

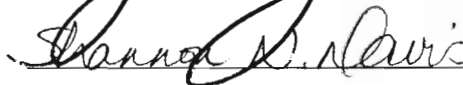
STIGMA AS A SOCIAL BARRIER TO THE UNDERSTANDING OF HIV

by

Victoria J. Watson
A Thesis
Submitted to the
Graduate Faculty
of
George Mason University
in Partial Fulfillment of
The Requirements for the Degree
of
Master of Arts
Sociology

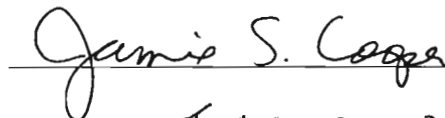
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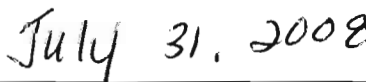

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A thesis submitted in partial fulfillment of the requirements for the degree of Master of Arts at George Mason University

By

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Bachelor of Arts
George Mason University, 2005

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DEDICATION

This is dedicated to those who are infected and affected by HIV and in appreciation for their strength, courage, and constant struggle to live, educate, and work towards the overall well-being of humanity.

ACKNOWLEDGEMENTS

I would like to thank Dr. Gregory Guagnano, Dr. Shannon Davis, Dr. Eden King, Danielle Lapierre, The Office of Drug, Alcohol and Health Education at George Mason University, T. Garey Davis, Dr. DeWitt Webster, and those infected and/or affected by HIV, whom I have learned from and encountered through the course of my own educational and personal journey. Without the contributions, feedback, conversations, resources, and inspiration provided by all the above parties, the commitment, passion, and completion of this research would not have been possible.

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ABSTRACT

STIGMA AS A SOCIAL BARRIER TO THE UNDERSTANDING OF HIV

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The HIV/AIDS epidemic is well into its third decade. Each year since 2002, 50% of all new HIV infections in the United States have been among young adults (Stine 2008). This study aimed to both build off previous research, while at the same time employing new techniques and rationale, such as vignettes and the social contextual construction of stigma, for explaining HIV stigma. This research entailed examining the differences in levels of HIV stigma based on the manipulated characteristics (sexual orientation, occupation as a proxy for class, and mode of contraction) of Jonathan Thompson, a fictional character, along with the degree of HIV knowledge participants possessed and personal identity characteristics (sex, religiosity, and age) of participants. Results indicated that mode of contraction was the only statistically significant independent variable in this sample. More specifically, participants were more likely to express judgment and blame as well as avoid intimate interaction with someone like Jonathan Thompson when that person contracted HIV through unprotected sex or intravenous drug use. Additionally, participants were more likely to avoid personal interaction with

someone like Jonathan Thompson, when that person contracted HIV through intravenous drug use. Further, it was found women expressed less judgment and blame, and were less likely to avoid personal interaction with an HIV positive person. Additionally, older participants had lower levels of the judgment and blame component of HIV stigma than younger participants. Finally, the greater the participant's religiosity the more likely they were to harshly judge and blame, as well as avoid personal interaction with someone who was HIV positive. Since this research focused on discovering both individual and relational mechanisms at work in HIV stigma, the outcomes provide new insight for educators and health programs to utilize in providing resources and discourse that are better suited to reduce stigmatization of the illness amongst college students.

INTRODUCTION

The HIV/AIDS epidemic is well into its third decade. Discourse has gone back and forth between social scientists, healthcare professionals, policy makers, and HIV/AIDS advocates concerning HIV/AIDS stigma in the United States and worldwide. There continues to remain uncertainty as to what are the best approaches for combating and deconstructing HIV/AIDS stigma. Furthermore, even the definition of HIV/AIDS stigma is highly contested (Parker and Aggleton 2003). Most importantly, though, HIV/AIDS stigma continues to remain a significant problem in relation to both public health and social support.

The HIV epidemic is having an alarming impact on young adults in the United States and globally. Twenty percent or approximately 360,000 of HIV infections in the United States are made up of young adults. Most young people globally are infected with HIV sexually, and only a fraction of them are aware of their positive sero-status. In addition, an even smaller number of young adults throughout the world are connected up with the proper medical care and social services to deal with their HIV infection. Lastly, “many young people do not know some basic facts about HIV risk, prevention, and treatment” (Stine 2008:344). Global statistics indicate that only 19% of 15 to 19 year olds and 44% of 18 to 25 year olds have ever been tested for HIV (Stine 2008:344). Therefore, it is imperative for HIV activists, healthcare professionals, and social scientists

to understand the levels of awareness of HIV and the stigma associated with it, if the epidemic amongst young people will begin to slow down (Stine 2008).

Each year since 2002, 50% of all new HIV infections in the United States are among young adults (Stine 2008). This study aimed to both replicate previous research, while at the same time employing new techniques and rationale for explaining HIV stigma that had not been utilized previously. The following questions were examined and discussed in this research: (1) What are the components of personal HIV stigma on a metropolitan university campus? (2) What impact do participants' identity characteristics, the presence or absence of deviant behavior by the fictitious character Jonathan Thompson, knowledge of HIV have on the perpetuation and reinforcement of the two components of HIV stigma, personal interaction and judgment and blame, on a metropolitan university campus?

These questions focused on discovering both individual and relational mechanisms at work in HIV stigma so that educators and health programs can provide resources and discourse that are better suited to reduce stigmatization of the illness amongst college students. This research specifically focused on the stigmatizer, the person who does the stigmatizing, rather than the stigmatized, the person who bears the stigma. Understanding the stigmatizer enabled me to gain insight into how people place social sanctions on HIV positive individuals, and what can be done to change the social and relational systems in place for the welfare of all.

HIV STIGMA: A THEORETICAL FRAMEWORK

The theoretical construct of stigma relies on Erving Goffman's (1963) definition. He states that "the term stigma... refer[s] to an attribute that is deeply discrediting" (Goffman 1963:3). But stigma does not concern attributes alone. Goffman (1963) states that stigma also involves "a special kind of relationship between attribute and stereotype" (p.4). Therefore, stigma is relationally and contextually based. According to Goffman (1963) there are three types of stigma. These are "abominations of the body, ... blemishes of individual character, [and]... tribal stigma" (Goffman 1963:4). My research on HIV stigma primarily focused on abominations of the body and blemishes of individual character, but this research does have some aspects of tribal stigma. HIV has both a physical component that frightens people away, as well as a moral component of unacceptable behavior and/or actions. The tribal component comes into play when one looks at race.

HIV stigma is what Goffman (1963) would term "discreditable," because the difference of the HIV positive individual is not readily known or perceived by others, especially in its early stages (p.4). Consequently, when an undesirable status, such as being HIV positive, is discovered, either based on physical signs or disclosure of status, the infected person quickly becomes isolated (Herek and Capitanio 2002; Deacon, Stephney, and Prosalendis 2005; Parker and Aggleton 2003). The reason is that others are afraid that the stigma and/or the disease may be transferred to them through association (Herek and Capitanio 1998). However, this action is contradictory, because the stigmatized and the "normal" person are interdependent. "The stigmatized and the

normal are part of each other; if one can prove vulnerable, it must be expected that the other can, too” (Goffman 1963:135). In other words, what is normal is contextually based. Ultimately, stigma, as discussed by Goffman (1963) is a “two-role social process” in which everyone participates. The stigmatized and the normal person are two perspectives in a particular set of circumstances. A person, who is stigmatized in one setting, may exude the same sort of prejudices towards another group in a different situation. Therefore, no one is immune to stigma.

How stigma is defined has a great deal of influence over how its operation is understood and how it should be addressed. By looking at stigma as a problem of fear and blame, rather than an issue of ignorance and/or social control, one is able to get away from models of HIV stigma typically relying on individualism and/or functionalism (Deacon et al. 2005). “Functionalist arguments, in which the effect of something is also defined as its cause or an essential part of its nature, have limitations because they are non-disprovable, circular arguments” (Deacon et al. 2005:3). The causes of stigma need to be separated from its effects, because once again “not all stigmatization leads to actual discrimination and not all discrimination is caused by stigma” (Deacon et al. 2005:29). HIV/AIDS stigma is context specific in that “different cultural, biological, situational, social or political contexts also influence the content and intensity of stigmatizing beliefs” (Deacon et al. 2005:50). Therefore, for the purposes of this study, the definition of disease stigma presented by Deacon et al. (2005) was utilized as the operational definition of HIV stigma. In other words, I defined HIV stigma as an “ideology that

identifies and links the presence of [HIV] (or any physical sign of [the] disease) to negatively defined behaviours or groups in society” (Deacon et al. 2005:49).

Herek and Capitanio (1998) operationally define HIV/AIDS stigma as “prejudice, discounting, discrediting, and discrimination directed at people perceived to have AIDS or HIV, their loved ones and associates, and the groups and communities with which they are affiliated” (p.232). Parker and Aggleton (2003) assert, however, that “stigmatization *devalues relationships* rather than being a fixed attribute” (p.14). These researchers claim that the problems involved in defining stigma are a consequence of the strong social-cognitive focus adopted in the field, where individual aspects are emphasized rather than social and/or cultural ones. As a consequence, HIV/AIDS stigma is seen as something inherent in the person stigmatized rather than a designation attached to the stigmatized by other people (Parker and Aggleton 2003).

It is also suggested that HIV/AIDS-related stigma is layered rather than a single entity in and of itself (Reidpath and Chan 2005). Reidpath and Chan (2005) state that “disentangling the layered nature of HIV stigma [is] crucial because it is only through understanding the complexity of it that comprehensively effective policies and interventions can be developed” (p.427). There are two different sources of stigma associated with an HIV positive person who is an injected drug user, and there is a stigma that both characteristics share. In other words, there is stigma that is uniquely associated with being HIV positive, a stigma uniquely associated with being an injected drug user, and then a shared stigma reflecting the sharing of stigma between being HIV positive and an injected drug user. Lastly, synergistic stigma, or compounded stigma, occurs, for

example, when being both HIV positive and an injected drug user is worse than the simple addition of the stigma associated with each characteristic in isolation (Reidpath and Chan 2005). In addition, it is important to note that the stigma associated with two characteristics, shared stigma, and the presence/absence and degree of synergistic stigma are all dependent on social norms, cultural values, and environmental circumstances. This is important to consider, because these four forms of stigma do not exist in a universal vacuum.

Deacon, et al. (2005) more thoroughly flesh out the construct of HIV stigma, by addressing problems with previous definitions of it. They start by explaining that stigma and discrimination are not one in the same. The concept of stigma suffers from conceptual inflation, because a great deal of the research on stigma “defines it as something that results in discrimination” (Deacon et al. 2005:2). However, disease stigma, which is the specific allocation of stigma HIV falls under, is an “ideology that identifies and links the presence of a biological disease agent (or any physical sign of a disease) to negatively defined behaviours or groups in society” (Deacon et al. 2005:49). Therefore, stigma does not have to give rise to discrimination in order to be harmful or have a negative impact. Stigma can be internalized, result in not getting tested or proper healthcare, and/or lead to a poor quality of life. Conversely, discrimination can be the consequence of stigma, but it can also be an outcome of a fear of contagion, concern about limited resources, sexism, racism, homophobia, et cetera (Deacon et al. 2005).

