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HIV Restitution:

Using Vengeance to Explain Nondisclosure and Transmission to Others

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ABSTRACT

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Using Vengeance to Explain Nondisclosure and Transmission to Others

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Research suggests that there exists in some homosexual men a moral push towards the disclosure of their HIV serostatus; yet, does an antithetical, individualistic, and self-oriented movement that searches for restitution for HIV infection exist in others? The following study tested the influence of vengeance, hostility, anger, and other negative traits over serostatus disclosure, nondisclosure, and HIV transmission to others. Using a survey posted on the Internet, 102 HIV-negative gay men and 106 HIV-positive gay men were asked to indicate their basic levels of the abovementioned outward-focused negative emotions as well as their sexual and health behaviors. From this information, I compared the two groups with respect to the prevalence of these psychological traits, the behaviors they provoked, and their influence over theoretical and actual disclosure and nondisclosure. Results initially suggested that though both groups of men did not differ with respect to the prevalence of negative traits, HIV-positive men were less communicative about their disease and more willing to justify its nondisclosure. Also, the ability for HIV-positive men to understand and verify their HIV transmission event helped diminish vengeance and hostility over time. And vengeance negatively influenced disclosure and positively influenced nondisclosure among seropositive men. Finally, vengeance was positively related to HIV transmission to others, where more vengeful seropositive men were *exponentially* more likely to have spread HIV to other gay men.

Acknowledgements

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Thank you all, and now, it is time that I begin.

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Chapter 1. Executive Summary

Recent studies suggest that of gay men who are HIV-positive, only between 42% and 48% report disclosing their serostatus to sexual partners before engaging in unprotected intercourse (Ciccarone et al., 2003; Marks & Crepaz, 2003). Though it would seem a sense of conscience or in-group protection might encourage a higher percentage towards disclosure, in actuality, disclosure rates are slightly lower than chance (lower than 50%). Naturally, there are many factors that coalesce to influence the decision to admit or conceal serostatus. Variables like CD4 counts, age, proximity to death of the seropositive individual, role of the recipient, cultural identity, and sense of morality have been suggested as correlates of HIV admission or concealment (Mason et al., 1995; O'Brien et al., 2003; Parsons et al., 2005; Serovich, Esbensen, & Mason, 2005). Yet, omitted from these studies are the effects of vengeance, anger, unfairness, and injustice associated with becoming seropositive on disclosure or nondisclosure. The following dissertation attempts to fill this gap in HIV communications and behavioral research. This first chapter will summarize the proceeding chapters and highlight their most important points.

The Warrant

To begin my study, I explored the current research on HIV disclosure, on victimization, and then I used that exploration to posit new directions for, and new links between those communication and psychological variables.

On disclosure. There are a cluster of studies that describe the variables that are correlated with HIV admission and a cluster that indicate the ways in which serostatus disclosures are accomplished. I divided my survey of the research accordingly. First, predictors of disclosure to casual and main partners were presented. The most notable pieces of literature in this section

explain that the strongest predictors of HIV disclosure to casual partners are self-efficacy and outcome-efficacy (Kalichman & Nachimson, 1999; Stirratt, 2006), and to main partners, senses of urgency and trying to increase emotional intimacy (O'Brien et al., 2003; Stirratt). After this, I reported the research on methods of disclosing a serostatus. Of the methods employed by gay men, the most widely used include verbal admissions, indirect admissions like leaving medications out for display, and/or relying on the stereotypes of seropositive and seronegative men as indicators (Stirratt). To conclude this portion of the introduction I briefly discussed the role of, and difficulties associated with HIV disclosure on Altman and Taylor's (1973) social penetration theory.

On victimization. The research into victimization then followed. I discussed the societal and individual meanings of victimization, and the correlates of being victimized such as negative emotional states, desires for restitution, equity loss, and deindividuation. Victimization is when another or others pilfer equity, where equity can take the form of a television set, money, human life, etc; and this theft of material or life is felt by individuals and by society (Morris, 1968). Restitution is required to fill the debt created by the crime (Hershenov, 1999). Victims of crimes go through stages and eventually, they end up accepting what has happened to them. But during this period, victims are likely to behave negatively or brashly, and endure negative mood states (Bard & Sangery, 1986). They may deindividualize others to exact revenge or attempt to restore equity through third parties (Austin & Walster, 1975; Zimbardo, 1969). Using this research, I established research questions and hypotheses that assessed the role of victimization in HIV disclosure and HIV-related behaviors.

New directions. Through the abovementioned theories I established that, at least to the seroconvert, to become HIV-positive is to become a victim. Malignant psychology begins to

govern mood and interactions are likely to reflect a perceived sense of injustice. That is, negative traits are more likely to emerge. In this last portion of the introduction, I posited 14 hypotheses with respect to the behaviors and tendencies between and within the groups of seropositive and seronegative men. Some of these included that HIV-positive and HIV-negative men would differ on negative traits associated with victimization. HIV-positive men would be less communicative about their disease and more willing to justify its nondisclosure. HIV-positive men who were more certain of how they acquired the disease would be less vengeful. Vengeance would negatively influence disclosure and positively influence nondisclosure among seropositive men. And also, vengeance would be positively related to HIV transmission to others. After this introduction, I began presenting my study.

Procedures and Methods

I opted for using an online survey to measure the hypotheses in my study. This online survey allowed me to reach into communities all over the world and solicit gay, seronegative and seropositive participants, thus increasing geographic and ethnic diversity. Participants indicated that the survey took between 20 and 30 minutes to complete. The initial sample consisted of 219 individuals who had completed the questionnaire in its entirety. Of these individuals, 46.6% reported being seronegative (n = 102), 48.4% seropositive (n = 106), and 5.0% sero-unknown (n = 11). I omitted these sero-unknown men from further analyses. On only three demographic variables were HIV-negative and HIV-positive men different (i.e., on age, income, and education). None of the variables was deemed detrimental to the validity of the study.

I used the following measures to answer my research questions. To test negative traits, I used four preexisting scales on vengeance, physical aggression, hostility, and anger. Other

preexisting scales that were used measured beliefs in a just world and responsibility ascription. When scales could not be found, I created my own. This occurred for testing: commitment to partners, willingness to disclose sexual health information, and willingness to justify nondisclosure. There were some scales and measures that were created specifically for the HIV-positive sample such as: time since diagnosis, HIV transmission event certainty, and likelihood of transmitting HIV to others. I measured individuals' desires to enact, and their actual enactment of 21 sexual behaviors. And finally, I measured the degree to which both groups of men practice protected intercourse, and for the seropositive men, the degree to which they also disclosed their serostatus to main, casual, and anonymous partners. No coding or special formatting was performed on the data after these measurements were made.

Results

There were ultimately 14 hypotheses that were tested in the results chapter. The data were statistically analyzed with ANOVA, bivariate correlations, multiple regression, and moderated regression. I will describe the main results of each hypothesis.

Differences in psychological and sexual behavior by serostatus. Though it was thought that HIV-negative and HIV-positive men would differ with respect to negative traits, the results suggested no difference between the two groups. They did however differ with respect to sexual behavior. As predicted, seropositive men indeed had more oral and anal intercourse partners in a given year, and they engaged in more unprotected anal intercourse than seronegative men. Also, they were more likely to sexually actualize than the seronegative group. That is, their desired sexual behaviors were more correlated with their enacted sexual behaviors.

Differences among seropositive men. These hypotheses clustered around how the HIV-positive men became infected and the degree to which they were certain about the events that led

to the seroconversion. It was hypothesized that the transmission method of HIV would impact both negative traits and HIV event certainty. Both were disconfirmed. Whether transmitted through anal, oral, or other sexual contact, men were no more likely to exhibit the negative traits nor were they any more certain about how they acquired it. However, with respect to certainty, an interesting interaction emerged where, as time since the HIV diagnosis transpired, men who were more certain of how they had acquired HIV showed decreasing levels of vengeance and hostility. This was not true of men with low HIV event certainty.

Intergroup disclosure differences. I tested the differences between the groups with respect to willingness to disclose sexual health information and willingness to justify nondisclosure. As predicted, HIV-negative men were more willing to disclose their sexual health information to partners and markedly less willing to justify the nondisclosure of HIV. Also, results confirmed that serostatus moderated the relationship between vengeance and nondisclosure where seropositive men who were more vengeful were more likely to justify HIV concealment than vengeful seronegative men. No other *negative* trait variable moderated this relationship; yet, for the variable, responsibility ascription, moderated regression was successful. HIV-positive men who were less personally responsible were more likely to justify nondisclosure than HIV-negative men who were less personally responsible.

Disclosure differences within HIV-positive men. I started by testing the degree to which adhering to a regiment of antiretroviral medications influenced both actual and theoretical disclosure. Though medicating men were indeed more willing to disclose sexual health information and less willing to justify nondisclosure, they were no more likely than their non-medicating counterparts to actually disclose their serostatus to main, casual, or anonymous partners. Second, I tested time since diagnosis on disclosure. Contrary to my hypothesis, time

since diagnosis actually increased the willingness to disclose sexual health information; and with respect to nondisclosure and actual disclosures to main, casual, and anonymous partners, only disclosures to main partners increased with time since diagnosis. Then, I tested the influence of negative traits on actual disclosure. As predicted, vengeance was negatively related to disclosures to casual and anonymous partners, and physical aggression was negatively correlated with disclosures to main and casual partners. Hostility and anger were not correlated with any type of disclosure. Finally, with respect to disclosure, I tested men's commitment to partners on disclosure to the three types of partners. As predicted, HIV-positive men who preferred commitment-oriented relationships were more likely to disclose to casual and anonymous partners.

The last bank of hypotheses concerned differences between seropositive men and whether they had spread HIV to others. Though I posited that men who harbor more negative traits would have transmitted HIV to others, only with respect to vengeance did the relationship ensue. Hostility, anger, and physical aggression did not correlate with transmission to others. Willingness to disclose sexual health information was negatively correlated with transmission to others, and willingness to justify nondisclosure was positively correlated with the variable. And finally, a strong, unpredicted, positive curvilinear relationship existed between responsibility ascription and transmission to others, where both HIV-positive men who either strongly held or strongly eschewed personal responsibility were likely to have infected others with the disease.

Discussion

To a large degree, many of the hypotheses posited were confirmed. And where the hypotheses were disconfirmed with respect to the relationships between *some* of these negative traits, group prevalence, and disclosure, the predicted model of vengeance influencing behavior

and attitudes emerged within the group of seropositive men (especially within those self-reported as highly vengeful). In the discussion chapter, I made conclusions about the results and suggested limitations of the study, of which I will now present the most meaningful.

Conclusions. I reasoned HIV transmission as a transgression, and as such, an event that creates a victim out of the seroconvert. However, in conclusion, this idea was incorrect. HIV may not be influential over pushing an individual into negative psychological states; or broadly, it may not be enough of a life-intervention to instill a sense of victimization in individuals. I concluded in this section that an HIV-positive diagnosis in 2007 might indeed have lost its severity and its significance. Then I turned to how certain individuals were of their transmission event as an independent variable. The results showed that over time understanding the transmission event related to a decrease in negative trait prevalence. I surmised that reconciliation and comprehension were indeed important in changing negative states in seropositive men. Men who remained uncertain about the events leading up to their seroconversion showed no movement in vengefulness or hostility over time. So, ostensibly this unknown creates personal and emotional barriers blocking psychological changes and the likelihood of positive trait orientations (i.e., being more forgiving, compassionate, or agreeable).

Conclusions were also made about HIV disclosure and transmission to others. Vengeance was indeed negatively related to disclosure to casual and anonymous partners; and physical aggression was negatively related to disclosure to casual and main partners. Though it would have strengthened the argument even more if all the negative traits and psychological correlates of retaliation and restitution would diminish the likelihood of disclosure, the two most important traits of the four emerged as good predictors—vengeance and physical aggression, or more tangibly, wanting to punish another and being the sort of person who actually punishes others. I

concluded the influence of these negative traits over disclosure supports nondisclosure as being a probable weapon for revenge. Last, the transmission to others measure produced a significant model when using vengeance as its predictor. And as suggested by research, vengeance is the most important construct for the concepts of retaliation and restitution (Stuckless & Goranson, 1992). A curvilinear effect was produced where, as seropositive individuals exhibited progressively greater amounts of vengeance; they were exponentially more likely to have infected other individuals with HIV. I concluded that transmission to others indeed played a part in restitution and vengeance actualization.

Limitations. Of the several limitations to this study I presented, the following was the most problematic. To test the hypotheses, I relied on self-report. Yet it has been established that HIV disclosure and nondisclosure can both be equally taboo depending on the environment (Halkitis & Wilton, 2006), but knowingly concealing a seropositive status is ultimately illegal (ACLU, 2004). As such I admitted to the possibility that surveying seropositive individuals may have proved insufficient as methodology, and useless in circumventing actual and psychological self-preservation and impression management. So though individuals may not have disclosed their status to partners, it may have proved unlikely that they admitted to this on the survey. In short, I stated that there remained the likelihood that individuals inflated the degree to which they disclosed their serostatus, practiced safe sex, and took preventing the spread of the disease as a personal responsibility.

Implications

In this concluding chapter I discussed how the data and results have great reach into the greater seropositive and seronegative communities. I also suggested and discussed future directions for the research. The following are the most important highlights from this last section.

General implications. I claimed the strongest implication from the study was the recognition of a vengeful minority. This study did to a varying degree deconstruct vengeance within seropositive men. For example, it was found that men's certainty with respect to how HIV was acquired decreased the tendency to be vengeful over time; and less vengeance was likely to produce more instances of serostatus disclosure and fewer actual seroconversions. I suggested that in the final analysis and considering that seropositive men were no more likely than seronegative men to be vengeful, HIV may not necessarily make victims out of men and seroconversion may not be the victimizing process initially presented. I conceded that HIV vengeance is not, by any means, a pervasive phenomenon. Yet, those few that are highly sensitive to victimization (5 - 15% of seropositive men), who are hurt, angry, and vengeful, or for those whose interpretations of seroconversion and the meaning of infection are intrinsically dysfunctional, behavior is likely to reflect such pathology.

Future directions. I found the most important future direction stemmed from the implication just mentioned. That is, now that a minority of vengeful men has been established within the greater HIV-positive population, more about this group of men needs to be understood. There is a richness that is lost with merely using quantitative data to explain the group. There is no qualitative evidence that allows for a more robust explanation or model of vengeful individuals and their behaviors. Thus, I suggested the next direction for HIV restitution is to select the most vengeful seropositive men for consultations and interviews. Only then can research decide: the degree to which vengeance plays a central role in these vengeful men's lives, or the degree to which the men realize the function of nondisclosure or their role in the seroconversion of others. I concluded that by adding an actual voice to this vengeful minority, a more complete analysis of the problem would be constructed.

Chapter 2. The warrant

The span and impact of the human immunodeficiency virus (HIV) are incredibly vast. From medical implications to biological research, from sociological effects to sexual behavior, from individual psychology to interpersonal communication, HIV has ramifications affecting each of these realms. And with the development of a cure that is years away, and out of the purview of contemporary virology, social scientists, physicians, and clinicians must continue to endeavor to define new branches of study regarding the disease while simultaneously refining what is currently understood. It was estimated that in 2005, about 4.2 million adults worldwide had seroconverted—tested HIV-positive (Joint United Nations Programme on HIV/AIDS, 2004). Past research suggests that the meaning of this conversion differs greatly from person to person, culture to culture, and continent to continent (Kaler, 2003; Mason, Marks, Simoni, Ruiz, & Richardson, 1995; O'brien et al., 2003; Travers & Paoletti, 1999). Whereas an HIV-positive result is practically expected in rural sub-Saharan African populations and certainly less of a stigmatizing diagnosis (Kaler), a European or American gay man may find incredible intra- and interpersonal turmoil and intense stigma when confronted with such a life change. And as a corollary, the meaning and significance of serostatus disclosure become as varying as the ultimate reactions to the disclosure itself.

An underappreciated fact regarding HIV is that it is one of the harder viruses to contract (AIDS InfoNet, 2005; Joint United Nations Programme on HIV/AIDS, 2004; Royce, Sena, Cates, & Cohen, 1997). It is a relatively selective virus that requires just the right conditions to infect its host; conditions such as inconsistent adherence to highly active antiretroviral therapy (HAART), genital trauma, compromised immune system, or high viral load (Hollander, 2001; Kaler, 2003; Quinn, Wawer, & Sewankambo, 2000). This concept is under-realized by the

general population as well as by those who live in communities with a high seroprevalence (Hollander; Quinn et al.). But as such, seroconversion can be framed as not necessarily the active fault of the seroconvert, but as a set of probabilities to which the convert fell victim. Some claim the likelihood of seroconverting from unprotected receptive anal intercourse with an HIV-positive partner can be as low as 1/1,000, and from unprotected insertive anal intercourse, even more unlikely as for receptive (AIDS InfoNet; Royce et al.). In terms of heterosexual behavior, the likelihood of male-to-female/female-to-male transmission can be even lower than the risk of transmission for homosexual men (again, from Royce et al.; AIDS InfoNet). Note that these ratios can vary due to myriad variables, most notably, those previously mentioned as pristine conditions for infection (Hollander; Quinn et al.); but as Royce et al. show in Figure 1, no sexual behavior reaches above single-digit percent likelihoods for causing actual seroconversions.

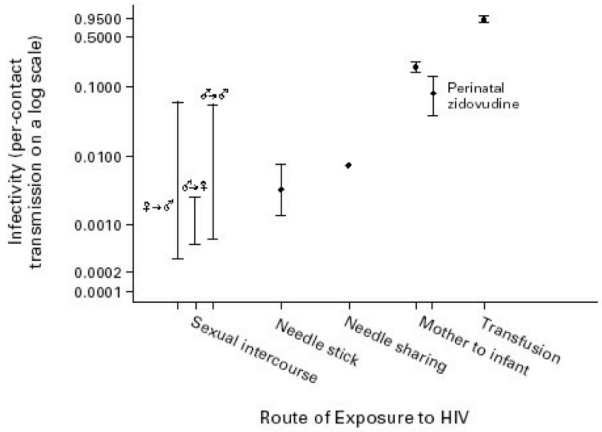

Figure 1. From Royce et al. (1997), Per-contact probability of HIV transmission. The infectivity ranges for sexual contact are derived from a comprehensive review of literature (lower and upper bounds are from modeling per-contact transmission in different study populations with different modeling techniques). Each infectivity estimate for the other routes of infection originates from one representative study. The routes of infection are as follows: sexual intercourse (female-to-male transmission, male-to-female transmission, and male-to-male transmission respectively), needle stick, needle sharing, transmission from mother to infant with and without perinatal zidovudine treatment, and finally, transfusion.

Considering these numbers (i.e., the chancy nature of HIV infection), a sense of inequity or injustice is likely to accompany infection. Current research documents many influences over

HIV disclosure and also, nondisclosure. Variables like CD4 counts, age, proximity to death of the seropositive individual, role of the recipient, cultural identity, and sense of morality have been suggested as correlates of HIV admission or concealment (Mason et al., 1995; O'Brien et al., 2003; Parsons et al., 2005; Serovich, Esbensen, & Mason, 2005). Yet, omitted from these studies are the effects of anger, unfairness, and injustice associated with becoming seropositive on disclosure or nondisclosure. Simply, if, as the research suggests, there exists in some a moral push towards serostatus disclosure and thus, the protection of the community, does an antithetical, individualistic and self-oriented movement that searches for restitution for HIV infection exist in others?

The following dissertation will use this question as its overarching frame. Within this chapter, there will first be a comprehensive literature review on both the HIV disclosure and victimization research. This review will begin with the research on disclosure to casual and main partners. Correlates of this disclosure will be explored, as will the ultimate differences between HIV admissions to casual v main partners. Then, the research on the ways in which most HIV-positive men indicate to their casual and/or main partners of their serostatus will be examined. And the last part of this section on disclosure will define and explore the assumptions that individuals make about the serostatus of possible partners. After the review on disclosure, what is currently known about victimization, and just world theory will be explored as it relates to HIV-negative and HIV-positive individuals. Then, an examination of equity theory, namely equity with the world, will be performed. Finally, within this part, the substantial effect of deindividuation over nondisclosure will be presented. The second part of this chapter will proffer new directions concerning HIV disclosure and nondisclosure, as they relate to negative traits and

vengeance. Original research questions and testable hypotheses will be reasoned using each, or a conglomerate of the previously mentioned theories.

HIV Disclosure

Before delving into the facets of disclosure, the very idea of discussing such a private and significant aspect of one's health and life with one's partners should be addressed. There is the strong stigma that accompanies the disclosure of an HIV diagnosis. A positive serostatus can suggest to others the enactment of negative behaviors notoriously associated with seroconversion (i.e., injection drug use, or unprotected sexual intercourse) (Kalichman & Nachimson, 1999). It can also imply that death is imminent and proximal (Katz, 1997). Reluctance to physically touch or share space with a person living with HIV has been noticed by seropositive individuals (Green, 1995; Wight, Aneshensel, Murphy, Miller-Martinez, & Beals, 2006); and the uninfected, general population has been known to exude fears about contagiousness (Crawford, 1994; Travers & Paoletti, 1999). Considering these perceptions and behaviors, disclosure is daunting, and for some, impossible. Yet, seropositive individuals suggest that over time, the need to widen those private communication boundaries and to discuss one's serostatus steadily increases (Katz; Kalichman, DiMarco, Austin, Luke, & DiFonzo, 2003; Serovich, Brucker, & Kimberly, 2000; Travers & Paoletti). Disclosure becomes an eventuality of the disease, and the need to include others in the positive diagnosis supercedes the need to prevent stigmatization.

The following section will explore the correlates of HIV disclosure to casual and main sexual partners, the most prevalent ways disclosure is accomplished, and finally, the assumptions that are regularly made regarding HIV serostatus and possible partners in the absence of disclosure. The following will exclude research concerning women and heterosexuals

and will focus solely on homosexual men, considering the proceeding results will be solely concerned with this seroprevalent group.

Correlates of Disclosure to Casual and Main Partners

Recent studies suggest that of men who are HIV-positive, only between 42% and 48% report disclosing their serostatus to sexual partners before engaging in unprotected intercourse (Ciccarone et al., 2003; Marks & Crepaz, 2003). Though it would seem a sense of conscience or in-group protection might encourage a higher percentage towards disclosure, in actuality, disclosure rates are slightly lower than chance. Naturally, there are many factors that coalesce to influence the decision to admit or conceal serostatus.

