affiliation (Kang et al., 2013).

HIV stigma was recently found to have a direct effect on HIV knowledge acquisition within Buddhist and Christian communities in a study in New York (Kang et al., 2013). Participants did not support their institution's involvement in programs for HIV education, HIV treatment, and HIV stigma reduction (Kang et al., 2013). The lack of support for institutional involvement was largely due to the lack of knowledge of HIV transmission (Kang et al., 2013). Therefore, stigma within religious institutions diminished the quality of life for PLHAs that were members of these organizations. An even greater dilemma was that HIV stigma within board members and religious leaders

prevented valuable community resources from being applied to social care initiatives (Kang et al., 2013).

Recently, over 500 church members in Kansas City, MO were assessed for HIV stigma levels and then introduced to a faith-based HIV awareness and education program (Berkley-Patton et al., 2013). The researchers wanted to know how stigma within religious organizations can impact their willingness and ability to participate in faith-based HIV programs for the community (Berkley-Patton et al., 2013). While the stigma levels for members were lower at 6 months after intervention, the surprising element was that stigma levels hardly changed at 12 months after intervention (Berkley-Patton et al., 2013). Successful HIV programs for rural areas should be faith-based and designed to be on-going services that never stop promoting awareness and knowledge.

Sexual behavior practices were often dictated by religious beliefs and guidelines stated in religious doctrine (Chakraborty, 2013). In India religion was a way for life where culture and religion become almost indistinguishable from each other (Chakraborty, 2013). Hinduism, Christianity, Islam, Jainism, Buddhism, and Sikhism were the major religions of India with Hinduism, Christianity, and Islam being the main three beliefs (Chakraborty, 2013). The doctrine of these institutions and the teachings of religious leaders had a significant impact on attitude toward HIV and sexual practices of followers.

While there may have been an assumption that fundamental Islamic and Hindu beliefs were a major cause of stigma against homosexuality in India, research indicated that the adoption of Christian beliefs during the Portuguese and British involvement may

have had a greater influence (Chakraborty, 2013). Christian perception of identifying homosexuality as a sin had slowly permeated through the social fiber of India over the last few centuries, and this had recently been extended to stigma against PLHAs (Chakraborty, 2013). While religion may have had stigma within its walls, it was important to learn how viewing religion as an ally and incorporating it into stigma reduction programs can help to improve the lives of PLHAs.

Many PLHAs lived in rural areas of developing nations around the world, and religion was vital to their worldview and social survival. If the quality of life for PLHAs was a concern then it was important to understand how religion influenced the mental and physical wellbeing of its followers. Research studies generally used population samples to make valid assumptions and generalizations, but caution should be taken before projecting any findings across entire belief systems (Monshipouri & Trapp, 2012). For example, Islam has been a highly organized institution that comprised of an incredible variety of ethnicity, nationality, cultures, and socioeconomic levels. Several studies on HIV risk levels among Muslims focused on sexuality and in particular sexual practices among men who have sex with men (MSM). However, this highlighted the need for more comprehensive assessments of HIV risk among Islamic communities that go far beyond evaluating MSMs and included other population groups (Monshipouri & Trapp, 2012).

The association between physical health and religious practices has been well researched, but the effects of one on the other may not be as well established (Holt, Clark, Debnam, & Roth, 2014). When individuals were stricken with grief or illness it was vital to turn to healthy coping mechanisms, and in some instances religion acted as

that coping vessel (Holt et al., 2014). For many religious believers, coping through religion diminished high-risk behaviors such as self-medicating with illicit drugs or alcohol (Holt et al., 2014).

A study in Israel investigated the relationship between religious practices and health, and found that synagogue attendance was associated with overall happiness (Levin, 2013). However, there was little indication that attendance was related to physical or mental wellbeing. On the other hand, functional health was related inversely with religious prayer (Levin, 2013). Participants were more likely to pray when health was poor in order to use it as a coping mechanism, but when health was not an issue prayer frequently decreased (Levin, 2013). The religion-health dynamic was a relationship that demanded further investigation to improve the quality of life for PLHAs.

Social stigma against PLHAs negatively impacted the prevention and treatment of HIV (Derose et al., 2014). In some parts of the world it may have been more effective to use a stigma reduction method that was multicultural and faith based (Derose et al., 2014). Utilizing local churches, for example, incorporated community leaders and mentors into a stigma reduction program and promoted HIV awareness through organized community led institutions (Derose et al., 2014). HIV testing events could be held at congregations and church leaders may be better able to use motivational strategies to mobilize communities towards prevention and care (Derose et al., 2014). This concept was tested in African American and Latino churches, and the results indicated that effective social change in stigma, prevention, and care must be community-led. When

local leaders and community institutions led the way there was much greater accountability and program ownership (Derose et al., 2014).

Researchers applied the Sisters Informing Sisters about Topics on AIDS (SISTA) program established by the Centers for Disease Control and Prevention (CDC) to young African American women with modifications to cater to a faith-based population (Wingood et al., 2013). The prevention program was significantly successful in increasing religious social capital such as church participation, religious values and norms, abstinence, and other constructs (Wingood et al., 2013). While the effectiveness of a faith-based SISTA program on HIV prevention may be well supported, the intervention still required further testing for stigma reduction. Nevertheless, the importance of increasing social capital for PLHAs through the integration of religion and HIV programs cannot be argued.

There were innovative volunteer HIV programs worldwide, but how effective were faith-based intervention programs when they were mandatory. Several countries in Africa made premarital HIV screening mandatory in order to reduce the rate of HIV transmission (Gbenga, Kamaldeen, & Folake, 2013). Many of these compulsory screenings were promoted and conducted through local religious institutions as a part of their marital services. Research was conducted to assess the level of HIV awareness and knowledge of religious leaders as well as their attitude towards the mandatory premarital screening program (Gbenga et al., 2013). The results in Nigeria indicated that most of the premarital screenings were initiated by religious leaders, and it was compulsory for members who wanted to get married by their particular church (Gbenga et al., 2013).

While the mandatory initiative in Nigeria had faced backlash from those who say that it abolished the rights of members to not be tested, there were significant benefits. One of the benefits was that religious leaders rated high in HIV awareness, knowledge, and their attitudes towards the mandatory screening fluctuated based on the willingness of members (Gbenga et al., 2013). Mandatory testing and program participation may have had real benefits but at what price. It may have been more productive to motivate individuals to participate voluntarily than to coerce them against their will.

When it came to making it mandatory for individuals to conform to the will of the many or chosen authoritarians, children and adolescents were the most susceptible. If religion was to be incorporated into HIV programs then peer support among youth members was crucial for success (Muñoz-Laboy et al., 2011). A part of HIV prevention was to increase awareness at a young age and educate children and adolescents about the risk before they engaged in high-risk behaviors. However, young adolescent members of religious organizations had to first be empowered to lead HIV awareness programs so that they could reach out to younger generations within the community (Muñoz-Laboy et al., 2011).

In a recent study in Brazil, youth members of Catholic churches were evaluated for their attitude toward participating in HIV programs and their perceived ability to lead others (Muñoz-Laboy et al., 2011). Within the studied institutions of religion, adult leaders viewed youth members as vulnerable and innocent souls who needed to be saved. The over protective viewpoint of adult religious leaders influenced their decisions to not involve youth members in leadership positions for HIV programs (Muñoz-Laboy et al.,

2011). While the adult religious leaders did not view the youth members as capable of leading others and becoming catalysts for change, this perspective was disconnected with the self-perception of adolescents. The youth members who were examined reported feeling capable and willing to help their peers in HIV education and awareness (Muñoz-Laboy et al., 2011).

Empowering adolescents and women to lead faith-based HIV initiatives can help to prevent the spread of HIV infection and improve the quality of life for PLHAs. Individuals infected with the disease had to face social stigma and painful treatment. While it may have been easier to see how religion could help with HIV prevention and stigma it may have been more difficult to examine the influence of religion on HIV progression. Nevertheless, research indicated that the type of God individuals believed in directly affected HIV treatment progression (Ironson et al., 2011). God in religious doctrine can generally be viewed as either being a loving and.

In a recent study evaluating the effect of religion on HIV progression, those who viewed God as being benevolent and forgiving had a positive viewpoint (Ironson et al., 2011). A negative viewpoint is where God was seen as being punishing and judgmental (Ironson et al., 2011). With this in mind, the study evaluated how having either a positive or negative viewpoint of God effects HIV progression in PLHAs over a four year time period (Ironson et al., 2011). A positive viewpoint of God significantly slowed down the progression of the disease in PLHAs, while those who viewed God as being punishing and judgmental had a significantly faster progression of HIV (Ironson et al., 2011). In rural areas of developing nations such as India, incorporating religion into HIV

intervention programs can help to decrease the rate of infection and social stigma. Furthermore, actively promoting early testing and healthcare accessibility along with the proper religious perspective of God can improve treatment outcomes.

Summary

HIV stigma was a barrier to prosperity for PLHAs around the world and especially in developing nations such as India. Behaviors that were perceived to be high-risk for HIV infections such as homosexuality, prostitution, unprotected sex, and sex with multiple partners may be at the core of HIV stigma (Mishra et al., 2014; Wolf et al., 2013; Taegtmeyer et al., 2013). Gender inequality also may have contributed to HIV infection rates and stigmatized women who are victims of power difference among the sexes (Exavery et al., 2012). Furthermore, women who worked as prostitutes were vulnerable to drug use, alcoholism, depression, or violence and each of these impaired the use of condoms to prevent HIV infection (Nuken et al., 2013).

While the concerns previously mentioned may have been the most obvious, the quickest mode of HIV transmission in India was heterosexual intercourse engaged in the sanctity of marriage (Marfatia et al., 2013). The power differential between gender, ethnic, racial, cultural, or religious groups within communities may have given rise to emotional distress and psychological disorders that promote high-risk behaviors in individuals (Lim et al., 2013). Implementation of support groups and HIV interventions in certain parts of the world were hindered by poverty, lack of funding, or corruption (Samo et al., 2013).

There was a need to emphasize that most PLHAs also experience racial, ethnic, religious, and other socioeconomic forms of stigma (Earnshaw et al., 2013). Education not only informed people of HIV transmission and treatment, but also empowered communities to diminish HIV related stigma (Ugarte et al., 2013). Furthermore, the lack of education and availability of HIV information in rural village areas resulted in many individuals not getting tested or participating in treatment (Nebhinani et al., 2012).

Due to this lack of knowledge and experienced social stigma, many women in rural areas used avoidance as a coping mechanism (Nyamathi et al., 2013). The poor coping skills were further complicated with the fact that in rural parts of Gujarat PLHAs had a genuine fear of disclosing their HIV positive status (Patel et al., 2013). Status disclosure and HIV treatment adherence were major issues for rural areas of India where consistent participation required money, commitment, and transportation (Patel et al., 2013).

Developing nations were most prone to having HIV stigma within healthcare settings, and for PLHAs that meant having to experience stigma even from the doctors who treated them (Naidoo et al., 2013). Doctor-patient relationship was vital for treatment adherence and success, and in order to minimize the effects of stigma better communication was needed within the healthcare industry (Steiner et al., 2013). Due to institutional stigma, patients were increasingly prone to experiencing internalized stigma where they blamed themselves for their condition (Dos Santos et al., 2014).

Religious institutions were led by people who themselves could be prone to stigmatic thoughts and prejudice impairing PLHAs from participating in services (Streets,

2013). Religious institutions had substantial resources such as manpower and money, but stigma prevented institutions from using these to make a positive difference for PLHAs (Kang et al., 2013). To empower local communities in rural areas it was vital to reduce HIV stigma within religious institutions and among religious leaders (Berkley-Patton et al., 2013). Stigma towards specialized groups such as homosexuals and drug addicts may have also been greater within religious institutions magnifying the stigma for religious PLHAs (Chakraborty, 2013).

India had the second highest rate of PLHAs in the world, and stigma within healthcare settings in India could diminish physical and mental health for patients (Jeyaseelan et al., 2013). In contrast to the notion that better education diminished HIV stigma, research suggested that shared experiences and close relationships with PLHAs may have been more effective (Ekstrand et al., 2013). While stigma within healthcare settings may have been detrimental, HIV stigma within religious institutions could have been even more devastating for rural areas. Therefore, understanding how religion related to HIV stigma was crucial for developing nations such as India who were already overwhelmed with HIV infection.

Chapter 3: Research Method

In this chapter, I will state the purpose of the study and introduce the research design. The design of this study indicates the statistical approach and its ability to answer the research questions. Participants, setting, and procedure of population sampling will be discussed as well as instruments of measure. Dimensions of the Stigma Scale (Bresnahan & Zhuang, 2011), ERI (Mattis et al., 2003), the Self-Report Measure of Religiousness (Cohen et al., 2008), and IPS (Holt et al., 2009) will be introduced as questionnaires used for data collection. Statistical analyses that were conducted with the collected data will be described to establish a model framework for answering the research questions. Finally, ethical and cultural considerations regarding this international study will be discussed. The research methodology that follows was reviewed by Walden University's Institutional Review Board (IRB) as per approval number 01-08-15-0146070.

Purpose of the Study

The purpose of this study was to examine the moderating effects of education on the relationship between perception of IPS and HIV stigma. Furthermore, I assessed the mediating effect of religiosity on the relationship between ERI and HIV stigma. A religious perception of illness where God was viewed as punishing individuals for their sins promoted HIV stigma and impaired treatment outcome (Holt et al., 2009; Ironson et al., 2011).

Education empowered individuals with accurate knowledge regarding HIV transmission and has shown to decrease HIV stigma (Ugarte et al., 2013). Therefore, education may be a moderator of the relationship between IPS and HIV stigma. Stigmatic

thinking has also been found to be associated with the longevity and intensity of religious belief systems (Chakraborty, 2013; Gbenga et al., 2013; Streets, 2013). The relationship between religiosity and HIV stigma may be mediated to some degree by ERI. The aim of this study was to investigate the above mentioned mediating and moderating effects in order to add to the existing field of knowledge and promote social change for persons living with HIV/AIDS (PLHAs).