HIV STIGMA IN THE UNITED STATES AND ABROAD: LITERATURE REVIEW

Stigma serves different functions for different individuals. Herek and Capitanio (1998) proposed that the attitudes used by people determine the purposes stigma serves for them. There are two broad groups of attitude functions: expressive and evaluative. Expressive attitudes derive affective content from personal needs that are met by the attitudes' expression. These needs are related to the affirmation of identity and enhancement of self-esteem. For instance, when an extremely religious person publicly denigrates HIV because it is viewed as a disease spread by gay men and sexual deviants, they are affirming their identity against homosexuality and promiscuity and enhancing their own self-esteem by highlighting him/herself as moral through adherence to their faith, thus exemplifying an expressive attitude function. In contrast, evaluative attitude functions reflect a need to understand the social world in terms of direct utility or harm to oneself (Herek and Capitanio 1998:231). For example, a laborer at a factory may express camaraderie with an HIV positive co-worker, even though he or she has concerns about contagion, because the two have the same class and labor interests, and the support the two laborers give to one another is crucial to the maintenance of a unionized workplace. Therefore, the laborer is basing his or her opinions on self-interest appraisals of the HIV positive laborer, thus utilizing an evaluative attitude function.

Herek and Capitanio (1998) found people with primarily expressive attitude functions have AIDS-related attitudes that reflect their religious and political values. However, people with primarily evaluative attitude functions possess AIDS-related attitudes that focus on personal safety (Herek and Capitanio 1998). People with

expressive attitude functions are the individuals whose blame and affective reactions to people with HIV/AIDS are explained by their attitudes towards gay men and contagion concerns. While the blame for and affective reactions to people with HIV/AIDS, of people with evaluative attitude functions, are explained solely by concerns about contagion.

Over the 1990's overt expressions of stigma declined, particularly concerning the quarantine of, public identification of, and negative feelings towards people with AIDS (PWAs) (Herek, Capitano, and Widaman 2002). However, more covert forms of stigma continue to persist. In their research on the prevalence and nature of HIV/AIDS stigma during the 1990's, Herek et al. (2002) found that one-fourth of respondents continued to be uncomfortable having direct or symbolic contact with PWAs. Furthermore, respondents were less knowledgeable about how HIV is *not* transmitted and consequently overestimated risks posed by casual contact in the 1997 and 1999 surveys, compared to the 1991 survey (Herek et al. 2002). Results such as these indicate that HIV/AIDS stigma remains a significant issue that is perpetuated by misinformation and ignorance.

In line with the notion that HIV/AIDS stigma is multi-layered, researchers have investigated how homophobia plays a role as a significant factor contributing to HIV/AIDS stigma (Bouton, et al. 1989; Herek and Capitano 1998; Herek and Glunt 1988; Herek, Widaman, & Capitano 2005). In their examination of heterosexual adults and the sexual transmission of HIV, Herek et al. (2005) found that heterosexuals tended to equate homosexual sex with HIV. One-third of men and approximately 45 percent of women incorrectly believed that a man could contract HIV through unprotected sex with

an uninfected male (Herek et al. 2005). Further, even when it was indicated that uninfected men used a condom, they were judged to be at risk for contracting HIV by one-fourth of men and 30 percent of women (Herek et al. 2005). This indicates that publicly there continues to be a strong association between HIV/AIDS and gay men in the minds of many people in the United States.

However, the notion of high levels of homophobia being equated with high levels of HIV/AIDS stigma has been challenged (Bishop et al. 1991). Bishop et al. (1991) found that perceived contagiousness or non-contagiousness determined whether or not homophobia was a factor in avoidance of people with HIV/AIDS. When a hypothetical disease was perceived to be contagious, in the experimentally manipulated design, participants focused on contagiousness, and ultimately their interaction behaviors were influenced by that. When the hypothetical disease was labeled non-contagious, however, participants expressed they would avoid the person, rate them more negatively on personality dimensions, and hold them more responsible for illness, if that individual was homosexual. Therefore, though the participants might not have approved of the hypothetical person's sexual preference, if they were designated as homosexual, it was not enough of a justification in and of itself for participants to avoid the person with a contagious illness (Bishop et al. 1991).

This study was limited in its generalizability and applicability to realistic circumstances and the general population, because it only examined undergraduate students on levels of stigma at the personal/psychological level. The absence of a social analysis in this research avoids the entire process in which attitudes are formulated

through interaction. Therefore, it is difficult to conclude from this work that contagiousness truly is the primary focus, without any influence of homophobia. Further replication and elaboration of this research is needed to draw more concrete conclusions.

Fear of contagion is a typical public reaction to disease. People are concerned about their own well-being and that of those they care about. Consequently, they can behave in overly protective and concerned manners for their own safety, especially if they do not have any information or education regarding a particular illness (Bouton et al. 1989). However, there is not a definitive distinction between legitimate precaution and stigmatizing behavior; therefore, some of the public may unintentionally judge and/or discriminate against people with HIV/AIDS, thus perpetuating the social stigma attached to it.

Many members of the public continue to misunderstand the mechanisms through which HIV is transmitted, and thus overestimate the chances of contagion from casual contact (Herek and Capitano 1993). Surprisingly, a high percentage of people continue to believe that HIV is transmitted through various types of casual contact, such as drinking from the same glass, kissing on the cheek, using the same public toilets, and/or being coughed or sneezed upon by a HIV-positive person (Herek and Capitano 1993). This is problematic for efforts aimed at addressing HIV/AIDS stigma, because though it is evident from previous research that people are being educated about HIV in some regard (Herek, et al. 2002; Herek et al. 2005; Johnson and Baer 1996) it is not enough to reduce the stigmatization, isolation, and discrimination experienced by HIV-positive people. In fact, accurate beliefs about HIV/AIDS are most prevalent among people with

a higher socio-economic status, because they have greater access to various types of resources typically afforded those with formal education and a higher income (Herek et al. 2005). This indicates that programs need to be implemented that reach people who are typically missed or overlooked. However, access to accurate information about HIV, at any socio-economic level, does not completely explain the reasons for the stigmatization of HIV, because it still persists at all socio-economic levels.

Perceptions of responsibility for illness present an interesting dynamic in the analysis of HIV/AIDS stigma. Research has found that there is the possibility of a morality element in perceptions of responsibility, suggesting judgments about people with HIV/AIDS are more based on emotional or visceral responses as opposed to cognitive or intellectual ones (Johnson and Baer 1996). Hemophiliacs and children born with HIV are viewed as less responsible for their conditions, because said conditions are beyond their control. In contrast, people who engage in unsafe sex (without a condom), are bisexual or homosexual, and/or are injected drug users are judged as responsible for their condition, because they chose to engage in risky behavior. Ultimately, blame is afforded to those who are alleged by the larger population, in this case undergraduate college students, to have had control over the life circumstances that led to their HIV-positive status (Johnson and Baer 1996; McBride 1998).

Responsibility for illness strongly determines the extent to which people interact or avoid a particular person with HIV/AIDS (McBride 1998). This has implications for combating HIV/AIDS stigma, because the local community continues to make judgments about the morality of HIV-positive people in their area with particular ways of life,

instead of recognizing their common humanity. No one is immune to HIV, and by discounting those who are blamed for their illness because of behavioral choices, the local neighborhoods, schools, community centers, health clinics, businesses and political offices distance themselves from the HIV epidemic and only help the proliferation of the epidemic and the stigma attached to it (McBride 1998).

Previous research has shown that the identity characteristics of sex and religiosity have related to levels of HIV stigma. More specifically, women and less religious people tended to express lower levels of HIV stigma (Herek and Capitanio 1993; Herek et al. 2005; Visser, Makin, & Lehobye 2006; Bouton et al. 1989). Age is also considered a predictor variable for HIV stigma, though not as thoroughly explored in the literature, because there is a historical component to HIV that may create cohort divides amongst students. It has been assumed in previous research (Herek et al. 2005) that younger people would harbor less misinformation about HIV than older people. However, with the drop off in new HIV/AIDS research, younger people are not consistently receiving updated and accurate information, in the ways older students were when HIV first emerged. Therefore, it is expected that a potential age gap has developed in regards to HIV stigma, where older individuals are less stigmatizing.

In the United States in particular, there is a public sentiment that HIV/AIDS is no longer a problem, or rather is a problem only of developing nations with less healthcare resources. This is far from the reality though. Ignorance of this sort will perpetuate if not exacerbate the HIV epidemic in the United States if interventions are not implemented.

LIMITATIONS AND GAPS IN THE EXISTING LITERATURE

There exist various limitations and gaps in the literature on HIV/AIDS-related stigma. Foremost, there is not a concrete definition of HIV stigma. Many definitions of HIV stigma presented in previous research suffer from conceptual inflation. HIV is frequently defined as causing or resulting in discrimination, which is not always the case. Further, these definitions ignore how stigma alone, when not paired with discrimination, is still detrimental to the stigmatized, because it can be internalized. Lastly, discrimination can occur, without the presence of stigma, and rather as a consequence of other concerns or prejudices (i.e. a fear of contagion, concern about limited resources, sexism, racism, homophobia, et cetera). Without a clear operational definition of HIV stigma, it is difficult to compare and utilize previous research in any meaningful and constructive way.

HYPOTHESES

In this study it was hypothesized that participant characteristics, and knowledge of HIV would affect the participant's responses to the manipulated vignette that was given to him or her to determine his or her level of HIV stigma. HIV stigma was measured by the degree personal interaction that would be avoided with, and the amount of judgment and blame towards a fictitious person, Jonathan Thompson, as an HIV positive man. It was expected that significant differences would exist across the 18 variations of the vignette. Figure 1 conceptually models the anticipated outcomes of the study.