Casual partners. A more detailed examination on disclosure suggests that casual partners are the least likely of any category of individual (e.g., friends, main partners) to be given warning of HIV serostatus, at about 25% (O'Brien et al., 2003). There are several reasons for this. Casual sex partners—one-night stands, anonymous encounters, etc.—are vehicles for sex as a strictly physical behavior. As such, a sense of deindividuation tends to occur (rendering admission unnecessary), which is only augmented when combined with drug and/or alcohol use, and/or an environment such as a bathhouse or backroom (Elwood, Greene, & Carter, 2003; Gorbach et al., 2004). Also, personal beliefs about one's HIV serostatus weigh on the decision to disclose. Gorbach et al. suggest that if a seropositive individual believes that serostatus is a private matter or if he is in denial, disclosure is unlikely to casual partners. Their research also claims that personal health statuses such as low viral load and/or adherence to HAART will diminish disclosure rates. In terms of psychosocial factors on admission to casual partners, outcome expectancies of hedonism, serostatus assumptions, and depression all negatively correlate to disclosure (Parsons et al., 2005).

But the strongest indicators of disclosure to casual partners are efficacies, namely self- and outcome-efficacies. The ability to communicate about a stigmatizing topic varies from person to person, and culture to culture; and it has been previously suggested that HIV infection is one such topic. Considering it takes time to develop an HIV disclosure script, to practice such communication, and thus, to develop a sense of high(er) self-efficacy regarding disclosure, HIV-positive individuals may simple be too inexperienced to discuss serostatus (Kalichman & Nachimson, 1999; Stirratt, 2006). Yet as disclosure self-efficacy increases, HIV-positive men tend to shift from being non-disclosers, to inconsistent disclosure, and finally, to consistent disclosures (Parsons et al., 2005).

Though seropositive men may show increased proficiency regarding serostatus communication, outcome-efficacy can often interfere with consistent disclosure (Stirratt, 2006). Seropositive men report strong negative reactions to their serostatus admissions by HIV-negative or HIV-unknown casual partners (Gorbach et al., 2004; Kalichman & Nachimson, 1999; Parsons et al., 2005). When the ultimate interaction goal with a casual partner is to have sex or engage in sexual behaviors, negative reactions (e.g., using two condoms or being rejected) are unwanted (Bailey & Hart, 2006; Stirratt). Self-efficacy may indeed be high, but previous negative experiences with other casual partners may decrease a sense of outcome-efficacy for many positive men.

Main partners. Whereas casual partners were the least of all categories of individuals to experience an HIV disclosure event, main partners were the most likely, at about 74% (O'Brien et al., 2003). It would seem that even though many of the previously mentioned fears about rejection, alienation, and stigma are still very much present, there are superceding issues that provide an impetus for disclosure. The first of these issues is sense of urgency. O'Brien et al.

suggest that as age increases and as CD4 levels decrease, the tendency to disclose increases to main partners. With a diagnosis transition on the horizon, from asymptomatic HIV to AIDS-related complexes (ARC), or from ARC to AIDS, it becomes important to acknowledge infection and prepare a significant other for the implications of deteriorating health. Also, individuals claim that after time, it becomes physically impossible to hide infection from main partners because of doctor visits, medications, and symptoms of opportunistic illness (Stirratt, 2006). However, non-psychological influences can encourage *nondisclosure* to a main partner as well. Mode of transmission and sexual activity diminish the likelihood of HIV disclosure. That is, if HIV is contracted through IV drug use, disclosure to a main partner is unlikely; similar trends of nondisclosure exist for individuals who are not sexually active with their main partners (O'Brien et al.).

Besides these physiological or non-psychological influences, psychological factors seem to also have incredible sway over the tendency to disclose to a main partner, namely moral obligations and feelings for the main partner. Gorbach et al. (2004) claim that though the most influential factor over disclosure is actually "fears of being arrested or jailed" for misleading or possibly infecting another, the second and third fall into the previously mentioned areas. Participants from their study and from other research (e.g., Parsons et al., 2005; Stirratt, 2006) report that a certain sense of morality exists within HIV-positive individuals, where it is simply unjust or unfair not to disclose to a partner, especially a main partner. Along the same lines, others claim a sense of responsibility to the greater gay community to protect HIV-negative individuals and prevent the further dissemination of the disease. Simply, as individual morality increases, the likelihood of disclosure increases accordingly.

Main partners experience significantly more intimacy, emotional bonding, trust, and accountability than do casual partners (Halkitis & Wilton, 2006). As such, disclosure becomes a palpable corollary. Individuals report that positive feelings towards, and caring about a partner increase the tendency to admit a seropositive status (Gorbach et al., 2004); this is even a stronger relationship than produced by morality. Some men even include it as a relational turning point that has the potential to cement the relationship or dissolve it. From Stirratt's (2006) qualitative research, a participant says of intimacy and disclosure:

> The reason to let them know is that there is a possibility that there will be a long-term relationship. And there's a possibility of having trust established in a relationship, is the main reason to let them know. And I found from experience that I've lost somebody who I was falling in love with for not having told him at first. (White male, age 46, New York)
> (p. 105)

It becomes evident that main partners or those who are in line to become main partners have more investment in the relationship and its continuity. Considering this, most positive men believe that the relationship will not survive unless serostatus is revealed in a timely manner.

Ways of Disclosing

Besides verbal confession, research suggests that with casual and/or main partners, individuals employ a variety of ways to both directly and indirectly admit to being infected. With stigma, rejection, alienation, and occasional violence as looming disincentives, individuals try to minimize negative outcome-efficacy by employing fitting disclosure methods, which tend to vary by the identity, personality, and type of seropositive individuals' partners (Stirratt, 2006).

Direct disclosure. The most direct method of disclosure as indicated across the literature is verbal admission. Considering seropositive (gay/bisexual) men are 11 times more likely to disclose to main partners over casual partners, these direct verbal admission are most likely to occur to main partners (Ciccarone et al., 2003; Stirratt, 2006). This form of disclosure usually

resembles an interactive conversation between the HIV-positive individual and his partner (Serovich, Oliver, Smith, & Mason, 2005a). Knowledge is exchanged and the ramifications of previous and future sexual behaviors are discussed (Remien, Carballo-Dieguiez, & Wagner, 1995; Remien, Wagner, Dolezal, & Carballo-Dieguez, 2001). When a seropositive individual verbally admits to a casual or main partner, either of two subsequent behaviors occurs. The partner may exit the situation and thus, reject the HIV-positive individual, or the partner may stay and either negotiate sexual boundaries or agree to protected/unprotected intercourse (Hoff & Manchikanti, 2006).

Indirect disclosures. Direct disclosure seems to be the prevalent method used in disclosing serostatus to non-sexual partners (i.e., friends or family, and to a lesser extent, main partners). However, to casual partners and the majority of main partners, individuals more often than not use indirect methods to indicate an HIV-positive diagnosis. One such way is ambiguous communication about the serostatus. Stirratt (2006) reports men who use phrases like: they do not know their serostatus, they should probably use a condom, or they are in the waiting period of an HIV test, are using this sort of ambiguous communication as a means to purposely trigger partners' suspicions. If HIV is of concern, ambiguous communication will usually turn into a direct conversation (Gorbach et al., 2004)

Seropositive individuals have also been known to leave indirect cues for either their casual or main partners to acknowledge. Some individuals subtly display their HAART medications for partners to see (Klitzman et al., 2004; Serovich et al., 2005a). Others keep calendars with doctors' appointments circled, or artifacts of membership to HIV-oriented support groups within bedroom proximity (Stirratt, 2006). Regardless of the indirect communication message or method, disclosure becomes the responsibility of the casual or main partner—to

notice the cues and either react accordingly, or force the HIV-positive individual into a verbal admission. In fact, many (≈ 1/4 of men) HIV-positive individuals participating in the research suggest that HIV-negative individuals share a responsibility for directly asking, or indirectly deducing another's HIV serostatus (Klitzman et al.; Serovich et al.; Stirratt).

Serostatus Assumptions

It has become abundantly clear that HIV disclosure to casual partners and, to a lesser extent, main partners, is anything but certain. As such, both HIV-positive and HIV-negative individuals draw on assumptions about the other group in order to justify either a safe or unsafe experience in such a disclosure vacuum. These assumptions provide an absolution of social or health responsibility (i.e., seropositive individuals need not disclose their status, and seronegative individuals need not use condoms). The amount of available information from which to derive these assumptions, and the degree to which these assumptions hold true will ultimately dictate unprotected or protected, risky or safe sexual behavior (Ekstrand, Stall, Paul, Osmond, & Coates, 1999; Gómez, Mason, & Alvarado, 2006; Gorbach et al., 2004; O'Leary, 2006). As the following will suggest, individuals are simply too reliant on specious, HIV-positive and HIV-negative male stereotypes as proof of HIV serostatus.

Stereotypically seropositive and seronegative men. It has been established that there is an increased seroprevalence among homosexual men; and with increased prevalence comes increased social exposure through friends and lovers. A stereotype of the HIV-negative and HIV-positive man develops over time from this exposure, and different variables become nonscientific, socially salient seropositive and seronegative measures. The largest indicator of positive or negative status is physical appearance (O'Leary, 2006; Gold & Skinner, 1996; Gold, Skinner, & Hinchy, 1999). Research suggests that due to the noticeable physically destructive

side effects of HAART medications (e.g., lipodystrophy) and/or symptomatic HIV, ARC or AIDS (e.g., Kaposi's sarcoma), individuals look for physical signs of serostatus. Men from O'Leary's research suggest an HIV-look (skinniness, facial wasting, translucent skin, over-visibility of veins) that can be perceived "useful" in distinguishing seropositive from seronegative partners. Conversely, an individual assumed to be HIV-negative does not exhibit these same physical anomalies. They are strong, of healthy color, and physically attractive (Gold & Skinner). With all stereotypes, there is some truth to what is believed. O'Leary claims that while it is true that individuals can distinguish other individuals with symptomatic AIDS by using such perceptions, for individuals with asymptomatic HIV or who unknowingly have HIV, it is impossible to use such information with any sort of reliability. Ironically and due to this exact misconception about physical appearance, it is these asymptomatic and unknowing HIV-positive individuals who are responsible for most seroconversions (Joint United Nations Programme on HIV/AIDS, 2004).

Another set of these so-called indicators of serostatus concern sex and sexual behaviors. Individuals are likely to perceive other individuals who are willing to have unprotected sex as already infected. Should they request condom usage, they are assumed seronegative (Gold et al., 1999; O'Leary, 2006). Similarly, the research suggests that individuals who are only willing to engage in low risk or moderately risky behaviors (e.g., oral sex, mutual masturbation) are likely to be perceived negative as well. The environment housing the sexual behavior is also factored during this process. Individuals at bathhouses, in public parks or bathrooms, or at sex clubs are more likely to be considered HIV-positive than those met at sexually uncharged environments (Ekstrand et al., 1999; Gold et al.; O'Leary). As with the previous section on physical appearance, there is some truth to these assumptions. Parson et al. (2005) suggest that those

willing to participate in unprotected sexual intercourse have the highest proportion of risk of seroconversion compared against the entire population; and individuals who have negative evaluations of those men show significantly lower risks of seroconversion. So this stereotype is strategically valuable. But in opposition to the use of these stereotypes, the previously mentioned researchers claim that environment is uncorrelated to serostatus—that it is ultimately only the behaviors that transpire in the environment that correlate to serostatus.

In terms of non-sexual indicators, expressions of lifestyle or demographics are deemed important in suggesting serostatus. Individuals who are more educated, wealthier, and who have made plans for the future are less likely to be viewed as HIV-positive (Gold & Skinner, 1996; O'Leary, 2006). Also, individuals, both White and non-White, tend to believe that Caucasians over all other races are most likely to be negative. They also believe that younger men are less likely to be positive. Last, Gold and Skinner claim individuals use positive or negative personality traits as indicators of serostatus (i.e., happy men are negative, and hostile men, positive). Again, it is true that non-White minorities are the most likely to be HIV-infected of all other groups, excluding Asians (Catania et al., 2001; Gómez et al., 2006). It is also true that there is a negative relationship between amount of education, and by extension, amount of income, and seropositive likelihood (Catania et al.). However, age is a poor indicator of serostatus, considering some studies show a positive correlation, and others, negative (Mansergh & Marks, 1998). And personality is certainly no reliable index for serostatus.

The use of stereotypes does seem to be rooted in senses of truth and conventional wisdom; and perhaps, to a certain degree, using these assumptions wards off seroconversion for some, for a few more weeks, months, or years. However, the only true way to prevent infection or ensure that one is not inadvertently spreading the disease to negative individuals is by condom

use or by other safe-sex practices. And in the final analysis, the most availably accurate way to assess serostatus is still by asking.

Some Final Words on the Disclosure Literature

The previously described research suggests that the prospect of HIV transmission to others intensifies the disclosure process. Casual partners are the least likely to be informed of a positive serostatus whereas main partners are the most likely. Even though main partners have the potential to reject or alienate a seropositive individual (to issue negative outcome-efficacy), reported experiences show that most of the time, they do not. And where disclosure can take many forms, either direct or indirect, in the absence of such communication, both seropositive and seronegative individual are all too reliant on erroneous reasoning and spotty stereotypes as indicators of serostatus. Simply, this survey of literature illustrates that the involvement of sexuality undeniably moderates the likelihood of disclosure. Where admission should be consistent, reliable and paramount, it is attenuated by the fear of rejection, the fear of stigmatization, and all too often, the desire to orgasm.

The negative impact of social penetration theory. Social penetration theory (SPT) suggests that individuals are comprised of multiple layers of personal information (Altman & Taylor, 1973). These layers are stacked on top of each other as sections are in an onion—with a central core of deep seeded values, beliefs, and experiences, a middle section of attitudes, and a top section of demographic and conspicuous information. The theory states that as a relationship develops, more and more of these layers are explored and thus, shed through self-disclosure. Considering the research into HIV disclosure, the question becomes, at what level does one's HIV status rest?

Individuals may find it too psychologically arousing to reveal their serostatus to casual partners, and to a lesser degree, to main partners. Such a confidential health admission in either a fleeting or nascent relationship might be deemed a communication violation according to SPT. Granted social and health norms encouraged by HIV advocates and adopted by society (especially gay society) have mitigated much of the shock surrounding an HIV-positive admission; as some of the qualitative research suggests, most individuals still believe that serostatus is something to be revealed after a certain amount of time transpires in a relationship (Halkitis & Wilton, 2006). And in addition to the seemingly contrary communicative tendencies described by SPT and, for example, the Centers for Disease Control, simple cognitive dissonance between the responsibility to protect others from infection and the need for health privacy has the potential to exist within many individuals. In short, it is important to realize that there are other forces besides fear of stigma pushing against disclosure. And I will continue to explore such forces through a review on victimization.

Revenge, Negative Affect, and Other Functions of Victimization

According to the American Civil Liberties Union (ACLU) (2004), a majority of states (27) have adopted laws that have criminalized the knowing transmission, or active concealment of HIV. Depending on the serostatus outcome and the particulars of the case, penalties can be as high as 20 years for offenders. This is a strong cultural and societal statement about the disease, about HIV-positive individuals, and about seroconversion. Simply, this suggests that HIV transmission is ultimately a sort of crime, an interpersonal transgression. Granted the above laws are aimed at protecting against *active* transmission, research suggests that unintentional, incidental, or passive transmission by an HIV-unknown partner provokes similar feelings of victimization, anger, and frustration (Clement & Schonnesson, 1998; Ryan, 1984; Sadovsky,

1991). When victimization occurs, so to does equity-loss. And when equity-loss occurs, so to does restitution and vengeance.

The Concept of Victimization

Victimization must be examined as both a social phenomenon, and as an individual occurrence (Frieze, Hymer, & Greenberg, 1987). There are sweeping societal implications regarding justice and restitution at this initial, larger level. And on the case level, victimization has ramifications that affect individual psychology, resulting dysfunction, and adaptive behaviors.

The phenomenon of victimization. Philosophers and ethicists have long debated the abstract concept of victimization as a phenomenon of modern society. Without digressing too much from the central themes of this paper, namely HIV restitution, vengeance, and nondisclosure, it remains important to acknowledge that victimization is a socialized construct, malleable with respect to variables like time, culture, and collective morality (Hershenov, 1999). Yet what remains fairly constant is that victimization represents, in essence, a breach of contract with society and an imbalance in equity. Morris (1968) describes victimization in terms of debt. Individuals are in a constant state of self-restraint with respect to each other and society (as it relates to wrongdoing). Any one individual gains an unfair advantage when he or she transgresses. Simply, he or she becomes over-benefited. The individual victim and society become under-benefited (i.e., the individual victim is actually harmed in some capacity), and the law abiding are socially harmed for having endured a crime in the face of their self-moderation. When self-restraint is lost and a crime occurs, an inequitable situation arises and the only way to recalibrate is through victim repayment. Thus, punishment or restitution is a means for the victimized to feel rebalanced with society and the criminal.

Victimization and the individual. On a more tangible level, individuals who have experienced criminal transgressions go through a series of stages in addition to wanting Morris's (1968) repayment. And built into human nature is a very primitive need to revenge those who have harmed us (Hershenov, 1999). A fitting prelude to these stages, Fischer and Wertz (1979) say of victimization:

> Being criminally victimized is a disruption of daily routine. It is a disruption that compels one, despite personal resistance, to face one's fellow as predator and oneself as prey, even though all the while anticipating consequences, planning, acting, and looking to others for assistance. These efforts to little avail, one experiences vulnerability, separateness, and helplessness in the face of the callous, insensitive, often anonymous enemy. Shock and disbelief give way to puzzlement, strangeness, and then to a sense of the crime as perverse, unfair, undeserved. Whether or not expressed immediately, the victim experiences a general inner protest, anger or rage, and readiness for retaliation, for revenge against the violator.
> (p. 149)

Victims tend to go through phases after being victimized. In this first, "impact-disorganization" phase, numbness and disorientation, denial and disbelief, and loneliness and depression, are but a few of the feelings experienced just after a crime has been committed or injustice perceived (Bard & Sangrey, 1986). Further research claims that after the depression comes a "frozen fright," a noticeable detachment from others marked with regressive behaviors (Symonds, 1975). Others have noticed anger, shock, confusion, fear, and anxiety as well (Notman & Nadelman, 1976; Sutherland & Scherl, 1970). The next phase, Bard and Sangrey's "recoil," is marked with vacillations between fear and anger. Levels of trust and autonomy may be lower as well. The victim may also relive the traumatic event or injustice, and may even form obsessions over it; a strong potential for posttraumatic stress disorder (PTSD) exists (Krupnick & Horowitz, 1981). Finally, there is "reorganization," where the victimized individual can reconcile the crime, learn from the experience, and continue living a more successful and psychologically adjusted life (Bard & Sangery). Many can move on; some remained lock in depression, guilt, fear, and relational dysfunction (Notman & Nadelman).

Though these phases define what the individual might feel at any one point after a crime or injustice, they fail to indicate a sense of behavioral response. There are two broad categories of such responses—those taken alone, and those that utilize help from others, (e.g., friends, family, and/or the criminal justice system; Frieze et al., 1987). Behaviors categorized under acting alone can be retaliatory or retributionist in nature (i.e., Morris, 1968). Victims, in order to reduce senses of injustice and inequity, may seek revenge on the offender in an attempt to restore equity (Walster, Walster, & Berscheid, 1978). Or, depending on the accountability and identification of the transgressor, they may seek to regain a sense of equity with the world (EwW) (Austin & Walster, 1974, Austin & Walster, 1975). In cases involving physical injury, individuals have been known to deny the seriousness of the problem or ignore the implications of injury; that is to say, a victim may pretend he or she is fine and unaffected (Silver & Wortman, 1980). Yet, the most likely behavior within this category is self-protection. Victims often attempt to protect themselves from further criminal or unjust attacks (e.g., the installation of a security system after being burgled; Conklin, 1975).

Individuals are equally likely to seek help from others. This tends to materialize in medical assistance, emotional support, information, or assistance with physical tasks (Frieze et al., 1987). Surrounding oneself with others may create a sense of reduction in the likelihood of being re-criminalized as well. Finally, simple communication with the victim, listening to his or her story, and sympathizing with his or her emotional state has been reported to be highly beneficial (Coates & Winston, 1983). Though these helping behaviors are widely accepted, research also suggests that this support can be fickle, short-lasting, or attenuated depending upon different traits exhibited by the victim, the supporter(s), and/or the crime (most notably in Lerner, 1980; Lerner & Miller, 1978).

Just world theory. Attribution and attitudinal research into the perceptions of victims suggest that victims are not always perceived equal. That is to say, that degree to which individuals completely exonerate crime victims of at least partial culpability will vary. This is due to just world theory (JWT). According to the theory, individuals implicitly need to believe in a just world, where fairness and justice guide actions and behaviors (Lerner, 1980; Lerner & Miller, 1978). The strength and tenacity of this belief tend to vary by individual differences; but for most, the belief is held as a means of justifying, in part, that previously mentioned contract with society to be self-controlled, law abiding, and deserving of outcomes (Lerner, 1977). As such, when confronted with the victimized, individuals compensate or support victims that are perceived to be totally innocent (Lerner, 1980). They acknowledge the intrinsic unfairness or injustice of the situation and respond with compassion (Hafer & Bègue, 2005). However, when confronted with a victim who will continue to suffer after a traumatic event, they are likely to perceive the victim to be somewhat responsible for his or her own fate, perceive him or her deserving of the negative outcome, and/or derogate the character of the victim (Lerner, 1980; Lerner & Miller). This mechanism defends the belief in a just world and relieves the dissonance between victimization and perceptions of inherent fairness within the human experience.

There are significant applications for this research to the HIV seroconversion process and HIV-positive individuals. At first, an early and initial study claimed that no significant association exists between JWT and AIDS sufferers (Connors & Heaven, 1990). Yet considering the disease was first documented nine years before, individuals' perceived implications and opinions of HIV/AIDS might have been too immature. To support this claim, two years later, Furnham and Procter (1992) found that JWT and negative opinions of people living with HIV/AIDS are indeed weakly associated. And most recently, two separate studies suggest that

individuals who have seroconverted are, more often than not, derogated and seen as deserving of their position (Correia & Vala, 2003; Correia, Vala, & Aguiar, 2001). It was also found that the way in which HIV is transmitted is influential over opinions of positive individuals (i.e., unprotected intercourse resulting in conversion is justified, and contraction through a broken condom is not). Simply, with respect to JWT and individuals living with the disease, HIV-negative individuals rate their HIV-positive counterparts as being less good and changeable, as being immoral and dominant, and as being dangerous (Stewart & Reppucci, 1994).