Population Sampling

Participants

Participants were a convenience sample of male and female adults from the rural town of Anaval in the state of Gujarat, India. Participants were selected from the community based upon the following criteria: (a) They were an accessible population, (b) they were of an age to provide informed consent, (c) they were presumed to be religious believers or familiar with the religious beliefs common to the area, and (d) they had sufficient reading comprehension in the local language of Gujarati to successfully complete the questionnaires (Creswell, 2009). Participation in the study was strictly on a voluntary basis, and therefore participants could choose to withdraw from the study at any time. The participants who were chosen for the study were not offered any compensation through money, goods, or services (Creswell, 2009).

Sample Size

To determine the minimum number of participants needed to conduct the study, a sample size analysis was conducted. Employing a standard practice in psychological research, the statistical power was set to .80 with an alpha of .05 (Creswell, 2009;

Gravetter & Wallnau, 2009). Current research on correlation studies in religion and HIV stigma indicate using an average effect size of .30 (Pirutinsky, Rosmarin, & Holt, 2012; Sales et al., 2012; Sikkema et al., 2013; Yi, Sandfort, & Shidlo, 2010). Therefore, this study required a minimum of 84 participants to have a valid sample size. In order to meet this requirement, I used a final sample size of 100 participants to effectively answer the proposed research questions (Creswell, 2009; Gravetter & Wallnau, 2009).

Setting

The study was conducted in the rural town of Anaval in the state of Gujarat, India. Anaval could be described as an agricultural community with smaller villages on the outskirts of a depressed socioeconomic area. The town of Anaval was selected as an ideal representation of a religious community in rural parts of southern Gujarat, India. Instead of using a local institution or establishment for recruiting purposes, the community at-large was used as a setting to find viable participants. This assured a minimization of institutional bias and coercing participants by approaching them in public areas or in groups. Therefore, the research design required participants to be solicited at home to assure privacy and confidentiality. This in turn defined the setting for this study as the town of Anaval itself and opened the entire community for participant solicitation (Creswell, 2009).

Research Design and Approach

The research was designed to investigate the relationship between specific religious constructs and HIV related stigma. The aim was to test how ERI, IPS, and religiosity relate to dimensions of HIV stigma. In order to assess the relationship, I used

correlation as an underlying approach to statistical assessment (Creswell, 2009; Gravetter & Wallnau, 2009). However, for added depth to the understating of the relationship between religion and HIV stigma, moderating and mediating effects on variables were also analyzed (Creswell, 2009; Gravetter & Wallnau, 2009). Education was tested as a moderator of the relationship between IPS and HIV stigma (Creswell, 2009; Gravetter & Wallnau, 2009). Religiosity was also tested as a mediator of the relationship between ERI and HIV stigma (Creswell, 2009; Gravetter & Wallnau, 2009).

The purpose of conducting this study was to answer the research questions stated in the design. Data were collected with preexisting questionnaire specifically designed for measures in behavioral sciences and have proven validity and test-retest reliability (Belgrave et al., 1993; Bresnahan & Zhuang, 2011; Cohen et al., 2008; Holt et al., 2009; Mattis et al., 2003;). The measures were administered to participants from the target population of religious community members in rural parts of Gujarat, India (Creswell, 2009).

I translated the test measures from English to Gujarati, which is the local regional language. I am fluent in both English and Gujarati, but to ensure objectivity and accuracy of translation, the documents were authenticated by a third party who was a member of the American Translators Association. I personally conducted the actual study in Gujarat, India upon IRB approval with the utmost care for safety and privacy of participants (Creswell, 2009).

Procedures

Participant selection was designed to be conducted by approaching households in the town of Anaval. Homes within the same neighborhood were targeted due to close proximity, and neighborhoods around the main market, school, and temple were ideal because of the greater concentration of people. Most of the solicitation was planned for morning and evening hours because in the afternoon it was customary for people to rest or nap. Potential participants who appeared to match inclusion criteria were solicited to participate in the study and were provided with the consent form for review (Creswell, 2009). People who decided to not participate in the study or wanted to think about it and were not ready at that time were provided with a flyer. The flyers summarized the study and contained contact information so that in case the prospects changed their mind, they could contact me in order to participate (Creswell, 2009).

The consent form included a background of the study, procedures for participants, and potential social benefit. Informed consent also included a section on participant's rights: confidentiality, voluntary participation, and ethical concerns (Creswell, 2009). Prospects were given the chance to ask questions for further clarification until they were fully satisfied to make a decision to either withdraw or proceed by providing consent. Upon review of the consent form, people were asked to keep the form for their reference and recordkeeping. Prospects who were interested in participating provided informed consent through verbal confirmation and by actually completing the survey packet. I conducted participant acquisition to ensure proper ethical conduct and consent

procedures. All written documentation and verbal information were provided to prospects and participants in the local language of Gujarati (Creswell, 2009).

The aim of participant selection was to get a sample that was representative of the local community and southern Gujarat. Participants who agreed to engage in the study and provided verbal consent were asked to keep the consent form for their record and handed a packet enclosed within an unmarked envelope. Participants were instructed to complete the survey packet, which included the demographic questionnaire and all measuring instruments, in the privacy of their home and place the completed packet back into the unmarked envelope. Approaching participants at home and allowing them to complete the surveys in such a private setting minimized the risk of coercion, bias, and intrusion. Furthermore, in order to assure that participants completed the packet in a timely manner, they were told that I would return in 1 hour to collect the envelope. It was estimated that completion of the survey packet would take approximately 45 minutes, and therefore the participants were provided with 1 full hour (Creswell, 2009).

The survey questionnaires were distributed to participants on an on-going basis until the established sample size of 100 participants had been reached. The survey packet included the demographic questionnaire that collected background information such as age, gender, education, occupation, religious affiliation, marital status, as well as if they had any children, and if so how many. The packet also included a battery of tests: Dimensions of Stigma Scale, ERI, Self-Report Measure of Religiousness, as well as the IPS Measure (Belgrave et al., 1993; Bresnahan & Zhuang, 2011; Mattis et al., 2003; Cohen et al., 2008; Holt et al., 2009). The test instruments were administered to the

participants as a packet with the demographic questionnaire on top and then each of the measures in sequential order (Creswell, 2009).

Instrumentation

Demographics

Participants were administered a demographic questionnaire to collect information regarding age, gender, education, occupation, ethnicity, religious affiliation, marital status, number of children (if any), and if they knew of at least one person who has/had HIV. The data were used for analyses and to create a descriptive representation of the sample in order to generalize results to the population (Creswell, 2009).

Dimensions of Stigma Scale

The Dimensions of Stigma Scale was a 27-item instrument that measured HIV/AIDS related stigma based on five dimensions: labeling, negative attribution, distancing, status loss, and controllability (Bresnahan & Zhuang, 2011). Labeling was a dimension of stigma that was measured with a 6-item questionnaire and had shown to have a test-retest reliability of $\alpha = .86$. The dimension of negative attribution was a 7-item questionnaire that had a reliability of $\alpha = .90$ (Bresnahan & Zhuang, 2011). Distancing was a 6-item questionnaire with $\alpha = .89$ reliability measure. Status loss and controllability were both 4-item questionnaires each, and status loss had a reliability of $\alpha = .82$ while controllability had a reliability of $\alpha = .89$ (Bresnahan & Zhuang, 2011).

Each dimension was measured based on a 5-point Likert scale ranging from 1 for *strongly disagree* to 5 for *strongly agree*. A higher score indicated that the participant was more likely to exhibit stigmatic thoughts in accordance with the specific dimension

of stigma. For example, the highest possible score for the 6-item dimension of labeling was 30, and therefore someone who scored 26 was more likely to exhibit labeling as a form of HIV stigma than someone who scored 22 (Bresnahan & Zhuang, 2011). Participants were administered the overall full scale in order to evaluate the relationship with other variables in accordance to each individual dimension of stigma. Utilization of the Dimensions of Stigma Scale has been approved for noncommercial research and educational purpose without the need for written permission (Bresnahan & Zhuang, 2011).

Early Religious Involvement

ERI is defined as the frequency of participation in religious activities and the importance of religion to the family of individuals during childhood (Mattis et al., 2003). ERI was measured based on a 4-item questionnaire that used a 5-point Likert scale (Mattis et al., 2003). Participants answered the questions based on a range from 1 signifying *never* to 5 signifying *very often*. The measure had a reliability of $\alpha = .72$, and scoring can range from 4 to 20, with higher scores indicating a greater tendency to be involved in religious faith early on in life (Mattis et al., 2003). ERI measure has been approved for noncommercial research and educational purpose without the need for written permission (Mattis et al., 2003).

Self-Report Measure of Religiousness

The Self-Report Measure of Religiousness was a 9-item questionnaire designed to quantify the religiosity of participants. Religiosity can be described as the intensity of belief in any type of religious practice and ideology (Cohen et al., 2008). The measure

had a test-retest reliability of α = .94, and participants answered the religiousness measure based on a 5-point Likert scale that ranged from 1 for *strongly disagree* to 5 for *strongly agree* (Cohen et al., 2008). Scoring for the measure ranged from 9 to 45 with higher scores indicating greater self-reported intensity for religious belief. Public use of the Self-Report Measure of Religiousness has been approved by the authors for noncommercial research and educational purpose without written permission (Cohen et al., 2008).

Religion and Health/Illness Measure

The Religion and Health/Illness Measure was designed to assess based on two dimensions: perceived religious influence on health behavior and illness as punishment for sin (Holt et al., 2009). IPS is defined as the perception of illness being a result of one's own fault for having sinned or having poor character. The complete scale was a 15-item instrument that was divided into a 7-item questionnaire for perceived religious influence on health behavior and an 8-item questionnaire for IPS. The IPS measure had an internal consistency of α = .91 and only IPS was administered to participants (Holt et al., 2009). Participants answered each dimension questionnaire based on a 4-point Likert scale ranging from 1 for *strongly disagree* to 4 for *strongly agree* (Holt et al., 2009). The possible score range for this measure was from 8 to 32 with a higher score indicating a greater likelihood to view illness as a divine punishment for sinful behavior. Use of the Religion and Health/Illness Measure was approved for noncommercial research and educational purpose without the need for written permission (Holt et al., 2009).

Data Analyses

The data instruments were administered to each participant, and upon completion the measures were reviewed to ensure completion of instruments. Since the participants were completing the questionnaires on paper, there may have been questions that were overlooked or mistakes that occurred due to human error (Creswell, 2009). Reviewing each paper for completion ensured data validity and diminished incomplete surveys that may not be usable in final analyses. At the end of testing, all data was transferred to SPSS software for safe storage and analyses (George & Mallery, 2010).

After digitizing the data into SPSS, the data went through a cleaning process that eliminated any outliers, blanks, errors, or participants who did not represent the population sample (George & Mallery, 2010). The data cleaning process also eliminated any duplicate records and ensured the accuracy of transporting data from physical to digital formats. The final resulting data was statistically evaluated using the SPSS software (George & Mallery, 2010). Initially, correlation tables were computed to describe the relationship among continuous variables (Creswell, 2009; Gravetter & Wallnau, 2009). This provided a base line understanding of the strength of the relationship between the measured variables without any additional manipulation or external factors. Then regression analyses were conducted to assess moderating and meditating effects for the research questions as follows:

RQ1: Does education moderate the relationship between IPS and HIV stigma?

$H1_0$: Education does not moderate the relationship between IPS and HIV stigma.

$H1_1$: Education does moderate the relationship between IPS and HIV stigma.

RQ2: Does religiosity mediate the relationship between ERI and HIV stigma?

$H2_0$: Religiosity does not mediate the relationship between ERI and HIV stigma.

$H2_1$: Religiosity does mediate the relationship between ERI and HIV stigma.

Ethical Considerations

The design of this research study was formulated with careful considerations of ethical conduct. The potential effect of the study on the physical, emotional, and mental wellbeing of participants was prioritized in research design (Creswell, 2009). Informed consent procedures were designed to provide both verbal and written descriptions of the background of the study, procedure for participation, confidentiality, voluntary participation, as well as a through explanation of the risks and benefits of taking part in the study. Furthermore, informed consent would notify prospects that all data collected was to be kept confidential and only this researcher would have access to the data records. The participants were also allowed to withdraw from the study at any time without any form of penalty or consequence (Creswell, 2009).

The study itself was conducted by administering a collection of brief questionnaires so there was no potential for physical risk or harm to any participant. Nevertheless, there may have been some potential for emotional hardship on participants who had experienced social stigma of any kind or had sensitivity to the topic of HIV/AIDS (Creswell, 2009). Prospects were be forewarned about the nature of the study and those who did not feel comfortable to participate were encouraged to withdraw.

As a precautionary measure all participants were provided with contact information to reach this researcher in case they felt any kind of distress from

participating in the study. Steps were taken to guide participants to Vallabh Ashram for localized counseling services and Surat Civil Hospital for medical care if participants requested interventions. Participants of the study were also provided with a handout created by UNICEF that contained factual HIV/AIDS information for educational purposes. Informed consent was established verbally to ensure anonymity and to avoid collection of any identifying information (Creswell, 2009).

Summary

The methodology described in this chapter reflects a design that efficiently answered the research questions and did so in a manner that prioritized ethical conduct. To further the knowledge of relationships between religion and HIV stigma, this study evaluated 100 individuals representing the population sample of rural inhabitants in Gujarat, India (Creswell, 2009). Valid and reliable measures of dimensions of HIV stigma, religiosity, early religious involvement, and religious perception of health/illness were used for data collection (Belgrave et al., 1993; Bresnahan & Zhuang, 2011; Cohen et al., 2008; Holt et al., 2009; Mattis et al., 2003;). The study procedures that have been outlined in detail in this chapter indicate how much care was taken in administering the above mentioned questionnaires and collecting informed consent (Creswell, 2009).

Prospects were solicited for the study within the town of Anaval in the state of Gujarat, India. Prospects were approached at their homes with care and informed consent procedures highlighted the nature of the study, confidentiality, procedures, and participant's rights (Creswell, 2009). The data collected was assessed using SPSS software for mediation and moderation effects on the relationships between variables

(George & Mallery, 2010; Gravetter & Wallnau, 2009). The results of this study would provide a greater understanding of the dynamics of HIV stigma in rural India. The body of knowledge can then be incorporated into prevention initiatives, intervention programs, and stigma reduction.