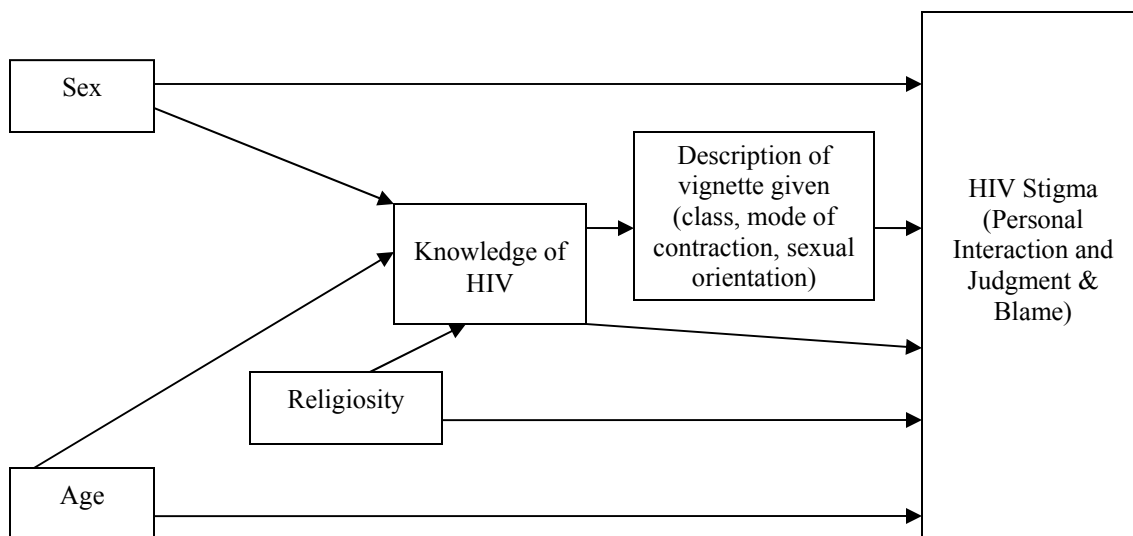


Figure 1: Research Model of HIV Stigma

The hypotheses were as follows:

H₁: Differences in levels of HIV stigma are based on the characteristics of Jonathan Thompson.

H_{1a}: Participants who think Jonathan Thompson is homosexual will report more HIV stigma than those participants who think Jonathan Thompson is heterosexual.

H_{1b}: Jonathan Thompson's class, as measured through his occupational status, either as an assistant manager or an associate professor, leads to higher levels of HIV stigma expressed by participants than when he is the CEO of a Fortune 500 Company.

H_{1c}: The mode of HIV contraction, either intravenous drug use or unprotected sex, results in higher levels of HIV stigma directed towards Jonathan Thompson by participants than blood transfusion.

H₂: The degree of knowledge participants have of HIV significantly impacts the level of stigma expressed by individuals such that increased HIV knowledge will lead to less reported HIV stigma.

H₃: The personal characteristics of sex, age, and religiosity affect the level of HIV stigma expressed by participants.

H_{3a}: Women are expected to have lower levels of HIV stigma than are men.

H_{3b}: Older participants are expected to have lower levels of HIV stigma than younger participants.

H_{3c}: The less religious participants are the lower the levels of HIV stigma they are expected to possess.

METHOD

SOURCE OF DATA

Sampling Strategy

The participants in this study were undergraduate students over the age of 18, who were enrolled at George Mason University. The Office of Alcohol, Drug, and Health Education at George Mason University sought permission, from the Provost's Office, for a random sample of 7,000 e-mail addresses of undergraduate students to contact for the purpose of this research. Since the response rate for such an online survey in this particular population was uncertain, the Office of Alcohol, Drug, and Health Education asked for 7,000 e-mail addresses in hopes of receiving at least 1,000 responses. This sample size of 1,000 participants was needed in order to ensure that generalizations could be made from the data collected. There were no restrictions on the gender, race/ethnicity, class, sexual orientation, ability, and/or religious affiliation of the students in the participant pool. It was expected that the participants would predominantly be in the age range of 18 to 25 years old. Participants were offered an opportunity to enter a drawing for the chance to win one of two \$100 gift cards to Barnes and Noble for compensation for their participation in the study.

Data Collection

The entire vignette and survey instrument was administered by Student Voice, a student assessment company that has a contract and works in collaboration with the University Life division of George Mason University. Student Voice was in charge of electronically designing and uploading the survey tools, and administering the survey to the random sample of student e-mail addresses they securely received from the Office of Alcohol, Drug, and Health Education.

A random sample of 7,000 participants was sent an e-mail from the researcher, in collaboration with the Office of Alcohol, Drug, and Health Education, inviting them to participate in a research study. Student Voice sent the e-mails, from their secured website, to the entire random sample of undergraduate student participants. Those students who were interested were asked to click a link attached to the e-mail they were sent. The link directed participants to the informed consent page, where they were asked to read the form, and select whether they agreed or disagreed to participate. Student participants were informed that though their data could not be kept completely anonymous, due to the internet transmission of data, their confidentiality was ensured and protected. More specifically, I did not have access to confidential student information. The random sample of e-mail addresses and the contact information for the participant drawing were handled solely by the Office of Alcohol, Drug, and Health Education. The data collected from the study was handled only by me. This procedure was enacted in order to prevent the connection of sensitive student contact information to students' responses. Furthermore, participants were reassured in the informed consent that their

answers would not be traceable back to their e-mail addresses or IP addresses, because the Student Voice page was setup so no electronic trail existed for the researcher and/or the Office of Alcohol, Drug, and Health Education to access or uncover. Ultimately then, participants did not have to be concerned with the connection of personally identifiable data to their responses.

Participants who agreed to participate were connected to a randomly selected vignette to read, and then asked to complete a series of questions. Those participants who refused to participate were directed to a screen that thanks them for their time and exited them out of the survey. Once those participants who agreed to participation finished reading their randomly assigned vignette, they were asked to answer questions about HIV personal interaction and judgment and blame, referring specifically to their individual perspective of Jonathan Thompson, the fictional character with HIV in the vignette read. Then, participants answered questions on their personal HIV knowledge. When students finished answering all of the measurement tools, they were asked to round out the study by providing demographic information relating to their own identities.

Finally, when all phases of the research were complete, participants were thanked for their participation. They then were also offered an opportunity to be entered into a drawing for one of two \$100 gift cards to Barnes & Noble. Interested participants were directed to a new page in order to enter into the drawing. No one was able to trace this contact information back to a particular participant's answers through any sort of encryption or electronic trail. The names of participants were only used by the Office of Alcohol, Drug, and Health Education to initially contact the winners of the drawing, in

order to best determine how they would receive their prize (i.e. via mail, on campus, etc.). Out of the 7,000 students contacted, 1,196 responded and 1,068 completed the survey.

OUTCOME VARIABLES

Exploration of Two Components of HIV Stigma

The two components of HIV stigma that were measured in this study were personal interaction and judgment and blame. The construct of personal interaction was operationally defined as the levels of comfort, contact, closeness, and anxiety one experiences towards an HIV positive person. In other words, the more negative the experience of comfort, contact, closeness, and the more positive the experience of anxiety the higher the levels of HIV stigma the respondent expressed for personal interaction in the study. Judgment and blame were operationally defined as the degree of shame, responsibility and morality a respondent perceived to be due to a person who is HIV positive. Differently stated, HIV stigma related to judgment and blame was expected to be higher when the HIV positive person was believed by participants to be at fault for his condition, socially sanctioned in a negative manner, and/or viewed as immoral. These two components of HIV stigma were utilized to study the HIV stigma, at George Mason University, of a fictional HIV positive man.

The operational definition of HIV stigma was taken from Visser et al. (2006). Individual stigma was operationally defined as an “individual’s attitudes [towards HIV] based on personal experiences” (Visser et al. 2006:45). Individual HIV stigma was measured by participants’ answers to questions regarding their own perception of and

reaction towards Jonathan Thompson, a fictional male who was HIV positive (See Appendix B for additional information). It was hoped that the exploration of HIV stigma helped provide a fuller picture and further understanding of the impact of HIV stigma in the U.S. university setting.

The dependent variables of personal interaction and judgment and blame were constructed utilizing a summed index, because the two question sets provided more meaningful information when considered as a whole. Questions 1, 4, and 5, of the personal interaction measure, and questions 2 and 5 of the judgment and blame measure were reversed scored prior to calculating the summed index. Finally, the scales themselves were reverse scored so that a high summed index score indicated high levels of HIV stigma (See Appendix B for additional information).

PRIMARY PREDICTOR VARIABLES

Vignettes as a Less Threatening and Invasive Stimulus for Survey Research

A common critique of attitudinal surveys is that they only measure what people say they believe and what they would do, rather than what they may actually believe and how they may actually behave in varying social contexts (Deacon et al. 2005).

Therefore, it is difficult for social scientists to draw accurate conclusions about the reality of the social phenomenon they are studying. Unfortunately though, survey measurement techniques may be the only feasible way one can reach particular populations regarding sensitive topics or issues. In order to address this issue, the use of vignettes as a means of obtaining a more appropriate depiction of real beliefs and actions is discussed in various

social science circles (Alexander and Becker 1978; Dulmer 2007; Finch 1987; Hughes 1998; Law et al. 2007).

“Vignettes are short descriptions of a person or social situation which contain precise references to what are thought to be the most important factors in the decision-making or judgment-making processes for respondents” (Alexander and Becker 1978:94). One or more vignettes are randomly selected for each research participant. Each vignette has the same basic framework; the only differences exist in the independent variables being manipulated within the vignettes themselves. Furthermore, differences between groups of participants can be measured when enough of each version of a particular vignette is distributed equally across different groups. A full factorial design is utilized when “all possible combinations of values for each of the manipulated variables” is used (Alexander and Becker 1978:96). This being said though, a researcher must be aware that the number of versions of a vignette increases exponentially with the number of manipulations added. Therefore, in order to achieve a full factorial design a researcher needs to carefully select his or her independent variables and determine what would be a feasible sample size for his or her research project.

There are a multitude of advantages to using a vignette technique in survey research. A vignette analysis “is a procedure that allows one to analyze judgment behavior under concrete conditions that are much closer to real-life judgment-making situations than relatively abstract questions that are more typical of opinion surveys” (Dulmer 2007:382). Consequently, participants have a context and specific scenario to react to, thus allowing them to more readily place themselves in the situation, and the use

of vignettes assists in “standardizing the social stimulus across respondents” (Alexander and Becker 1978:103). Furthermore, vignettes can be used to examine situations that would be practically impossible to study using “behavioral strategies” (Law et al. 2007:84). Thus, vignettes have the distinct benefits of determining relationships without causing mental anguish, by distancing the issues from respondents and those close to them (Finch 1987; Law et al. 2007). By making the questions less personally threatening, participants are more likely to provide answers that are in line with their actual beliefs, reactions, and practices.

Vignettes, like all research strategies, have their limitations as well. “One of the main criticisms leveled at the vignette technique is that it neglects the interaction and feedback that is a necessary part of social life” (Hughes 1998). In other words, vignettes detach participants from the situation, thus restricting comparisons to real life. In real life participants have to engage and react irregardless of their comfort level, because they are engaged in a social encounter.