It seems that the main problem with the association of HIV infection and victimization is that individuals largely realize HIV to be preventable. Clearly, seroconversion is a traumatic, statistically unfair event, and to a certain extent, individuals sympathize and support the new convert. However, it is made evident through the previously mentioned research that the degree to which new HIV-positive individuals are perceived to be victims varies (often away from their favor). They may perceive themselves as victims of the disease or of circumstance, but in the eyes of their peers, they are deserving of their fate as a function of their behavior; they are owed no debt by society and are neither under- nor over-benefited. These outsider perceptions aside, research suggests an almost identical process of seroconversion to acceptance, as the process of victimization to acceptance (Clement & Schonnesson, 1998; Ryan, 1984; Sadovsky, 1991). As such, and unfortunately for many positive individuals, second or third party ignorance of, or blame for seroconversion exacerbates this sense of loneliness, depression, and alienation already endemic of victimization (for qualitative evidence see Katz, 1997; Kimberly, Serovich, & Greene, 1995; Travers & Paoletti, 1999).

On Equity

Feelings and self-perceptions of victimization have been proven to be a function, in part, of equity-loss (Hershenov, 1999; Morris, 1968). A transgression has occurred, and one has over-benefited at the expense of another. However, framing interactions in terms of equity, outcomes, and inputs is not unique to victimization. Equity theory has applications to all relationships. Basically, the theory states that individuals are keenly aware of the outcomes and inputs of any given relationship. A relationship is equitable when these two relational measures are equivalent. Conversely, a state of inequity arises when one feels either responsible for contributing more inputs than receiving outcomes, or receiving more outcomes than contributing inputs (Homans, 1961; Adams, 1965; Walster, Berscheid, & Walster, 1973). As previously suggested, inequity is negatively arousing. Over-benefiters will feel internal pressure to compensate under-benefiters, and under-benefiters will feel internal pressure to seek reprisal (Austin & Walster, 1974; Walster et al., 1978). This may be accomplished through either the actual restoration of equity or through psychological distortion, also known as denial. Further investigation into equity theory indicates that equity reprisal or compensation need not be confined to the individual who perpetrated the inequity. Austin and Walster (1974, 1975) claim that equity may be rebalanced trans-relationally (i.e., through a secondary partner or third party).

Equity with the world. It is overly simple to consider relationships as independent entities. Ultimately, any single interpersonal relationship exists within the context of every other endeavored relationship. The degree of equity perceived by summing all of these relationships represents EwW. It is a global assessment of the net equity that exists across relationships over a portion of time (Austin & Walster, 1975). Over- or under-benefited individuals decide whether they seek to compensate, or seek reprisal from either the offended/offender (i.e., person-specific equity), or from EwW. Research suggests that similarity, costs of restoring person-specific

equity, and accountability ultimately dictate whether an individual seeks person-specific equity or EwW (Austin & Walster). When equity is disrupted, it may be restored using EwW if the subsequent individual with whom interaction will take place shares a great degree of similarity to the original offended/offender. If restoring equity with the original person will seemingly result in either more lost or gained equity, an individual will defer to EwW. Finally, if restoring equity will cause retaliation by a secondary partner (the world) or will embarrass the secondary partner, and accountability exists, the individual will not defer to EwW (Shapiro, 1975).

Deindividuation

Accountability has the potential to reach outside of EwW and influence other psychological propensities. Such is the case for the human tendency towards deindividuation.

Definitions. Work on deindividuation dates back to the late 19th century when interest in crowd mentalities was strong (see, Le Bon, 1895/1995). But it was ultimately Festinger, Pepitone, and Newcomb's (1952) research that drew contemporary attention to the tendency. According to their research, they describe deindividuation as a state in which individuals are not "seen or paid attention to as individuals" (p. 382) when in a group of people. They are mere components of a greater mass without any real identity; and as a corollary, they are likely to have a significantly lowered sense of restraint and inhibition. Zimbardo (1969) adds to this definition. He claims that deindividuation is not merely a function of groups, but can occur as a psychological state within a lone individual. Circumstances like anonymity, loss of individual responsibility, arousal, sensory overload, novel or unstructured situations, and consciousness-altering substances such as drugs and alcohol can induce the effect. Simply, Zimbardo claims that deindividuation causes a disinterest and general apathy towards self-observation, self-

evaluation, and concern for social appropriateness and evaluation. This leads to ignoring conscience-oriented feelings (e.g., shame, guilt, fear, or commitment), which facilitates norm breakage. Last, Diener (1980) takes previous definitions and simplifies the human tendency into more of a function of decreased self-awareness and increased outward focus than any other variables.

Effects and applications. The degree to which deindividuation affects individuals, and the severity or extremity of its effects remain controversial. Considering the divergent, and often contrary and competing perspectives, contentions are quick to be refuted and evidence may be found to support any facet of an argument regarding this human phenomenon. It used to be widely accepted that deindividuation provokes antisocial behaviors in individuals (e.g., murders, rapes, burglary; Diener, 1980; Festinger et al., 1952; Zimbardo, 1969). The reduction in accountability, recognition, self-evaluation, etc, allows for an uninhibited freedom to perform even the most heinous actions with the illusion of impunity. It is only until recent investigation that this idea has been moderated. A large-scale meta-analysis of deindividuation research suggests that the relationship between this psychological tendency and abnormal social behavior is weaker than previously assumed (Postmes & Spears, 1998); participation within a group, situational norms, and the evaluation and appraisal of environmental cues are actually the most substantial and guiding forces behind whether an individual ultimately will behave in an antisocial manner under the phenomenon.

Though lab research suggests the above relationship only under certain conditions, actual self-reports and qualitative interviews suggest that, with respect to HIV, deindividuation is an important factor guiding certain antisocial behaviors. It is highly debatable whether the concealment, or the nondisclosure of serostatus, may be considered an antisocial or abnormal

behavior. Heterosexuals rarely even consider such communication, whereas homosexuals are intensely socialized to be open and communicative about HIV; and as such, at least in most environments, revealing serostatus to protect others from possible infection is a gay social norm (Stirratt, 2006). There are several environments where this is not the case. In bathhouses, sex clubs, public places, and darkrooms, verbal communication, let alone HIV disclosure, is actually taboo (Elwood et al., 2003; Parsons & Vicioso, 2006). Ironically, it is in places where seroconversion is most likely to occur that individuals systematically quell serostatus admissions.

As the previous section of this review suggests, casual partners are the least likely of any category of individual (e.g., friends, main partners) to be given warning of HIV serostatus, at about 25% (O'Brien et al., 2003). One of the most cited reasons for this is the widely held belief that casual sex partners—one-night stands, anonymous encounters, etc.—are vehicles for sex as a strictly physical behavior. As such, a sense of deindividuation tends to occur (rendering admission unnecessary), which is only augmented when combined with drug and/or alcohol use, and/or an environment such as a bathhouse or backroom (Elwood et al., 2003; Gorbach et al., 2004). Anonymity, low accountability, and in some cases, groups (i.e., orgies, threesomes, or group sex) encourage deindividuation and HIV reticence. Finally, considering the arousing nature of casual encounters, or the intense sensory overload characteristic of a bathhouse or darkroom, deindividuation is likely to provoke nondisclosure.

HIV and Theory

The theories and research mentioned on victimization, equity theory, and deindividuation have only loose ties to HIV disclosure and HIV transmission. The full effects of each single theory on each other, and then how those effects guide human communication and relational behavior are largely unknown, especially with respect to HIV. Research has delved into

seroconversion as a victimization process, but only examining it as it relates to individual psychology and intrapersonal effects (e.g., Clement & Schonnesson, 1998). JWT has been linked to general perceptions about HIV-positive individuals; but no research has tested positive individuals for their beliefs in a just world. Equity theory clearly applies to victimization, but framing HIV in terms of being an equitable or inequitable exchange has yet to occur. And though deindividuation has been qualitatively documented as occurring during risky sexual behavior, whether it is ultimately serving the underlying function of EwW restoration remains to be tested. Social science searches for the most parsimonious answers to posed research questions. However, HIV, with its constantly changing social and medical meaning, its stigmatizing nature, and its volatile likelihood, is a complex monster that serves as its own independent variable influencing interpersonal psychology, social, and sexual behavior, and the communication that facilitate the three.

New Directions

The theories suggest ways that individuals ultimately react and respond to being victimized. And it has been established that, at least to the seroconvert, to become HIV-positive is to become a victim. Malignant psychology begins to govern mood and interactions are likely to reflect a perceived sense of injustice. That is, negative traits are more likely to emerge. The following questions, hypotheses, and their rationales form four major areas of concern: intergroup differences in psychology and behavior, differences among HIV-positive men, intergroup disclosure differences, and finally, disclosure differences within HIV-positive men.

Intergroup Differences in Psychology and Sexual Behavior

The process of transitioning from HIV-negative to HIV-positive is, on many different levels, an exchange. The odd IV-related transmission aside, most HIV conversions occur through

unprotected sexual intercourse (Joint United Nations Programme on HIV/AIDS, 2004). An exchange of fluids occurs. An exchange of the virus occurs. And an exchange of (what this dissertation will call) seroconversion equity occurs. As in any exchange, both parties give something to each other; and according to equity theory, they should be roughly equivalent in order to preserve positive feelings towards the person and the relationship. Yet in the case of HIV transmission, there is a very real, inequitable exchange occurring. The negative partner gives the positive partner his trust and his consent to engage in unprotected intercourse, which has incredible symbolic and actual value. Unprotected intercourse not only implies affection, affinity, closeness, immediacy, and confidence, it also is substantially more physiologically arousing and creates a scientifically measured, more satisfying orgasm (Shackelford, Pound, & Goetz, 2005). Not unlike any upgradeable product, there become two versions of sex, the standard, protected intercourse v the luxurious, unprotected intercourse. The negative partner ultimately decides which he will offer in the exchange. The positive partner, whose natural deference is towards unprotected sex, offers nothing to the exchange except for the disease. He is making no effortful concession, but gets to enjoy the equity offered by the negative individual. The negative individual does not perceive the inequitable situation because he assumes the positive individual is negative and thus, making a commensurate concession (see, truth biases, illusions of invulnerability, and attribution theory for theoretical support). The inequity becomes evident only after the negative individual receives a seropositive test result. And with inequity comes blame and an increased prevalence of negative traits.

Research suggests that seropositive individuals tend to vary with respect to blame. Some blame themselves, others, their partners, and a few, their family or community (Bimbi & Parsons, 2006). Framing seroconversion as an inequitable process has never been done before.

The degree to which an individual perceives an inequity will ultimately dictate how unjust he will feel or whether he will harbor negative traits. Naturally, the first few questions must assess baseline differences in these measures between seropositive and seronegative men (i.e., intergroup differences). Do HIV converts harbor more negative traits than do uninfected men? To what degree do HIV-positive and HIV-negative men feel the world is unfair or unjust? Are there sexual behavioral differences between the groups?

Hypothesis 1. HIV-positive men are significantly more likely to report negative traits like vengeance, anger, hostility, physical aggression, and are less likely to believe in a just world.

Research suggests that in situations of low interactional justice—low fairness of interpersonal treatment, such as in the case of HIV transmission—increased outward-focused negative emotions such as hostility or anger are extremely likely (Barclay, Skarlicki, & Pugh, 2005). I predicted that when compared against HIV-negative individuals, on average, seropositive men would show these negative traits more significantly. Being HIV-positive in not a preferred state of health or identity. As such, and as indicated by much of the research into disclosure (e.g., Halkitis & Wilton, 2006; Stirratt, 2006), many HIV-negative individuals are intolerant and unwilling to accommodate an HIV-positive man. This is likely to sour an individual over and above the normal course of experiences. Simply, these individual differences—being more aggressive or more vengeful—will have resulted as a function of the men's seroconversion rather than from their preexisting set of attitudes and behaviors.

The research into JWT presents a strong idea of HIV-negative perceptions of seropositive individuals. Few studies have documented HIV-positive perceptions of a just world. Seronegative individuals, more often than not, hold negative evaluations and attitudes of seropositive individuals as a means to preserve their belief in a just world. They often also harbor

high levels of beliefs in a just world for themselves (Connors & Heaven, 1990). I reasoned that the impact of an HIV diagnosis would lower seropositive individuals' beliefs in a just world over and above those held by HIV-negative men. Because of the chancy nature of infection (see the introduction to this chapter), belief that the world is just must intuitively be lowered for the seropositive individual because he has been victimized.

Hypothesis 2. HIV-positive men have more oral and anal male partners than HIV-negative men; and they use condoms during risky sexual behaviors significantly less than negative men.

Hypothesis 3. HIV-positive men enjoy more sexual freedom and actualize on their sexual behavior desires more so than do HIV-negative men.

These are not new hypotheses with respect to HIV research. Yet, I posited these arguments for two reasons. First, I wanted to give a stronger sense of relevancy towards HIV disclosure. By showing that seropositive men are more sexually active and use condoms disproportionately less than HIV-negative men, their disclosure may often be the only line of defense blocking the seroconversion of another. Second, I wanted to show that HIV-positive men show less reservation with respect to sexual behaviors that may or may not pose risks to their partners. There is not the same degree of conservatism or inhibition with respect to sexual activity. As a corollary, the degree to which an HIV-positive man wishes to enact risky behaviors and then follows through on those desires is likely to be higher than for HIV-negative men. And in that premise also lies the relevancy of serostatus admission.

In accordance with previous research (Catania et al., 2001; Ekstrand et al., 1999; Parsons & Vicioso, 2006), HIV-positive men are on average more sexually active than HIV-negative gay men. And whether it is their being HIV-positive that gives them the "freedom" to have sex with

more men, or their being highly sexual individuals that led to their seroconversion in the first place, this relationship exists. I reasoned that the sample would follow previously researched trends. Whether HIV-positive men sexual actualize has been less researched. In extrapolating from some of the research into barebacking (e.g., Gauthier & Forsyth, 1999), it would seem that being HIV-positive does allow for an increased sense of sexual freedom. That is, men lose the fear of acquiring HIV because they have already contracted it. With that relief comes exploration and experimentation. I reasoned that HIV-positive men would be more likely to enact their sexual desires over and above HIV-negative men.

Differences among Seropositive Men

After examining these initial differences between seropositive and seronegative men, I turned to the differences among men living with HIV. Namely, these concerned how individuals actually became seropositive and the degree to which they understood their transition. Did the way in which HIV was transmitted influence vengeance, hostility, or anger? Did the degree to which seropositive men were certain about their HIV transmission event influence their levels of negative traits?

Hypothesis 4. Positive men who suspect they had become infected through anal intercourse show fewer negative traits than those who suspect they contracted it through oral intercourse, or through other sexual contact.

Studies into HIV prophylaxis suggest a hierarchy of risk, where the riskiest behavior is receptive anal intercourse, followed by insertive anal intercourse, and then oral intercourse (Hart, Wolitski, Purcell, Gómez, & Halkitis, 2003; Royce et al., 1997; Wegesin & Meyer-Bahlburg, 2000). This is widely known and accepted by the gay community. Considering this, should seroconversion be a function of unprotected anal intercourse, blame is likely to be self-oriented.

Should it be deemed a function of unprotected oral intercourse or other unprotected sexual contact (e.g., fisting), the individual is likely to be oriented towards blaming others. Simply, whether one feels that he has been victimized is highly contingent on the ability to recall and recount the experience, and the appropriateness of the behaviors that culminated in infection.

It is difficult to predict the pertinence of seroconversion blame over other aspects of the life of a seroconvert. Ostensibly, it would seem that self-blame is most healthy for the functionality of interpersonal relationships; however, it is most likely detrimental for intrapersonal mechanisms, namely, self-esteem, self-worth, and self-respect. Conversely, other-blame will likely increase negative outward-focused emotions and make further interpersonal relationships difficult; yet, it is likely to assuage the intrapersonal demons associated with seroconversion. As such, I reasoned that if unprotected anal intercourse were perceived to be the culpable behavior associated with transmission, that negative traits would decrease in appearance. If transmission were perceived a result of unprotected oral intercourse or sexual contact, those emotions would increase in prevalence or appearance.

Hypothesis 5. The degree to which an HIV-positive individual is certain of how he became infected (of the transmission event) is negatively related to negative traits

Individual perceptions of the seroconversion process are also likely to include the location or environment, the time, and the infector that contributed to the serostatus change. To digress a moment, life-narrative construction plays an important role as a psychological mechanism used to understand, interpret, cope, and grow from an experience (McAdams, 1993). Individuals are keenly aware of the actors, environments, behaviors, and experiences in any given narrative chapter. The process of seroconversion is one such narrative chapter that is likely to affect every subsequent life chapter. As such, the partner responsible for the transmission of

HIV should not only be accounted, but the seroconvert should understand him and his role within the process. Similarly, the environment in which the conversion took place should be acknowledged. And last, the behaviors resulting in conversion should be known and reconciled.

The degree to which these variables are understood as parts of the seroconversion life chapter will influence blame as well. If there is a stronger understanding and certainty of the event, blame is likely to be self-oriented because an individual can more readily understand how he could have prevented the seroconversion. If the event is ambiguous, the potential for other-blame certainly intensifies. As a corollary of both narrative and blame construction, I reasoned that more ambiguity would lead to more negative emotions like anger, hostility, and vengeance; and less ambiguity would contribute to less of these traits.

Intergroup Disclosure Differences

The role of HIV as an independent variable has been explored. However, few studies have asked *HIV-negative men* whether they communicate health information to partners. And even fewer have examined what individuals think of nondisclosure of HIV serostatus. Are there differences between HIV-negative and HIV-positive men with respect to either their willingness to disclose health information or their willingness to justify nondisclosure of an HIV serostatus? Do negative traits moderate the tendency for seronegative or seropositive individuals to disclose health information or justify nondisclosure?

Hypothesis 6. Seropositive men will be less willing to disclose sexual health information and will find nondisclosure more justified than seronegative men.

As a function of the stigma associated with actually being seropositive and the collection of disclosure events actually experienced, men who live with HIV will have a stronger understanding of disclosure and will understand that it is more complex than simply admitting

one's serostatus. They will have been rejected or will have had to deal with some other negative consequence of the communication act. Conversely, HIV-negative men, who have little or virtually no experience with such communication, will rate themselves more likely to be able to disclose sexual health information and will be harsher towards nondisclosure. With their low degree of outcome efficacy and high degree of inexperience, they will claim to be more conscientious and virtuous with health communication than their HIV-positive counterparts.

Hypothesis 7. Negative traits will moderate the relationship between serostatus and the willingness to disclose sexual health information and the willingness to justify nondisclosure.

Projecting from the victimization and justice research, higher levels of perceived injustice would be associated with higher levels of nondisclosure. And these sorts of seropositive individuals are going to be more hostile and angry, and less comfortable with their serostatus than those who feel low perceived injustice. This relationship will not occur within HIV-negative men, and so it is likely the groups differ with respect to negative emotions predicting disclosure and nondisclosure. If perceived injustice indeed pushes individuals towards nondisclosure, it is equally likely that feeling vengeance will push a positive individual towards concealment. Hostility, anger, vengeance, and wanting restitution are all strong correlates of victimization. If an individual is angry or frustrated by serostatus change, this indicates an unwillingness of acceptance, and thus, an unwillingness to internally and externally discuss his infection. Again, this will not manifest in seronegative men. I reasoned that these negative traits would not affect the relationship between serostatus and opinions about disclosure among men who are not infected with HIV as much as it will among men who are infected.

Disclosure Differences within HIV-Positive Men

The degree to which seropositive men feel the responsibility to disclose varies. And though a majority report wanting to protect their partners, other research suggests that this "protection" is based largely on indirect and ambiguous communication, or specious assumptions about partner serostatus concordance (Gorbach et al., 2004; O'Leary, 2006; Stirratt, 2006; Wolitski & Bailey, 2006). Strong personal responsibility may be felt by two-thirds of HIV-positive men, but the degree to which they operationalize this responsibility is questionable. Among those who believe HIV is either a shared responsibility (≈ 1/4 of seropositive men) or their partner's responsibility (≈ 1/8 of seropositive men), nondisclosure may be a norm. And finally, within an extremely, small portion of men, transmitting HIV to others may even be more a conscious effort and less an incidental function of ejaculation.

I wanted to understand the differences between HIV-positive men with respect to disclosure and transmission. A bank of questions emerged. Does HAART influence either the willingness to disclose health information or the willingness to justify nondisclosure? Do individuals on HAART disclose more to main, casual, and anonymous partners? As time transpires from a diagnosis, do individuals change their tendencies to disclose? Do individuals who feel injustice, who show higher levels of anger, hostility, vengeance, etc., disclose at different rates to main, casual, and anonymous partners? What is the role of commitment to partners over disclosure? Last, what influences the likelihood a seropositive individual has transmitted HIV to others? Does vengeance relate to this likelihood as victim restitution and EwW might indicate?

Hypothesis 8. Seropositive men who adhere to highly active antiretroviral therapies (HAART) will be more willing to disclose sexual health information, be less likely to justify

nondisclosure, and will disclose their serostatus more readily to main, casual, and anonymous partners.

Gorbach et al. (2004) suggest that HAART negatively affects HIV and other health disclosures among HIV-positive gay men. However, I reasoned that the side effects of these protease inhibitors and antiretrovirals (i.e., lipodystrophy) might make nondisclosure/concealment impossible (as suggested by O'Leary, 2006; Gold & Skinner, 1996; Gold et al., 1999). In addition, I reasoned that disclosure would increase and the willingness to justify nondisclosure would decrease because individuals who adhere to HAART would also be more health conscientious. An individual who is going to assiduously manage their health, make regular visits to a physician, and is going to negotiate ingesting harsh medications daily seems also more likely to a be a socially conscientious person. Across all categories, disclosure will be a more witnessed phenomenon among HAART adherers than among non-medicating HIV-positive men.

Hypothesis 9. As time from HIV diagnosis increases, the willingness to disclose sexual health information and the tendency to disclose to casual and anonymous partners will decrease. The tendency to justify nondisclosure and the tendency to disclose to main partners will increase.