Chapter 4: Results

The purpose of this study was to gain a better understanding of the relationship between education, religious factors, and HIV stigma within religious communities in Gujarat, India. Specifically, this study was designed to evaluate the moderating effects of education on the relationship between perception of IPS and HIV stigma. The mediating effects of religiosity on the relationship between ERI and HIV stigma were also examined in this study. I used quantitative analysis and validated measures to capture the data on a sample population to specifically answer the research questions stated above (Creswell, 2009; Gravetter & Wallnau, 2009). The data collected were entered into SPSS software for computation and further analysis (George & Mallery, 2010; Green & Salkind, 2008).

I will begin this chapter by presenting the descriptive characteristics of the sample population. Then, the statistical analyses conducted for this study will be clearly stated along with tabulated results. Finally, the summary will tie the results together with the descriptive characteristics of the sample in order to make sense of the results as a whole and answer the research questions. I aim to only state the facts and interpret the results without any bias. Therefore, any assumptions extrapolations or conclusions that were suggested by the data collected will be presented in following chapter (Creswell, 2009; Gravetter & Wallnau, 2009).

Descriptive Characteristics

This study was conducted in the rural town of Anaval in the state of Gujarat, India. In assessing a sample population for this study, the research design excluded

minors who were under the age of 18 and elders who were over the age of 65. The primary reason for selecting only adults between ages 18 and 65 was to assure they had the ability to provide informed consent. Furthermore, it was necessary that participants were able to read and comprehend the native language of Gujarati in order to provide consent and participate in the study. Beside age and reading comprehension, there were no other major exclusion criteria, and therefore the descriptive characteristics of the sample were allowed to be as unrestricted as possible (Creswell, 2009).

Participants were solicited at their homes, and approximately less than 10 households declined participating all together. However, nearly twice as many households said they would think about it or were too busy at the time to participate, so they were provided with a flyer to contact me if and when they were ready. However, none of the people who were handed flyers called to participate or ask questions regarding the study. The final number of participants included in this study was 100, which fulfilled the sample size requirements needed based on a statistical power of .80 with an alpha of .05 and an effect size of .30 (Creswell, 2009; Gravetter & Wallnau, 2009).

A total of 113 completed questionnaire packets were collected by the end of the study. The survey packets were then reviewed for consent, completion, and legibility for inclusion in the data analyses. Five of the participants who completed the questionnaires wrote their age to be under 18 years old on the demographics and were excluded from analyses. Another eight questionnaire packets were excluded from the study because they either had missing data or were not clearly legible. The remaining 100 completed

questionnaire packets were included in the study because they met all of the research design criteria. Table 1 is a description of the sample characteristics, which also includes central tendency and dispersion for demographic variables computed in SPSS (George & Mallery, 2010; Green & Salkind, 2008).

Table 1

Summary of Sample Characteristics (n = 100)

Characteristic	*n*	Percentage
Gender		
Male	80	80%
Female	20	20%
Marital status		
Single	57	57%
Married	40	40%
Separated	1	1%
Divorced	2	2%
Number of children		
Zero	67	67%
One	10	10%
Two	13	13%
Three	10	10%
Religious affiliation		
Hindu	100	100%
Know PLHAs		
Yes	8	8%
No	92	92%
Occupation		
Student	49	49%
Unemployed	14	14%
Self-employed	17	17%
Full-time job	20	20%

Characteristic	Range	*M*	*SD*
Age	19-64	28.30	10.97
Years of education	9-20	13.01	2.84

Central Tendency and Dispersion of Scales

Data needed to answer the research questions were collected by administering a battery of survey questionnaires. The survey questionnaires captured data on Religiosity, ERI, IPS, and HIV Stigma (Bresnahan & Zhuang, 2011; Cohen et al., 2008; Holt et al., 2009; Mattis et al., 2003). HIV Stigma was comprised of five subscales that measure a specific dimension of stigma. Labeling, Negative Attribution, Distancing, Status Loss, and Controllability were the five dimensions of stigma subscales that added up to provide a comprehensive HIV Stigma measure. The central tendency and dispersion of the scores for each of these measures as computed in SPSS is provided below in Table 2 (George & Mallery, 2010; Green & Salkind, 2008).

Table 2

Central Tendency and Dispersion for Scales (n = 100)

Variables	Scale range	Sample range	*M*	*SD*
Religiosity	9-45	24-45	41.53	4.30
ERI	4-20	4-20	17.63	2.87
IPS	8-32	8-32	21.97	7.01
Stigma	27-135	57-135	99.89	16.93
Labeling	6-30	9-30	23.19	6.12
Neg attribution	7-35	11-35	24.09	6.12
Distancing	6-30	6-30	20.73	6.41
Status loss	4-20	8-20	15.74	3.25
Controllability	4-20	5-20	16.10	3.93

Note. ERI = Early Religious Involvement
IPS = Illness as Punishment for Sin

Correlations Between Variables

In order to understand the existing relationship between these variables, a correlation analysis was conducted. Table 3 provides the Pearson Correlations between continuous variables for all participants. Participant age, years of education, religiosity, ERI, IPS, and HIV Stigma are presented for relational analysis (George & Mallery, 2010; Green & Salkind, 2008).

Table 3

Correlations Between Continuous Variables for All Participants (n = 100)

Variables	Age	Education	Religiosity	ERI	IPS	Stigma
Age	-----					
Education	.477**	-----				
Religiosity	.250*	.068	-----			
ERI	-.253*	-.127	.142	-----		
IPS	.101	-.187	.297**	.011	-----	
Stigma	.091	-.106	.361**	.202*	.344**	-----

Note. * Significant at the 0.05 level (2-tailed)
** Significant at the 0.01 level (2-tailed)
ERI = Early Religious Involvement
IPS = Illness as Punishment for Sin

Analysis of Variance (ANOVA)

One-way analyses of variances (ANOVA) were conducted to determine if there were any significant differences in age, years of education, ERI, IPS, religiosity, and stigma scales based upon the gender of participants in this study (Bresnahan & Zhuang, 2011; Cohen et al., 2008; Holt et al., 2009, Mattis et al., 2003). The results of the ANOVA testing are presented below (Creswell, 2009; George & Mallery, 2010; Green & Salkind, 2008).

ANOVA: Gender – Age

An ANOVA was conducted to examine any significant difference in age of participants based upon gender. The independent variable, gender, included two groups:

male (M = 26.95, SD = 10.14, n = 80) and female (M = 33.35, SD = 12.86, n = 20). The assumption of homogeneity of variances was tested using Levene's Test and found to be tenable, F (1, 98) = 1.748, p = 0.189. The ANOVA test results indicated a significant difference in age at the $p < .05$ level, F (1, 98) = 5.700, p = 0.019 (George & Mallery, 2010; Green & Salkind, 2008). Furthermore, the actual effect size was slightly small, η^2 = 0.054, so gender accounted for approximately 5.4% of the change in overall participant age (Cohen, 1988).

ANOVA: Gender – Education

An ANOVA was conducted to examine any significant difference in years of education based upon gender. The independent variable, gender, included two groups: male (M = 12.83, SD = 2.86, n = 80) and female (M = 13.75, SD = 2.69, n = 20). The assumption of homogeneity of variance was tested and upheld using Levene's Test, F (1, 98) = 0.017, p = 0.895. The ANOVA test results indicated that there was no significant difference in the means between gender and education, F (1, 98) = 1.708, p = 0.194 (George & Mallery, 2010; Green & Salkind, 2008). The effect size was very small, η^2 = 0.017, meaning that gender only accounted for approximately 1.7% of the change in education (Cohen, 1988).

ANOVA: Gender – Early Religious Involvement (ERI)

An ANOVA was conducted to examine any significant difference in ERI based upon participant gender. The independent variable, gender, included two groups: male (M = 17.59, SD = 2.81, n = 80) and female (M = 17.80, SD = 3.19, n = 20). The assumption of homogeneity of variance was tested using Levene's Test and found to be tenable, F (1,

98) = 0.646, $p = 0.423$. The ANOVA test results indicated that there was no significant difference in the means between ERI and gender, F (1, 98) = 0.087, $p = 0.769$ (George & Mallery, 2010; Green & Salkind, 2008). The effect size was almost nonexistent, $\eta^2 = 0.000$; therefore, gender had almost no effect on ERI among the participants in this study (Cohen, 1988).

ANOVA: Gender – Illness as Punishment for Sin (IPS)

An ANOVA was conducted to examine any significant difference in IPS based upon the gender of participants. The independent variable, gender, included two groups: male ($M = 21.64$, $SD = 6.91$, $n = 80$) and female ($M = 23.30$, $SD = 7.46$, $n = 20$). The assumption of homogeneity of variance was tested and upheld with Levene's Test, F (1, 98) = 0.516, $p = 0.474$. The ANOVA test results indicated that there was no significant difference in the means between gender and IPS, F (1, 98) = 0.897, $p = 0.346$ (George & Mallery, 2010; Green & Salkind, 2008). The effect size was extremely low, $\eta^2 = 0.009$, so IPS was hardly impacted at all by the gender of participants in this study (Cohen, 1988).

ANOVA: Gender – Religiosity

An ANOVA was conducted to test the effect of gender on the religiosity of participants. The independent variable, gender, included two groups: male ($M = 41.04$, $SD = 4.47$, $n = 80$) and female ($M = 43.50$, $SD = 2.83$, $n = 20$). The assumption of homogeneity of variance was tested using Levene's Test and was not upheld due to being statistically significant at the $p < .05$ level, F (1, 98) = 4.656, $p = 0.033$. The ANOVA test results indicated a significant difference in the means between gender and religiosity at

the $p < .05$ level, F (1, 98) = 5.484, p = 0.021 (George & Mallery, 2010; Green & Salkind, 2008).

Since Levene's Test indicated that variance was not homogenous, Welch and Brown-Forsythe tests were conducted for a rigorous assessment. The Brown-Forsythe test results indicated that there was a significant difference at the $p < .01$ level in the means between gender and religiosity, F (1, 46) = 9.289, p = 0.004. The Welch test further solidifies this result with a significance at the $p < .01$ level, F (1, 46) = 9.289, p = 0.004 (George & Mallery, 2010; Green & Salkind, 2008). The actual effect size was found to be slightly small, $\eta^2 = 0.052$, so the gender of participants impacted nearly 5.2% of the change in religiosity scores (Cohen, 1988).

ANOVA: Gender – HIV Stigma

An ANOVA was conducted to evaluate any significant difference in HIV stigma based on the gender of participants. The independent variable, gender, included two groups: male (M = 99.00, SD = 15.36, n = 80) and female (M = 103.45, SD = 22.27, n = 20). The assumption of homogeneity of variance was tested using Levene's Test and was not confirmed due to a statistical significance at the $p < .01$ level, F (1, 98) = 8.893, p = 0.004. The ANOVA test resulted in no significant difference between the means of gender and HIV stigma, F (1, 98) = 1.106, p = 0.295 (George & Mallery, 2010; Green & Salkind, 2008).

However, due to the lack of confirmation of homogeneity of variances, the Brown-Forsythe and Welch tests were conducted for a more rigorous assessment. The Brown-Forsythe test results suggested that there was no significant difference in means

between gender and stigma scores, F (1, 24) = 0.714, p = 0.407. The Welch test further confirmed a result of nonsignificance, F (1, 24) = 0.714, p = 0.407 (George & Mallery, 2010; Green & Salkind, 2008). The actual effect size was very small, $\eta^2 = 0.011$, further indicating that participant gender had no significant effect on stigma scores in this study (Cohen, 1988).

Moderation Analysis

The first research question aimed to understand if years of education had a moderation effect on the relationship between IPS and HIV stigma (Bresnahan & Zhuang, 2011; Holt et al., 2009). In order to test for moderation effect, an interaction term (EduIPS) was created using years of education and IPS. In the first step of the regression model education and IPS were entered as variables (Bresnahan & Zhuang, 2011; Holt et al., 2009). Then in the second step the interaction term was introduced into the regression model.

If the interaction term explained a statistically significant amount of variance in the dependent variable then it can be concluded that a moderation effect has taken place (Baron & Kenny, 1986; Pirutinsky, Rosmarin, & Holt, 2012). The results indicated that when the interaction term was introduced into the regression model it did not account for a statistically significant amount of variance. Therefore, education did not significantly moderate the relationship between IPS and HIV stigma. Table 4 presents the summary of results for regression analysis conducted in SPSS to test for moderation (George & Mallery, 2010; Green & Salkind, 2008).

Table 4

Regression Analysis for Moderation Effect on HIV Stigma (n = 100)

Variable		*B*	*SE B*	*β*	R^2	ΔR^2
Step 1					.120	.120**
	Education	-.259	.578	-.043		
	IPS	.810	.234	.336**		
Step 2					.122	.002
	Education	-.220	.586	-.037		
	IPS	.814	.235	.337**		
	EduIPS	.043	.091	.046		

Note. ** Significant at the 0.01 level
IPS = Illness as Punishment for Sin
EduIPS = Interaction Term.

Mediation Analysis

The second research question aimed to understand if Religiosity had a mediating effect on the relationship between ERI and HIV stigma (Bresnahan & Zhuang, 2011; Cohen et al., 2008; Mattis et al., 2003). In order to test for mediation effect, the mediation variable was regressed on the independent variable in the initial step (Step 1) of the analysis. In the second step (Step 2) the dependent variable was regressed on the independent variable, and then finally in the third step (Step 3) the dependent variable was regressed on both the independent and mediating variables.

According to Baron and Kenny (1986) for mediation to occur a series of conditions must be met. Initially, variations in the independent variable must significantly account for variations in the mediator (path A). Then variations in the mediator must significantly account for variations in the dependent variable (path B). When both path A

and B are controlled, the previously significant relationship between the independent and dependent variable must no longer be significant or preferably be nonexistent (Baron & Kenny, 1986; Sales et al, 2012; Sikkema et al., 2013).

The results indicated that religiosity does not significantly mediate the relationship between ERI and HIV stigma. Since ERI was not significantly correlated with religiosity, it violated a necessary condition for both full and partial mediation to exist. Table 5 provides a summary of the results in SPSS for regression analysis conducted to test for mediation (George & Mallery, 2010; Green & Salkind, 2008).