Other limitations of vignettes revolve around their development. Construction of a vignette is critical so that it can be readily followed, understood, and responded to in a survey (Finch 1987). Specifically, vignettes need to be internally consistent, not overly complex, and yet still deep enough to be believable (Finch 1987; Hughes 1998). Moreover, researchers need to be aware of the vocabulary and wording of vignettes in relation to the particular group being studied. Some populations have their own vocabulary, so the intended meaning of the researcher may not result in the correct interpretation by the research participants, if the researcher is unfamiliar with the

vernacular of the group. Therefore, the researcher must know his or her population well enough to present vignettes and questions that can accurately relate meaning to participants (Hughes 1998). Finally, “vignettes are more limited when used in questionnaires where there is less opportunity to probe and explore responses” (Hughes 1998:386). Since research participants may not readily have access to the researcher when filling out a questionnaire, particularly if it is by mail or through the internet, vignettes need to be especially clear and data should be checked for consistency before drawing conclusions.

However, if vignettes are used only to provide an interpretation of the real world, and are put forth in such a way as to provide a situated context in which to react, then they can make a valuable contribution methodologically (Hughes 1998). Though direct parallels to real life cannot be drawn between reactions to vignettes and actual behaviors, they serve as a window toward better understanding social behaviors that otherwise would go unexplored.

Measurement of Primary Predictor Variables

This research utilized vignettes as the manipulation in the study, survey questions relating to the vignettes, and demographic material. The vignettes consisted of a 2x3x3 factorial design, thus creating 18 different versions of the basic vignette (See Appendix A). The factors were sexual orientation (homosexual or heterosexual), occupation as a proxy for class (assistant manager, associate professor, CEO of Fortune 500 Company) and mode of contraction (intravenous drug use, unprotected sex, blood transfusion). The vignettes were brief, containing only 5 sentences, in order to more readily ensure that

participants read the entire vignette and were not deterred away from the survey based on the verbosity of the vignette.

The survey questions contained variations from the instruments of Visser et al. (2006) and the United States Department of Health and Human Services (1995) (See Appendices B and C respectively). The Visser et al. (2006) survey instrument measured the two constructs of personal interaction and judgment and blame, which were the two components of HIV stigma that were explored in this research. The instrument was revised, however, by changing the abstract and personal nature of the questions, and inserting the name of the fictional character Jonathan Thompson, in order to give the questions a realistic context and to make them less threatening to the participants. The United States Department of Health and Human Services questionnaire measured the participant's knowledge of HIV, and remained completely intact with the exception of the addition of mosquito bites to the end of the list of ways one may or may not contract HIV. Lastly, multiple demographic variable questions were asked to determine how personal identity characteristics played a role in the two constructs of HIV stigma measured in this survey (See Appendix D). The demographic variables used as predictor variables included sex, religiosity, and age.

A dummy variable was constructed for sex, by coding 0 for self-identified males and 1 for self-identified females. For sex the standard for which every other category in the group was compared to was female. Religiosity was determined by a Likert-scale item asking how religious the participant considered him or herself to be. The range of the religiosity question went from 1- Extremely Religious to 5- Not Religious at All.

This item was reversed scored so that higher religiosity was equated to a higher number in order to avoid confusion when analyzing the data. Since age was already a numerical variable, it did not need to be transformed into a dummy variable, and was entered into the regression models based on the age written by respondents.

ANALYTIC STRATEGY

The analysis was preceded with listwise deletion of missing data. Participants who chose not to participate or who did not answer the majority, meaning more than half, of the entire questionnaire were excluded from the data set. Out of the 1,196 original responses, 128 had to be excluded to meet these criteria leaving a remaining sample of 1,068. Analysis was conducted using the statistical software program STATA. Summative indices were constructed for judgment and blame, personal interaction, and HIV knowledge.

Finally, data had to be manually excluded that did not include the demographic variables (age, religiosity, and sex), a score for the HIV knowledge index, a score for the judgment and blame index, a score for the personal interaction index, or a score for the question regarding intimate interaction. Missing data for these categories were sorted out through a series of commands computed to STATA. It was important to manually sort out missing data from the above categories in order to ensure a consistent sample size across the various regression models. When the process was complete, the final sample size was 977 participants.

INDEX CONSTRUCTION AND VARIABLE MANIPULATION

Dependent Variables

Prior to more complex analysis, the normality in distributions of the data was checked. It was found that the judgment and blame index had a skewness of .529, the personal interaction index had a skewness of 1.111, and the intimate interaction question had a skewness of -1.172. Therefore, since none of the normality distributions had a skewness above 1.2, it was reasonably determined that the assumptions of normality stood. Once the normality of the distributions was checked, I then began constructing the indices for the variables of personal interaction and judgment and blame. An average summative index of items was created for each participant under each component of HIV stigma measured, with the exception of question #4 (intimacy question) under personal interaction. Question #4 stood out as its own factor and therefore was treated as a separate component of HIV stigma in the models. (See Table 1 for descriptive statistics of all variables).

Table 1: Descriptive Statistics for the Dependent Variables, Vignette Manipulations, and Background Characteristics in the Analysis (N = 977)

Variables	Cronbach's Alpha (α)	Mean or Proportions	Median	Standard Deviation	Skewness	Range
<i>Dependent Variables:</i>						
Judgment and Blame	.788	12.868	12	5.230	.540	6-30
Personal Interaction	.752	8.843	8	2.786	1.114	6-20
Intimate Interaction		3.360	4	.877	-1.187	1-4
<i>Vignette Manipulations:</i>						
<i>Sexual Orientation:</i>						
Heterosexual		.504				
Homosexual		.496				
<i>Occupation as a Proxy for Class:</i>						
CEO of Fortune 500 Co.		.305				
Associate Professor		.347				
Assistant Manager		.348				
<i>Mode of Contraction:</i>						
Blood Transfusion		.328				
Unprotected Sex		.325				
Intravenous Drug Use		.347				
<i>Background Characteristics:</i>						
HIV Knowledge	.714	5.493	6	1.627	-1.250	0-7
<i>Sex:</i>						
Male		.313				
Female		.687				
Religiosity		2.782	3	1.177	-.084	1-5
Age		22.301	21	5.687	3.149	17-59

Factor analysis, with varimax rotation, was employed to confirm two dimensions of HIV stigma present in the data: personal interaction and judgment and blame.

However, the exploratory factor analysis resulted in three factors each with eigenvalues greater than 1.0: Factor 1 was the factor of judgment and blame, Factor 2 was the factor of personal interaction, and Factor 3 consisted of question number 4 of the personal interaction measure. This particular question stood out, because it seemed to measure an element of intimate interaction. Thus it was used separately in the analysis.

Independent Variables

In order to measure the influence of the vignette manipulations, dummy variables were constructed for sexual orientation, occupation (as a proxy for class), and mode of contraction. For sexual orientation, a single dummy variable was constructed where 0 was heterosexual and 1 was homosexual. The reference category for sexual orientation was heterosexual. However, the dummy variables for occupation as a proxy for class and mode of contraction required two different dummy variables since each of these categories had three manipulations. For occupation (as a proxy for class), the first dummy variable had associate professor as 1 and everything else was 0, while the second dummy variable had assistant manager as 1 and everything else as 0. The reference category for occupation (as a proxy for class) was CEO of a Fortune 500 Company. The first dummy variable for mode of contraction had unprotected sex as 1 and everything else as 0, while the second dummy variable had intravenous drug use as 1 and everything else as 0. The reference category for mode of contraction was blood transfusion. The reference categories, as stated above, were chosen to be the point of comparison for all other manipulations, because it was decided that they invoked the least amount of stigma amongst participants.

A factor analysis of the HIV Knowledge survey was conducted to determine if there were sub-dimensions within the data. However, the variables composing Factor 2 each had limited variability (98.3% of participants answered question 4 as very likely or somewhat likely, and 98.4% of participants answered question 8 as very likely or somewhat likely), which indicated that these two forms of contraction are widely

understood and taught throughout the educational experiences of the student sample utilized here. Therefore, Factor 2 was not used in this analysis.

The HIV Knowledge Index, therefore, was constructed from questions 1, 2, 3, 5, 6, 7, and 9. Each of these knowledge items was coded as 0 if the participant did not know the correct answer and 1 if they did. This delineation enabled the creation of an index that ranged from 0 to 7, where a higher score was equated with greater knowledge of HIV. Table 1 outlines the descriptive statistics of the HIV Knowledge Index utilized in this study.

RESULTS

Once the factor analysis was conducted, indices were created, and the descriptive statistics were assessed, three hierarchical linear regression analyses were conducted for these three components of HIV stigma: judgment and blame, personal interaction, and intimate interaction. Model 1 examined how the demographic variables of sex, religiosity, and age impacted the particular measure of HIV stigma. Model 2 added HIV knowledge to determine whether or not the personal identity characteristics worked through knowledge in determining levels of HIV stigma. Model 3 added the influence of the vignette manipulations.

Judgment and Blame

In Model 1 of the judgment and blame regression analysis, sex, religiosity, and age all significantly influenced the judgment and blame placed upon Jonathan Thompson. More specifically, females expressed significantly less judgment and blame towards Jonathan Thompson than did males ($t = -5.63, p = .000$). Also, the more religious participants were the higher the levels of judgment and blame they attributed to Jonathan Thompson ($t = 6.00, p = .000$). Lastly, participants who were older expressed lower levels of judgment and blame towards Jonathan Thompson than did younger participants

($t = -2.87$, $p = .004$). Table 2 illustrates the breakdown of each of the three models for judgment and blame.

Model 2 of the judgment and blame regression analysis showed that sex, religiosity, age, and HIV knowledge all significantly affected the judgment and blame of HIV towards Jonathan Thompson. Again, females expressed significantly less judgment and blame towards Jonathan Thompson than males ($t = -5.64$, $p = .000$), while participants who expressed higher levels of religiosity exerted high levels of HIV judgment and blame towards Jonathan Thompson ($t = 5.29$, $p = .000$). Additionally, the older the participants were the lower the levels of HIV judgment and blame ascribed to Jonathan Thompson. Finally, participants with higher levels of HIV knowledge placed less judgment and blame upon Jonathan Thompson ($t = -4.10$, $p = .000$). Moreover, with the addition of the HIV Knowledge Index, the only change in effect size for judgment and blame was found in religiosity, where religiosity decreased. Sex and age remained substantively unchanged.

The Model 3 regression analysis for judgment and blame found that sex, religiosity, age, HIV knowledge all significantly affect HIV judgment and blame towards him. In addition, controlling for the effects of all other variables in the model, those participants receiving vignettes where Jonathan Thompson contracted HIV through unprotected sex or intravenous drug use were significantly more likely to assign HIV judgment and blame toward Thompson. Females expressed significantly less judgment and blame than males ($t = -6.23$, $p = .000$), more religious people expressed more judgment and blame than less religious people ($t = 6.03$, $p = .000$), and older participants

articulated less judgment and blame than younger participants ($t = -2.47, p = .014$).