As suggested earlier in this section and in previous research (Gorbach, 2004; Parsons et al., 2005; Stirratt, 2006), poor outcome efficacy may play an influential role in changing an individual from a discloser to a nondiscloser. Over time, seropositive men have reported experiencing negative responses upon communicating their HIV status. I reasoned that after having collected many of these experiences, individuals living with HIV longer would be significantly less likely to disclose sexual health information, or disclose their serostatus to casual or anonymous partners, and they would be more likely to justify why an individual might

not disclose. Conversely, I reasoned that as time transpires from a diagnosis, individuals would disclose to main partners more often because it would be an inevitability of any substantial relationship, and (as suggested by Stirratt) impossible to conceal.

Hypothesis 10. Vengeance, anger, hostility, and physical aggression are negatively correlated with HIV disclosures to main, casual, and anonymous partners.

Hypothesis 11. Commitment to partners and HIV disclosures to main, casual, and anonymous partners are positively correlated among seropositive men.

Disclosure rates are highest (74%) to main partners and lowest (25%) to casual partners (O'Brien et al., 2003). Research suggests that this is because individuals feel moral and emotional imperatives to protect their partners from infection (Parsons et al., 2005; Stirratt, 2006; Wolitski & Bailey, 2006). According to EwW restoration tendencies, individuals gain restitution from a secondary partner if there is high similarity, low chance of retaliation, and low accountability. Main partners fit none of these characteristics. Anonymous or casual partners fit them all, and are certainly the most likely candidates to be exploited for EwW. An anonymous partner will be most similar to the original infector in that he will have either actually been anonymous or will have been metaphorically anonymous through the ignorance of, or nondisclosure of his serostatus. Considering the lack of identification, there is a low chance for person-specific equity retaliation and virtually no chance of accountability (i.e., legal action or vigilantism).

I reasoned that negative traits would be negatively correlated with disclosures across partner types. Individuals who exhibit higher negative emotions are going to be more apathetic towards others in general. And as previously explained, individuals with these traits are likely looking for retaliation or retribution. For these reasons, I did not think there would be any

difference between the types of partners and that there would be a uniformly negative trend—a truly vengeful, angry, or physically aggressive individual would be unlikely to differentiate much between an anonymous, casual, or main partners. However, I reasoned the degree to which individuals enjoyed committed partnerships would be positively correlated with disclosures across partner types. That is, individuals who consider themselves commitment-oriented men, who prefer main partners to casual or anonymous ones, and who enjoy sex more if in a romantic, interpersonal relationship, will disclose more often because they are more often in situations in which personal disclosure is appropriate. And conversely, individuals who favor anonymous partners or casual partners may do so to escape the intimacy of having to disclose their serostatus in the first place.

Hypothesis 12. Seropositive men who harbor more negative traits are more likely to believe that they have infected other individuals with HIV.

Negative feelings and evaluations, vengeance, and jealousy are all likely to influence an HIV-positive individual's perceptions of responsibility to protect others against further infection. Research into HIV disclosure suggests that most seropositive men believe it is their duty to protect other men from transmission (Wolitski & Bailey, 2006). And among men living with HIV, individual differences such as fears of spreading the disease, concern for individual autonomy, ultimately dictate responsibility levels. Yet, it is a small group of about one-eighth of seropositive men (who eschew all responsibility to protect others) that may be exemplifying the sorts of tendencies previously presented (i.e., trans-relational hostility, restitution via EwW, etc). In order to restore that trust that was stolen and that unprotected experience that was exploited at grave costs to the once seronegative individual, the now seropositive individual finds restitution from the same behaviors that ultimately changed his serostatus. This idea of seroconversion

inequity led me to reason HIV-positive men who exhibit more negative traits would report a stronger likelihood of having infected others.

Hypothesis 13. Seropositive men who are more likely to disclose sexual health information and who can justify nondisclosure less are both less likely to believe that they have infected other individuals with HIV.

Hypothesis 14. Seropositive individuals who take personal responsibility over situations or who believe in a just world will be less likely to perceive that they have transmitted HIV to others.

Where the previous hypothesis was concerned with those men who either eschew responsibility or view it as shared with men who are HIV-negative, the thirteenth and fourteenth hypotheses focus on individuals who are likely to view themselves as personally responsible for HIV-related communication or preventing transmission. The previous research suggests that men do disclose, even to anonymous or casual partners, despite the likely loss of positive outcomes (Stirratt, 2006). Senses of community protection, moral duty, or simply caring for others all influence disclosure. Yet, I wondered whether disclosing one's HIV serostatus was effective in also preventing transmissions. I wondered if negative outcome efficacy would play a latent role in the transition from behavior to enactment. As such, I optimistically reasoned that men who would be willing to disclose sexual health information and men who would be less willing to justify an act of nondisclosure would also report a diminished likelihood of transmission of HIV to other individuals.

As a follow up, I wondered if personal responsibility or if belief in a just world were really effective characteristics that might help prevent transmission to others. Again, about two-thirds of seropositive men hold HIV to be a personal responsibility—their own burden. This

hypothesis tests whether these individuals (or more generally, individuals who show responsibility towards duties or situations to which they have been assigned) actually believe they have prevented transmitting HIV to others. I reasoned that personal responsibility would be extremely effective in preventing the spread of HIV. As previously suggested, personally responsible individuals are more likely to disclose or to use condoms if they do not disclose (Stirratt, 2006; Wolitski & Bailey, 2006). Similarly, individuals who are personally responsible are intuitively more likely to believe in a just world. And individuals who believe in a just world seem less likely to perceive themselves as having transmitted HIV to others because HIV transmission to others is inherently unjust. Individuals who do not believe in a just world will admit to a stronger likelihood that they have transmitted HIV to others because to them, after all, this is an inherently unjust world. Simply, the more responsibility and the more justice an individual holds for the world will negatively relate to negative behaviors—negative behaviors like HIV transmission.

Framing seroconversion as a process that strips equity from a seronegative individual, and HIV vengeance as a means to restore that equity is indeed a philosophical way to understand transmission. Previous research suggests reasons documenting why many individuals fail to disclose their positive serostatus. Reasons have also been proffered as to why these same individuals engage in unprotected or risky sexual behaviors. It just seems that these explanations are too convenient. Unprotected intercourse is undeniably more arousing and more stimulating than protected intercourse. But at least in some, something significantly more psychological must be being used to absolve a seropositive man from (a) disclosing his serostatus, and then (b) using condoms. HIV restitution and HIV vengeance, at least on subconscious levels, must be being used as both a defense mechanism and a strong justification for such unconscionable behavior.

Just as HIV-negative men use specious reasoning to discern HIV-negative from HIV-positive men, *some* HIV-positive men must use selfish and self-deluded reasoning to enact unprotected intercourse. These fourteen hypotheses will hopefully shed light into HIV communication and HIV vengeance.

Chapter 3. Procedures and Methods

Online surveys are an increasingly popular and effective way of assessing attitudes and collecting information, especially from small or isolated populations (Bockting, Miner, Robinson, Rosser, & Coleman, 2006). Considering I was surveying homosexual men who were also HIV-positive, I opted for using such procedures. I wanted to provide respondents of the questionnaire with a palpable sense of anonymity and confidentiality. An individual's sexuality, let alone his serostatus is some extremely sensitive information; and if the sample was to be honest and candid, it would need an electronic veil that could be only provided by the home personal computer and Internet. Also, I was looking for a small portion of HIV-positive men who would ultimately fit the characteristics of nondisclosers. Serostatus concealment is not an admirable trait encouraged or endorsed by either the HIV-negative or HIV-positive communities (Stirratt, 2006). The Internet helped to tease admission of this inaction from individuals who would not ordinarily disclose such communication tendencies. Last, I needed a large sample of seropositive men ($n > 100$). A similarly large sample of HIV-negative men also needed to be surveyed in order to keep the experimental and control groups equal. The online survey allowed me to reach into communities all over the world and solicit gay, seronegative and seropositive participants, thus increasing geographic and ethnic diversity.

Procedures

IRB approval was received on October 31, 2006, after which, the survey was posted on www.surveymonkey.com for a monthly fee. This site offered the collection of data from up to 1,000 respondents per month, and it supplied me with a web-link, which could be distributed to the public. After the survey was accessible to the public, advertisements with links for the survey were strategically placed around the web. Notices were posted on gay blog pages (e.g.,

www.gay-torrents.net) to gain participation. Free advertisements were placed on www.craigslist.com, in the "etcetera jobs" section of its employment opportunities pages. These craigslist ads were placed in Chicago, Atlanta, Palm Springs, Ft. Lauderdale, Baltimore, Toronto, and Vancouver (see the appendix for an example, exhibit A). Advertisements were also placed in AOL "m4m" chat rooms, (e.g., "phoenixm4m," "southcarolinam4m," or, "losangelesm4m"). I took out a classified ad in the weekly publication, *Gay Chicago Magazine*, as well. Finally, advertisements were placed on gay listservs for graduate schools, for example, University of Michigan Medical School.

Participants indicated that the survey took between 20 and 30 minutes to complete. Consent was collected through the first two questions. These indicated that sensitive and frank material regarding health, sexuality, and attitudes were to be assessed through the following questions. The website would not let participants advance to the survey without consenting to both questions. When the questionnaire was completed, a thank you page popped up. The option to, and instructions for how to receive a small payment for completing the survey was also given through this thank you page. This compensation was a $10.00 gift card to Starbucks. Anonymity was kept intact during the compensation process as the individual had to independently contact us for payment through an email address supplied on that last, thank you page. Of all the individuals who completed the survey in its entirety, 44.7% (n = 98) requested compensation for their time.

The sample. This study was focused on bisexual and homosexual HIV-positive men, but used bisexual and homosexual HIV-negative men as a control group. This study used serostatus self-report because it has good validity between lab-tested HIV results and those that are self-reported (Ekstrand et al., 1999); and many other peer-reviewed, published studies have relied on

self-reports over serological tests to measure serostatus (e.g., Bockting et al., 2006; Kalichman et al., 2003; Mason et. al, 1995; O'Brien et al., 2003). Biological women, male-to-female postoperative transsexuals, female-to-male preoperative transsexuals, individuals who would not label their sexuality, and individuals who considered themselves heterosexual were all prevented from completing the survey via automatic redirection when any of those demographic attributes were selected.

The initial sample consisted of 219 individuals who had completed the questionnaire in its entirety. Of these individuals, 46.6% reported being seronegative (n = 102), 48.4% seropositive (n = 106), and 5.0% sero-unknown (n = 11). In order to ensure a sense of serostatus reliability (because I did not physically HIV-test individuals), I placed three questions in which a seropositive individual could indicate they were HIV-positive. The first was, "What is your serostatus?" The second was embedded in the question concerning which STD's an individual had; HIV was one selectable choice. And the third was embedded in a question concerning the frequency of HIV testing, where being seropositive was a choice. Reliability was excellent, α = .925, and thus, I am confident that the strong consistency in serostatus admission endorsed the likelihood for a truthful response. I decided to exclude sero-unknown individuals from any further analysis because I was not particularly interested in sero-ambiguity in this study; and also considering the group's small size, their response distributions on many of the dependent variables varied too widely.

This left a final sample of 208 participants. Virtually all of the seronegative and seropositive individuals reported being gay, 94.1% and 98.1% respectively; and of those who reported being bisexual, 5.9% were HIV-negative and 1.9% were positive. HIV-negative men ranged in age from 20 to 60 years (M = 29.79, SD = 8.00), while positive men ranged in age

from 20 to 62 years (M = 41.08, SD = 9.28). Seropositive individuals were older at a statistically significant level, $F(1, 206) = 88.29$, $\eta^2 = .30$, $p < .001$. Location was divided into eight ranges: less than 10,000 people, 10,000 - 50,000, 50,000 - 100,000, 100,000 - 250,000, 250,000 - 500,000, 500,000 - 750,000, 750,000 - 1,000,000, and 1,000,000+. The distribution of location for HIV-negative men, respective to this ascending order was: 2.0%, 10.8%, 8.8%, 7.8%, 10.8%, 7.8%, 6.9%, and 45.1%. Similarly, the distribution for positive men was: 2.8%, 7.5%, 4.7%, 10.4%, 7.5%, 7.5%, 15.1%, and 44.3%. The racial composite of seronegative men was 74.5% White, 1.0% Native American, 1.0% Black, 8.8% Latino, 9.8% Asian, 2.0% Indian, 2.0% Pacific Islander, and 1.0% Middle Eastern, whereas the sample of seropositive men was 84.9% White, Native American 0.9%, 1.9% Black, 7.5 % Latino, 2.8% Asian, 0.9% Indian, 0.0% Pacific Islander, and 0.9% Middle Eastern. These were not statistically different.

Some unintended results of advertising the survey on graduate school gay listservs were a skewing of HIV-negative men on two demographic attributes, income and education. The distribution of income for HIV-negative men was: 21.6% less than $10,000, 18.6% $10,000 - $30,000, 29.4% $30,000 – $50,000, 14.7% $50,000 - $75,000, 6.9% $75,000 - $100,000, and 8.8% $100,000+. However, the distribution for positive men was: 6.6%, 25.5%, 31.1%, 17.9%, 14.2%, and 4.7% respectively, $\chi^2(5, N = 208) = 13.743$, $\Phi^2 = .066$, $p = .017$. The composite of education for seronegative men was 1.0% finished some high school, 5.9% graduated high school, 10.8% graduated high school and finished some college, 22.5 % graduated college, 24.5% graduated college and finished some graduate school, 35.3% have a graduate degree, whereas the sample of seropositive men using that same attribute order was 4.7%, 14.2%, 17.0%, 34.9%, 4.7%, and 24.5%, $\chi^2(5, N = 208) = 26.359$, $\Phi^2 = .127$, $p < .001$. Because many

seronegative graduate students completed the survey, their low income but high education level skews them away from the more normal distribution responded by the seropositive men.

Measures

Besides the previously mentioned demographic measures, I also assessed individual differences in negative and positive traits (e.g., propensity towards hostility), other sorts of health and sexual demographic information, and health behaviors and communication (e.g., condom use, HIV disclosure). Note the full questionnaire may be viewed in the appendix to this dissertation under exhibit B.

Measuring traits. Established scales were used to assess most of these negative states or traits. The following reliability coefficients were derived from the data from this current sample. Stuckless and Goranson's (1992) 20-item Vengeance scale ($M = 2.93$, $SD = .97$) was used to assess the degree to which an individual tended towards vengeance or revenge, $\alpha = .93$. An example from this measure was "I don't just get mad—I get even." This was measured on a seven-point scale, where a score of one signified an individual was not at all vengeful, and a score of seven signified an individual was extremely vengeful. From vengeance and revenge, the survey asked aggression-oriented questions and checked tendencies towards manipulative behavior. Subscales from Buss and Perry's (1992) 29-item Aggression questionnaire, which measured physical aggression ($M = 2.07$, $SD = 0.68$, $\alpha = .83$), anger ($M = 2.42$, $SD = 0.70$, $\alpha = .81$), and hostility ($M = 2.81$, $SD = 0.75$, $\alpha = .83$), posed statements like, "once in a while I can't control the urge to strike another person." Respondents could claim it characteristic or uncharacteristic of themselves. These were measured on five-point scales, where, for instance using hostility, a score of one signified an individual was not at all hostile, and a score of five signified an individual was extremely hostile. I used Dalbert's (1999) 7-item Justice scale ($M =$

4.54, *SD* = .92) to measure individuals' beliefs that their world was just, α = .76. Items for this scale included, "I am usually treated fairly." This was measured on a seven-point scale, where a score of one signified an individual strongly believed the world was unjust, and a score of seven signified an individual strongly believed the world was just. The final established measured used was the Ascription of Responsibility scale (*M* = 3.59, *SD* = 0.46) by Schwartz (1968), with statements like, "I would feel less bothered about leaving litter in a dirty park than in a clean one." As in other studies (e.g., Eisenberg et al., 2002), I used an adapted, 12-item version of this measure (from the original 20-item version,) α = .65. Note that even in Schwartz's original use of the scale, reliability was no higher than .67. This was measured on a five-point scale, where a score of one signified an individual strongly absolved himself of personal responsibility, and a score of five signified an individual strongly held himself personally responsibility in situations.

There were several new scales that I created in order to test specific sorts of constructs. These scales and their items were created after reading qualitative studies on seropositive men where they discussed each of these constructs: commitment to partner, feelings about sex, willingness to disclose serostatus, and justifying nondisclosure (see Bailey & Hart, 2006; Halkitis & Wilton, 2006; Halkitis, Wolitski, & Gómez, 2006). To assess individual's propensities towards committed relationships (*M* = 3.52, *SD* = 0.80), I asked six items—"I think it's important to know a person's last name if I'm sleeping with them." Reliability was good, α = .81. This was measured on a five-point scale, where a score of one signified an individual preferred anonymous partners, and a score of five signified he preferred a committed partnership. To assess individuals' feelings about sex (*M* = 3.86, *SD* = 0.62, α = .73), I asked six items—"Most of the time, I feel good when I'm having sex." This was measured on a five-point scale, where a score of one signified he found sex extremely unpleasant, and a score of five signified he

found sex extremely pleasant. To assess individuals' willingness to disclose sexual health information, I asked six items ($M = 3.79$, $SD = 0.77$, $\alpha = .82$)—"I think it's important to talk about STD's or HIV before having sex." This was measured on a five-point scale, where a score of one signified he was extremely unwilling to disclose sexual health information, and a score of five signified he was extremely willing to disclose information. Finally, I created nine scenarios that presented situations in which HIV disclosure occurred or did not occur. These situations manipulated nondisclosure in terms of concealment, deception, and interest in transmitting to others. And example of an item from this scale is:

> Tommy's a little drunk and he brings home a partner he just met at a bar. Tommy is HIV-positive and is fairly certain that the partner he's bring home is positive too. They have unprotected sex, and in the morning, the partner reveals that he is actually negative. Tommy doesn't say anything about his status to prevent a scene from breaking out.

Participants could indicate on a seven-point scale how justified or unjustified were the behaviors in the scenarios. These 9 items coalesced to form a reliable scale ($\alpha = .80$) that assessed individuals' propensity to justify nondisclosure of HIV ($M = 2.07$, $SD = 0.88$). A score of one signified an individual was unwilling to justify nondisclosure, and a score of seven signified he was extremely willing to justify nondisclosure. Note that for this measure, there was a slight skew towards unwillingness to justify nondisclosure.

Health demographics. There were several health demographic questions that could only be accessed and answered if one reported he was HIV-positive. I assessed if seropositive individuals were adhering to a highly active antiretroviral therapy (HAART) regiment, when they were diagnosed with HIV, and how they had contracted HIV (through oral, anal, or sexual contact with main, anonymous, or casual partners). I also created measures scaled on a continuum from 0% to 100% certainty using increments of 10% that assessed the degree to which a seropositive individual was certain of by who (item 1), when (item 2), and how (item 3)

he had contracted HIV, $M = 59.48$, $SD = 30.87$, $\alpha = .76$. Thus the mean is a percent, where a score of 100 signified absolute certainty, and a score of 0 signified absolute uncertainty.

Sexual demographics. I wanted to assess two sorts of sexual demographics. First, individuals could select (no = 0, yes = 1) up to 21 sorts of sexual behaviors in which they had engaged over the past year. These were selected after reviewing pieces of research that cite such behaviors during their discussions of sexual activity (Kelley & Byrne, 1992; Krafft-Ebing, 1886; Lowenstein, 2002; Moskowitz & Roloff, 2007; Sandnabba, Santtila, & Nordling, 1999). These were: receptive oral intercourse, insertive oral intercourse, receptive anal intercourse, insertive anal intercourse, insertive vaginal intercourse, receptive anilingus, insertive anilingus, receptive fisting, insertive fisting, receptive urination, dominant urination, receptive defecation, dominant defecation, receptive erotic asphyxiation, dominant erotic asphyxiation, domination, submission, voyeurism, exhibitionism, receptive sexual assault, and dominant sexual assault. For the definitions of these behaviors, see the appendix (exhibit B, question 60). A follow-up question was asked that measured in which of those same 21 behaviors the respondent would like to engage if they could with impunity or without fear of rejection. Individuals could select no (0) or yes (1) as they did for the previous question on behaviors they had actually enacted. I summed the 21 behaved sexual acts ($M = 5.67$, $SD = 3.38$) with good reliability, $\alpha = .83$, and the 21 "would like to behave" sexual acts ($M = 8.10$, $SD = 4.01$) with similarly good reliability, $\alpha = .86$. The survey then questioned how many sexual partners individuals had accrued over the past year with respect to oral ($M = 13.61$, $SD = 26.93$) and anal intercourse male partners ($M = 9.47$, $SD = 24.82$), and oral ($M = 0.11$, $SD = 0.56$), vaginal ($M = 0.10$, $SD = 0.52$), and anal intercourse female partners ($M = 0.07$, $SD = 0.50$.) These previous means should be interpreted as actual counts of behaviors, or actual counts of partners respectively. Last, respondents could indicate

the consistency with which they used drugs and alcohol, either just before or during sex experiences. All drug use was scaled on a continuum from 0% to 100% of the time using 10% increments. The seven illegal, illegally obtained, or legal drugs were: crystal methamphetamine, cocaine, Viagra or other erectile dysfunction medication, amyl nitrate (poppers), alcohol, ecstasy (MDA/MDMA), or marijuana. Though alcohol was tested, it did not make the final scale because it was not deemed a party-N-play drug (PnP). To get a general idea of individuals' tendencies towards PnP, or substance use/abuse during sex, the six drugs were summed (M = 8.62, SD = 13.32) with acceptable reliability, $\alpha = .69$. Like the HIV certainty measure, the mean for this measure is a percent, where a score of 100 signified never been sober just before or during sexual experiences, and a score of 0 signified an individual was always sober just before or during sexual experiences.

Health behaviors and communication. The use of condoms by participants and the degree to which HIV-positive men disclosed their status was of great interest. Both the condom and disclosure measures were scaled on a continuum from 0% to 100% of the time using 10% increments. As such, I measured, of those who reported performing five sexual behaviors, the percent of time individuals reported using condoms—receptive oral intercourse (M = 8.53, SD = 25.40), insertive oral intercourse (M = 8.59, SD = 25.74), insertive vaginal intercourse (M = 30.45, SD = 40.06), receptive anal intercourse (M = 52.96, SD = 43.06), and insertive anal intercourse (M = 56.06, SD = 42.65)—and with three sorts of partners—main (M = 43.41, SD = 45.33), casual (M = 57.10, SD = 42.41), and anonymous partners (M = 56.36, SD = 44.06). I also measured the percent of time HIV-positive individuals reported disclosing their serostatus to three sorts of partners—main (M = 90.88, SD = 25.96), casual (M = 78.84, SD = 32.37), and anonymous partners (M = 63.74, SD = 39.57). Again, the means are percents, where a score of

100 signified constant and enduring HIV disclosure, and a score of 0 signified constant and enduring HIV concealment.