Table 5

Regression Analysis for Mediation Effect on HIV Stigma (n = 100)

Variable	*B*	*SE B*	*β*	R^2	ΔR^2
Step 1 – Religiosity				.020	.020
ERI	.213	.150	.142		
Step 2 – HIV Stigma				.041	.041*
ERI	1.190	.584	.202*		
Step 3 – HIV Stigma				.153	.113**
ERI	.905	.557	.153		
Religiosity	1.336	.372	.339**		

Note.* Significant at the 0.05 level
** Significant at the 0.01 level
ERI = Early Religious Involvement

While conducting the previous mediation analysis for research question two, there was an indication that a second mediation analysis should be conducted. The indication

was that the data set included significant positive correlations between IPS, religiosity, and HIV stigma. An examination of the correlations and concepts suggested that a second mediation analysis could be conducted, and an analysis was needed to confirm this idea.

A second mediation analysis was conducted to understand if IPS has a mediating effect on the relationship between Religiosity and HIV stigma (Bresnahan & Zhuang, 2011; Cohen et al., 2008; Holt et al., 2009). In order to test for mediation effect, IPS was regressed on religiosity in the initial step (Step 1) of the analysis. In the second step (Step 2), HIV stigma was regressed on religiosity, and then HIV stigma was regressed on both IPS and religiosity (Step 3).

The results indicated that IPS does significantly mediate the relationship between religiosity and HIV stigma. However, the previously significant relationship between religiosity and HIV stigma did not drop out of significance when IPS was introduced. Therefore, instead of a full mediation the relationship between religiosity and stigma was partially mediated by IPS. Table 6 provides a summary of the results in SPSS for regression analysis conducted to test for mediation (George & Mallery, 2010; Green & Salkind, 2008).

Table 6

Regression Analysis for Mediation Effect on HIV Stigma-2 (n = 100)

Variable	*B*	*SE B*	*β*	R^2	ΔR^2
Step 1 – IPS				.088	.088**
Religiosity	.485	.157	.297**		
Step 2 – HIV Stigma				.130	.130**
Religiosity	1.422	.371	.361**		
Step 3 – HIV Stigma				.192	.061**
Religiosity	1.118	.376	.284**		
IPS	.626	.231	.259**		

Note. * Significant at the 0.05 level
** Significant at the 0.01 level
IPS = Illness as Punishment for Sin

Summary

This chapter was a presentation of the results of this study conducted in Anaval, India. A description of the sample characteristics was presented first along with central tendency and dispersion of the scales administered. In order to answer the research questions, moderation and mediation analyses were conducted in SPSS to determine the effect on relationships between variables (George & Mallery, 2010; Green & Salkind, 2008). Therefore, this chapter introduced the moderation assessment conducted as a part of this study to understand the relationship between years of education, IPS, and dimensions of HIV stigma (Bresnahan & Zhuang, 2011; Holt et al., 2009).

The mediation analysis was conducted to answer the second research question; the results were also presented in this chapter. The effect of religiosity on the relationship between ERI and dimensions of HIV stigma was presented (Bresnahan & Zhuang, 2011; Cohen et al., 2008; Mattis et al., 2003).

The next chapter (Chapter 5) presents the discussion and interpretation of the findings stated in chapter 4. Chapter 5 clearly states what the results of this study mean and how these findings may be used for positive social change and in future research. The next chapter will also present some of the limitations that this study faced and what future research should strive for in order to fill the gaps. With all of these things in mind, a comprehensive conclusion is presented in the next and last chapter of this study (Creswell, 2009; Gravetter & Wallnau, 2009).

Chapter 5: Discussion, Conclusions, and Recommendations

This study was proposed to gain a better understanding of HIV stigma in rural parts of Gujarat, India. The nation of India has been challenged financially, socially, and politically by the crisis that HIV/AIDS has propagated over the last few decades (NACO, 2014). While there has been increasing research on HIV stigma, literature in regards to the propagation of stigma in rural India was sparse at best (Fung et al., 2007; Patel et al., 2012; Van Rompay et al., 2008). The aim of this study was to contribute to the existing literature by narrowing the gap and providing a deeper understanding of HIV stigma. Data for this study were collected to evaluate the moderating effects of education on the relationship between IPS and HIV stigma (Bresnahan & Zhuang, 2011; Holt et al., 2009). Furthermore, I tested the mediating effects of religiosity on the relationship between ERI and HIV stigma (Bresnahan & Zhuang, 2011; Cohen et al., 2008; Mattis et al., 2003).

The results of this study were analyzed, and in this chapter, I provide an interpretation of the findings. The implications of research design are discussed, and sample characteristics are presented. Then, an interpretation of the correlations among variables is stated along with a discussion of the influence of participant demographics. An explanation of the findings from the moderation and mediation analyses is presented with final recommendations for future studies. In this chapter, I aim to summarize the results of this study in a manner that can add to the quality of life for PLHAs in Gujarat, India and pave the way for future research on the topic.

Discussion

This research was designed to understand how a religious agrarian society in India perceived stigma related to HIV/AIDS. It is important to note that the research design had some significant implications on the findings of this study. Since participants were solicited in person instead of anonymously online, individuals may have felt the urge to provide answers that were more socially acceptable or made a better impression. When participants were approached at their homes, men were more likely to engage in conversation and volunteer to participate in the study than women. Furthermore, it was possible that by approaching people at home to participate in the study, the sample was more likely to be comprised of those who were unemployed, students, or housewives. These factors played a pivotal role in shaping the final pool of participants and their demographic characteristics (Creswell, 2009; George & Mallery, 2010; Green & Salkind, 2008).

Sample Characteristics

The sample of participants for this study included 80 men and 20 women. Women who were approached to participate would often call their husbands, fathers, or sons to discuss the study. The tendency for women to be more reserved and place the men forward may be due to traditional gender roles. This religious community appeared to adhere to a traditional role for men to be providers, leaders, and decision makers for the family. The women seemed to largely be caretakers and educators who played a vital role in the upbringing of children. Furthermore, women may have been uncomfortable conversing with men who were not family members due to conservative views on

sexuality and cultural values (Creswell, 2009; George & Mallery, 2010; Green & Salkind, 2008).

A possible reason that 80% of participants were male and 57% were single may be because there were not enough women in community. This area of rural Gujarat may practice patriarchy where traditionally land and assets were passed along to male children. There may also have been areas that expected the parents of brides to pay dowry to the family of the groom during marriage. This in turn made girls a financial liability and boys a financial asset. However, further investigation would be needed to understand what cultural practices were prominent and how they influence the demographic characteristics of the locality. Future studies are encouraged to examine how traditional gender roles may influence participant selection in creating a representative sample (Creswell, 2009; George & Mallery, 2010; Green & Salkind, 2008).

A majority of the male participants were unemployed students who were not yet married. One of the contributing factors in this homogeneity may be the fact that young single unemployed men may have been an accurate representation of the larger community. Information on job opportunities and male/female ratio for the surrounding community could have emboldened the results of this study. While it is not known what the average age was for people to get married in this community, it appears that 28-year-old students may not have been ready to get married and settle down (Creswell, 2009; George & Mallery, 2010; Green & Salkind, 2008).

Education appeared to have played an important role for participants since 49% identified themselves as students. However, it was probable that not all of those who

identified themselves as students were actually enrolled full-time students. Due to self-esteem issues and a bias to present in the best manner, it was likely that many of the participants did not want to identify themselves as unemployed (Creswell, 2009; George & Mallery, 2010; Green & Salkind, 2008). While 14% of the sample was unemployed, there was a good possibility that many of the students were actually unemployed but did not want to share that information (Creswell, 2009; George & Mallery, 2010; Green & Salkind, 2008).

The level of education was also a vital part of the moderation analysis for this study. The participants had an average of 13 years of formal education, which was slightly above a high-school graduate. It was difficult of determine if 13 years of formal education was good or poor for this area without a benchmark to compare with. Information on what the average level of education was for rural Gujarat may have helped this study by providing a benchmark comparison. Nevertheless, many factors such as the quality of education provided, curriculum, and comprehensive testing were unknown. These could have been significant factors in determining the influence of education on other variables within this study (Creswell, 2009; George & Mallery, 2010; Green & Salkind, 2008).

All of the participants identified themselves as being religious and active participants in the Hindu religion. The fact that not even one of the participants was of a different faith may be a shortcoming of the participant selection process for this study. However, this may also indicate that the rural community in southern Gujarat may not be as religiously diverse as some of the urban cities in India. Larger demographic

information would be needed from rural areas of Gujarat to determine if religious homogeneity was common. It was also concerning that having all Hindu participants may influence the perception of PLHAs and HIV/AIDS related stigma within the population sample (Creswell, 2009; George & Mallery, 2010; Green & Salkind, 2008).

Correlations Among Variables

The age of participants had a strong positive correlation with years of education within the sample. Older participants had more education, which could mean that an older participant pool could yield much different results from a younger sample. However, this depends on the quality of school education received because the only confirmation is that the quantity of education increases with age. It is important to understand the quality of school education that was received, and if the curriculum included sex education or HIV/AIDS awareness. Nevertheless, it may be safe to assume that as individuals strive for higher education the importance of that education could go up. Participants who were older in age may have valued their education more allowing it to make them more understanding and sympathetic towards PLHAs.

Age of participants was also positively correlated with religiosity and negatively correlated with ERI (Mattis et al., 2003). Older participants seemed to be more likely to have greater intensity in their religious beliefs and less childhood religious teachings. As participants got older in age, they might have become more independent and formulated their own perception of the world. This could be attributed to higher education, work experience, or separation from parental guidance. It was possible that as participants got older and found solace in religious teachings, their beliefs intensified because they did

not have this comfort growing up. It is possible that people who have had a lot of ERI might rebel against it as they grow into adulthood, but the opposite can be true as well.

It was also possible that as participants became older, they identified themselves as being very religious, but their memories of ERI may have faded. However, memory loss may not be as much of an attribute as bias towards creating a good impression. In order to feel more religious today, participants could have bias towards their early childhood memories and falsely lowered their ERI scores (Mattis et al., 2003). Very religious people may want to feel a progression towards salvation, and therefore identify themselves as being more faithful in the present than they were in the past. Regardless, it is important to note that the age of participants is vital to understanding the results of this study.

Religiosity and IPS had a significant positive relationship within the population sample (Cohen et al., 2008; Holt et al., 2009). Participants who were more religious were also more likely to view illness as a punishment for sin. This may be because religiosity could have had a strong positive correlation to fundamental authoritarian belief for participants in this study. If participants believed in an authoritarian God who punished sinners, then it makes sense why they would have a high IPS score (Holt et al., 2009). Believers of an authoritarian deity would feel that PLHAs got what they deserved for engaging in high-risk behaviors. Further information is needed to check if there was any association between intensity of religiousness and fundamental belief in an authoritarian God.

A significant positive relationship also existed between religiosity and HIV stigma as well as IPS and HIV stigma (Bresnahan & Zhuang, 2011; Cohen et al., 2008; Holt et al., 2009). Therefore, participants who were significantly more religious were also more likely to have higher levels of HIV stigma (Bresnahan & Zhuang, 2011). Those who had a significantly strong belief in IPS were also more likely to stigmatize PLHAs. It appears that within this study, participants had strongly associated stigmatic thinking to a more fundamental orthodox view of religious belief. The findings suggest that religion was a significant influence on the worldview for participants in this study. The fact that religiosity and IPS were both strongly related to HIV stigma indicated that participants looked to religious doctrine for guidance on morality pertaining to high-risk sexual behaviors (Bresnahan & Zhuang, 2011; Cohen et al., 2008; Holt et al., 2009).

If local religious teachings promoted belief in an authoritarian or punishing God, then people may be more likely to view IPS and stigmatize PLHAs. However, a loving, caring, and forgiving deity may lessen the tendency to stigmatize PLHAs and promoted greater sympathy. A deeper qualitative understanding of the subjective nature of religion in the area may expand upon the understanding of the kind of God this rural community believes in and how it influences their worldview. Future studies should conduct a qualitative analysis of the influence of religiosity and IPS on the perception of participants (Cohen et al., 2008; Holt et al., 2009).

Analyses of Variances (ANOVA)

A series of analysis of variance tests were conducted to assess any significant differences in age, education, ERI, IPS, religiosity, or HIV stigma based upon the gender

of participants in this study (Bresnahan & Zhuang, 2011; Cohen et al., 2008; Holt et al., 2009, Mattis et al., 2003). While most of the tests did not find any notable significance, age and religiosity were variables that were most affected by participant gender. The average age for males was 27 years old and females were approximately 33 years old on average. Men had an average score of 41 on the religiosity scale while women scored nearly 44 on average, which was of significance (Creswell, 2009; George & Mallery, 2010; Green & Salkind, 2008).

The results of the ANOVA tests shed light on interesting characteristics of the population sample for this study (Creswell, 2009; George & Mallery, 2010; Green & Salkind, 2008). First of all, it is important to note that the difference in age may be a catalyst for different world views among men and women. Since the men are in their late 20s and mostly unemployed students, they may not have developed a level of maturity or cultural competency due to lack of experience. Age was also positively correlated with education and religiosity. This explains why women who were on average older than men, had higher education, and were more religious.

Religiosity appeared to be more closely connected to age than gender specifically. It does not seem that women in particular were more religious, but the fact that women in this sample were older means they were more likely to be religious. It could have implications on the fact that gender may not have been as influential in this study as age of participants. It would have been interesting to see how a sample of men in their mid-30s would have impacted the results. A sample of older men would have had higher education, more religiosity, and could have changed the results. Therefore, having more

men or women may not have been as significant as having older participants. While women were underrepresented in this sample, what set them apart was ultimately not their gender but their age.

It is important to note that while age and religiosity were significantly affected by gender in the ANOVA tests, education, ERI, IPS, and stigma were not (Bresnahan & Zhuang, 2011; Cohen et al., 2008; Holt et al., 2009, Mattis et al., 2003). Even the actual effect size of participant gender on age and religiosity was small. The lack of significance with these variables indicates that while age was positively correlated with education, gender had no influence. Women participants were more educated than men, but it was not an important differentiating factor. Regardless of the multitude of conclusions reached, men and women in this sample did not differ much. Their scores on most of the scales were about the same, and ultimately men and women did not stigmatize PLHAs any differently. This may have turned out differently if the representation was more equal, but it is difficult to conclude that there was any major difference based on gender (Creswell, 2009; George & Mallery, 2010; Green & Salkind, 2008).