Furthermore, the more knowledge of HIV participants had, the less judgment and blame they placed upon Jonathan Thompson ($t = -4.86, p = .000$). However, out of the three manipulation categories for the vignettes presented to participants, only the mode of contraction category was significant. Jonathan Thompson as a homosexual ($t = -1.43, p = .153$), an associate professor ($t = 1.41, p = .158$), or an assistant manager ($t = 1.28, p = .200$) did not elicit any significant findings. Compared to the blood transfusion category though, Jonathan Thompson was significantly more likely to be judged and blamed for his HIV positive status if he contracted HIV through unprotected sex ($t = 11.73, p = .000$) or intravenous drug use ($t = 14.50, p = .000$) when the effects of all other variables in the model were controlled.

Table 2: Unstandardized Regression Coefficients (Standard Errors) in the Analyses of Judgment and Blame of a Person with HIV

Variable	Model 1	Model 2	Model 3
<i>Background Characteristics:</i>			
Sex:			
(Male)			
Female	-1.974*	-1.961*	-1.956*
	(.351)	(.348)	(.314)
Religiosity	.830*	.735*	.755*
	(.138)	(.139)	(.125)
Age	-.082*	-.076*	-.063*
	(.029)	(.028)	(.025)
HIV Knowledge		-.411*	-.438*
		(.100)	(.090)
<i>Vignette Manipulations:</i>			
Sexual Orientation:			
(Heterosexual)			
Homosexual			-.415
			(.290)
Occupation as a Proxy for Class:			
(CEO of Fortune 500 Co.)			
Associate Professor			.509
			(.360)
Assistant Manager			.460
			(.358)
Mode of Contraction:			
(Blood Transfusion)			
Unprotected Sex			4.190*
			(.357)
Intravenous Drug Use			5.093*
			(.351)
Constant	13.741*	16.129*	12.664*
	(.779)	(.967)	(.922)
Model Adjusted R ²	.063	.078	.258

N = 977

* p < .05, two-tailed test.

An incremental F-test was conducted to determine whether Model 3 was a better fit for the judgment and blame component of HIV stigma than the previous models. The critical F-value for this incremental F-test was $F_{\text{critical}}(5, 967) = 2.223$. The following calculations were computed:

H₀: R²_{new} - R²_{old} = 0

H_a: R²_{new} - R²_{old} > 0

$$F_{\text{obtained}} = \frac{(R^2_{\text{new}} - R^2_{\text{old}}) / (k_1 - k_2)}{(1 - R^2_{\text{new}}) / (N - k_1)} = \frac{(.2652 - .0818) / (10-5)}{(1 - .2652) / (977-10)} = 48.271$$

where k₁ = number of parameters in the new model

where k₂ = number of parameters in the old model

with (k₁ - k₂) and (N - k₁) degrees of freedom

Since the incremental F-test produced a value of 48.271, it was determined that Model 3

was a significantly better fit for the judgment and blame component of the data.

Personal Interaction

Model 1 of the personal interaction regression analyses found sex and religiosity to significantly affect the levels of personal interaction participants would have with Jonathan Thompson, but age did not. Females were significantly less likely to avoid personal interaction with Jonathan Thompson than males were (t = -5.16, p = .000).

Further, the more religious a participant was the more likely he or she would be to avoid personal interaction with Jonathan Thompson (t = 4.89, p = .000). Table 3 exemplifies the breakdown of each of the three models for personal interaction.

The personal interaction regression analysis for Model 2 found that sex, religiosity, and HIV knowledge all significantly impacted the degrees of personal interaction with Jonathan Thompson, but again age had no such effect. Females were significantly less likely to avoid personal interaction with Jonathan Thompson than males (t = -5.46, p = .000), while more religious participants were significantly more likely to avoid personal interaction with Jonathan Thompson (t = 3.09, p = .002). Furthermore, though age did not have a significant impact (t = .92, p = .358), the more knowledge of

HIV participants had, the less likely they were to say they would avoid personal interaction with Jonathan Thompson ($t = -12.87, p = .000$). Moreover, when HIV knowledge was controlled for, the only change in effect size for personal interaction was found in religiosity, where religiosity decreased. Sex and age remained substantively unchanged. Lastly, based on the amount of variance accounted for, HIV knowledge was a more influential predictor in the personal interaction model ($R^2 = .1846$) than the judgment and blame model ($R^2 = .0818$). This illustrated that HIV knowledge played a more critical role in the personal interaction component of HIV stigma.

In Model 3 of the personal interaction regression analysis sex, religiosity, and HIV knowledge all significantly influenced the avoidance of personal interaction with Jonathan Thompson. In addition, controlling for the effects of all other variables in the model, those participants receiving vignettes where Jonathan Thompson contracted HIV through intravenous drug use were significantly more likely to avoid personal interaction with Thompson. Females were significantly less likely to avoid personal interaction with Jonathan Thompson than males ($t = -5.55, p = .000$), the more religious were more likely to avoid personal interaction with Jonathan Thompson than the less religious ($t = 3.14, p = .002$), and those with more knowledge of HIV were less likely to avoid personal interaction with Jonathan Thompson ($t = -13.09, p = .000$). Lastly, compared to the blood transfusion category, it was found that participants were significantly more likely to avoid personal interaction with Jonathan Thompson if he contracted HIV through intravenous drug use, when the effects of all other variables in the model were controlled. Age ($t = .99, p = .320$) and Jonathan Thompson as a homosexual ($t = -.37, p = .711$),

and/or an associate professor ($t = .78, p = .438$) were not at all significant; however, Jonathan Thompson as an assistant manager ($t = 1.85, p = .065$) and/or someone who contracted HIV through unprotected sex ($t = 1.80, p = .072$) reached close to significance.

Table 3: Unstandardized Regression Coefficients (Standard Errors) in the Analyses of Avoiding Personal Interaction with an HIV Positive Person

Variable	Model 1	Model 2	Model 3
<i>Background Characteristics:</i>			
Sex:			
(Male)			
Female	-.974*	-.954*	-.967*
	(.189)	(.175)	(.174)
Religiosity	.364*	.216*	.218*
	(.074)	(.070)	(.069)
Age	.004	.013	.014
	(.015)	(.014)	(.014)
HIV Knowledge		-.648*	-.653*
		(.050)	(.050)
<i>Vignette Manipulations:</i>			
Sexual Orientation:			
(Heterosexual)			
Homosexual			-.060
			(.161)
Occupation as a Proxy for Class:			
(CEO of Fortune 500 Co.)			
Associate Professor			.155
			(.200)
Assistant Manager			.367
			(.199)
Mode of Contraction:			
(Blood Transfusion)			
Unprotected Sex			.356
			(.198)
Intravenous Drug Use			.885*
			(.195)
Constant	8.404*	12.166*	11.603*
	(.419)	(.486)	(.511)
Model Adjusted R ²	.043	.181	.197

N = 977

* $p < .05$, two-tailed test.

An incremental F-test was conducted to determine if Model 3 was a better fit for the personal interaction component of HIV stigma than the previous models. The critical F-value for this incremental F-test was $F_{\text{critical}}(5, 967) = 2.223$. The following calculations were computed:

$$H_0: R^2_{\text{new}} - R^2_{\text{old}} = 0$$

$$H_a: R^2_{\text{new}} - R^2_{\text{old}} > 0$$

$$F_{\text{obtained}} = \frac{(R^2_{\text{new}} - R^2_{\text{old}}) / (k_1 - k_2)}{(1 - R^2_{\text{new}}) / (N - k_1)} = \frac{(.2047 - .1846) / (10-5)}{(1 - .2047) / (977-10)} = 4.888$$

where k_1 = number of parameters in the new model

where k_2 = number of parameters in the old model

with $(k_1 - k_2)$ and $(N - k_1)$ degrees of freedom

Since the incremental F-test produced a value of 4.888, it was determined that Model 3 was a significantly better fit for the personal interaction component of the data.

Intimate Interaction

The regression analyses for intimate interaction found few significant predictors across the three models. Model 1, in Table 4 shows that sex, religiosity, and age had no significant influence on whether or not participants would be in an intimate (dating) relationship with someone like Jonathan Thompson ($t = -1.10, p = .271$; $t = 1.06, p = .288$; $t = -.40, p = .693$). Model 2 revealed that HIV knowledge was the only variable to significantly impact whether participants would be in an intimate (dating) relationship with someone like Jonathan Thompson. The more knowledge of HIV participants had, the less likely they were to avoid an intimate (dating) relationship with someone with similar circumstances as Jonathan Thompson ($t = -3.79, p = .000$). Sex, religiosity, and

age were all again non-significant ($t = -1.07, p = .283$; $t = .43, p = .668$; $t = -.22, p = .830$). Table 4 outlines each of the three models for intimate interaction.

The Model 3 regression analysis for intimate interaction found that only participant knowledge of HIV significantly determined whether or not participants would be in an intimate (dating) relationship with someone like Jonathan Thompson. In addition, controlling for the effects of all other variables in the model, those participants receiving vignettes where Jonathan Thompson contracted HIV through unprotected sex or intravenous drug use were significantly more likely to avoid an intimate (dating) relationship with someone like Jonathan Thompson. The more HIV knowledge participants had the less likely they would be to avoid an intimate relationship with someone like Jonathan Thompson ($t = -3.75, p = .000$). Yet, if Jonathan Thompson contracted HIV through unprotected sex ($t = 3.41, p = .001$) or intravenous drug use ($t = 1.98, p = .048$), participants reported they would be significantly more likely to avoid an intimate relationship with someone like Jonathan Thompson. Again, all the background characteristics, sex ($t = -.94, p = .345$), religiosity ($t = .55, p = .581$), and age ($t = -.00, p = .999$), along with Jonathan Thompson being homosexual ($t = -.30, p = .762$), an associate professor ($t = -1.19, p = .233$), or an assistant manager ($t = -.39, p = .698$) were all non-significant findings.

An incremental F-test was conducted to determine whether Model 3 was a better fit for the intimate interaction question relating to HIV stigma than the previous models. The critical F-value for this incremental F-test was $F_{\text{critical}}(5, 967) = 2.223$. The following calculations were computed:

$H_0: R^2_{\text{new}} - R^2_{\text{old}} = 0$

$H_a: R^2_{\text{new}} - R^2_{\text{old}} > 0$

$$F_{\text{obtained}} = \frac{(R^2_{\text{new}} - R^2_{\text{old}}) / (k_1 - k_2)}{(1 - R^2_{\text{new}}) / (N - k_1)} = \frac{(.0305 - .0168) / (10-5)}{(1 - .0305) / (977-10)} = 2.733$$

where k_1 = number of parameters in the new model

where k_2 = number of parameters in the old model

with $(k_1 - k_2)$ and $(N - k_1)$ degrees of freedom

Since the incremental F-test produced a value of 2.733, it was determined that Model 3

was a significantly better fit for the intimate interaction component of the data.