The following results were based off of these procedures, sample, and measures.

Chapter 4. Results

In this chapter, I will report the following tests, patterns, and results. First, I will provide a statistical overview for how the hypotheses will be tested. Second, I will examine the pattern of correlations among all of the independent and dependent variables. Third, I will report the results associated with each hypothesis. For organizational purposes, I have broken this third part into sections. Initially, I will test the hypotheses associated with differences in psychological and sexual behavior between HIV-positive and HIV-negative men. Then, I will move onto intragroup differences in traits and behaviors within HIV-positive men, followed by disclosure differences between seronegative and seropositive men, and finally, disclosure differences within the HIV-positive group.

Statistical Overview

The data were statistically analyzed with ANOVA, bivariate correlations, multiple regression, and moderated regression. SPSS 11.0 for Mac was used for carrying out the analyses of variance, and the simple and multiple linear regressions presented in this current chapter. JMP 5.1 for Mac was used for all higher-level analyses (i.e., moderated regression and for graphing more complex models). Missing data was not found to be a significant problem as individuals could not continue onto the next webpage of questions without having answered all on the previous page. However, since the participants had the option to exit the questionnaire early, and also had the option to leave certain questions pertaining to sensitive HIV-oriented questions blank, some chose to stop answering. For example, of the 375 individuals who answered at least the first question, 219 (58.4%) finished the entire survey. Hence, the sample size will vary across some of the analyses.

Correlations among the Independent and Dependent Variables

Before testing the more central hypotheses regarding negative traits, serostatus, disclosure, and sexual behavior, I reviewed the correlation matrix (Table 1) for the independent and dependent variables. I attempted to achieve two goals. First, I wanted to establish construct validity. Second, I wanted to look for statistical artifacts that might provide incorrect results. There was a cluster of correlations that was noteworthy and should be discusses with respect to this initial goal. All of the outward-focused negative emotion scales were positively correlated (i.e., anger, hostility, vengeance, and physical aggression), but negatively correlated with the just world scale. This was not surprising since these negative emotions were factored from a larger scale (see Buss and Perry, 1992). Thus, what the correlations represented was a strong sense of construct validity. As such, when testing hypotheses that looked at the influence of negative traits over any dependent variable, all of these variables—vengeance, hostility, physically aggression, and anger—were tested individually to provide a more multifaceted understanding of the relationships. And this is what is meant by negative traits, or alternatively, outward-focused negative emotions.

Second, I was concerned with age and time since HIV diagnosis as artifacts. These variables were interesting because they represented indicators of maturation or growth. To digress, two of the most influential variables with respect to disclosure and nondisclosure are self- and outcome-efficacy (Kalichman & Nachimson, 1999; Parsons et al., 2005; Stirratt, 2006). Research suggests that over time since their diagnosis, individuals refine and change their ability to disclose or not disclose their serostatus; and ultimately, it is the incremental accrual of experiences that is responsible for HIV communication. Yet also, individuals' opinions, attitudes, and abilities change naturally as they age. The strong relationship found between age and time since HIV diagnosis itself, see row 16 on column 17 in the matrix, concerned me for

Table 1. Correlation matrix of variables

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	_	-.003	-.097	-.270**	-	.025	.042	-.060	.-.047	-.310**	-.119	-.078	.256**	.018	.387**	.556**	-
2		_	-.018	.023	.051	-.040	-.084	-.085	-.027	.101	-.044	.093	-.231**	-.129	.000	.117	.125
3			_	.134*	.057	-.023	.002	-.081	.063	-.024	.006	.047	.184**	.162*	-.074	.054	.068
4				_	.157	-.206**	-.047	-.162*	.266*	.433**	-.183**	.054	-.017	.071	-.434**	-.133*	.223*
5					_	.088	-.025	.011	-.115	.132	.076	-.130	-.107	-.089	.034	-.124	.070
6						_	.627**	.435**	-.453**	-.128	.579**	-.259**	-.049	-.046	.291**	-.157*	-.180
7							_	.493**	-.239**	-.065	.366**	-.238**	-.006	-.063	.103	.050	-.028
8								_	-.320**	-.025	.368**	-.480**	.007	.032	.064	-.131	-.130
9									_	.115	-.593**	.241**	.080	.046	-.305**	.117	.124
10										_	-.125	.069	-.338**	-.241**	-.382**	-.299**	.028
11											_	-.308**	-.109	-.088	.202**	-.192**	-.132
12												_	-.036	.004	-.053	-.043	.014
13													_	.664**	.091	.203**	.059
14														_	-.049	.140*	.100
15															_	.155*	-.143
16																_	.543**
17																	_

Note. 1 = Serostatus, 2 = PnP, 3 = Feelings about sex scale, 4 = Willingness to disclose scale, 5 = HIV transmission event certainty, 6 = Physical aggression scale, 7 = Anger scale, 8 = Hostility scale, 9 = Responsibility ascription scale, 10 = Commitment to partner scale, 11 = Vengeance scale, 12 = Just world scale, 13 = Enact/behaved sex acts, 14 = Wanted to enact/behave sex acts, 15 = justified nondisclosure scale, 16 = age, 17 = time since HIV diagnosis. ** $p < .01$, * $p < .05$.

this dual, and equally likely explanation. Because there was such a substantial correlation between the two variables, and there was a large portion of the variance explained ($R^2 = .29$), when testing time since HIV diagnosis as a predictor, I controlled for age. I did not want either age or time since HIV diagnosis to become spurious contributors or statistical artifacts.

Differences in Psychological and Sexual Behavior by Serostatus

Hypothesis 1. HIV-positive men are significantly more likely to report negative traits like vengeance, anger, hostility, physical aggression, and are less likely to believe in a just world.

The patterns contained in the correlation matrix did not confirm this hypothesis. None of the correlations between serostatus and the dependent variables were statistically significant. Overall, this suggests that HIV serostatus was not related to negative traits, and that hypothesis one was incorrect.

Hypothesis 2. HIV-positive men have more oral and anal male partners than HIV-negative men; and they use condoms during risky sexual behaviors significantly less than negative men.

Hypothesis two was tested through a series of one-way ANOVAs. Note that during these—and during future hypothesis tests in this chapter—the sample size varied dramatically; for example, the sample changed from 201 participants down to 130 in the proceeding tests. This was because individual could report that they had not had this sort of partner at all in the past year (e.g., a casual partner). As such, they were excluded from the analysis. This was the case for many of the variables that asked about partner types or sexual behaviors. If an individual did not report having had that sort of partner, they were excluded.

Table 2 shows that seropositive men had, on average, more oral and anal partners than seronegative men in a year, $F(1, 200) = 13.21$, $\eta^2 = .06$, $p < .001$, for oral partners, and $F(1, 200)$

= 16.90, η^2 = .08, p < .001, for anal partners. Also, seropositive men had more unprotected receptive and insertive anal intercourse than did seronegative men, $F(1, 147) = 12.00$, η^2 = .08, p < .001, and $F(1, 148) = 3.58$, η^2 = .02, p = .06 respectively. And finally, HIV-positive men had more unprotected intercourse with casual and anonymous partners than did HIV-negative men, $F(1, 129) = 40.08$, η^2 = .24, p < .001, for casual partners, and $F(1, 111) = 36.97$, η^2 = .25, p < .001 for anonymous partners.

Table 2. Sexual partners and condom use by group

	Seropositive	Seronegative
	M, *SD*	*M*, *SD*
Number of oral partners*	20.37, 34.24	6.99, 14.33
Number of anal partners*	16.40, 33.57	2.61, 4.48
% of time, protected receptive anal*	42.14, 40.87	66.15, 43.33
% of time, protected insertive anal **	50.85, 42.66	63.97, 41.76
% of time, protected w/ main partner	40.15, 45.22	48.92, 45.69
% of time, protected w/ casual partner*	41.36, 41.92	84.79, 29.03
% of time, protected w/ anonymous partner*	42.11, 43.03	89.71, 25.03

Note. Significantly different at: * p < .001, ** p = .06

I wanted to further understand the role of HIV serostatus with respect to protected and unprotected anal intercourse. Regression models were created, including interaction terms to test if the relationship between the tendency towards protected sex and number of sex partners was further moderated by the men's HIV status. The interaction term was the product of serostatus

multiplied by number of anal sex partners. Two statistically significant, moderated multiple regression models emerged, one with the interaction term predicting unprotected receptive anal intercourse and the other, predicting unprotected insertive anal intercourse. The first found that a model containing the main variables, HIV serostatus and the number of anal partners, and an interaction term of the two was significant at predicting protected receptive anal intercourse, $F(3, 134) = 7.20$, $R^2 = .14$, $p < .001$. The interaction term added significantly to the fit of the model, $b = -.11$, $p = .028$, $\Delta R^2 = .03$. The second found that the same independent variables could predict protected insertive anal intercourse, $F(3, 135) = 6.15$, $R^2 = .12$, $p < .001$. For this model, the interaction term was also significant, $b = -.14$, $p = .005$, $\Delta R^2 = .05$.

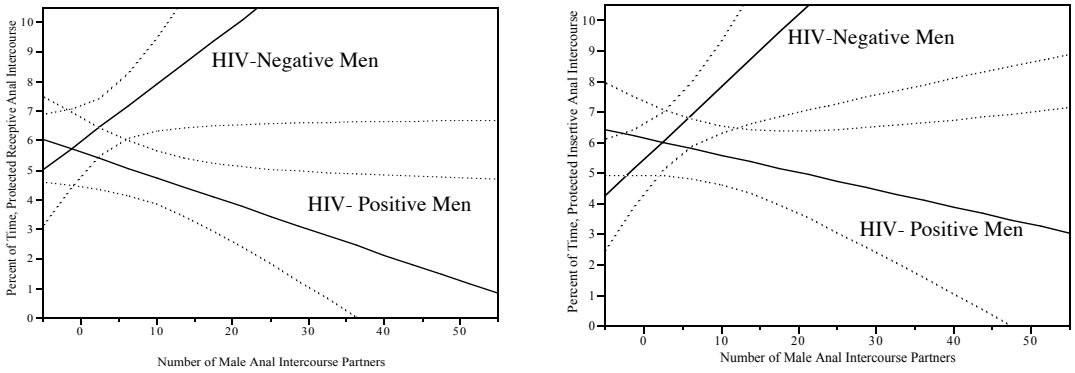

Figure 2. The number of male anal partners predicting protected receptive and insertive anal intercourse by serostatus group. The x-axis values are actual self-report counts of partners. The y-axis values are percent of time where, y = percent of time x 10^{-1}. There were nine outliers that fell above two standard deviations from mean. I left them in the statistical models, as they did not influence their significance. Yet, for the graphs, I removed them to show a less diffuse interaction plot (keeping it to $x \leq 50$ partners). Again, the same relationships would ensue for both receptive and insertive protected anal whether the outliers were included or excluded. Dotted lines indicate the 95% confidence interval for each group.

After breaking apart the interaction, the results supported the second hypothesis and indicated, as the number of men an HIV-negative man had anal intercourse within a year increases (for receptive anal, $b = .19$, $t(63) = 1.90$, $p = .06$; for insertive anal, $b = .23$, $t(66) = 2.45$, $p = .02$), so too did the likelihood that he would be having protected receptive and

insertive anal sex; conversely, as the number of men an HIV-positive man had anal intercourse within a year increases (for receptive anal, $b = -.03$, $t(78) = -2.27$, $p = .026$; for insertive anal, $b = -.04$, $t(76) = -3.03$, $p = .003$), the likelihood that he would use protection lessens. Figure 2 illustrates these propensities. So, HIV-positive men engaging in the most dangerous acts were doing so with lots of other men.

Hypothesis 3. HIV-positive men enjoy more sexual freedom and actualize on their sexual behavior desires more so than do HIV-negative men.

The patterns identified in the correlation matrix indicated that HIV-positive men enacted more sexual behaviors than do seronegative men. However, these patterns suggested that no difference existed between the groups on the "want to enact sex acts" scale. There was a strong correlation between enacting sexual behavior and wanting to enact sexual behavior, $r = .66$, $p < .001$. So, those men who wanted to enact a variety of behaviors seemed to do so. To test the above hypothesis, I created a model to see if the desire to enact sexual behavior, and actual enactment of sexual behavior, was moderated by serostatus. The interaction term was the product of serostatus multiplied by desired enactment of sexual behavior. The model containing the main variables, HIV serostatus and wanting to enact sexual behavior, and the interaction term of the two was significant at predicting actual sexual behavior, $F(3, 195) = 60.41$, $R^2 = .48$, $p < .001$. The interaction term was also significant with respect to the model, $b = .10$, $p = .03$, $\Delta R^2 = .01$. Figure 3 illustrates this interaction.

In support of the third hypothesis, I broke apart the interaction and tested each group, seronegative v seropositive men, separately. Though there was a strong positive association between wanting to perform certain sexual behaviors and enacting them among seronegative men ($b = .45$, $t(100) = 6.64$, $p < .001$), the same association was even stronger between the two

variables among seropositive men ($b = .64$, $t(104) = 12.30$, $p < .001$). Simply, HIV-positive men actualized on their sexual desires at a significantly higher rate than HIV-negative men.

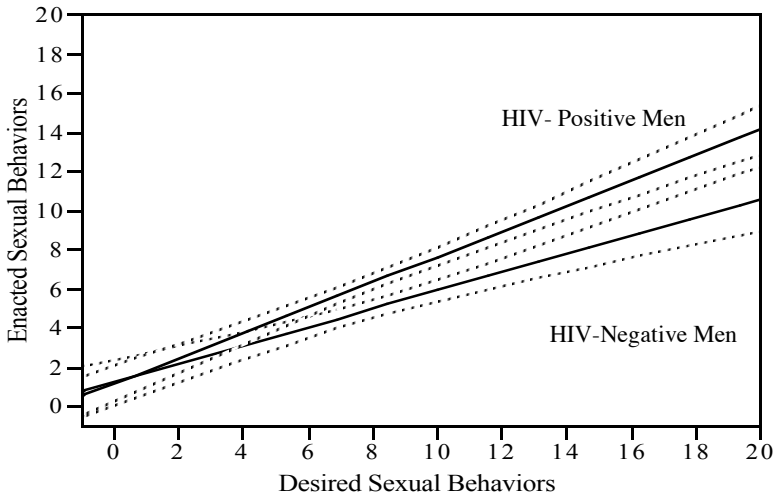

Figure 3. The desire to enact sexual behaviors predicting actual enactment of sexual behaviors by serostatus group. Note, both the x and y-axis values indicate a count of sexual behaviors. They are not codes for the behaviors themselves. Dotted lines indicate the 95% confidence interval for each group.

Differences among Seropositive Men

Hypothesis 4. Positive men who suspect they had become infected through anal intercourse show fewer negative traits than those who suspect they contracted it through oral intercourse, or through other sexual contact.

Out of all risky sexual behaviors, unprotected anal intercourse is unequivocally the most efficient way to achieve HIV transmission; unprotected oral intercourse and other sexual contact are often ambiguously correlated with actual transmission (see Robinson & Evans, 1999; Page-Shafer et al., 2002). I thought this ambiguity might cause negative emotions in individuals who perceived they contracted HIV in such a way. However, the fourth hypothesis was disconfirmed. There were no statistically significant differences between those who contracted HIV through

anal intercourse, oral intercourse, or other sexual contact with respect to vengeance, anger, hostility, physical aggression, responsibility ascription, etc.

In fact, of all the variables I worked with outside of those negative traits tested in hypothesis four, on only one was an association statistically significant. The means for the degree to which an individual was certain of how he was infected (of the transmission event) were different, $F(2, 89) = 3.75$, $\eta^2 = .09$, $p = .027$. Interestingly, individuals who perceived they contracted the disease through oral sex were most confident with their transmission method ($M = 76.63$, $SD = 24.70$), followed by those who thought it was through anal intercourse ($M = 63.62$, $SD = 29.51$), and finally, those who thought it was through other sexual contact ($M = 45.63$, $SD = 24.70$). A Bonferroni correction indicated that only oral intercourse and other sexual contact means were different ($M\ diff = -31.00$, $p = .049$). This suggested that contrary to previous reasoning, individuals who contracted HIV through anal intercourse were no more certain than either those who contracted it through oral or other sexual contact.

Hypothesis 5. The degree to which an HIV-positive individual is certain of how he became infected (of the transmission event) is negatively related to negative traits.

Individual linear regressions uncovered no significant relationship between certainty surrounding the HIV transmission event and any trait (i.e., vengeance, anger, hostility, physical aggressions, or even responsibility ascription, and feelings about sex). However, time since diagnosis was a likely moderator because, as supported by the extensive research presented in previous chapters, psychological functions of victimization (i.e., emotional and individual trait changes) develop and refine over time. Testing time since HIV diagnosis required me to control for age (see correlation matrix). Even so, when time since the HIV diagnoses was tested as a moderator, relationships between certainty, age, and psychological traits became significant and

in some cases, quite strong. First, I tested the degree to which time since HIV diagnosis moderates the relationship between HIV transmission event certainty and vengeance, when controlling for age. An interaction term comprised of time since diagnosis multiplied by transmission certainty was created. The model was significant, $F(4, 88) = 2.91$, $R^2 = .12$, $p = .026$, and the interaction term added significantly to the fit of the model ($b = -.04$, $p = .012$, $\Delta R^2 = .07$).

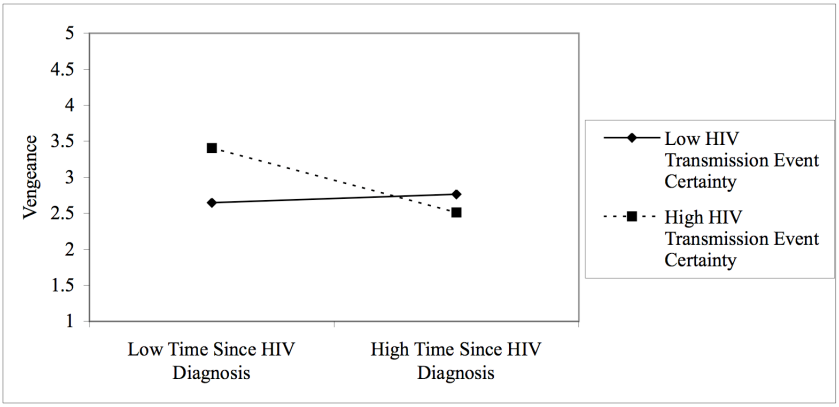

Figure 4. Time since HIV diagnosis predicting vengeance by HIV transmission event certainty. Low certainty means one standard deviation below the mean, and high certainty means one standard deviation above.

As Figure 4 illustrates, I broke HIV event certainty into two groups. Those that fell one standard deviation ($SD = 30.50$) below the mean of HIV event certainty were placed into the highly uncertain group, and those that fell one standard deviation above were placed into the highly certain group. Controlling for age, an unforeseen effect emerged. If an HIV-positive individual was highly uncertain of how he acquired HIV, over time he would become neither more nor less vengeful, $b = .03$, $t(88) = .46$, $p = .65$. Yet, if he were highly certain of the transmission event, he would become increasingly less vengeful, $b = -.22$, $t(88) = -2.80$, $p = .006$. So to a certain degree, the fifth hypothesis was confirmed.

Then, I tested the degree to which time since HIV diagnosis moderates the relationship between HIV transmission event certainty and hostility. The same interaction term was used as in the previous two tests, certainty multiplied by time since diagnosis. The model was not significant, $F(4, 88) = 1.86$, $R^2 = .08$, $p = .124$; however, the interaction term of time since diagnosis and event certainty added significantly to the model, $b = -.02$, $p = .044$, $\Delta R^2 = .04$. After breaking apart the HIV certainty variable and testing each level, there was no statistically significant relationship with respect to those who were highly uncertain, $b = .03$, $t(86) = .53$, $p = .599$; however, as Figure 5 illustrates on the next page, there was a significant relationship among those who were highly certain , $b = -.11$, $t(86) = -2.00$, $p = .05$).

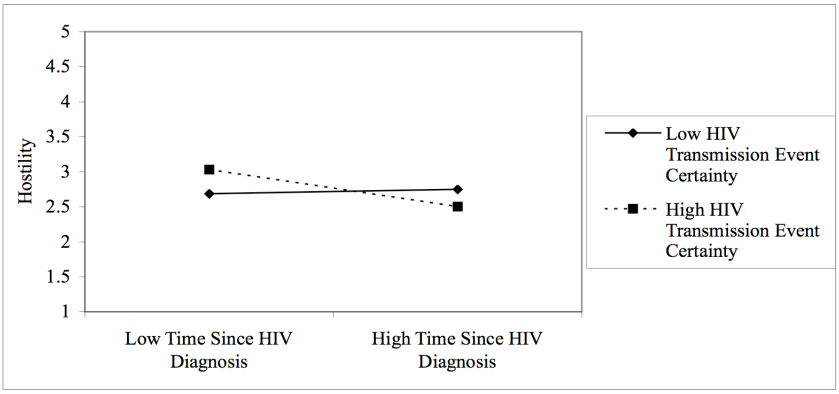

Figure 5. Time since HIV diagnosis predicting hostility by HIV transmission event certainty. Low certainty means one standard deviation below the mean, and high certainty means one standard deviation above.

Simply, individuals who were highly certain of their HIV transmission event became less hostile over time. Individuals who were highly uncertain showed little propensity towards either greater or diminished hostility. Again, to a certain degree, the hypothesis could be relatively confirmed. Note that I also tested age, time since diagnosis, HIV transmission certainty, and the interaction term (time multiplied by certainty) on anger and physical aggression as the dependent variables, but no significant models could be created. Overall towards the fifth

hypothesis, the variable of HIV transmission event certainty only influenced some of the negative traits I measured and their prevalence *over time*.

Intergroup Disclosure Differences

Hypothesis 6. Seropositive men will be less willing to disclose sexual health information and will find nondisclosure more justified than seronegative men.