An interpretation of the ANOVA tests is that other factors such as age, employment, education, belief in a benevolent versus authoritarian God, or exposure to PLHAs may be of greater influence on HIV stigma than gender. This may be good because intervention programs may not have to differentiate applications based upon the gender of individuals. Instead, programs should focus on environmental factors such as availability of education, content of religious teachings, and exposure initiatives that allow PLHAs to speak to communities about their personal experiences. An inclusive

approach towards men and women would also diminish the likelihood of discrimination based on gender and empower local leaders to focus on relevant environmental/cultural factors (Creswell, 2009; George & Mallery, 2010; Green & Salkind, 2008).

Conclusions From Moderation Analysis

A regression analysis was conducted to test the moderating effect of education on the relationship between IPS and HIV stigma (Bresnahan & Zhuang, 2011; Holt et al., 2009). The moderation analysis suggested that education did not significantly moderate the relationship between IPS and HIV stigma within the sample used in this study. This may have been evident from the fact that education was not significantly correlated with either IPS or HIV stigma (Bresnahan & Zhuang, 2011; Holt et al., 2009). The participants in this sample showed a strong association between an authoritarian religious belief and stigmatic perception of PLHAs. However, education did not have any relevance in either a positive or negative way in this sample. This means that for the participants in this sample, education did not affect the strength or direction of the relationship between IPS and HIV stigma (Bresnahan & Zhuang, 2011; Holt et al., 2009).

A reason for this finding might be that participants of this sample may not regard education as a high priority or the content of education provided may not directly relate to perceptions of illness or HIV stigma. For example, if participants were not provided with sex education or HIV awareness information in schools, then their formal education may not be as relevant to this analysis. Participants in this sample may have also compartmentalized educational teachings and religious teachings to apply them separately. Participants may have applied religious teachings to issues of morality and

sinful behavior, but when it comes to financial decisions or practical problem solving, they used educational teachings. Future researchers should investigate the concept of compartmentalization within this community as well as the value that is placed on education (Creswell, 2009; George & Mallery, 2010; Green & Salkind, 2008).

Among the female participants in this study, education had a slightly significant negative relationship with IPS (Holt et al., 2009). For these women, the perception of illness as a punishment for sin went down as education levels went up. This could mean that education overall had a greater meaning for women than men in this sample. Women could have viewed education as a privilege because of a lack of opportunity compared to men who might have viewed it as a compulsory burden. With 80% men in this sample, it was possible that education was undervalued which in-turn diminished its effects in the moderation analysis.

Because there were so few female participants it was difficult to know for sure if the negative correlation between education and IPS was dependable. Therefore, any further testing using this population sample could be unreliable. It is recommended that future research should collect a reliable sample of 100 women to investigate if education has a moderating effect on the relationship between IPS and HIV stigma (Creswell, 2009; George & Mallery, 2010; Green & Salkind, 2008).

Participants in this sample had an average of 13 years of education, so the weak effect of education might not be because the participants were not educated enough. The issue might not be the quantity of education received but the quality, relevance, and useful application of the education provided. It is highly unlikely that the academic

curriculum for this community included some form of sex education or HIV/AIDS awareness initiative. Formal education may not be as effective in influencing moderation between IPS and HIV stigma as sex education (Bresnahan & Zhuang, 2011; Holt et al., 2009). Future studies should examine if curriculum in rural schools include sex education or HIV/AIDS awareness programs. Furthermore, a regression analysis testing the moderating effects of sex education on the relationship between IPS and HIV stigma with a similar population sample is recommended (Creswell, 2009; George & Mallery, 2010; Green & Salkind, 2008).

Conclusions From Mediation Analyses

A second regression analysis was conducted to test the mediating effect of religiosity on the relationship between ERI and HIV stigma (Bresnahan & Zhuang, 2011; Cohen et al., 2008; Mattis et al., 2003). The mediation analysis indicated that religiosity did not significantly mediate the relationship between ERI and HIV stigma within the population sample used in this study (Bresnahan & Zhuang, 2011; Cohen et al., 2008; Mattis et al., 2003). For the participants in this sample, strong religious beliefs were associated with high levels of stigma towards PLHAs.

Religious teachings during childhood appeared to promote stigma towards PLHAS among unemployed participants in this sample (Bresnahan & Zhuang, 2011). However, religious experience during childhood did not seem to be correlated with intensity of religious beliefs in the overall sample. Therefore, the mediation analysis suggested that intensity of religious belief did not have any influence on the connection

between childhood religious teachings and stigma towards PLHAs (Creswell, 2009; George & Mallery, 2010; Green & Salkind, 2008).

Nevertheless, religiosity and ERI had a strong positive relationship among participants who were under 28 years old and unemployed (Cohen et al., 2008; Mattis et al., 2003). Young unemployed participants who were involved in religious activities at an early age might not have matured enough to distance themselves from their family and develop individual thinking. However, ERI did not have a significant correlation with HIV stigma among participants who were under 28 years old.

The results suggested that younger participants in this sample were not depending on childhood religious teachings for guidance on how to relate to PLHAs. Older participants who may have had the same upbringing but developed individually to the point that childhood teachings were no longer an influence. Financial independence might have also been an important factor in empowering the participants to break the association between ERI and religiosity (Cohen et al., 2008; Mattis et al., 2003). While financial freedom may have promoted individualism, it is more likely that the experience of working with diverse group of people broadened their worldview. Unemployed participants with poor financial stability may continue to live at home with parents or be financially dependent on relatives. This dependence into adulthood might have contributed to the importance of ERI and its close association with religiosity (Cohen et al., 2008; Mattis et al., 2003).

It is possible that employed participants over the age of 28 diminished the mediating effect of religiosity on the relationship between ERI and HIV stigma

(Bresnahan & Zhuang, 2011; Cohen et al., 2008; Mattis et al., 2003). Future studies should examine the role of individualistic versus communal thinking, and at what age familial bonds are broken in this community. The family dynamic of this community was vital to understanding the results of the mediation analysis (Creswell, 2009; George & Mallery, 2010; Green & Salkind, 2008).

It was possible that participants who held strong fundamental religious beliefs tended to believe in an authoritarian deity that may punish them for sinful behaviors. Assuming that PLHAs contracted the disease through high-risk behaviors such as unprotected sex or drug use, participants may feel that PLHAs were responsible for their own illness. This viewpoint may have done little to provide sympathy for PLHAs and instead fueled HIV/AIDS related stigma within this sample (Bresnahan & Zhuang, 2011; Cohen et al., 2008; Holt et al., 2009).

Sympathy towards PLHAs could be promoted by educating society on alternative methods of HIV contraction. A great number of viral transmissions may occur by being raped, medical offices using infected needles instead of disposables, blood transfusions, or even being infected by a cheating spouse. Expanding the narrow-minded thinking that HIV requires an individual to engage in immoral behaviors could be the antidote to viewing illness as a punishment for sin.

The findings indicated that religion played an important influential role in how participants of this study viewed PLHAs. The partial mediating effect of IPS on the relationship between religiosity and HIV stigma suggested that participants may have been more likely to believe in an authoritarian deity than a loving and forgiving God

(Holt et al., 2009). However, further research is needed to understand what type of God members of this community believe in and how that belief may influence their worldview and behaviors. A population sample who did not believe in an authoritarian deity may score high on religiosity but score low on IPS and consequently HIV stigma. Therefore, HIV stigma reduction initiatives for rural areas may want to focus on shifting religious beliefs from an authoritarian to a benevolent God (Bresnahan & Zhuang, 2011; Cohen et al., 2008; Holt et al., 2009).

Limitations

This study had some limitations that impaired the acquisition of a much deeper understanding of the dynamics between religion and HIV stigma in rural Gujarat, India. The research could have benefited from learning some statistical and demographic information about the overall region of southern Gujarat. For example, the average age for marriage in the community as well as the male to female ratio would have helped to understand if the sample was representative of the population. This study could have benefited from specifically asking participants who identified themselves as students if they were currently enrolled in a full-time educational program. While this study was concerned with mental or emotional harm of stigmatization, it did not incorporate the potential for individuals to physically harm PLHAs. If participants were asked if they had engaged in, witnessed, or heard of any physical abuse towards PLHAs this study could be benefited from the additional knowledge.

A more diverse sample that included more women and participants who have different religious affiliation, occupation, and marital status would have enhanced this

study. A limitation of this study was also not having a better understanding of the content of information provided through religious institutions. For example, if religious teachings in the region promoted a view of a loving and forgiving God or an authoritarian and punishing God. Finally, a limitation of this study was that participants were not specifically asked if they had received any form of sex education or HIV/AIDS information either in school or from the community.

Recommendations

The conclusions drawn from the results of this study have shown how intensity of religious belief may be related to how individuals treat PLHAs, and this relationship may be influenced by the perception of illness as a punishment for sin. It is recommended that future studies strive to attain a diverse sample that includes participants of different faith, marital status, age, and greater representation of women. To add to the existing body of knowledge, a better understanding of education in rural Gujarat is vital. In this study education did not have significantly strong relationships with other variables, but years of education may not be the best construct to use (Creswell, 2009; George & Mallery, 2010; Green & Salkind, 2008).

The specific form of education received might be equally important, so it is recommended that researchers assess sex education, HIV awareness, and years of formal education for a comprehensive understanding. Furthermore, women participants in this study had a slightly significant negative correlation between education and IPS. This prompts a recommendation that a representative sample of women be used to test if education has a moderating effect on the relationship between IPS and HIV stigma. The

focus of future research and HIV intervention should be on understanding and diminishing levels of IPS. For the participants in this study, viewing illness as a punishment for sin had the greatest affect on how they related to PLHAs. Therefore, interventions should not attack religion as a whole but instead focus on IPS as the key ingredient in stigma towards PLHAs (Bresnahan & Zhuang, 2011; Holt et al., 2009).

For the results of this study to be applicable to other rural parts of India, an in-depth assessment of the community is needed. The representative sample for this study suggests that there are several complex factors such as employment, socioeconomic conditions, childhood upbringing, and belief in authoritarian versus benevolent deity that need to be accounted for. Furthermore, 92% of the sample has no familiarity with PLHAs which may be an underlying factor in this whole study. Future researchers should test for each of these potentially contributing factors to determine significance and provide recommendations (Creswell, 2009; George & Mallery, 2010; Green & Salkind, 2008).

The aim of this study was to add to existing research so that a more comprehensive understanding of stigma could be attained. This purpose was for much more than academic intrigue. Instead, this study was conducted to identify ways to improve the quality of care and living conditions for PLHAs in Gujarati, India. While no study can achieve such a monumental purpose alone, there is hope that when this study is combined with others from around the world and those yet to be conducted, positive social change will be realized. Table 7 presents a comprehensive list of recommendations for future studies, and Table 8 summarizes implications for positive social change.

Table 7

Recommendations for Future Research

Population Sample
• Future studies strive to attain a diverse sample that includes participants of different faith, marital status, age, and greater representation of women. • Future studies are encouraged to examine how traditional gender roles may influence participant selection in creating a representative sample. • Future studies should attain a sample of participants who are more familiar with PLHAs since nearly 92% of this sample did not know anyone who had HIV/AIDS.
Education
• Future studies should examine if curriculum in rural schools include sex education or HIV/AIDS awareness programs. • Researchers should assess sex education, HIV awareness, and years of school education for a comprehensive understanding. • An analysis should be conducted to test moderating effects of school education on the relationship between IPS and HIV stigma using a sample of women. • A regression analysis to test the moderating effects of sex education on the relationship between IPS and HIV stigma with a similar study sample.
Religion and IPS
• The focus of future research and HIV intervention should be on understanding and diminishing levels of IPS. • A better understanding of how participants viewed God's role in their own financial conditions was needed to add to this body of knowledge and is recommended for future studies. • Future studies should test fluctuations in intensity of faith during times of crisis for rural inhabitants of Gujarat. • A deeper qualitative understanding of the subjective nature of religion in the area may expand upon the understanding of the kind of God this rural community believes in and how it influences their worldview. • Future studies should conduct a qualitative analysis of the influence of religiosity and IPS on the perception of participants.

Table 8

Implications for Positive Social Change

Religion and IPS
• Interventions should not attack religion as a whole but instead focus on IPS as the key ingredient in stigma towards PLHAs. • HIV stigma reduction initiatives for rural areas may want to focus on shifting religious beliefs from an authoritarian to a benevolent God. • Intervention programs should partner with local religious leaders to evaluate the content of religious teachings being promoted and utilize their influence to promote stigma reduction. • Clinical psychology interventions such as psychotherapy for PLHAs and cognitive-behavioral modifications for those with high stigma scores can improve quality of life for all in the community.
Key demographics
• HIV awareness initiatives and stigma reduction programs should focus unemployed men under the age of 28 as a key demographic to improve quality of life conditions for PLHAs. • Women have the greatest influence on future generations since they are tasked with childrearing and teaching, and this study shows that educated women have lower IPS scores. Therefore, women should lead HIV awareness initiatives and education reform in rural areas.
Social taboos
• Drug use and sexual practices should be discussed in open forums and community leaders must provide greater support for proliferation of fact-based information to diminish social taboos. • It is vital educate the community on different modes of HIV transmission, and have PLHAs lead awareness programs so communities can learn from experience.
Socioeconomic factors
• School education programs should incorporate sex education and HIV/AIDS awareness initiatives. This study suggests that employed men above 30 years old and women should lead. • Communities should focus on improving socioeconomic factors because educated women and employed men had lower levels of IPS and HIV stigma.

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Appendix A: Certificate of Accurate Translation

OneHourTranslation

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American Translators Association
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Date: October 31st, 2014

Certificate of Accurate Translation

Translated document: Consent Form for Adults.doc ; Demographic Questionnaire.doc ; Dimensions of Stigma Scale.docx ; Early Religious Involvement.docx ; Illness as Punishment for Sin.docx ; Measure of Religiousness.docx ; Research Volunteer Flyer.docx - Scientific / Academic Expert Translation

Translation date: October 31st, 2014 Project #: 3441757

Source Language: English Target Language: Gujarati

One Hour Translation, the largest professional translation agency online, hereby certifies and states the following, that the above mentioned document has been translated by a certified professional translator who has the background and the experience needed to perform the translation. We further certify that, to the best of our knowledge, the translated document is accurate translation of the original document and that it reflects the content, style and meaning of the original document.