Table 4: Unstandardized Regression Coefficients (Standard Errors) in the Analyses of Avoiding Intimate Interaction with an HIV Positive Person

Variable	Model 1	Model 2	Model 3
<i>Background Characteristics:</i>			
Sex:			
(Male)			
Female	-.067 (.061)	-.065 (.060)	-.057 (.061)
Religiosity	.025 (.024)	.010 (.024)	.013 (.024)
Age	-.002 (.005)	-.001 (.005)	.000 (.005)
HIV Knowledge		-.066* (.017)	-.065* (.017)
<i>Vignette Manipulations:</i>			
Sexual Orientation:			
(Heterosexual)			
Homosexual			-.017 (.056)
Occupation as a Proxy for Class:			
(CEO of Fortune 500 Co.)			
Associate Professor			-.083 (.069)
Assistant Manager			-.027 (.069)
Mode of Contraction:			
(Blood Transfusion)			
Unprotected Sex			.235* (.069)
Intravenous Drug Use			.134* (.068)
Constant	3.379* (.135)	3.762* (.168)	3.644* (.178)
Model Adjusted R ²	-.001	.013	..021

N = 977

* = p < .05, two-tailed test.

DISCUSSION

RESULTS OF HYPOTHESIS TESTS

The purpose of this study was to both build off previous research, while at the same time employing new techniques and rationale, such as vignettes and the social contextual construction of stigma, for explaining HIV stigma. This research entailed examining the differences in levels of HIV stigma based on the manipulated characteristics (sexual orientation, occupation as a proxy for class, and mode of contraction) of Jonathan Thompson, an HIV positive, fictional character. Also, this research explored the degree of HIV knowledge participants possessed and personal identity characteristics (sex, religiosity, and age) of participants to see how they would affect the level of HIV stigma expressed towards Jonathan Thompson.

Hypothesis 1, claiming that differences in levels of HIV stigma would be based on the characteristics of Jonathan Thompson, was tested through examining Model 3. Hypothesis 2, stating that the degree of knowledge participants have of HIV would significantly impact the level of stigma expressed by individuals, was tested in Model 2, and again in Model 3 once the vignette manipulations were added. Lastly, Hypothesis 3, declaring that the personal characteristics of sex, religiosity, and age would affect the level of HIV stigma expressed by participants, was tested in Model 1.

The findings of this research indicate that sex, age, religiosity, HIV knowledge, and mode of contraction all play varying significant roles in the expression of HIV stigma. Therefore, the null hypotheses for Hypothesis 1c, Hypothesis 2, and Hypothesis 3 were all rejected in this research, while the null hypotheses for Hypothesis 1a and Hypothesis 1b were supported.

Hypothesis 1, claiming that the differences in levels of HIV stigma are based on the characteristics of Jonathan Thompson, was only partially supported. Hypothesis 1a, examining Jonathan Thompson's sexual orientation, and Hypothesis 1b, exploring Jonathan Thompson's class status, were not supported by any of the models. There are discrepancies in the literature about the effect of sexual orientation on HIV stigma, so this finding is consistent with that lack of consensus (Bishop et al. 1991; Johnson and Baer 1996; McBride 1998), but class has not been tested as an independent variable so a comparison to the literature cannot be made. However, Hypothesis 1c, looking at how Jonathan Thompson contracted HIV, was supported in some manner in all three elements of HIV stigma. HIV contraction through unprotected sex led to significantly greater stigma in the judgment and blame and intimate interaction segments of HIV stigma, while intravenous drug use led to significantly greater stigma in all three categories of HIV stigma. In both of the above claims, the manipulations of unprotected sex and intravenous drug use were compared to the reference category of blood transfusion. These findings did support those of previous research (Johnson and Baer 1996).

Hypothesis 2, stating that the degree of HIV knowledge on the part of the participants significantly affected the level of HIV stigma expressed by participants, was

supported, by the finding that the higher levels of HIV knowledge resulted in lower levels of HIV stigma across the three components of judgment and blame, personal interaction, and intimate interaction. This finding was consistent with some previous research (Bouton et al. 1989), but inconsistent with other research (Johnson and Baer 1996). Since HIV knowledge was significant across all three components of HIV stigma, this illustrates the critical function HIV education plays in reducing the expression of HIV stigma by students. Therefore, an inventory needs to be done to expand upon this finding and determine what information is and needs to be available and how it can reach students from a multitude of backgrounds.

In addition, HIV knowledge is much more important in Table 3 regarding personal interaction than in Table 2 dealing with judgment and blame. This seems to signify that HIV knowledge surrounds issues of contagion, and therefore relates to personal interaction or contact. Moral judgments and responsibility for a person's HIV positive status only convey limited information regarding contraction and serve more the purpose of social sanctioning rather than health protection. It is logical that HIV knowledge would be more important in the personal interaction regression analysis, because that component of HIV stigma deals with the concrete and physical dealings between people, which are how HIV is contracted.

In general, Hypothesis 3, stating the personal characteristics of sex, age, and religiosity affect the level of HIV stigma expressed by participants, was supported. It was discovered that women expressed less judgment and blame, and were less likely to avoid personal interaction with an HIV positive person, than men were, which is

consistent with some (Herek and Capitanio 1993), but not all the literature (Herek et al. 2005; Johnson and Baer 1996). This outcome proved to be interesting, because it showed there is a sex-based component to HIV stigma that needs to be explored further. Also, older participants had lower levels of judgment and blame than younger participants. Since HIV/AIDS misinformation has increased in the United States since the mid to late 1990's, these findings may be a consequence of this trend and thus exposing the gap in knowledge of the younger population (Herek et al. 2002), but such a conclusion cannot be delineated by the data presented here. This result contradicts previous research by Visser et al. (2006) examining age and HIV stigma in South Africa, but more examination needs to occur to see if culture and geography play a role in this discrepancy.

Finally, the greater the participant's religiosity the more likely they were to harshly judge and blame, as well as avoid personal interaction with someone who was HIV positive. This result was consistent with previous research examining the religiosity of participants (Bouton et al. 1989). This finding is fascinating, because many religions emphasize a need to reserve judgment of people to a higher power, and yet those who were more religious were more judgmental. It appears here that religion may be a barrier that needs to be permeated with HIV education and prevention in order to reduce the overall judgment and blame of HIV positive people in U.S. society. In addition this also raises the question as to whether or not there are differences across the various types of religious affiliations.

In comparing Table 2 and Table 3, the effect size of religiosity decreased for both judgment and blame and personal interaction when the HIV Knowledge Index was added to the regression analysis. This seemed to indicate that religiosity played less of a role when participants had access to knowledge on the subject of HIV. In other words, participants who were more religious might have relied on their belief system to guide them when they were uncertain as to whether they should judge/blame or personally interact with Jonathan Thompson, but they did not rely on it as heavily when other sources of information were available for guidance, such as HIV knowledge. A Pearson's Correlation was calculated between the HIV Knowledge Index and religiosity, and showed a somewhat weak, negative relationship ($r = -.163$). This correlation suggests that a person who is more religious has less HIV knowledge, but this claim would need to be further explored and possess a stronger relationship to determine with any certainty. However, this finding may help advocate for accurate HIV education in religious communities, without making these communities feel their belief systems and/or practices are being threatened.

The outcomes in the judgment and blame category are intriguing, because participants attribute fault only to Jonathan Thompson's actions and not his social standing or sexual preferences. The circumstances presented seem to create a "You did this to yourself, so it's your problem" mentality, thus potentially exposing the individualistic tendencies of U.S. society and its response to health crises. However, an alternative interpretation of these findings could be that they are acting as an

encouragement for people to be held responsible for their actions. Further exploration is required to more concretely determine the intent.

The personal interaction component of HIV stigma illustrated a differentiation of stigma in response to risk behaviors. Participants did not want to be associated with an intravenous drug user, so they felt it was acceptable to ostracize an individual who obtained HIV through such a means. However, participants seemed to have more mixed feelings about interacting with a person who got HIV through unprotected sex, perhaps because they could better relate to such circumstances. Therefore, it appears that participants may have situated themselves relative to the fictional character, and then decided the degree of personal interaction they would engage in based on where they stood.

Finally, the intimate interaction element of HIV stigma showed that both HIV knowledge and whether Jonathan Thompson contracted HIV through unprotected sex or intravenous drug use significantly influence whether or not participants would avoid an intimate (dating) relationship with someone like Jonathan Thompson. This finding is supported by previous literature, where Visser et al. (2006) found that “72% [of respondents] would not date someone with HIV, [therefore indicating] the closer the contact the stronger [the] negative response” (p.50). Participants showed an understanding that with intimacy come higher risks of contracting HIV when one’s partner is HIV positive. Also, participants showed an increase of stigma towards an HIV positive person who contracted HIV through unprotected sex or intravenous drug use,

because they likely had concerns for their own health and overall well-being and did not want to jeopardize that.

However, it appears that the intimate interaction component of HIV stigma may have an interesting disconnect between HIV knowledge and the manipulations where Jonathan Thompson contracted HIV through unprotected sex or intravenous drug use, though this was not tested specifically. Participants with the most knowledge probably understood that all intimacy does not automatically equate to an HIV positive status, and yet significant levels of stigma were expressed towards Jonathan Thompson when he contracted HIV through intravenous drug use or unprotected sex. It seems logical to conclude that when it comes to participants' own intimate lives they choose to avoid people who contracted HIV from unprotected sex or intravenous drug use, because such people have engaged in risk behaviors they are either not interested in or are afraid of in some respect. Further exploration is necessary to fully flesh out this outcome, however, because the specific interaction effect of HIV knowledge and stigma due to method of contraction was not tested. The initial findings presented in this report though, do provide a confirmation that HIV positive people tend to be isolated and/or rejected from the society, even when the public is educated, but the reason for why this occurs needs to be exposed.

Through the investigation of such stigma in a college setting, I hope that insight was formed in how the social environment and context as experienced by college students can be reshaped to facilitate healthier practices and genuine concern for the well-being of humanity. Furthermore, I hope that by promoting more beneficial responses

among individuals and groups on campus, students will be more inclined to get tested and take care of those who are already infected or affected by the illness.

LIMITATIONS OF THIS RESEARCH

This research proved to have several limitations. To start, the sample presented in this study was by no means representative of the entire U.S. population. It was limited to undergraduate college students at a metropolitan university in the mid-Atlantic region. Consequently, this research is reflective of a particular region, age group, and education level of the United States. Multiple studies need to be conducted in a variety of areas and compared in order to overcome issues relating to geographic location, age, and education level.