It has already been established through the correlations in Table 1 that serostatus and willingness to disclose sexual health information were related (see correlation matrix, variables one on four). Though more specifically, seropositive men were less likely than seronegative men to willingly disclose sexual health information to their partners, $F(1, 206) = 16.17$, $\eta^2 = .07$, $p < .001$. And since the willingness to disclose sexual health information was negatively correlated to the justified nondisclosure scale ($r = -.43$, $p < .001$), it was no surprise that seropositive men were also more likely than seronegative men to justify nondisclosure of HIV serostatus, $F(1, 197) = 33.55$, $\eta^2 = .15$, $p < .001$.

Table 3. Disclosure scales by group

	Seropositive	Seronegative
	M, *SD*	*M*, *SD*
Willingness to disclose health information*	3.59, .80	4.00, .69
Willingness to justify nondisclosure of HIV serostatus*	2.40, .97	1.72, .59

Note. * Significantly different at, p < .001.

Table 3 describes the means and standard deviations of the willingness to disclose sexual health information and to justify nondisclosure scales. Though both of the serostatuses favor treating nondisclosure as unjustified, seropositive men hold a less extreme position on the matter. The above tests validate the sixth hypothesis.

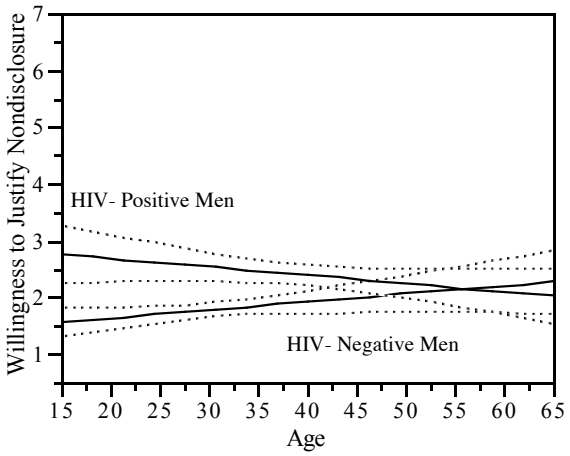

Figure 6. Age predicting willingness to justify nondisclosure by serostatus group. Dotted lines indicate the 95% confidence interval for each group.

As an addendum to this hypothesis, it should be noted that although age did not moderate the relationship between willingness to disclose sexual health information and serostatus, it did moderate the relationship between serostatus and willingness to justify disclosure. This latter model was significant, $F(3, 204) = 14.50$, $R^2 = .18$, $p < .001$. The interaction term composed of serostatus multiplied by age was significant, $b = .02$, $p = .02$, $\Delta R^2 = .02$. In breaking the interaction term into seronegative and seropositive groups, only marginally significant effects emerged. Justifying nondisclosure became increasingly more popular among seronegative men as they age ($b = .01$, $t(100) = 1.84$, $p = .07$); however, among seropositive men, justifying nondisclosure became increasingly less popular as age increases ($b = -.02$, $t(104) = -1.82$, $p = .07$). Younger HIV-positive men were thus marginally more likely to justify nondisclosure.

Figure 6 illustrates the differences between the serostatus with respect to age and nondisclosure.

Hypothesis 7. Negative traits will moderate the relationship between serostatus and the willingness to disclose sexual health information and the willingness to justify nondisclosure.

Again, Table 1 shows the negative relationships between willingness to disclose sexual health information and vengeance, physical aggression, and hostility. I wanted to explore that these negative traits play(more significant role among HIV-positive men than HIV-negative men with respect to disclosure. Interaction terms were created between serostatus and those previously mentioned traits; however, none proved to significantly moderate willingness to disclose sexual health information. It was only in the case of justifying nondisclosure that traits (and behaviors like PnP) became significant in moderating the relationship between serostatus and the dependent variable.

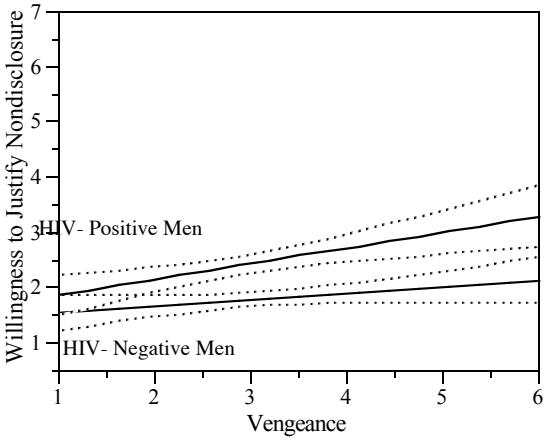

Figure 7. Vengeance predicting willingness to justify nondisclosure by serostatus group. Dotted lines indicate the 95% confidence interval for each group.

As predicted, vengeance influenced the relationship between serostatus and justifying nondisclosure at marginally significant levels, $F(3, 195) = 19.40$, $R^2 = .23$, $p < .001$. Multiplying

vengeance by serostatus created an interaction term that approached significance, $b = .10$, $p = .07$, $\Delta R^2 = .01$. As Figure 7 illustrates, among HIV-negative men, vengeance positively impacted whether nondisclosure was justified, $b = .12$, $t(100) = 1.95$, $p = .05$; yet among HIV-positive men, there was an even stronger, positive relationship between vengeance and justifying nondisclosure, $b = .33$, $t(104) = 3.76$, $p < .001$.

No other *negative* trait moderated the relationship between serostatus and justifying nondisclosure. However, ascription of responsibility (which was neither positive nor negative) did prove to moderate the relationship. This variable basically measured individuals' sense of personal responsibility. The overall model was significant, $F(3, 195) = 20.04$, $R^2 = .24$, $p < .001$, as was the interaction of serostatus multiplied by ascription of responsibility ($b = -.23$, $p = .05$, $\Delta R^2 = .02$). It became evident that among seropositive men ($b = -.73$, $t(104) = -3.84$ $p < .001$), personal responsibility was more negatively related to justifying disclosure than in seronegative men ($b = -.29$, $t(104) = -2.29$ $p = .02$). Only one variable significantly and positively influenced HIV-negative men's ability to justify nondisclosure of an HIV-positive serostatus. This was the party-N-play or PnP variable. A significant interaction model existed, $F(3, 157) = 11.91$, $R^2 = .19$, $p < .001$, as did a significant interaction term of PnP multiplied by serostatus ($b = -.13$, $p = .04$, $\Delta R^2 = .02$). Looking at each group separately, the more a seronegative man engaged in PnP behaviors, the more likely he was to justify a seropositive man's nondisclosure of his serostatus ($b = .30$, $t(77) = 4.09$ $p < .001$). This relationship did not exist among HIV-positive men with respect to drug use just before or during sex ($b = .004$, $t(89) = .63$, $p = .532$). Figure 8 illustrates both the PnP and responsibility ascription interaction models. Overall, the seventh hypothesis was partial proven because of the vengeance variable.

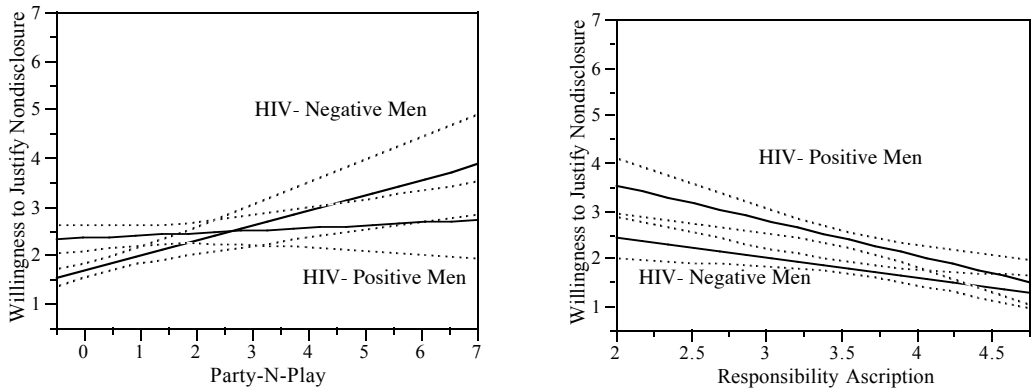

Figure 8. Party-N-play and responsibility ascription predicting willingness to justify nondisclosure by serostatus group. The party-N-play (PnP) scale signifies percent of sexual experience where an individual was using drugs either just before or during intimacy (X_{PnP} = percent of time x 10^{-1}). Higher values on the responsibility ascription scale signify responsibility lies with the individual; lower values signify that responsibility lies with other individuals. Dotted lines indicate the 95% confidence interval for each group.

Disclosure Differences within HIV-Positive Men

Hypothesis 8. Seropositive men who adhere to highly active antiretroviral therapies (HAART) will be more willing to disclose sexual health information, be less likely to justify nondisclosure, and will disclose their serostatus more readily to main, casual, and anonymous partners.

Of the 103 men who answered the bank of questions exclusively for seropositive men, about two-thirds (62.1%) of that sample indicated that they were adhering to a HAART regiment. Table 4 shows the means and standard deviations for the disclosure variables for those who adhere to HAART versus those who do not. As predicted, seropositive men on HAART were more willing to disclose sexual health information, and they were less likely to justify the nondisclosure of serostatus before, during, or after sex, $F(1, 101) = 6.16$, $\eta^2 = .06$, $p = .015$, and $F(1, 101) = 5.10$, $\eta^2 = .05$, $p = .026$ respectively. However, there was no significant difference between the disclosure behaviors of those on HAART and those who were not with respect to main, casual, or anonymous partners. As an aside, I wondered whether this HAART variable

was correlated with any of the psychological trait variables, as it had been with other unrelated variables described in previous research (e.g., Parsons et al., 2005). Interestingly enough, seropositive men who adhere to HAART were less physically aggressive (r = -.31, p =.001), less hostile (r = -.20, p =.049), and less vengeful (r = -.19, p =.057) than were seropositive men who were not on medication. They were also more likely to believe in a just world (r = .23, p =.021). Overall, the eighth hypothesis was partially proven.

Table 4. HAART means and standard deviations

	HAART	Untreated
	M, *SD*	*M*, *SD*
Willingness to disclose health information*	3.75, .80	3.35, .74
Willingness to justify nondisclosure of HIV serostatus*	2.25, .77	2.68, 1.21
% of time, disclosure of serostatus to main partners	92.40, 24.46	88.33, 28.53
% of time, disclosure of serostatus to casual partners	83.51, 29.73	70.93, 35.50
% of time, disclosure of serostatus to anonymous partners	68.18, 37.71	56.95, 41.87

Note. * Significantly different at, p < .05.

Hypothesis 9. As time from HIV diagnosis increases, the willingness to disclose sexual health information and the tendency to disclose to casual and anonymous partners will decrease. The tendency to justify nondisclosure and the tendency to disclose to main partners will increase.

When testing time since HIV diagnosis, I had to control for age, and so the following tests will also include this demographic variable as a predictor. I first tested willingness to

disclose sexual health information and the time variable. The overall model only approached significance, $F(2, 86) = 2.44$, $R^2 = .05$, $p = .09$. Age did not significant contribute to the model ($b = -.01$, $p = .33$), however, time since HIV diagnosis did ($b = .10$, $p = .03$). This suggested that after controlling for maturation, as time transpires from the diagnosis, seropositive men became increasingly more willing to share sexual health information.

As for *actual* disclosures to casual and anonymous partners (not merely willingness towards disclosure), and the tendency to justify nondisclosure, models comprised of time from diagnosis and age did not significantly predict any of those variables. A significant model could be created using the independent variables, time since diagnosis, age, and the dependent variable, disclosure to main partners, $F(2, 63) = 3.55$, $R^2 = .10$, $p = .03$. As in the previous model, age was not a significant predictor ($b = .03$, $p = .40$); however, time since diagnosis did approach significance ($b = .29$, $p = .08$). So, when controlling for age, as the time since diagnosis increased, it was marginally more likely that seropositive men would disclose to their main partners. Again, this hypothesis was only partially supported.

Hypothesis 10. Vengeance, anger, hostility, and physical aggression are negatively correlated with HIV disclosures to main, casual, and anonymous partners.

I first regressed vengeance on each of the disclosure variables. With respect to main partner disclosures, vengeance was not significantly related, $F(1, 78) = 1.29$, $R^2 = .02$, $p = .26$. However, there was a significant and negative relationship between vengeance, $b = -.85$, and HIV disclosure to casual partners, $F(1, 84) = 6.51$, $R^2 = .07$, $p = .01$, and vengeance, $b = -.78$, and HIV disclosure to anonymous partners, $F(1, 89) = 3.79$, $R^2 = .04$, $p = .05$. Hostility and anger were not correlated with disclosure to any sort of partner. Finally, supporting the hypothesis, physical aggression as a negative trait was negatively correlated with both main ($b =$

-.85) and casual partners, (b = -.97), $F(1, 78) = 4.41$, $R^2 = .05$, $p = .04$, and $F(1, 84) = 4.84$, $R^2 = .05$, $p = .03$ respectively, but not anonymous partners. Overall, there was marginal support for hypothesis ten.

Hypothesis 11. Commitment to partners and HIV disclosures to main, casual, and anonymous partners are positively correlated among seropositive men.

Commitment to partners, (i.e., the degree to which an individual prefers commitment with respect to sexual partners), was negatively correlated with serostatus (see Table 1, variables one on ten). That is, positive men favored anonymous or casual partners over main partners. However, within the seropositive group, individual differences existed, and they influenced disclosure at significant levels. An interaction model could not be built because my survey did not ask HIV-negative men to indicate the percent of time they disclosed their HIV-negative serostatus to each type of partner. As such, I used simple linear regression to test this hypothesis. Commitment to partners was indeed positively correlated with all disclosure types among seropositive men. It should be noted that with the disclosure to main partners variable, the model only approached significance (b = .63), $F(1, 72) = 3.00$, $R^2 = .04$, $p = .09$. Though for the relationships between this independent variable, and disclosures to casual partners (b = 1.19) and disclosures to anonymous partners (b = 2.05), the relationship was statistically significant below the, $\alpha = .05$ level, $F(1, 78) = 5.68$, $R^2 = .07$, $p = .02$, and $F(1, 83) = 15.47$, $R^2 = .16$, $p < .001$ respectively. The eleventh hypothesis was therefore confirmed.

Hypothesis 12. Seropositive men who harbor more negative traits are more likely to believe that they have infected other individuals with HIV.

Testing this hypothesis required that I control for time since individuals' HIV diagnoses. For even though there was not a statistically significant correlation between time since diagnoses

and transmission to others ($r = .08$, $p = .47$), or between time and any of the other predictors; theoretically, individual who had HIV longer were more likely to have transmitted it to others (whether they were ignorant or cognizant of the transmission). This was my guiding rationale for including the variable in all models. First vengeance was tested. The simple linear model was not significant; however, after analyzing a scatter plot of vengeance predicting HIV transmission to others, it appeared that a quadratic term might significantly fit the data. Figure 9 illustrates both the simple scatter plot and the quadratic model. So, using time since HIV diagnoses, vengeance, and the quadratic term of vengeance squared ($b = .59$, $p = .03$, $\Delta R^2 = .06$), a significant amount of variance was accounted $F(3, 83) = 2.88$, $R^2 = .09$, $p = .04$. Vengeance became exponentially more positively correlated with transmission of HIV to others, especially among men who were highly vengeful. Anger, physical aggression, and hostility were all tested similarly to vengeance; however, none predicted transmission of HIV to others suggesting the twelfth hypothesis only really applied to vengeance.

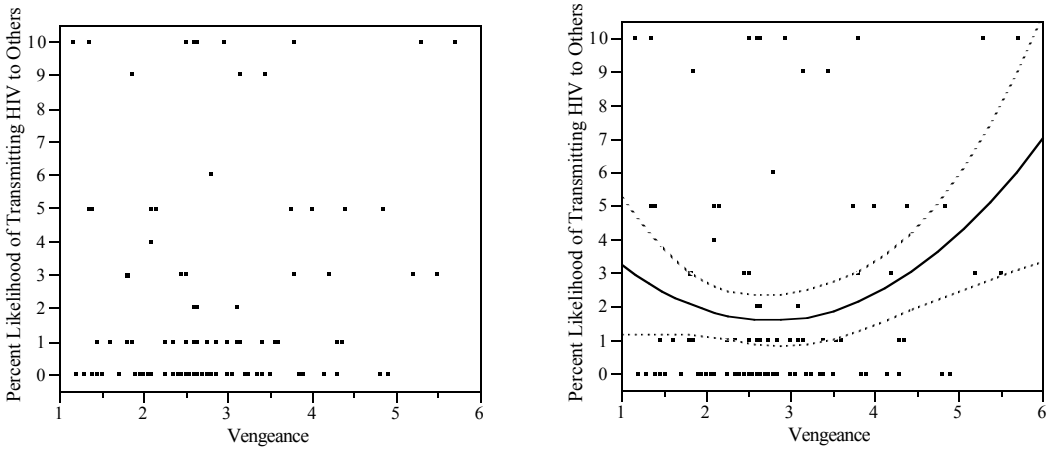

*Figure 9.*Vengeance predicting the likelihood of transmission of HIV to others. The figure on the left represents a scatter plot of vengeance on transmission. Note the suitability of a quadratic. The figure on the right confirms the presence of vengeance as a quadratic. Dotted lines indicate the 95% confidence interval.

Hypothesis 13. Seropositive men who are more likely to disclose sexual health information and who can justify nondisclosure less are both less likely to believe that they have infected other individuals with HIV.

Again, I controlled for time since HIV diagnosis when testing these disclosure variables on HIV transmission to other men. A statistically significant model could be created with time (b = -.05, p = .74) and willingness to disclose sexual health information (b = -1.11, p = .01) predicting transmission to others, $F(2, 84) = 3.72$, $R^2 = .08$, $p = .03$. Unlike for vengeance, the quadratic model was not statistically significant. As for the second part of the hypothesis, a significant model could also be created using the predictors, time (b = -.06, p = .69) and the tendency to justify nondisclosure (b = 1.48, $p < .001$), on transmission to others, $F(2, 84) = 8.82$, $R^2 = .17$, $p < .001$. So, HIV-positive individuals who were willing to discuss their sexual health were less likely to transmit HIV to others, and individuals who were more willing to justify nondisclosure to others were more likely to transmit HIV to others. The thirteenth hypothesis was therefore confirmed.

Hypothesis 14. Seropositive individuals who take personal responsibility over situations or who believe in a just world will be less likely to perceive that they have transmitted HIV to others.

In theory, there should have been a linear relationship with respect to personal responsibility and HIV transmission to others. However, within the sample of HIV-positive men, no linear model could be developed. Again, I reviewed the scatter plot. As in the previously mentioned model that predicted HIV transmission by vengeance, a quadratic pattern was likely present and useful in explaining more of the variance with respect to responsibility and transmission likelihood. Thus, a quadratic term comprised of ascription of responsibility squared

was added into a model already containing time since diagnosis and ascription of responsibility. Figure 10 illustrates both the simple scatter plot and the quadratic model. A significant quadratic model could be formed, $F(3, 83) = 5.99$, $R^2 = .18$, $p = .001$. Ascription of responsibility as a quadratic factor was also highly significant ($b = 4.65$, $p < .001$, $\Delta R^2 = .17$). Controlling for time since diagnosis, seropositive men were more likely to transmit HIV at the extremes of responsibility (i.e., if they were either personally responsible or attribute responsibility to others). Interestingly enough, men who neither blamed others nor blamed themselves were the least likely to perceive themselves as having transmitted HIV. Though a pattern emerged, it was not predicted by the fourteenth hypothesis.

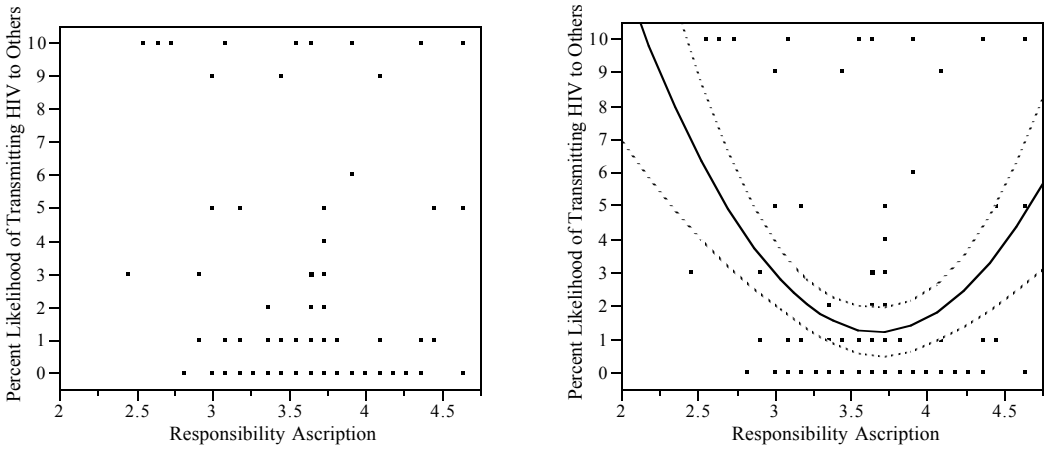

Figure 10. Responsibility ascription predicting the likelihood of transmission of HIV to others. The figure on the left represents a scatter plot of responsibility on transmission. Note the suitability of a quadratic. The figure on the right confirms the presence of responsibility ascription as a quadratic. Note that higher values on the responsibility ascription scale signify responsibility lies with the individual; lower values signify that responsibility lies with other individuals. Dotted lines indicate the 95% confidence interval.

Last, HIV transmission was regressed by the belief in a just world. Once again, a linear model of just world predicting transmission was insufficient at explaining enough variance. Yet, when looking at the scatter plot, it became likely that a significant quadratic model could be created. This was deceptive; and even though a quadratic could be viewed, neither it nor the

entire model was significant. Overall, neither ascription of responsibility nor belief in a just world predicting HIV transmission likelihood followed the trends suggested by this last hypothesis.

Chapter 5. Discussion

The main goals of this dissertation were to understand the roles of vengeance, negative traits, and other functions of victimization and retaliation in HIV-positive individuals' tendencies towards serostatus disclosure and towards perceptions about disease transmission to others. To a large degree, many of the hypotheses posited were confirmed. And even though some of the hypotheses oriented towards negative traits were disconfirmed, a predicted model of vengeance influencing behavior and attitudes emerged within the group of seropositive men—most notably among the top 25th percentile of vengeful individuals (vengeance > 3.24). In this chapter I will analyze the meaning of the results, discuss how and why the hypotheses were either confirmed or disconfirmed, and also show how the theories and research discussed in the literature review influence and apply to these current results. After these conclusions, I will discuss the limitations of the methodology and the research in general.