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Yours Sincerely,

David Shaw
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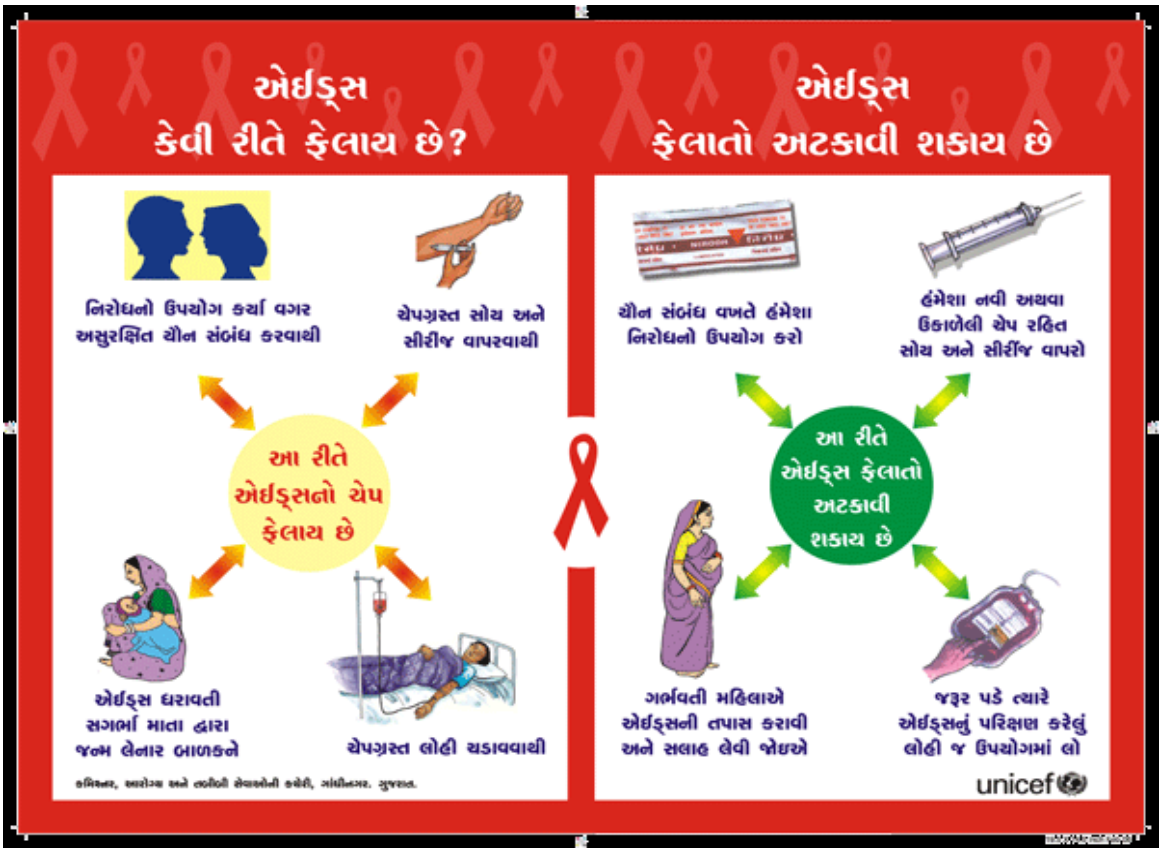
Appendix B: UNICEF HIV Handout (Gujarati)



Appendix C: Volunteer Flyer (English)

Research Volunteers Needed

FOR

HIV Stigma within Religious Communities in Rural India

STUDY

Adult male and female volunteers are needed to participate in a community study about the relationship between religion and HIV stigma in rural Gujarat, India.

Eligibility Requirements:

- Must be over the age of 18 and able to give consent.
- Must be able to read/write in the Gujarati language.
- Must be able to give 45-60 minutes of your time.

If you would like additional information please contact Mr. Krutarth Vyas at:

India Phone: xxx-xxx-xxxx

US Phone: xxx-xxx-xxxx

Email: xxxxxx@waldenu.edu

Appendix D: Volunteer Flyer (Gujarati)

સંશોધનકાર્ય માટે સ્વયંસેવકોને આમંત્રણ

ગ્રામીણ ભારતમાં ધાર્મિક વિચારસરણી ધરાવતા સમાજમાં એચઆઈવી માટે અણગમાની વૃત્તિના અભ્યાસ માટે

ગ્રામીણ ગુજરાતમાં (ભારતમાં) ધર્મ અને એચઆઈવી માટે સમાજમાં અણગમાની વૃત્તિના સંબંધના અભ્યાસ અને સંશોધનકાર્ય માટે પુખ્ત ઉમરના પુરુષ અને સ્ત્રી સ્વયંસેવકોની આવશ્યકતા છે.

આવશ્યક યોગ્યતાઓ:

- ૧૮ વર્ષ કે તેથી વધારે ઉમરના અને સંમતિ આપી શકે તેવા.
- ગુજરાતી ભાષા વાંચી/લખી શકે તેવા.
- ૪૫/૬૦ મિનિટનો સમય આપી શકે તેવા.

જો આપને વધારે માહિતી મેળવવી હોય તો શ્રી. કૃતાર્થ વ્યાસનો સંપર્ક કરો:

ફોન: xxx-xxx-xxxx (India)

ફોન: xxx-xxx-xxxx (US)

ઈ-મેઈલ: xxxxxx@waldenu.edu

Appendix E: Consent Form (English)

You are invited to take part in a research study of HIV related stigma within religious communities in rural Gujarat, India. The researcher is inviting adults from the community who are familiar with local religious practices or customs to be in the study. This form is part of a process called "informed consent" to allow you to understand this study before deciding whether to take part.

This study is being conducted by a researcher named Krutarth J. Vyas, who is a doctoral student at Walden University.

Background Information:
The purpose of this study is to learn more about the relationship between religion, education, and stigma towards people living with HIV/AIDS in the community. Involvement in religion at an early age, level of religiousness, and religious view of illness will be looked at to see how they relate to level of education and HIV stigma.

Procedures:

If you agree to be in this study, please do the following and return the packet to the researcher upon completion:

- Fill out a demographic questionnaire that collects basic information such as age, gender, education, occupation, ethnic caste, religious affiliation, marital status, number of children (if any), and if you know of at least one person who has/had HIV (approximate time: 5-6 minutes).

- Fill out a survey packet that has 48 questions about your religious beliefs, views on health/illness, and attitude towards HIV/AIDS (approximate time: 30-40 minutes).

Sample Questions:

What is your marital status?

HIV/AIDS is a ticking time bomb.
(Strongly Disagree) **1----------2----------3----------4----------5** (Strongly Agree)

How important was religion to your family when you were growing up?
(Not At All Important) 1----------2----------3----------4----------5 (Very Important)

Illness is the result of one's negative thoughts.
(Strongly Disagree) 1----------2----------3----------4 (Strongly Agree)

Voluntary Nature of the Study:
This study is voluntary. Everyone will respect your decision of whether or not you choose to be in the study. If you decide to join the study now, you can still change your mind later. You may stop at any time.

Risks and Benefits of Being in the Study:
Being in this type of study involves some risk of the minor discomforts that can be encountered in daily life, such as fatigue from answering questions or stress related to the nature of the topic. Being in this study would not pose risk to your safety or wellbeing. If you feel distressed in any way by participating in this study please contact the researcher so that proper care can be provided for you.

Your participation in this study will benefit the community and the overall field of knowledge in HIV/AIDS research for rural parts of Gujarat, India. The results of this study may be used by local leaders, researchers, and non-government organizations (NGOs) to create better ways of helping people with HIV/AIDS and improve their quality of life.

Payment:
While your participation in this study will be greatly appreciated, there will be no compensation provided in form of goods or services for your time.

Privacy:
Any information you provide will be kept private and strictly confidential. The researcher will not use your personal information for any purposes outside of this research project. Also, the researcher will not include your name or anything else that could identify you in the study reports. Data will be kept secure by storing completed surveys in a private non-disclosed location and electronic data will be password protected. Data will be kept for a period of at least 5 years, as required by the university.

Contacts and Questions:
You may ask any questions you have now. Or if you have questions later, you may contact the researcher at:
India Phone: xxx-xxx-xxxx
US Phone: xxx-xxx-xxxx
Email: xxxxxx@waldenu.edu

If you want to talk privately about your rights as a participant, you can call Dr. Leilani Endicott. She is the Walden University representative who can discuss this with you. Her phone number is 001-612-312-1210 (for participants outside the US). Walden University's approval number for this study is **01-08-15--0146070** and it expires on **January 7, 2016**.

Please keep this consent form for your record.

Statement of Consent:
I have read the above information and I feel I understand the study well enough to make a decision about my involvement. By completing the surveys and returning them to the researcher, I understand that I am agreeing to the terms described above.

Appendix F: Consent Form (Gujarati)

ગુજરાતના ગ્રામીણ વિસ્તારમાં ધાર્મિક વૃત્તિ ધરાવતા લોકોમાં, એચ.આઈ.વી વિષે દૂષણની માન્યતા બાબતના સંશોધન અભ્યાસમાં ભાગ લેવા માટે, આપને વિનંતિ કરવામાં આવે છે. સંશોધનકર્તા, સમાજના એવા લોકો, જે સ્થાનિક ધાર્મિક અથવા રીતિ-રિવાજના વ્યવહારોથી પરિચિત છે, તેવા પુખ્ત ઉમરના વ્યક્તિઓને, આ અભ્યાસમાં ભાગ લેવા આમંત્રણ આપે છે. આ પત્રક "માહિતીસંપન્ન સંમતિ" નામની ક્રિયાનો એક ભાગ છે, જે આપને, આ અભ્યાસમાં ભાગ લેવો કે નહિ તે નક્કી કરતાં પહેલાં, આ અભ્યાસને સમજવાની છૂટ આપે છે.

આ અભ્યાસ કૃતાર્થ જે. વ્યાસ નામના સંશોધનકર્તા, દ્વારા કરવામાં આવી રહ્યો છે. કૃતાર્થ જે. વ્યાસ, વાલ્ડન યુનિવર્સીટીમાં પી.એચ.ડીના વિદ્યાર્થી છે.

પૂર્વભૂમિકાની માહિતી:

આ અભ્યાસનો હેતુ, ધર્મ, શિક્ષણ અને સમાજમાં એચ.આઈ.વી/એઈડ્સ ગ્રસ્ત લોકો પ્રત્યે અણગમાની ભાવના વચ્ચેના સંબંધને વધારે સારી રીતે સમજવાનો છે. નાની ઉમરે ધર્મમાં રૂચિ, ધર્મભાવનાનું સ્તર અને ધાર્મિક દ્રષ્ટિએ બીમારીનું અવલોકન કરવામાં આવશે અને તે શિક્ષણના સ્તર અને એચ.આઈ.વી સાથે કેવી રીતે સંબંધ ધરાવે છે, તેનો અભ્યાસ કરવામાં આવશે.

કાર્યપદ્ધતિઓ:

જો આપ આ અભ્યાસમાં જોડાઓ, નીચેના કરવું અને તે પૂર્ણ પેકેટ સંશોધક ને પરત કરો:

- વસ્તીવિષયક પ્રશ્નાવલિમાં પ્રાથમિક માહિતી આપવી, જેવી કે, ઉમર, જાતિ (સ્ત્રી/પુરુષ), શિક્ષણ, વ્યવસાય, જ્ઞાતિ, ધર્મ, વૈવાહિક સ્થિતિ, બાળકોની સંખ્યા (જો હોય તો) અને જો આપ કમસે કમ એક, એચ.આઈ.વી/એઈડ્સ ગ્રસ્ત (હોય કે ભૂતપૂર્વ) વ્યક્તિને જાણતા હોવ (આશરે સમય: ૫-૬ મિનિટ).

- એક સર્વેક્ષણ પુસ્તિકા જેમાં, આપની ધાર્મિક માન્યતાઓ, તંદુરસ્તી/બીમારી વિષે આપનો અભિપ્રાય, અને એચ.આઈ.વી/એઈડ્સ અંગે આપનો દ્રષ્ટિકોણ વિષેના પ્રશ્નો હશે (આશરે સમય: ૩૦-૪૦ મિનિટ).

નમૂના પ્રશ્નો:

આપની વૈવાહિક સ્થિતિ શું છે?

એચઆઈવી/એઈડ્સ એટલે મોતની સજા.

દ્રઢતાપૂર્વક અસંમત ૧------- 2 ------ 3 ------ ૪ -------- ૫------- દ્રઢતાપૂર્વક સંમત

બાળપણમાં આપ કેટલી વખત મંદિરમાં જતા?

(કદી નહિ) ૧------ ૨------ 3------ ૪------ ૫------- (ઘણી વખત)

બીમારી એ, વ્યક્તિના નકારાત્મક વિચારોનું પરિણામ છે.

(દ્રઢતાપૂર્વક અસંમત) ૧------- 2 ------ 3 ------ ૪ -------- (દ્રઢતાપૂર્વક સંમત)

અભ્યાસની સ્વૈચ્છિક પ્રકૃતિ:

આ અભ્યાસ સ્વૈચ્છિક છે. આપનો, આ અભ્યાસમાં જોડાવા કે નહિ જોડાવાનું પસંદ કરો કે ના કરો, આપનો નિર્ણય સર્વેને આદરણીય (માન્ય) રહેશે. જો આપ અભ્યાસમાં અત્યારે જોડાઓ તો આપ પાછળથી પણ આપનો વિચાર બદલી શકો છો. આપ કોઈ પણ સમયે છૂટા થઈ શકો છો.