Methodologically there existed two limitations in the construction of the survey instrument. Foremost, the vignettes themselves only examined a male fictional character with no race specified. Manipulating the race and gender of the vignette character may shed light on the intricacies of HIV stigma and help move towards a more comprehensive definition and measure of HIV stigma. This project was limited in order not to overcomplicate the first phase of investigation, but later phases of examination need to include manipulations for race and gender. Secondly, the intimate interaction measure, though an unexpected finding, only partially explained the concept, because it only consisted of one survey question. An entire measure needs to be developed in order to fully uncover the nuanced complexity of intimate interaction and its role in HIV stigma.

FUTURE DIRECTIONS

The possibilities are endless for new directions in HIV stigma research. Since there is still no one definition and explanation of HIV stigma, new bodies of research are needed in order to conceptually develop a clear understanding of what it truly means. As previous research has shown, current definitions of HIV stigma are conflated and overly narrow, thus not taking into account the complexities of human existence (Deacon et al. 2005; Visser et al. 2006). It may be most effective to develop multiple dynamic definitions of HIV stigma that are sensitive to cultural context, geographic location, time, and socioeconomic and political circumstances.

Further, a research base needs to be developed and used for advocacy and intervention. Too often advocacy and intervention shape the research, which may limit the possibilities of the research and the insights it could uncover (Chan and Reidpath 2005b). Also, it would be intriguing to examine how power and control structures play a role in HIV/AIDS stigma, and to consider social mobilization and empowerment of those stigmatized as advocacy plans for combating the issue (Parker and Aggleton 2003). This research focused only on the person who does the stigmatizing, but understanding both the recipient as well as the placer of stigma would also uncover how stigma may be internalized and perpetuated within the HIV positive community.

Research also needs to be conducted looking beyond a college population. Even though this research did not find the manipulations for sexual orientation and class to be significant in a college setting, they may prove to be significant in other contexts where attitudes and perspectives of the general population can be measured. More specifically,

in accordance with the work of Herek et al. (2005), HIV transmission needs to be discussed in communities with high sexual prejudice, particularly against homosexuality, because systems of HIV/AIDS stigma are based mainly on moral judgments and not general political beliefs or positions. The same could potentially be said about communities with large class divisions and/or tensions though no literature explores such a claim. HIV stigma in the academic setting may possess different features than that in particular communities, states, or the nation as a whole. A multitude of contexts should be studied in order to best inform the literature and HIV/AIDS advocates, practitioners, and educators.

Furthermore, a one-size-fits-all model of HIV stigma will not help solve the issues faced by culturally diverse communities in the United States and globally. Over-generalization and mass implementation of interventions will only do a disservice to the cause. By focusing on variations as well as commonalities between communities, researchers can uncover more meaningful information that can be utilized for more productive and beneficial interventions (Deacon et al. 2005).

Finally, much of the HIV stigma research in the United States does not recognize the cultural and contextual and how they impact “key areas of everyday life” (Chan and Reidpath 2005a:S209). This is problematic, because such an oversight leads researchers, policy makers, and advocates in the wrong direction, looking at aspects of the phenomenon that may not be relevant. Furthermore, by not taking culture and context into consideration, the people of the United States are ignoring the multicultural nature and geography of their country. Confronting HIV stigma requires that resources,

dialogues, and programs address the unique ways HIV affects the multitude of diverse communities that exist in the United States. Also, a shift needs to be made away from a solely psychological, individualistic, and functionalist model of examination to a sociological and relational model (Deacon et al. 2005). Humans do not exist as isolated beings, so it is critical to explore how social interactions, environments, and structures shape the formation and maintenance of HIV stigma.

There are further steps that also need to be taken methodologically in order to foster the progress of work surrounding HIV stigma. Use of the vignette technique in large-scale HIV/AIDS studies may help reduce the threat felt by ambiguous, personal, and often prying questions, while also still giving participants a context in which to answer. Also, researchers may want to explore HIV stigma utilizing qualitative methodologies, so that they can ask participants why those who contract HIV through unprotected sex or intravenous drug use are judged and blame so greatly. The questions asked in this research only point to the notion that this occurs, but do not explain it. It might be interesting to find out whether or not people ask what led the HIV positive person to unprotected sex or intravenous drug use, and if they do not ask then find out if they assume that the HIV positive person's actions are just signs of individual mistakes and shortcomings rather than larger societal/institutional influences. Moreover, it may be beneficial to explore the use of online techniques for surveying. This research received a relatively high response rate, which may be attributed to the confidentiality, and complete objectivity a machine like the computer can only provide or the familiarity of the sample with the technology. Further research could determine which or if both of the above

conjectures are the case, and produce literature that could best inform research techniques based on the population being studied.

Lastly, as mentioned previously, a measure for intimate interaction needs to be developed. Since I received significance for this factor in my survey, with only one question, it is likely that intimate interaction is a larger issue that needs to be delved into further. Understanding how people view intimacy with an HIV positive partner may help uncover an entirely new aspect of HIV stigma that is necessary to understand for prevention, treatment, and education programs.

CONCLUDING REMARKS

The contribution of this work to the study of HIV stigma spans both the methodological and conceptual. Methodologically speaking, this research has shown the utility of vignettes in creating a concrete and more realistic context to measure HIV stigma. Herek et al. (2005) are the only other researchers who have utilized scenarios that somewhat mirror vignettes, but their research focused primarily on the symbolic stigma of AIDS as it relates to sexual transmission, rather than the larger notion of HIV stigma. The vignette technique is a novel way to do work surrounding HIV stigma. Though the use of vignettes has been suggested for application in HIV research (Hughes 1998), it has yet to be used for this specific purpose until now. Further use of vignette techniques in HIV/AIDS stigma research could potentially lead to new breakthroughs in the field, while also preventing some of the social desirability effects present in vague and personal survey questions.

Conceptually, this research has made efforts to understand the intricacies of HIV stigma, by replicating previous research regarding its different components (Visser et al. 2006), while also adding a situational aspect upon which participants can base their answers. Additionally, this research uncovered an intimacy factor to HIV stigma, which has only been mentioned marginally in previous literature (Visser et al. 2006), and seems to play an important and central role that requires further investigation. When participants across identity characteristics are reluctant to engage intimately with an HIV positive person, this indicates a distancing process that keeps HIV stigma strong and rooted. By revealing the intimacy characteristic of HIV stigma, this research has opened up a whole new avenue for research and the conceptualization of the phenomenon.

This research on HIV stigma aimed to reach an improved understanding of how sex, religiosity, age, and HIV knowledge relate to HIV stigma, while also determining which characteristics of an HIV positive person are most stigmatized. Such information can help enlighten advocates, healthcare providers and educators about what may be inhibiting students from seeking out their services, while also providing student reported information as a tool to examine what areas of existing HIV programming, events, and support systems need to be modified or rejuvenated. Since this research worked to create the least threatening forum for student response by utilizing vignettes and no identifiable data, it is believed that this research created a unique glimpse into the social environmental context surrounding individual HIV stigma at George Mason University.

APPENDIX A

Vignettes (Each participant will receive 1 of these 18 vignettes to read)

Please read the following vignette and answer the questions on the following pages. Please be sure to read the vignette carefully and completely, in order to provide the best answers for the survey questions.

Example #1a:

Jonathan Thompson is a young man, who is known by friends, family, coworkers, and his partner Aaron for being charismatic, thoughtful, and hard-working. He is employed at a local fast-food chain as an assistant manager, and is struggling to make ends meet. After a routine physical at an adult health clinic, Jonathan discovers he is HIV positive. Jonathan has a history of intravenous (needle) drug use, particularly heroin, and he will need an expensive drug therapy to keep him alive. Jonathan never thought something like this could happen to him.

Example #1b:

Jonathan Thompson is a young man, who is known by friends, family, coworkers, and his partner Aaron for being charismatic, thoughtful, and hard-working. He is employed at a local fast-food chain as an assistant manager, and is struggling to make ends meet. After a routine physical at an adult health clinic, Jonathan discovers he is HIV positive. Jonathan has a history of unprotected sex with multiple partners, and he will need an expensive drug therapy to keep him alive. Jonathan never thought something like this could happen to him.

Example #1c:

Jonathan Thompson is a young man, who is known by friends, family, coworkers, and his partner Aaron for being charismatic, thoughtful, and hard-working. He is employed at a local fast-food chain as an assistant manager, and is struggling to make ends meet. After a routine physical at an adult health clinic, Jonathan discovers he is HIV positive. Jonathan has a history of blood transfusions early in his life, and he will need an expensive drug therapy to keep him alive. Jonathan never thought something like this could happen to him.

Example #1d:

Jonathan Thompson is a young man, who is known by friends, family, coworkers, and his girlfriend Ashley for being charismatic, thoughtful, and hard-working. He is employed at

a local fast-food chain as an assistant manager, and is struggling to make ends meet. After a routine physical at an adult health clinic, Jonathan discovers he is HIV positive. Jonathan has a history of intravenous (needle) drug use, particularly heroin, and he will need an expensive drug therapy to keep him alive. Jonathan never thought something like this could happen to him.

Example #1e:

Jonathan Thompson is a young man, who is known by friends, family, coworkers, and his girlfriend Ashley for being charismatic, thoughtful, and hard-working. He is employed at a local fast-food chain as an assistant manager, and is struggling to make ends meet. After a routine physical at an adult health clinic, Jonathan discovers he is HIV positive. Jonathan has a history of unprotected sex with multiple partners, and he will need an expensive drug therapy to keep him alive. Jonathan never thought something like this could happen to him.

Example #1f:

Jonathan Thompson is a young man, who is known by friends, family, coworkers, and his girlfriend Ashley for being charismatic, thoughtful, and hard-working. He is employed at a local fast-food chain as an assistant manager, and is struggling to make ends meet. After a routine physical at an adult health clinic, Jonathan discovers he is HIV positive. Jonathan has a history of blood transfusions early in his life, and he will need an expensive drug therapy to keep him alive. Jonathan never thought something like this could happen to him.

Example #2a:

Jonathan Thompson is a young man, who is known by friends, family, coworkers, and his girlfriend Ashley for being charismatic, thoughtful, and hard-working. He is employed at a Fortune 500 Corporation as the Chief Executive Officer (CEO), and is making more than enough to support himself and to participate in various leisure activities. After a routine physical at an adult health clinic, Jonathan discovers he is HIV positive. Jonathan has a history of intravenous (needle) drug use, particularly heroin, and he will need an expensive drug therapy to keep him alive. Jonathan never thought something like this could happen to him.

Example #2b:

Jonathan Thompson is a young man, who is known by friends, family, coworkers, and his girlfriend Ashley for being charismatic, thoughtful, and hard-working. He is employed at a Fortune 500 Corporation as the Chief Executive Officer (CEO), and is making more than enough to support himself and to participate in various leisure activities. After a

routine physical at an adult health clinic, Jonathan discovers he is HIV positive. Jonathan has a history of unprotected sex with multiple partners, and he will need an expensive drug therapy to keep him alive. Jonathan never thought something like this could happen to him.