Conclusions

HIV vengeance or restitution as a means to restore theoretically lost equity is undoubtedly difficult to conceive and digest. Reasons have been documented that show why many individuals fail to disclose their positive serostatus. Reasons have also been suggested as to why these same individuals engage in unprotected or risky sexual behaviors. Few will deny that unprotected intercourse is more arousing and more stimulating than protected intercourse. But psychology and individual differences must also be being used to absolve an HIV-positive individual from disclosing his serostatus. The following conclusions will support this claim.

Group differences concerning psychological traits and sexual behavior. I predicted that seropositive men would report higher levels of negative traits and would generally favor the low sides of the positive traits' scales (e.g., low belief in a just world). The theories surrounding

victimization and restitution suggested that an individual who has been wronged would, at least for a period of time, embrace negative mood states and traits (Bard & Sangrey, 1986; Notman & Nadelman, 1976; Sutherland & Scherl, 1970). I reasoned HIV transmission as a transgression, and as such, an event that creates a victim out of the seroconvert. This idea was disconfirmed. Seropositive men were no more likely than seronegative men to tend to be more vengeful, angry, hostile, or physically aggressive. They were also no more likely than HIV-negative men to believe or disbelieve in a just world. This suggested that HIV might not be influential in pushing an individual into negative traits or emotional states; or broadly, it may not be enough of a life-intervention to instill a sense of victimization in individuals. An HIV-positive diagnosis in 2007 may indeed have lost its severity and its significance.

This contention was further supported by the comparable degrees to which seronegative and seropositive individuals believe in a just world. One might expect an individual living with HIV to hold a different perspective regarding the world and individual outcomes—more specifically, that this world is unfair. Previous research indicates that seronegative individuals use beliefs in a just world to reason and reconcile seropositive individuals (Correia & Vala, 2003; Correia et al., 2001). However, my current findings indicated that between the groups, the world is just as fair; and that HIV does not change that belief. Once again, this hypothesis was unanimously incorrect—perhaps because I overestimated the degree to which seroconversion is a victimizing process for many.

I moved on to the sexual behaviors of HIV-positive versus HIV-negative men. HIV disclosure has been established as an important measure in preventing the spread of the disease (Stirratt, 2006); and I wanted to reinforce that seropositive men have more sexual partners and engage in more sexual behaviors than do their seronegative counterparts (rendering serostatus

admission even more important). The results supported this claim and also supported the propensity of HIV-positive men to use condoms disproportionately less than HIV-negative men. This result was of little surprise. After all, once one becomes HIV-positive, one never has to worry about becoming HIV-positive. As supported by the results, condom use invariably declines and number of partners invariably increases within this group of men; disclosure, in situations where condoms are eschewed, does indeed become the only line of defense against HIV exposure, or ever worse, transmission.

In addition to the number of partners and amount of unprotected intercourse, sexual actualization (or the tendency to carry out sexual desires) was equally important in signaling why disclosure becomes vital during serodiscordant or sero-unknown sexual encounters. Gay men as a group showed a strong correspondence between the desire to enact behaviors and actually enacting behaviors. Yet *among* gay men, HIV serostatus moderated the relationship, and the data showed that seropositive men indeed sexually actualized at higher rates. But this was only a correlation, and though it is tempting to suggest HIV as the cause of this sexual freedom when making conclusions; further research will have to rule out whether this relationship exists because men who sexually actualize at higher rates are more likely to contract HIV in the first place. Either way, the results painted seropositive men as enactors and as less reserved. And individuals without sexual inhibitions and who actualize more may seem more likely to consciously or unconsciously ignore disclosure in order to accomplish the sex act.

Differences among seropositive men. The theories on victimization and some of the qualitative research presented suggest that individuals will perceive victimization differently and will vary the degree to which they blame themselves or blame others (Bimbi & Parsons, 2006; Silver & Wortman, 1980). As such, I thought that the way in which an individual contracted HIV

might influence the negative traits that stem from victimization. Again, this was incorrect. Individuals who contracted HIV through anal intercourse were no more or less likely than those who contracted it through oral intercourse, or sexual contact to exhibit vengeance, anger, hostility, or physical aggression. After reviewing the data, I concluded that individuals did not differentiate between transmission methods. They did not assign more blame if they perceived that seroconversion was a result of anal intercourse, oral intercourse, or some unprotected sexual contact (e.g., fisting). And to link back to the equity research by Walster et al. (1978), the transmission event itself must not drain equity, or force intrapersonal or interpersonal blame.

Following the tests surrounding HIV acquisition and psychological traits, I turned to how certain or sure individuals were of that transmission method or the transmission event as an independent variable. Research suggests that certainty, understanding, and reconciliation are all extremely influential over the stages that occur after being victimized (Bard & Sangery, 1986; Notman & Nadelman, 1976). They indicate that if this does not occur, psychopathology and interpersonal dysfunction can overwhelm an individual. I thought that the more certain an individual was of how he became infected, the less likely he would exhibit vengeance, anger, hostility, and physical aggression. Initially, no significant relationship existed between those variables. However, as suggested by the research, individuals' psychological states change over time, especially with respect to victimization and an event such as seroconversion (Bard & Sangery; Halkitis et al., 2006; Notman & Nadelman). The results were most evident among highly certain individuals where, over time, individuals certain of their transmission event were more likely to show decreased levels of vengeance and hostility. This suggested that reconciliation and comprehension were indeed extremely important in changing negative states in seropositive men. Men who remained uncertain about the events leading up to their

seroconversion showed no movement in vengefulness or hostility over time. Ostensibly, this unknown creates personal and emotional barriers blocking psychological changes and the likelihood of positive trait orientations (i.e., being more forgiving, compassionate, or agreeable).

Intergroup disclosure differences. Disclosure was finally analyzed using both theoretical measures (willingness to disclose sexual health information) and actual measures (percent of time that disclosure occurred). Previous research suggests specific variables that influence actual disclosure (see O'Brien et al., 2003; Stirratt, 2006); yet, I wanted to first examine general willingness towards disclosure and the willingness to justify nondisclosure. That is, I wanted to establish levels of theoretical disclosure that I could compare across men in both the seronegative and seropositive groups. The results confirmed that seropositive men show less willingness towards disclosures and more willingness towards justifying nondisclosure. Supporting the self- and outcome-efficacy research discussed in the literature review of this dissertation (namely Gorbach et al., 2004; Parsons et al., 2005 as well), these trends quantified that actually having to disclose a serostatus (having first-hand experience with telling another) is likely to push men towards unwillingness to disclose health information. These first-hand experiences are also likely to invite room to justify nondisclosures. Where seronegative men may not be able to comprehend why one might not disclose his serostatus, seropositive men have a greater understanding of the reactions that might ensue after a disclosure has been made. After all, age did moderate the relationship where, as individuals age, the ability to justify nondisclosure increases. Seronegative men have only speculative disclosure self-efficacy and *no* disclosure outcome-efficacy. In such a vacuum of experience, these men will self-present in an extremely conscientious way and according to social expectations. Simply, HIV-positive men know better.

Age was not the only suspected moderator between serostatus and willingness towards disclosure, and serostatus and willingness to justify nondisclosure. I tested whether negative traits exhibited by individuals moderated these relationships as well. Only vengeance moderated the relationship between serostatus and justifying nondisclosure. Though vengeance was positively correlated with the justification of nondisclosure for both groups, in comparison, it was even more positively correlated for HIV-positive men. Aside from the negative traits, personal responsibility seemed to moderate the relationship where seropositive men who were more personally responsible were significantly less likely to justify nondisclosure. Responsibility did not affect willingness to justify nondisclosure in seronegative men. Results from testing this hypothesis in total proved to show tendencies espoused by both victimization and disclosure research (i.e., Bimbi & Parsons, 2006; Notman & Nadelman, 1976; Zimbardo, 1969)). More vengeful individuals who have been wronged are more likely to justify a future wronging towards others. That is, crime begets crime; equity with the world is actualized. And similarly, HIV-positive individuals who absolve themselves of responsibility can more readily justify nondisclosure. Deindividuation is embraced; distance from the actualities and consequences of nondisclosure is established. As always, it is difficult to make that causal leap and suggest two competing camps—the vengeful, nondisclosing HIV-positive men versus the responsible, disclosing HIV-positive men. Yet, there is some evidence to support it.

Disclosure differences within HIV-positive men. The research into serostatus disclosure suggests that adherence to a HAART regiment is influential over disclosure (Gorbach et al., 2004). I wanted to reexamine this correlation again both theoretically and actually. Indeed seropositive men on HAART were more willing to disclose and less willing to justify nondisclosure than those not on HAART. Yet, medicating men were no more likely than non-

medicating men to *actually* disclose their status to main, casual, or anonymous partners. It seems that though behavioral intent was higher, something blocked the transition from intent to enactment among men on HAART. And last, men on antiretrovirals were less likely to exhibit most of the negative traits previously discussed.

Adherence to highly active antiretroviral therapies proved to be an interesting variable. Though I incorrectly posited that *actual* disclosure would be higher in men using such a medication regiment, theoretical disclosure (willingness to disclose and willingness to justify nondisclosure) did indeed follow predicted trends. It seems that HAART may dubiously reflect in individuals a certain sense of health responsibility. It might seem like individuals who are conscientious about their health would be conscientious about the health of others. In reality, there was no real difference between HIV-positive men when using medication adherence as a predictor of behavior. And in terms of preventing HIV transmission to others, the willingness to disclose is only as useful as its actualization.

I tested time since the HIV diagnosis on those same disclosure variables—the theoretical and actual measures of serostatus admission. Only two weak associations could be produced. Time since diagnosis was only positively related to willingness to disclose, and to actual disclosure to main partners. My hypothesis was thus only partially confirmed, and time since diagnosis was deemed not as important a variable in predicting disclosures, either theoretical or actual. But, previous studies into men adhering to HAART suggest that actual disclosure is related to time since diagnosis (see Gorbach et al., 2004; Parsons et al., 2005; Stirratt, 2006). What my results illustrate is that these other indicators—HAART, CD4 count, age, etc.—explain disclosure differently from time since diagnosis. Even though there existed a relationship

between those variables correlated with disclosure and time since diagnosis, that relationship did not extend in the same way to encompass either theoretical or actual disclosure.

From the more demographic variables like HAART adherence or time since diagnosis, I returned to the influence of negative traits over actual disclosure.

As predicted and supported by both the research into deindividuation and equity with the world (see Austin & Walster, 1975; Shapiro, 1975; Zimbardo, 1969), vengeance was indeed negatively related to disclosure to casual and anonymous partners; and physical aggression was negatively related to disclosure to casual and main partners. Anger and hostility had no effect over actual disclosure. Though it would have strengthened the argument even more if all the negative traits and psychological correlates of retaliation and restitution would diminish the likelihood of disclosure, the two most important traits of the four emerged as good predictors—vengeance and physical aggression, or more tangibly, wanting to punish another and being the sort of person who actually punishes others. The influence of these negative traits over disclosure supports nondisclosure as being a probable weapon for revenge.

Gay men have been known to show great variety in the sorts of partners that they prefer. Some individuals prefer strictly anonymous encounters and others prefer committed, monogamous partnerships (Bailey & Hart, 2006). My results suggested that there was some variability in disclosure rates between individuals who prefer these different sorts of relationships. Where there was a strong positive relationship between commitment to partners and disclosures to casual and anonymous partners, a weaker positive relationship between the independent variable and disclosure to main partners resulted. This weaker relationship concerning main partners was initially a surprise. However, after reviewing Stirratt's (2006) qualitative research into HIV disclosure to main partners and giving the data a closer visual

analysis, the preponderance of data points indicated that no matter the score on the independent variable—commitment to partners—men were reporting that they disclosed 100% of the time. The relationship was being pushed into marginal significance by a few outlying lower scores at the base of both the independent and dependent scales. Basically, what this suggested was that regardless of what a seropositive individual reports with respect to commitment to partners, if he is in a relationship with someone who he considers to be his main partner, he will disclose. Where it seemed that disclosure and titling a relationship as a main partnership were intrinsically linked, that same expectation to disclose did not prevail over communication to anonymous and casual partners.

The last dependent variable I examined was the likelihood an individual felt that he had transmitted HIV to another. Note, this was an extremely new variable and in none of the current research in circulation was this variable analyzed. The likelihood of transmission measure asked individuals how certain they were that they had transmitted HIV to another individual(s). And according to equity with the world, retaliation, and deindividuation research (i.e., Austin & Walster, 1975; Walster et al., 1978; Zimbardo, 1969), there should have been a relationship between negative traits and transmission to others. Yet the only of these variables to produce a truly significant model was vengeance. Though there were some individual parts of models containing hostility or anger that were significant, the overall models were not, and the effect sizes were extremely small. But as previously stated, vengeance is the most important construct for the concepts of retaliation and restitution (Hershenov, 1999; Stuckless & Goranson, 1992). A curvilinear effect was produced where, as seropositive individuals exhibited progressively greater amounts of vengeance; they were exponentially more likely to have infected other individuals with HIV. Again, it was hard to predict the relationship with respect to this

dependent variable because measuring transmission to others was quite new. Once I realized that curvilinear models might predict this variable better, I applied this transformation to all other independent variables predicting the seroconversion of others.

Testing theoretical disclosure and nondisclosure did, however, follow linear trends during their multiple regression analyses. Individuals who were more willing to disclose and less willing to justify nondisclosure were both less likely to have infected another or others with HIV. Though there was some earlier debate within these results as to how well theoretical disclosure relates to actual disclosure among some HIV-positive men, in this instance, these traits seemed successful in preventing further seroconversions in seronegative men. Also, there was some evidence to suggest that percent of actual disclosures to at least casual and anonymous partners also lowers the likelihood of the transmission of HIV to others. So basically, in support of previous studies conducted by researchers like Stirratt (2006), the way individuals consider disclosure and nondisclosure, and the degree to which disclosure actual occurs are both vitally important for preventing the spread of HIV.

Last and most surprising, it was the final hypothesis that yielded the least predictable results of all with respect to transmission likelihood. Testing the relationship between responsibility and HIV transmission, and between beliefs in a just world and transmission could only be achieved at statistically significant levels by returning to quadratic modeling. Squaring responsibility ascription produced a positive parabola where individuals who felt personally responsible in situations, and individuals who felt others should be responsible in situations were most likely to have infected other individuals. As for the second part of the hypothesis, when squaring beliefs in a just world, the only model that could be created fell well below significance.

These relationships were virtually impossible to foresee; but now in making conclusions, at least the relationship containing responsibility ascription can be more readily justified. With respect to this variable, individuals who consider themselves personally responsible are going to be more likely to concede that they have infected others or concede that it was at least likely that over the course of their living with the disease they could have inadvertently transmitted it. Those who consider others personally responsible would be more likely to have caused seroconversions because these were the individuals who (at statistically significant levels) were most likely to justify nondisclosure and least willing to disclose sexual health information (see the correlation matrix in the previous chapter for statistical evidence). Clearly, individuals who held such traits were going to be the most likely transmitters of the disease. As for the belief in a just world explaining too little of the variance in HIV transmission to others, I concluded this dissonant with just world theory (see Lerner, 1977, 1980). I predicted individuals who perceived the world as unjust would be more likely to transmit HIV because; after all, the world is unjust and thus, behaviors are more easily absolvable. The insignificant relationship between these variables merely added to the mounting evidence that this variable was, at most, only superficially involved in HIV transmission and other functions of disclosure and nondisclosure.

Limitations

Studies that attempt to sample and study disproportionately small cultures, and also the subgroups of these small cultures are likely to encounter limitations. The experimental design, the methodology, the recruitment, and the sample itself will all invariably be compromised to differing degrees in order to achieve a functional study on the minority (Meezan & Martin, 2003). Yet, by no means should these limitations be viewed as fatal flaws, and by no means

should the study be discredited because of these difficulties. Mine was a study that looked at the attitudes, practices, and behaviors of the homosexual male minority and its subgroup of HIV-positive homosexual men who comprise about 20% of its parent group in major metropolitan areas (Van de Ven et al., 2002). During this investigation, I encountered some of these inevitable problems in its development, design, and implementation. The following will outline limitations according to these three broad categories and will provide an analysis of the severity and influence of them over the data.

Limitations in theoretical development. The most difficult part of this study was not its implementation, but rather it was trying to reason and posit logically grounded hypotheses. Yes, these hypotheses stemmed from the theories discussed in the literature review and throughout the warrant; and as a result, they were *theoretically* valid. Yet in testing them, half proved either only partially correct or completely incorrect. In developing my research questions and my predictions, a miscalculation must have occurred. Thus, the first major developmental limitation or concern was that these hypotheses were based solely off of an HIV-negative perspective—a seronegative interpretation and application of theory. There was no first-hand, HIV-positive insight that suggested the probability of vengeance or retributive behaviors in the experimental group. In general, HIV socialization does exist, and being HIV seropositive is likely to serve as its own independent variable guiding environmental comprehension, evaluations, and interpretations of behavior (Halkitis et al., 2006; Halkitis & Wilton, 2006). But this perspective was omitted during the developmental phase, and no actual HIV-positive individuals gave their insights and speculations during the creation of the survey and during the formulation on my hypotheses.

The social and medical meaning of HIV is a living construct. An HIV-positive diagnosis is different now than it was in 1984. Even the degree to which it has been accepted and understood by the general population has increased many times over for the better. And from these concepts came the second developmental limitation. As socially positive a phenomenon as this is, it severely limits the validity and longevity of research on HIV. Simply, social studies on the disease have a shelf life, some as short as a few months. Researchers must ask themselves how relevant are studies from the mid- to late 1980's?—the mid- to late 1990's? Even more frightening, can accurate findings still be suggested from last year's research? Most of my hypotheses were based off of research from all ages of the human immunodeficiency virus (i.e., from its birth in the early 1980's to last year). As such, results that may have been produced at one point in time (off of which I may have based a hypothesis) may no longer be valid. Thus, the hypothesis may have been erroneous and ripe for disconfirmation for that developmental reason, and not something more attributable to the design or the implementation.

Limitations in design. The developmental limitations aside, there were also some limitations to the design of the study. To test the hypotheses, I relied on questioning individuals through an online survey; that is, I relied on self-report. Yet it has been established that HIV disclosure and nondisclosure can both be equally taboo depending on the environment (Elwood et al., 2003; Halkitis & Wilton, 2006), but knowingly concealing a seropositive status is ultimately illegal (ACLU, 2004). As such, surveying seropositive individuals may have proved insufficient as methodology, and useless in circumventing actual and psychological self-preservation and impression management. So though individuals may not have disclosed their status to partners, it may have proved unlikely that they admitted to this behavior on the survey. Granted the Internet survey helped diminish the prevalence of this problem, there remained the

likelihood that individuals inflated the degree to which they disclosed their serostatus, practiced safe sex, and took preventing the spread of the disease as a personal responsibility—and conversely, deflated the presence of negative traits in their personalities and the likelihood that they have infected another or others with HIV.

When putting together a survey, it is unavoidable that some questions are going to be omitted or scales are not going to work reliably; and though my questionnaire was both broad and deep with respect to its measures, there were several areas that could have used either further questions or improvements. First, there was a bank of questions that was overlooked and did not make it into the finalized, IRB approved survey. Where I asked HIV-positive men the percent of time they disclosed their serostatus to their partners, I did not ask HIV-negative men the same question. This limited the testing of some of the later hypotheses—hypotheses that could have been strengthened by testing whether serostatus moderated actual disclosures and not merely theoretical ones. Second, I created some of my own scales to test the more intricate variables (e.g., willingness to justify nondisclosure). Though internally reliable with acceptable alphas, the *validity* of many of the measures I created myself was not completely checked. In addition, I had to throw out an entire scale that aimed at testing who individuals thought was most responsible when seroconversion occurs. I posed six statements such as, "If I contracted HIV, I would place the most blame on the person who gave me the infection," and asked participants to rate on a five point scale their degree of agreement or disagreement. The strongest alpha that could be derived from the six items was .34, and even by deleting items, it could only be increased to .51. The scale was deemed untenable. This meant having to dismiss an entire variable and, as a corollary, having to readjust the sorts of measures used to test the hypotheses, especially with respect to those interested in seroconversion blame.

Limitations in recruitment. The last group of limitations for this study concerned the recruitment process, or more simply, acquiring the sample of HIV-negative and HIV-positive men. Some issues arose with respect to where I recruited the seropositive and seronegative men. Men were first recruited by word of mouth, whereas I sent the survey webpage link to several individuals who ended up posting it on multiple graduate, medical, and law school gay and lesbian association listservs. Virtually all of the responders from these posts were HIV-negative graduate students, and therefore, skewed high on education and health responsibility, and low on income. Alternatively, the low turnout of seropositive survey-takers forced me to buy a print advertisement in *Gay Chicago Magazine* and place electronic ads in multiple cities using craigslist.com. I also had to recruit HIV-positive guys in AOL chat rooms. As a result of these different recruitment processes, there was a more normal distribution across the demographic variables for the seropositive men, but a more a skewed distribution for the seronegative men. In the final analysis, this was not deemed a substantial problem because the variables that were skewed were uncorrelated with just about everything; and where they were, (e.g., age) I controlled for them.

Finally, there was the problem of survey-taker attrition. Participants were not locked into completing the survey, and as many as 41% of individual who initially consented to the survey dropped out without finishing it. This left a self-selected sample of survey completers, and therefore, the likelihood of a selection bias. It was impossible to know whether there were intrinsic differences between those who finished and those who did not, and even more specifically, between HIV-positive men who finished and HIV-positive men who did not. As stated by previous results (e.g., Bimbi & Parsons, 2006) and by some of the results in this very dissertation, seropositive men hold vastly different senses of responsibility towards HIV

prophylaxis. Individuals who opted out of taking the survey or who gave up midway through may be those same individuals who believe it is ultimately none of their responsibility to prevent the disease. Or conversely, individuals who completed it may be those same individuals who hold themselves extremely responsible if transmission were to occur. Simply, there existed a sampling limitation that perhaps men who were willing to contribute to the scientific understanding and prevention of HIV, were also men who were the most assiduous and conscientious regarding their own mental health, physical health, and sexual behavior.

None of these limitations were new or unique to my project. Bockting et al. (2006) cite similar limitations during their use of virtually the same exact methodology as in this study. And they still felt confident with their findings from their online survey-based study of HIV-positive and HIV-negative transgender individuals. Future research will have to correct these design and recruitment issues, and it would be wise to consult the HIV-positive community before creating either research questions or hypotheses.