અભ્યાસમાં જોડાવાનાં જોખમો અને લાભો:

આ પ્રકારના અભ્યાસમાં જોડાવામાં રોજિંદા જીવનમાં કેટલીક મામૂલી અગવડો છે, જેવી કે, પ્રશ્નોના ઉત્તર આપવાથી થાક લાગવો, અથવા અભ્યાસના પ્રકારને લીધે તાણ અનુભવવી. આ અભ્યાસમાં ભાગ લેવાથી આપની સલામતી કે તંદુરસ્તીને કોઈ જોખમ થતું નથી. આ અભ્યાસમાં ભાગ કોઈપણ રીતે દુઃખી લાગે તો યોગ્ય કાળજી તમારા માટે પૂરી પાડવામાં શકાય છે કે જેથી સંશોધન સંપર્ક કરો.

આ અભ્યાસમાં આપની સહભાગિતા સમાજને લાભદાયી થશે અને ગુજરાતના (ભારત) ગ્રામીણ વિસ્તારો માટે, એચ.આઈ.વી/એઈડ્સ વિષે સમગ્ર સંશોધન ક્ષેત્રમાં લાભદાયી બનશે. સ્થાનિક આગેવાનો, સંશોધનકર્તાઓ અને બિન-સરકારી સંસ્થાઓ (એનજીઓ), આ અભ્યાસનાં પરિણામોનો ઉપયોગ, એચ.આઈ.વી/એઈડ્સ ગ્રસ્ત લોકોને મદદ કરવા અને તેમના જીવનની ગુણવત્તા સુધારવાના વધારે સારા ઉપાયો કરવા માટે કરશે.

વળતર:

આ અભ્યાસમાં આપની સહભાગિતાની અમે ઘણી કદર કરીએ છીએ, પરંતુ ચીજ વસ્તુ કે સેવાઓ રૂપે કોઈ વળતર આપવામાં નહિ આવે.

માહિતીની ગુપ્તતા:

આપ જે કોઈ માહિતી આપશો તે ગુપ્ત અને અત્યંત ખાનગી રહેશે. સંશોધનકર્તા, આ સંશોધન પ્રોજેક્ટ સિવાય, આપની અંગત માહિતીનો, કોઈ પણ અન્ય હેતુ માટે, ઉપયોગ નહિ કરે. ઉપરાંત, સંશોધનકર્તા, અભ્યાસના અહેવાલમાં, આપનું નામ કે અન્ય કોઈ બાબત જે આપની ઓળખ આપે, તેવી માહિતીનો સમાવેશ નહિ કરે. માહિતીને, પૂર્ણ થયેલ સર્વેક્ષણોને ગુપ્ત અને અજ્ઞાત સ્થળે સંગ્રહ કરીને સલામત રાખવામાં આવશે, અને ઈલેક્ટ્રોનિક માહિતી સાંકેતિક શબ્દ (પાસવર્ડ) દ્વારા સુરક્ષિત રાખવામાં આવશે. યુનિવર્સીટીની આવશ્યકતા મુજબ માહિતી ઓછામાં ઓછા પાંચ વર્ષ સુધી જાળવી રાખવામાં આવશે.

સંપર્કો અને પ્રશ્નો:

આપને કોઈ પણ પ્રશ્નો હોય તો આપ અત્યારે પૂછી શકો છો. અથવા, આપને પછીથી કોઈ પ્રશ્નો હોય તો, આપ સંશોધનકર્તાનો સંપર્ક કરી શકો છો:

ફોન: xxx-xxx-xxxx (India)

ફોન: xxx-xxx-xxxx (US)

ઈ-મેઈલ: xxxxxx@waldenu.edu

આપને, સહભાગી તરીકે આપના અધિકારો વિષે, ખાનગીમાં વાતચીત કરવી હોય તો આપ ડૉ. લીલાની એન્ડીકોટને ફોન કરીને કરી શકો છો. તેઓ વાલ્ડન યુનિવર્સીટીના પ્રતિનિધિ

છે, જેઓ આપની સાથે ચર્ચા કરી શકે છે. તેમનો ફોન નંબર 001-612-312-1210 છે. (યુ એસ બહારના સહભાગીઓ માટે). આ અભ્યાસ માટે યુનિવર્સીટીનો માન્યતા નંબર **01-08-15--0146070** છે અને તેની સમાપ્તિ તારીખ **January 7, 2016** છે.

તમારા રેકોર્ડ માટે આ સંમતિ ફોર્મ રાખવા વિનંતી.

સંમતિનું નિવેદન:

મેં ઉપરની માહિતી વાંચી છે અને હું માનું છું કે મારા આ અભ્યાસમાં શામેલ થવા માટે મારા નિર્ણય કરવા માટે, આ અભ્યાસને હું સારી રીતે સમજુ છું. આ સર્વેક્ષણ પૂર્ણ અને નિયુક્ત સંશોધક

તેમને પરત સુધીમાં, હું સમજુ છું કે હું ઉપરોક્ત શરતોને કબૂલ રાખી રહ્યો છું.

Appendix G: Demographic Questionnaire (English)

Instructions: Please provide a response for each of the following questions:

1. What is your gender? Female ○ Male ○

2. What is your marital status?

Single ○ Married ○ Separated ○ Divorced ○ Widowed ○

3. What is your current age? _____

4. How many children do you have? _____

5. How many years of education do you have? _____

6. What do you do for a living (occupation)? _____

7. What is your religious affiliation? _____

8. Have you ever known someone who has HIV/AIDS? Yes ○ No ○

Appendix H: Demographic Questionnaire (Gujarati)

સૂચનાઓ: દરેક પ્રશ્ન માટે ઉત્તર આપશો.

1. આપની જાતિ કઈ છે? સ્ત્રી ○ પુરુષ ○

2. આપની વૈવાહિક સ્થિતિ શું છે?

અવિવાહિત ○ વિવાહિત ○ વિભક્ત ○ છુટાછેડા ○ વિધુર ○

3. **આપની હાલની ઉમર શું છે**? ----------

4. **આપને કેટલાં બાળકો છે**? ----------

5. **આપનો શૈક્ષણિક અભ્યાસ શું છે**? ----------

6. **આપનો વ્યવસાય શું છે**? ----------

7. **આપ કયો ધર્મ પાળો છો**? ----------

8. **આપ એવી કોઈ વ્યક્તિને જાણો છો જેને એચઆઈવી/ એઈડ્સ હોય**?

હા ○ ના ○

Appendix I: Dimensions of Stigma Scale (English)

Instructions:

Please circle the number that best represents your answer on each of the following questions:

1. HIV/AIDS is a loaded gun.

(Strongly Disagree) **1----------2----------3----------4----------5** (Strongly Agree)

2. HIV/AIDS is a death sentence.

(Strongly Disagree) **1----------2----------3----------4----------5** (Strongly Agree)

3. HIV/AIDS is a ticking time bomb.

(Strongly Disagree) **1----------2----------3----------4----------5** (Strongly Agree)

4. HIV/AIDS is a filthy vessel of disease.

(Strongly Disagree) **1----------2----------3----------4----------5** (Strongly Agree)

5. HIV/AIDS is a thief stealing a person's life.

(Strongly Disagree) **1----------2----------3----------4----------5** (Strongly Agree)

6. HIV/AIDS is a mammoth disaster.

(Strongly Disagree) **1----------2----------3----------4----------5** (Strongly Agree)

7. A person who has HIV/AIDS has no will power.

(Strongly Disagree) **1----------2----------3----------4----------5** (Strongly Agree)

8. A person who has HIV/AIDS likes instant gratification.

(Strongly Disagree) **1----------2----------3----------4----------5** (Strongly Agree)

9. A person who has HIV/AIDS took the path of least resistance.

(Strongly Disagree) **1----------2----------3----------4----------5** (Strongly Agree)

10. A person who has HIV/AIDS is weak in character.

(Strongly Disagree) **1----------2----------3----------4----------5** (Strongly Agree)

11. A person who has HIV/AIDS is self-indulgent.

(Strongly Disagree) **1----------2----------3----------4----------5** (Strongly Agree)

12. People who have HIV/AIDS bring the disease on themselves.

(Strongly Disagree) **1----------2----------3----------4----------5** (Strongly Agree)

13. People who have HIV/AIDS take high health risk.

(Strongly Disagree) **1----------2----------3----------4----------5** (Strongly Agree)

14. I would stay away from a person with HIV/AIDS.

(Strongly Disagree) **1----------2----------3----------4----------5** (Strongly Agree)

15. I would not want contact with any body fluid from someone with HIV/AIDS.

(Strongly Disagree) **1----------2----------3----------4----------5** (Strongly Agree)

16. I would not want contact with tears from someone with HIV/AIDS.

(Strongly Disagree) **1----------2----------3----------4----------5** (Strongly Agree)

17. I would not want contact with saliva from someone with HIV/AIDS.

(Strongly Disagree) **1----------2----------3----------4----------5** (Strongly Agree)

18. I would not want to share food with someone who has HIV/AIDS.

(Strongly Disagree) **1----------2----------3----------4----------5** (Strongly Agree)

19. I would not want contact with the blood of someone with HIV/AIDS.

(Strongly Disagree) **1----------2----------3----------4----------5** (Strongly Agree)

20. Other people look down on people who have HIV/AIDS.

(Strongly Disagree) **1----------2----------3----------4----------5** (Strongly Agree)

21. People who have HIV/AIDS are judged negatively.

(Strongly Disagree) **1----------2----------3----------4----------5** (Strongly Agree)

22. People who have HIV/AIDS often suffer status loss.

(Strongly Disagree) **1----------2----------3----------4----------5** (Strongly Agree)

23. HIV/AIDS makes a person disempowered.

(Strongly Disagree) **1----------2----------3----------4----------5** (Strongly Agree)

24. I can control HIV/AIDS by refusing to have unsafe sex.

(Strongly Disagree) **1----------2----------3----------4----------5** (Strongly Agree)

25. I know what needs to be done to prevent HIV/AIDS.

(Strongly Disagree) **1----------2----------3----------4----------5** (Strongly Agree)

26. HIV/AIDS is controllable.

(Strongly Disagree) **1----------2----------3----------4----------5** (Strongly Agree)

27. I can control HIV/AIDS by not engaging in risky behaviors.

(Strongly Disagree) **1----------2----------3----------4----------5** (Strongly Agree)

Appendix J: Dimensions of Stigma Scale (Gujarati)

સૂચનાઓ:

નીચેના દરેક પ્રશ્ના માટે આપના ઉત્તરને ઉત્તમ રીતે દર્શાવે તે નંબરની આસપાસ વર્તુળ કરો:

1. એચઆઈવી/એઈડ્સ એક ઘાતક રોગ છે.

   દ્રઢતાપૂર્વક અસંમત ૧------- 2 ------ 3 ------ ૪ -------- ૫------- દ્રઢતાપૂર્વક સંમત

2. એચઆઈવી/એઈડ્સ એટલે મોતની સજા.

   દ્રઢતાપૂર્વક અસંમત ૧------- 2 ------ 3 ------ ૪ -------- ૫------- દ્રઢતાપૂર્વક સંમત

3. એચઆઈવી/એઈડ્સ એટલે ફાટવા જઈ રહેલો ટાઈમબોમ્બ.

   દ્રઢતાપૂર્વક અસંમત ૧------- 2 ------ 3 ------ ૪ -------- ૫------- દ્રઢતાપૂર્વક સંમત

4. એચઆઈવી/એઈડ્સ રોગનું ગંદુ પાત્ર છે.

   દ્રઢતાપૂર્વક અસંમત ૧------- 2 ------ 3 ------ ૪ -------- ૫------- દ્રઢતાપૂર્વક સંમત

5. એચઆઈવી/એઈડ્સ એ માણસનું જીવન છીનવી લેતો એક ચોર છે.

   દ્રઢતાપૂર્વક અસંમત ૧------- 2 ------ 3 ------ ૪ -------- ૫------- દ્રઢતાપૂર્વક સંમત

6. એચઆઈવી/એઈડ્સ એક પ્રચંડ વિનાશ છે.

   દ્રઢતાપૂર્વક અસંમત ૧------- 2 ------ 3 ------ ૪ -------- ૫------- દ્રઢતાપૂર્વક સંમત

7. એચઆઈવી/એઈડ્સ ગ્રસ્ત વ્યક્તિને ઈચ્છાશક્તિ હોતી નથી.

   દ્રઢતાપૂર્વક અસંમત ૧------- 2 ------ 3 ------ ૪ -------- ૫------- દ્રઢતાપૂર્વક સંમત

8. એચઆઈવી/એઈડ્સ ગ્રસ્ત વ્યક્તિને તાત્કાલિક આનંદ)સંતોષ(ગમે છે.

દ્રઢતાપૂર્વક અસંમત ૧------- 2 ------ 3 ------ ૪ -------- ૫------- દ્રઢતાપૂર્વક સંમત

9. એચઆઈવી/એઈડ્સ ગ્રસ્ત વ્યક્તિએ ન્યૂનતમ પ્રતિકારક શક્તિનો ઉપયોગ કર્યો હતો.

દ્રઢતાપૂર્વક અસંમત ૧------- 2 ------ 3 ------ ૪ -------- ૫------- દ્રઢતાપૂર્વક સંમત

10. એચઆઈવી/એઈડ્સ ગ્રસ્ત વ્યક્તિ નબળા ચારિત્ર્યનો વ્યક્તિ છે.

દ્રઢતાપૂર્વક અસંમત ૧------- 2 ------ 3 ------ ૪ -------- ૫------- દ્રઢતાપૂર્વક સંમત

11. એચઆઈવી/એઈડ્સ ગ્રસ્ત વ્યક્તિ પોતાની જાતને લાડ લડાવનાર વ્યક્તિ છે.

દ્રઢતાપૂર્વક અસંમત ૧------- 2 ------ 3 ------ ૪ -------- ૫------- દ્રઢતાપૂર્વક સંમત

12. એચઆઈવી/એઈડ્સ ગ્રસ્ત વ્યક્તિઓ પોતાની જાતે જ રોગને નોંતરે છે.

દ્રઢતાપૂર્વક અસંમત ૧------- 2 ------ 3 ------ ૪ -------- ૫------- દ્રઢતાપૂર્વક સંમત

13. એચઆઈવી/એઈડ્સ ગ્રસ્ત વ્યક્તિઓ તંદુરસ્તી સામે ગંભીર જોખમ લે છે.

દ્રઢતાપૂર્વક અસંમત ૧------- 2 ------ 3 ------ ૪ -------- ૫------- દ્રઢતાપૂર્વક સંમત

14. એચઆઈવી/એઈડ્સ ગ્રસ્ત વ્યક્તિથી હું દૂર રહીશ.