Example #2c:

Jonathan Thompson is a young man, who is known by friends, family, coworkers, and his girlfriend Ashley for being charismatic, thoughtful, and hard-working. He is employed at a Fortune 500 Corporation as the Chief Executive Officer (CEO), and is making more than enough to support himself and to participate in various leisure activities. After a routine physical at an adult health clinic, Jonathan discovers he is HIV positive. Jonathan has a history of blood transfusions early in his life, and he will need an expensive drug therapy to keep him alive. Jonathan never thought something like this could happen to him.

Example #2d:

Jonathan Thompson is a young man, who is known by friends, family, coworkers, and his partner Aaron for being charismatic, thoughtful, and hard-working. He is employed at a Fortune 500 Corporation as the Chief Executive Officer (CEO), and is making more than enough to support himself and to participate in various leisure activities. After a routine physical at an adult health clinic, Jonathan discovers he is HIV positive. Jonathan has a history of intravenous (needle) drug use, particularly heroin, and he will need an expensive drug therapy to keep him alive. Jonathan never thought something like this could happen to him.

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physical at an adult health clinic, Jonathan discovers he is HIV positive. Jonathan has a history of blood transfusions early in his life, and he will need an expensive drug therapy to keep him alive. Jonathan never thought something like this could happen to him.

Example #3a:

Jonathan Thompson is a young man, who is known by friends, family, coworkers, and his partner Aaron for being charismatic, thoughtful, and hard-working. He is employed at a state university as an associate professor, and is making enough to accommodate a comfortable lifestyle. After a routine physical at an adult health clinic, Jonathan discovers he is HIV positive. Jonathan has a history of intravenous (needle) drug use, particularly heroin, and he will need an expensive drug therapy to keep him alive. Jonathan never thought something like this could happen to him.

Example #3b:

Jonathan Thompson is a young man, who is known by friends, family, coworkers, and his partner Aaron for being charismatic, thoughtful, and hard-working. He is employed at a state university as an associate professor, and is making enough to accommodate a comfortable lifestyle. After a routine physical at an adult health clinic, Jonathan discovers he is HIV positive. Jonathan has a history of unprotected sex with multiple partners, and he will need an expensive drug therapy to keep him alive. Jonathan never thought something like this could happen to him.

Example #3c:

Jonathan Thompson is a young man, who is known by friends, family, coworkers, and his partner Aaron for being charismatic, thoughtful, and hard-working. He is employed at a state university as an associate professor, and is making enough to accommodate a comfortable lifestyle. After a routine physical at an adult health clinic, Jonathan discovers he is HIV positive. Jonathan has a history of blood transfusions early in his life, and he will need an expensive drug therapy to keep him alive. Jonathan never thought something like this could happen to him.

Example #3d:

Jonathan Thompson is a young man, who is known by friends, family, coworkers, and his girlfriend Ashley for being charismatic, thoughtful, and hard-working. He is employed at a state university as an associate professor, and is making enough to accommodate a comfortable lifestyle. After a routine physical at an adult health clinic, Jonathan discovers he is HIV positive. Jonathan has a history of intravenous (needle) drug use, particularly heroin, and he will need an expensive drug therapy to keep him alive. Jonathan never thought something like this could happen to him.

Example #3e:

Jonathan Thompson is a young man, who is known by friends, family, coworkers, and his girlfriend Ashley for being charismatic, thoughtful, and hard-working. He is employed at a state university as an associate professor, and is making enough to accommodate a comfortable lifestyle. After a routine physical at an adult health clinic, Jonathan discovers he is HIV positive. Jonathan has a history of unprotected sex with multiple partners, and he will need an expensive drug therapy to keep him alive. Jonathan never thought something like this could happen to him.

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Jonathan Thompson is a young man, who is known by friends, family, coworkers, and his girlfriend Ashley for being charismatic, thoughtful, and hard-working. He is employed at a state university as an associate professor, and is making enough to accommodate a comfortable lifestyle. After a routine physical at an adult health clinic, Jonathan discovers he is HIV positive. Jonathan has a history of blood transfusions early in his life, and he will need an expensive drug therapy to keep him alive. Jonathan never thought something like this could happen to him.

Key:

Variable 1 = sexual orientation (homosexual = partner, heterosexual = girlfriend)

Variable 2 = occupation as a proxy for class (lower, middle, upper)

Variable 3 = mode of contraction (intravenous drug use, unsafe sex, blood transfusion)

APPENDIX B

Personal Interaction and Judgment & Blame Scales (Visser, Makin, & Lehoby, 2006)--Revised

The questions you are about to answer concern your opinions about personal interactions with people who have HIV/AIDS. Please select the **ONE** answer that best represents your beliefs.

	1 Very Much	2 Somewhat	3 A little	4 Not at All
❖ To what extent would you be ...				
1) Comfortable around Jonathan Thompson?			1 2 3 4	
2) Afraid to be around Jonathan Thompson?			1 2 3 4	
3) A firm believer that Jonathan Thompson should <u>NOT</u> take care of other people's children?			1 2 3 4	
4) Willing to date a person in Jonathan Thompson's position if it was known that the person had HIV?			1 2 3 4	
5) Willing to stay friends with someone like Jonathan Thompson, knowing his or her HIV status?			1 2 3 4	
6) Likely to be upset if Jonathan Thompson moved next door to you?			1 2 3 4	

This section of questions looks at how you may perceive Jonathan Thompson. Please select the **ONE** response that best illustrates your opinion.

1	2	3	4	5	6
Very True	True	Somewhat True	Somewhat False	False	Very False

❖ How true is it that ...

- | | | | | | | |
|--|---|---|---|---|---|---|
| 1) HIV is punishment for Jonathan Thompson's bad behavior? | 1 | 2 | 3 | 4 | 5 | 6 |
| 2) Jonathan Thompson should <u>NOT</u> feel ashamed for having HIV? | 1 | 2 | 3 | 4 | 5 | 6 |
| 3) Jonathan Thompson got what he deserved? | 1 | 2 | 3 | 4 | 5 | 6 |
| 4) Jonathan Thompson only has himself to blame? | 1 | 2 | 3 | 4 | 5 | 6 |
| 5) Jonathan Thompson is still of good moral character? | 1 | 2 | 3 | 4 | 5 | 6 |

APPENDIX C

AIDS Knowledge and Attitudes Supplement (U.S. Department of Health and Human Services, 1995)

The following questions are asking about HIV/AIDS infection. Please select **ONE** answer from the options provided.

1	2	3	4	5
Very Likely	Somewhat Likely	Somewhat Unlikely	Definitely Not Possible	Don't Know

❖ How likely do you think it is that a person will get HIV/AIDS from:

- | | | | | | |
|---|---|---|---|---|---|
| 1) Using public toilets? | 1 | 2 | 3 | 4 | 5 |
| 2) Working near or with someone who has HIV/AIDS? | 1 | 2 | 3 | 4 | 5 |
| 3) Sharing plates, forks, glasses, or any other eating utensils with someone with HIV/AIDS? | 1 | 2 | 3 | 4 | 5 |
| 4) Sharing needles for drug use with someone who has HIV/AIDS? | 1 | 2 | 3 | 4 | 5 |
| 5) Being coughed or sneezed on by someone who has HIV/AIDS? | 1 | 2 | 3 | 4 | 5 |
| 6) Attending school with another person who has HIV/AIDS? | 1 | 2 | 3 | 4 | 5 |
| 7) Kissing, hugging, or holding hands with someone who has HIV/AIDS? | 1 | 2 | 3 | 4 | 5 |
| 8) Having unprotected sex (meaning without a condom) with someone who has HIV/AIDS? | 1 | 2 | 3 | 4 | 5 |
| 9) Mosquito bites? | 1 | 2 | 3 | 4 | 5 |

APPENDIX D

Demographics

This last part of the survey concerns some basic information about your background. All information provided will be kept strictly confidential.

1) Have you ever known anyone personally who had HIV/AIDS?

- Yes
- No
- Unsure

2) Including yourself, do you know anyone who has ever been tested for HIV, either using blood or an oral swab (no blood) test?

- Yes
- No
- Unsure

3) Age: _____

4) Year in College:

- Freshman Junior Other (please specify): _____
- Sophomore Senior

5) How would you describe your racial/ethnic identity (Select all that apply)?

- African/African-American/Black/Caribbean Heritage
- Asian/Asian-American/Pacific Islander Heritage
- Indigenous/Native American Heritage
- Arab/Arab-American/Middle Eastern Heritage
- Caucasian/White/European Heritage

- Latino or Latina/Chicano or Chicana/Hispanic Heritage
- Bi-racial/Bi-ethnic
- Multi-racial/Multi-ethnic

6) What is your religious affiliation if any:

7) How religious do you consider yourself to be?

- Extremely Religious
- Religious
- Somewhat Religious
- Not Very Religious
- Not Religious at All

8) What was your biological sex at birth?

- Male
- Female

9) How would you describe your gender identity?

- Male
- Female
- Transgender
- Gender Queer
- None of these apply to me

10) How would you describe your sexual orientation?

- Heterosexual
- Bisexual
- Homosexual
- Asexual
- Pansexual

11) How would you describe your class status?

- Upper class/Owning class/More than enough resources
- Middle class/ Enough resources
- Working class/Less than enough resources
- Working-poor/Poor

12) Please feel free to share any comments, concerns, or questions either with the researcher or in the following space on this page.

Thank you for your participation!

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CURRICULUM VITAE

Victoria J. Watson graduated from Nashua Senior High School, in Nashua, New Hampshire in 2001. She earned her Bachelor of Arts Degree in Psychology in May of 2005 from George Mason University. Victoria attended the University of Massachusetts Lowell for one year working towards a Master Degree in Community Social Psychology before transferring to George Mason University to pursue a Master Degree in Sociology. As an undergraduate Victoria completed the Honors Program in General Education and the Honors Program in Psychology, and upon graduation received the awards of Outstanding Undergraduate Researcher and Outstanding Scholar from the Department of Psychology. Through the course of her graduate studies, Victoria won the 2006-2007 Outstanding Graduate Student Paper Award from the Society for the Study of Social Problems (SSSP) Racial and Ethnic Minorities Division. Victoria presented this paper, as her first professional paper presentation, at the Student Award Winning Papers I Session during the 57th SSSP Annual Meeting in New York City. She also was awarded the 2008 Outstanding Sociology Graduate Student Award at George Mason University. Victoria has served three years as a Graduate Teaching Assistant at both the University of Massachusetts Lowell and George Mason University. She taught her first college-level class in the Spring of 2008 at Northern Virginia Community College- Woodbridge Campus through the new Teaching Fellows Program. Victoria will begin the Doctor of Philosophy Program in Sociology at the University of Connecticut starting in the Fall of 2008, where she will serve as a full-time Graduate Assistant.