દ્રઢતાપૂર્વક અસંમત ૧------- 2 ------ 3 ------ ૪ -------- ૫------- દ્રઢતાપૂર્વક સંમત

15. એચઆઈવી/એઈડ્સ ગ્રસ્ત વ્યક્તિના પરસેવા કે અન્ય પ્રવાહીથી હું સંપર્ક ના ઈચ્છું.

દ્રઢતાપૂર્વક અસંમત ૧------- 2 ------ 3 ------ ૪ -------- ૫------- દ્રઢતાપૂર્વક સંમત

16. એચઆઈવી/એઈડ્સ ગ્રસ્ત વ્યક્તિના આંસુનો હું સંપર્ક ના ઈચ્છું.

દ્રઢતાપૂર્વક અસંમત ૧------- 2 ------ 3 ------ ૪ -------- ૫------- દ્રઢતાપૂર્વક સંમત

17. એચઆઈવી/એઈડ્સ ગ્રસ્ત વ્યક્તિની લાળનો હું સંપર્ક ના ઈચ્છું.

દ્રઢતાપૂર્વક અસંમત ૧------- 2 ------ 3 ------ ૪ -------- ૫------- દ્રઢતાપૂર્વક સંમત

18. એચઆઈવી/એઈડ્સ ગ્રસ્ત વ્યક્તિ સાથે હું ખાવાનું ના ખાઉં.

દ્રઢતાપૂર્વક અસંમત ૧------- 2 ------ 3 ------ ૪ -------- ૫------- દ્રઢતાપૂર્વક સંમત

19. એચઆઈવી/એઈડ્સ ગ્રસ્ત વ્યક્તિના લોહી સાથે હું સંપર્ક ના ઈચ્છું.

દ્રઢતાપૂર્વક અસંમત ૧------- 2 ------ 3 ------ ૪ -------- ૫------- દ્રઢતાપૂર્વક સંમત

20. એચઆઈવી/એઈડ્સ ગ્રસ્ત વ્યક્તિઓને અન્ય લોકો અવગણે છે.

દ્રઢતાપૂર્વક અસંમત ૧------- 2 ------ 3 ------ ૪ -------- ૫------- દ્રઢતાપૂર્વક સંમત

21. એચઆઈવી/એઈડ્સ ગ્રસ્ત વ્યક્તિઓને નકારાત્મક રીતે માને છે.

દ્રઢતાપૂર્વક અસંમત ૧------- 2 ------ 3 ------ ૪ -------- ૫------- દ્રઢતાપૂર્વક સંમત

22. એચઆઈવી/એઈડ્સ ગ્રસ્ત વ્યક્તિઓ ઘણી વખત પોતાનો મોભો ગુમાવે છે.

દ્રઢતાપૂર્વક અસંમત ૧------- 2 ------ 3 ------ ૪ -------- ૫------- દ્રઢતાપૂર્વક સંમત

23. એચઆઈવી/એઈડ્સ વ્યક્તિને અશક્ત બનાવે છે.

દ્રઢતાપૂર્વક અસંમત ૧------- 2 ------ 3 ------ ૪ -------- ૫------- દ્રઢતાપૂર્વક સંમત

24. હું બીન સલામત સંભોગથી દૂર રહીને એચઆઈવી/એઈડ્સને કાબૂમાં રાખી શકુ છું.

દ્રઢતાપૂર્વક અસંમત ૧------- 2 ------ 3 ------ ૪ -------- ૫------- દ્રઢતાપૂર્વક સંમત

25. હું જાણું છું કે એચઆઈવી/એઈડ્સને અટકાવવા માટે શું કરવું જોઈએ.

દ્રઢતાપૂર્વક અસંમત ૧------- 2 ------ 3 ------ ૪ -------- ૫------- દ્રઢતાપૂર્વક સંમત

26. એચઆઈવી/એઈડ્સને કાબૂમાં લઈ શકાય છે.

દ્રઢતાપૂર્વક અસંમત ૧------- 2 ------ 3 ------ ૪ -------- ૫------- દ્રઢતાપૂર્વક સંમત

27. જોખમી આચરણોથી દૂર રહીને હું એચઆઈવી/એઈડ્સને કાબૂમાં રાખી શકુ છું.

દ્રઢતાપૂર્વક અસંમત ૧------- 2 ------ 3 ------ ૪ -------- ૫------- દ્રઢતાપૂર્વક સંમત

Appendix K: Self-Report Measure of Religiousness (English)

Instructions:

Please circle the number that best represents your answer on each of the following questions:

1. My personal religious beliefs are very important to me.

(Strongly Disagree) **1----------2----------3----------4----------5** (Strongly Agree)

2. My religion or faith is an important part of my identity.

(Strongly Disagree) **1----------2----------3----------4----------5** (Strongly Agree)

3. If someone wanted to understand who I am as a person, my religion or faith would be very important in that.

(Strongly Disagree) **1----------2----------3----------4----------5** (Strongly Agree)

4. I attend religious services regularly.

(Strongly Disagree) **1----------2----------3----------4----------5** (Strongly Agree)

5. I practice the requirements of my religion or faith.

(Strongly Disagree) **1----------2----------3----------4----------5** (Strongly Agree)

6. I believe strongly in the teachings of my religion or faith.

(Strongly Disagree) **1----------2----------3----------4----------5** (Strongly Agree)

7. I believe in God.

(Strongly Disagree) **1----------2----------3----------4----------5** (Strongly Agree)

8. I consider myself a religious person.

(Strongly Disagree) **1----------2----------3----------4----------5** (Strongly Agree)

9. I consider myself a spiritual person.

(Strongly Disagree) **1----------2----------3----------4----------5** (Strongly Agree)

Appendix L: Self-Report Measure of Religiousness (Gujarati)

સૂચનાઓ:

નીચેના દરેક પ્રશ્નો માટે આપના ઉત્તરને ઉત્તમ રીતે દર્શાવે તે નંબરની આસપાસ વર્તુળ કરો:

1. મારી અંગત ધાર્મિક માન્યતાઓ મારા માટે ઘણી મહત્વની છે.

)દ્રઢતાપૂર્વક અસંમત(૧------- 2 ------ 3 ------ ૪ -------- ૫-------)દ્રઢતાપૂર્વક સંમત(

2. મારો ધર્મ અથવા શ્રદ્ધા મારી ઓળખનો એક મહત્વનો અંશ છે.

)દ્રઢતાપૂર્વક અસંમત(૧------- 2 ------ 3 ------ ૪ -------- ૫-------)દ્રઢતાપૂર્વક સંમત(

3. હું કોણ છું તે સમજવા□માટે કોઈ ઈચ્છે તો મા□રો ધર્મ **અથવા શ્રદ્ધા તેમાં ઘણા મહત્વનાં છે.**

)દ્રઢતાપૂર્વક અસંમત(૧------- 2 ------ 3 ------ ૪ -------- ૫-------)દ્રઢતાપૂર્વક સંમત(

4. હું નિયમિત રીતે ધાર્મિક પ્રાર્થનાઓમાં ભાગ લૌ છું.

)દ્રઢતાપૂર્વક અસંમત(૧------- 2 ------ 3 ------ ૪ -------- ૫-------)દ્રઢતાપૂર્વક સંમત(

5. હું મારા ધર્મ અથવા શ્રદ્ધાના આદેશો મુજબ આચરણ કરુ છું.

)દ્રઢતાપૂર્વક અસંમત(૧------- 2 ------ 3 ------ ૪ -------- ૫-------)દ્રઢતાપૂર્વક સંમત(

6. હું મારા ધર્મ અથવા શ્રદ્ધાના ઉપદેશોમાં દ્રઢતાપૂર્વક માનુ છું.

)દ્રઢતાપૂર્વક અસંમત(૧------- 2 ------ 3 ------ ૪ -------- ૫-------)દ્રઢતાપૂર્વક સંમત(

7. હું ભગવાનમાં માનુ છું.

)દ્રઢતાપૂર્વક અસંમત(૧------- 2 ------ 3 ------ ૪ -------- ૫-------)દ્રઢતાપૂર્વક સંમત(

8. હું મારી જાતને ધાર્મિક)આસ્તિક(વ્યક્તિ માનુ છું.

)દ્રઢતાપૂર્વક અસંમત(૧------- 2 ------ 3 ------ ૪ -------- ૫-------)દ્રઢતાપૂર્વક સંમત(

9. હું મારી જાતને આધ્યાત્મિક વ્યક્તિ માનુ છું.

)દ્રઢતાપૂર્વક અસંમત(૧------- 2 ------ 3 ------ ૪ -------- ૫-------)દ્રઢતાપૂર્વક સંમત(

Appendix M: Early Religious Involvement (English)

Instructions:

Please circle the number that best represents your answer on each of the following questions:

1. How important was religion to your family when you were growing up?

(Not At All Important) **1----------2----------3----------4----------5** (Very Important)

2. How often did you attend temple as a child?

(Never) **1----------2----------3----------4----------5** (Very Often)

3. When you were growing up how often did your father attend temple?

(Never) **1----------2----------3----------4----------5** (Very Often)

4. When you were growing up how often did your mother attend temple?

(Never) **1----------2----------3----------4----------5** (Very Often)

Appendix N: Early Religious Involvement (Gujarati)

સૂચનાઓ

નીચેના દરેક પ્રશ્નો માટે આપના ઉત્તરને ઉત્તમ રીતે દર્શાવે તે નંબરની આસપાસ વર્તુળ કરો:

1. આપની નાની ઉમરથી આપના પરિવાર માટે ધર્મનું મહત્વ કેટલુ હતું?

)જરા પણ મહત્વ નહિ(૧------ ૨------ 3------ ૪------ ૫-------)ઘણું મહત્વ(

2. બાળપણમાં આપ કેટલી વખત મંદિરમાં જતા?

)કદી નહિ(૧------ ૨------ 3------ ૪------ ૫-------)ઘણી વખત(

3. આપના બાળપણના સમયમાં આપના પિતાજી કેટલી વખત મંદિરમાં જતા?

)કદી નહિ(૧------ ૨------ 3------ ૪------ ૫-------)ઘણી વખત(

4. આપના બાળપણના સમયમાં આપના માતાજી કેટલી વખત મંદિરમાં જતા?

)કદી નહિ(૧------ ૨------ 3------ ૪------ ૫-------)ઘણી વખત(

Appendix O: Illness as Punishment for Sin (English)

Instructions:

Please circle the number that best represents your answer on each of the following questions:

1. Illness is the result of one's negative thoughts.

(Strongly Disagree) **1----------2----------3----------4** (Strongly Agree)

2. God uses sickness to send a message to people.

(Strongly Disagree) **1----------2----------3----------4** (Strongly Agree)

3. Illness comes because of something bad a person has done in their life.

(Strongly Disagree) **1----------2----------3----------4** (Strongly Agree)

4. God sometimes uses physical illnesses to punish people.

(Strongly Disagree) **1----------2----------3----------4** (Strongly Agree)

5. God uses sickness as punishment for the things people have done wrong in their lives.

(Strongly Disagree) **1----------2----------3----------4** (Strongly Agree)

6. Illness is a punishment/result from God for sinful behaviors or lifestyle.

(Strongly Disagree) **1----------2----------3----------4** (Strongly Agree)

7. Illness is caused by a sinful lifestyle.

(Strongly Disagree) **1----------2----------3----------4** (Strongly Agree)

8. God uses sickness as a way to punish people for their sins.

(Strongly Disagree) **1----------2----------3----------4** (Strongly Agree)

Appendix P: Illness as Punishment for Sin (Gujarati)

સૂચનાઓ:

નીચેના દરેક પ્રશ્ના માટે આપના ઉત્તરને ઉત્તમ રીતે દર્શાવે તે નંબરની આસપાસ વર્તુળ કરો:

1. બીમારી એ, વ્યક્તિના નકારાત્મક વિચારોનું પરિણામ છે.

)દ્રઢતાપૂર્વક અસંમત(૧------- 2 ------ 3 ------ ૪ --------)દ્રઢતાપૂર્વક સંમત(

2. ભગવાન બીમારીનો ઉપયોગ લોકોને એક સંદેશ પહોંચાડવા માટે કરે છે.

)દ્રઢતાપૂર્વક અસંમત(૧------- 2 ------ 3 ------ ૪ --------)દ્રઢતાપૂર્વક સંમત(

3. વ્યક્તિએ જીવનમાં કરેલાં દુષ્કૃત્યોના કારણે બીમારી આવે છે.

)દ્રઢતાપૂર્વક અસંમત(૧------- 2 ------ 3 ------ ૪ --------)દ્રઢતાપૂર્વક સંમત(

4. ભગવાન કેટલીક વખત શારીરિક બીમારીનો ઉપયોગ લોકોને શિક્ષા કરવા માટે કરે છે.

)દ્રઢતાપૂર્વક અસંમત(૧------- 2 ------ 3 ------ ૪ --------)દ્રઢતાપૂર્વક સંમત(

5. વ્યક્તિઓએ જીવનમાં કરેલાં ખોટાં કાર્યોની શિક્ષા કરવા માટે ભગવાન માંદગી આપે છે.

)દ્રઢતાપૂર્વક અસંમત(૧------- 2 ------ 3 ------ ૪ --------)દ્રઢતાપૂર્વક સંમત(

6. બીમારી એ, ભગવાન તરફથી, લોકોએ કરેલ પાપકૃત્યો કે આચરણ માટેની શિક્ષા છે.

)દ્રઢતાપૂર્વક અસંમત(૧------- 2 ------ 3 ------ ૪ --------)દ્રઢતાપૂર્વક સંમત(

7. પાપકૃત્યોવાળી જીવનશૈલીથી બીમારી થાય છે.

)દ્રઢતાપૂર્વક અસંમત(૧------- 2 ------ 3 ------ ૪ --------)દ્રઢતાપૂર્વક સંમત(

8. લોકોએ કરેલાં પાપકૃત્યોની સજા કરવા માટે ભગવાન માંદગીનો ઉપયોગ કરે છે.

)દ્રઢતાપૂર્વક અસંમત(૧------- 2 ------ 3 ------ ૪ --------)દ્રઢતાપૂર્વક સંમત(