Chapter 6. Implications

The conclusions I made regarding my hypotheses imply that though not all HIV-positive men follow posited trends and though the two groups varied little with respect to negative traits, some surprising and truly meaningful trends did exist. And these have implications for the greater seropositive and seronegative communities, and into the way social, behavioral, and medical research should understand HIV. The following will define some more implications of this current research, most notably its significance with respect to healthcare, the medical community, psychology and communication studies. I will conclude with some suggestions for future research and a final word on HIV.

The Existence of a Vicious Cycle

Victimization is clearly a process with both intrapersonal and interpersonal steps. Individuals who have been unjustly exploited or unfairly harmed psychologically interpret the event, respond to the situation, and either mentally or physically address the culprit(s). HIV seroconversion seems to be a little different. The HIV-negative world regards individuals who seroconvert as ultimately responsible for their situations; but converts (depending on their personalities) ultimately can feel victimized by another or others. In these men, this creates a lonely rift between friends, family, and lovers. Over time, as suggested by my results, this transitions in some into states of resentment, hostility, and vengeance. Without the proper social and institutional support mechanism to calm this negative arousal state, the vengeful individual is left to his own devices to regain a sense of normalcy. And this may take the form of nondisclosure, or in extreme cases, pointed serostatus concealment.

Yet to qualify the previously mentioned hypotheses and their theoretical and statistical evaluations, HIV restitution and vengeance is not, by any means, a pervasive phenomenon. Cited

research in earlier sections and much of the data presented in the results section suggest that an overwhelming majority of HIV-positive men are actually quite socially responsible with respect to disclosure and practicing protected sexual behaviors. However, for those that are highly sensitive to victimization, who are hurt, angry, and vengeful, or for those whose interpretations of seroconversion and the meaning of infection are intrinsically dysfunctional, behavior is likely to reflect such pathology. The problem with these restitution behaviors is that they promote further victimization. That is to say, some of the new converts, while feeling victimized, either ignore or deny their infection, or conceal it. By doing so, they in turn may become the new infectors for a whole new class of converts who ultimately regard them with the same exact animosity, hostility, and accountability. In short, the phenomenon of HIV restitution represents victims victimizing new victims to gain peace of mind for having been victimized in the first place.

The Vengeful Minority

The degree to which one is vengeful is ultimately an individual difference. There exists a spectrum among the general population just as in my sample of seropositive and seronegative men. Yet though the distributions between the two groups ultimately did not differ, HIV-positive men who were vengeful were both different from their less vengeful counterparts and different from HIV-negative men. This implies that a subgroup of vengeful seropositive men exists who believe, intuit, and behave differently from the larger group of more self-responsible and forgiving HIV-positive individuals. This minority discloses less to anonymous and casual partners. It is significantly less likely to show a willingness towards disclosure, and more importantly, more likely to justify a nondisclosure. It is this group that disproportionately reports having infected others with HIV. Bimbi and Parsons (2006) report a similarly small minority of

HIV-positive men in their sample who absolve themselves of responsibility with respect to the transmission of HIV to others. And though not explicitly tested in the results, the relationship between this other-oriented responsibility and vengeance is extremely related (see the correlation matrix in the results chapter, variables nine on eleven). Simply, I believe vengeance, vengeful behavior, and transmission-responsibility absolution rest with these same men.

An image of this vengeful minority begins to emerge. The studies cited in the beginning of this dissertation describe myriad situations and variables that affect disclosure, but few that affect nondisclosure or transmission of HIV to others. My research strongly suggests that individual types and guiding psychological traits within the HIV-positive gay male group are just as influential as variables like partner type, age, or disease progression. Minorities of seropositive men, such as those who self-report as being vengeful, exist and ultimately affect the spread of the disease to the larger majority of gay men. Just as generous individuals will give or will be altruistic, vengeful individuals seek to harm individuals for a perceive injustice. They seek restitution and rebalance, and they seem to do so through antisocial-health behaviors.

The relationship between victimization, HIV, and resulting behavior cannot so easily be packaged into one large study. There are still many questions to be asked and many hypotheses to be supposed before an understanding of which seropositive men will feel victimized and which will not. Yet, my current study did to a varying degree deconstruct vengeance within seropositive men. For example, men's certainty with respect to how HIV was acquired decreased the tendency to be vengeful over time; and less vengeance was likely to produce more instances of serostatus disclosure and fewer actual seroconversions. In the final analysis and considering that seropositive men were no more likely than seronegative men to be vengeful, HIV may not necessarily make victims out of men and seroconversion may not be the victimizing process

initially suggested. However, it is abundantly clear that individuals with predisposed, vengeful personality are likely to consider their seroconversion as victimization and react accordingly through nondisclosure and through an increased likelihood to infect others with the disease.

Contributions to Academic Fields and Healthcare

The research described in this dissertation has multiple applications to not only the academic fields of psychology and communication studies, but also to the public health sector. In my attempt to advance what is already known with respect to HIV behavioral research, I accomplished three important and applicable goals. I looked at the influence of individual differences over HIV-related behaviors. I examined the communication propensities and practices of both seronegative and seropositive men. And finally, I combined the two to develop a greater description of pathological behavior for social workers, psychologists, physicians, and other HIV healthcare providers.

To psychology and communication studies. Personality research has rarely extended into the realms of disease and disease prophylaxis. Few have examined the interaction of prevailing individual traits with disease-related behaviors—and virtually none treating HIV serostatus as a moderator of the two. My research further opens personality psychology. It shows that intrapersonal differences can be just as influential as interpersonal differences with respect to behavioral modification and enactment. That is, where many argue that one of the strongest indicators of disclosure behaviors is the relationship type between the HIV-positive individual and his partner (e.g., O'Brien et al., 2003; Parsons et al., 2005), some of my results suggest that individual traits or differences influence the above relationship between partner and disclosure. And if psychology searches for the most parsimonious explanation for behavioral intent and

enactment, my research points to expressions of intrapersonal traits as indeed the simpler deconstruction of why some men disclose their serostatus and why others do not.

With respect to the field of communication studies, my research develops a richer understanding of HIV and sexual health information disclosure among both seronegative and seropositive men. Countless health communication articles delving into disease disclosure have been published, but few have asked both the healthy and diseased groups to respond to theoretical instances of disclosure—to answer, "if you had HIV, would you…." As the results indicated, having HIV serves as a significant intervention and influences both theoretical disclosure and the tendency to justify sexually risky situations in which nondisclosure occurs. Also, and as a more methodological contribution to the field, mine was the first to suggest breaking the casual partners category into casual and anonymous partners. Gay men treat partners differently—from main partners, with who perhaps they live, to casual partners, with who perhaps they have sex from time to time, to anonymous partners, whose name perhaps they do not even know. They communicate differently to each group and treat each with differing degrees of emotional and communicative intimacy. I suggest that future research should adopt such partner categories as well when examining HIV disclosure.

To healthcare. The data in this study suggest that within a minority of seropositive men, HIV seroconversion is considered an under-benefiting process. And for these vengeful individuals, restitution manifests in nondisclosure and in an increased likelihood towards transmitting HIV to others. But, it is unlikely that restitution will ever truly be achieved and contentment truly be derived from nondisclosure. The equity that seroconversion reaps from an HIV-negative person is intangible. It cannot be replaced or restored. This whole model is socially harmful and antithetical to prophylaxis. And where HIV restitution does satiate some

seropositive individuals on an intrapersonal level, on an interpersonal and community level, these behaviors are dangerous. Again, it is only a minority group who enjoys self-absolved nondisclosure; but if these behaviors constitute an answer to their being seropositive, there will continue to be disease transmission. This is the most important contribution my research adds to the field of public health—one more of a long line of answers to the infernal question: why do HIV seroconversions continue to prevail after 25 years of health information bombardment?

It is somewhat relieving that HIV does not cause individuals to necessarily become more vengeful; but what social workers, physicians, HIV clinicians, and psychologists must begin to realize is that on an individual level, personality differences in some can manifest as antisocial behavior that may abet the spread of HIV to others. As a policy suggestion, when a newly seroconverted individual is either given his new serostatus or during follow-up therapy sessions after the diagnosis, negative traits should be noted, especially vengefulness. And subsequently, when these individuals (between 5% and 15% of seropositive men) either self-identify as being vengeful or are assessed as such, healthcare representatives need to preempt the disclosure dysfunctions and predispositions towards spreading HIV that are disproportionately more likely to occur for this group. For in the final analysis, the data support that this vengeful minority's tendency towards nondisclosure and its likelihood to infect other men with HIV does not diminish over time. Public health officials and healthcare institutions need to address this individual difference early in order to prevent the enactment of the negative behaviors this very study presents.

Future Directions and Research

There will always be a need for HIV behavioral, psychological, medical, and social research; that is until a cure is found. As stated in the introduction to this dissertation, the

meaning of the disease is constantly changing, and its significance as a life-altering intervention continues to vary greatly. It is ultimately up to health and social science research to account for and explain these changes, and then update medical and psychological treatment accordingly. My current research showed the influence of the negative trait of vengeance over some seropositive individuals. It also documented the ways many of these individuals use behaviors like nondisclosure and disease transmission to enact a sort of restitution. Yet there is more to HIV restitution than has been presented through this work, and there are further HIV research interests that must also be examined in order to decrease seroconversion rates. The following will outline and explore these future directions.

Continuing research into HIV restitution. A minority of vengeful men exists within the greater HIV-positive population. There is still a vast amount of information that needs to be understood about this group of men. Certainly they are less likely to disclose, more likely to justify nondisclosure, and also more likely to report having seroconverted others. But there is a richness that is lost with merely using quantitative data to explain the group. There is no qualitative evidence or cluster of first-person narratives that allow for a more robust explanation or model of vengeful individuals and their behaviors. The next direction for HIV restitution is thus to select the most vengeful seropositive men—those who fall above one *SD* above the mean for vengeance—for consultations, interviews, and even further quantitative examinations. Only then can research decide: the degree to which vengeance plays a central role in the vengeful men's lives, the degree to which the men realize the function of nondisclosure or the seroconverting of others, and the degree to which the men actively feel victimized by HIV. Adding an actual voice to this vengeful minority will add a more complete analysis of the problem to my current research.

In addition to examining these more vengeful HIV-positive men, it would also increase an understanding of the role of vengeance in HIV behavior to examine seronegative men who strongly hold this trait. The results in this study suggest that seronegative, vengeful men are slightly more likely to justify nondisclosure than their less vengeful cohorts. Do these men understand the implications of HIV disclosure better than those who are more forgiving? Can these men more accurately take the perspective of HIV-positive gay men and anticipate the low outcome-efficacy intrinsic to serostatus disclosure? Simply, what is vengeance so strongly representing that it overcomes social and health expectations to guide attitudes and behaviors?

Other avenues of HIV research. To leave vengeance and broaden the suggestions for future research, sexual behavior should also be further examined. Embedded within the results of this study was an analysis of HIV-positive v HIV-negative sexual behaviors and sexual actualization. And where understanding differences in the quantity of partners and the degree to which protected intercourse was enacted were not particularly new to the field, the concept of sexual actualization was both quite novel and controversial. Individuals have posited that seronegative individuals look at seropositive individuals as being more able to actualize on their sexual desires (e.g., Gauthier & Forsyth, 1999). And even more controversial, some debate whether HIV-negative men actually become jealous of HIV-positive men to pathological degrees (again Gauthier & Forsyth; also Moskowitz & Roloff, 2007). I show that HIV-positive men's desires are more positively correlated with their actual enacted behaviors than among their HIV-negative counterparts. Research still must confirm if seronegative men really perceive this difference between themselves and those living with HIV; and even more importantly, if they admire or are jealous of seropositive men for this ability?

In returning back to the psychological trait dimensions of HIV research, there are still many other groups besides sexual partners that should be tested for the influence of individual differences over disclosure (e.g., family members, friends, employers or employees). Does vengeance moderate disclosure to these types of individuals as it does to casual and anonymous sexual partners? Or are there other negative (or positive) traits that moderate disclosure? For instance, passive or unassertive individuals do not like to aggravate interpersonal dynamics. Are these individuals less likely to disclose to their families or friends? Or conversely, do assertive or open individuals actually disclose at greater rates? Simply, how strong is the overall relationship between trait orientations and HIV disclosure, or what sorts of influence do individual differences have over individuals' HIV communicative practices? When individual differences are more fully factored into the research on HIV disclosure, the fields of psychology, communication studies, and public health will all be one step closer to actualizing HIV prophylaxis.

A Final Word on HIV

In technologically advanced and educated societies, the spread of HIV should theoretically be controllable. The protective measures that can prevent STD contraction are ingrained as early as pre-adolescence. Yet, for specific reasons, seroconversion prevails. Like clockwork, every year, another two percent of HIV-negative gay men undergo serostatus conversion, and seroprevalence rates within gay male populations remain steady at about 30% by age 30, and 50%, by age 50 (Ekstrand et al., 1999). If honest and full disclosure were really such strongly held norms, if nondisclosure was not a devious shield used against stigmatization and rejection, and if positive individuals were really so watchful over their negative brethren, HIV would have died out years ago. This dissertation suggests above all else that individuals within

the gay community must embrace the following positive traits if they are ever to truly curtail the spread of HIV. They must show responsibility. They must show vigilance. And they must show that which is most antithetical to vengeance—they must show forgiveness.

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Appendix

Exhibit A. Sample Recruitment Advertisement

Are you a Pozitive man?
Reply to: job-235687758@craigslist.org
Date: 2006-11-16, 11:46AM EST

Stay at home but help us out! We are looking to find out the attitudes and behaviors of HIV-positive gay men through a new, online survey. We just need your help. Researchers with the Communication Studies Department at Northwestern University are offering $10.00 gift cards to Starbucks for between 20 & 30 minutes of time. And yes, it is completely anonymous. Follow the link below if you've got the time, and are in the appropriate, private environment to complete the survey. You'll be helping out science and helping yourself to a gift by answering a bunch of questions about your life and personal experiences. Head to this website only if you intend on completing the entire survey. Any questions may be directed to NUCommResearch@aol.com

http://www.surveymonkey.com/s.asp?u=825782596217

* Compensation: $10
* Principals only. Recruiters, please don't contact this job poster.
* Please, no phone calls about this job!
* Please do not contact job poster about other services, products or commercial interests.

Exhibit B. The Survey

The following questionnaire is aimed at assessing demographic, attitudinal, and behavior information. Please answer each question, staying as true as possible to your actual feelings, opinions, or past behaviors. This is an anonymous survey, and your particular answers will not in any way be traced back to you—so please be as honest as possible. Unless otherwise indicated, please select a **single** choice, or fill in the information that best describes you. Please note that this is a completely forward moving survey. The program will not let you go back to the previous question or sets of questions, so make sure you are completely happy with your answers before you press "next." This survey will take you less than 30 minutes. Thank you very much for your participation

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Part 1. Demographic Information

1. What is your gender?
    1) Male
    2) Female
    3) Preoperative transsexual (Male to Female)
    4) Preoperative transsexual (Female to Male)
    5) Postoperative transsexual (Male to Female)
    6) Postoperative transsexual (Female to Male)

2. To the best of your knowledge, what is your HIV serostatus?

1) Seronegative
2) Sero-unknown
3) Seropositive

3. If you are seropositive, how long ago were you diagnosed with HIV?
    1) 0-3 months
    2) 3-6 months
    3) 6-12 months
    4) 12-24 months (1-2 years)
    5) 24-48 months (2-4 years)
    6) More than 48 months (more than 4 years)
    7) I'm seronegative

4. How old are you? _____

5. Using your best estimate, what is the size of the town or city in which you live?
    1) Less than 10,000 people
    2) Between 10,000 and 50,000 people
    3) Between 50,000 and 100,000 people
    4) Between 100,000 and 500,000 people
    5) More than 500,000 people

6. What is your race or ethnicity?
    1) White, non-Hispanic or Latino
    2) Native American
    3) Latino or Hispanic
    4) African
    5) African American
    6) Asian (for example, Japanese, Chinese or Korean)
    7) Indian
    8) Pacific Islander
    9) Middle Eastern (Including Pakistani or Afghani)
    10) Other (please specify)_____

7. Using your best estimate, what is your yearly income?
    1) Less than 10,000 US Dollars (USD)
    2) Between 10,000 and 30,000 USD
    3) Between 30,000 and 50,000 USD
    4) Between 50,000 and 75,000 USD
    5) Between 75,000 and 100,000 USD
    6) More than 100,000 USD

8. Which of the below statements best describes your sexuality?
    1) I'm straight
    2) I'm bisexual

3) I'm gay
4) I don't consider myself gay, straight, or bisexual

9. What is your highest level of education?
    1) Finished some high school
    2) Graduated high school
    3) Graduated high school, and finished some of college
    4) Graduated college
    5) Graduated college, and finished some graduate work (business, graduate, medical, law school, etc.)
    6) Received a graduate degree (business, graduate, medical, law school, etc.)

10. What is your relationship status?
    1) I am currently single
    2) I am in a relationship (0-12 months)
    3) I am in a relationship (1- 3 years)
    4) I am in a relationship (3 – 10 years)
    5) I am in a relationship (10+ years)
    6) I was recently in a relationship (that lasted longer than 12 months), but we broke up in the past 6 months

11. Which statement best describes your religiousness?
    1) I do not believe in god(s) and am not at all religious
    2) I believe in god(s) but am not at all religious
    3) I believe in god(s) and attend religious services, masses, or meetings a couple of times a year
    4) I believe in god(s) and attend religious services, masses, or meetings, about every month
    5) I believe in god(s) and attend religious services, masses, or meetings, every week
    6) I believe in god(s) and attend religious services, masses, or meetings in some capacity, every day.

Part 2. Attitudes

Listed below are a number of statements that describe attitudes that different people have. There are no right or wrong answers, only opinions. And your particular answers will not in any way be traced back to you, so please be as honest as possible. Read each item and decide whether you agree or disagree, and to what extent. If you strongly agree, check 7. If you strongly disagree, check 1. If you feel somewhere in between, check any one of the numbers between 1 and 7. If you feel neutral or undecided, then check 4. Please remember that this is a completely forward moving survey. The program will not let you go back to the previous question or sets of questions, so make sure you are completely happy with your answers before you press "next."

12. It's not worth my time or effort to payback someone who has wronged me. VS-R
    1) Disagree strongly

2) Disagree
3) Disagree slightly
4) Neither disagree nor agree
5) Agree slightly
6) Agree
7) Strongly agree

13. I believe that, by and large, I deserve what happens to me. JWP
1) Disagree strongly
2) Disagree
3) Disagree slightly
4) Neither disagree nor agree
5) Agree slightly
6) Agree
7) Strongly agree

14. It is important for me to get back at people who have hurt me. VS
1) Disagree strongly
2) Disagree
3) Disagree slightly
4) Neither disagree nor agree
5) Agree slightly
6) Agree
7) Strongly agree

15. I try to even the score with anyone who hurts me. VS
1) Disagree strongly
2) Disagree
3) Disagree slightly
4) Neither disagree nor agree
5) Agree slightly
6) Agree
7) Strongly agree

16. I am usually treated fairly. JWP
1) Disagree strongly
2) Disagree
3) Disagree slightly
4) Neither disagree nor agree
5) Agree slightly
6) Agree
7) Strongly agree

17. It is always better not to seek vengeance. VS-R
1) Disagree strongly

2) Disagree
3) Disagree slightly
4) Neither disagree nor agree
5) Agree slightly
6) Agree
7) Strongly agree

18. I live by the motto, "Let bygones be bygones." VS- R
1) Disagree strongly
2) Disagree
3) Disagree slightly
4) Neither disagree nor agree
5) Agree slightly
6) Agree
7) Strongly agree

19. I believe that I usually get what I deserve. JWP
1) Disagree strongly
2) Disagree
3) Disagree slightly
4) Neither disagree nor agree
5) Agree slightly
6) Agree
7) Strongly agree

20. There is nothing wrong in getting back at someone who has hurt you. VS
1) Disagree strongly
2) Disagree
3) Disagree slightly
4) Neither disagree nor agree
5) Agree slightly
6) Agree
7) Strongly agree

21. I don't just get mad—I get even. VS
1) Disagree strongly
2) Disagree
3) Disagree slightly
4) Neither disagree nor agree
5) Agree slightly
6) Agree
7) Strongly agree

22. Overall, events in my life are just. JWP
1) Disagree strongly

2) Disagree
3) Disagree slightly
4) Neither disagree nor agree
5) Agree slightly
6) Agree
7) Strongly agree

23. I find it easy to forgive those who have hurt me. VS-R
1) Disagree strongly
2) Disagree
3) Disagree slightly
4) Neither disagree nor agree
5) Agree slightly
6) Agree
7) Strongly agree

24. I am not a vengeful person. VS-R
1) Disagree strongly
2) Disagree
3) Disagree slightly
4) Neither disagree nor agree
5) Agree slightly
6) Agree
7) Strongly agree

25. In my life, injustice is the exception rather than the rule. JWP
1) Disagree strongly
2) Disagree
3) Disagree slightly
4) Neither disagree nor agree
5) Agree slightly
6) Agree
7) Strongly agree

26. I believe in the motto, “An eye for an eye, a tooth for a tooth.” VS
1) Disagree strongly
2) Disagree
3) Disagree slightly
4) Neither disagree nor agree
5) Agree slightly
6) Agree
7) Strongly agree

27. Revenge is morally wrong. VS-R
1) Disagree strongly

2) Disagree
3) Disagree slightly
4) Neither disagree nor agree
5) Agree slightly
6) Agree
7) Strongly agree

28. I believe that most of the things that happen in my life are fair. JWP
1) Disagree strongly
2) Disagree
3) Disagree slightly
4) Neither disagree nor agree
5) Agree slightly
6) Agree
7) Strongly agree

29. If someone causes me trouble, I'll find a way to make them regret it. VS
1) Disagree strongly
2) Disagree
3) Disagree slightly
4) Neither disagree nor agree
5) Agree slightly
6) Agree
7) Strongly agree

30. People who insist on getting revenge are disgusting. VS-R
1) Disagree strongly
2) Disagree
3) Disagree slightly
4) Neither disagree nor agree
5) Agree slightly
6) Agree
7) Strongly Agree

31. If I am wronged, I can't live with myself unless I get revenge. VS
1) Disagree strongly
2) Disagree
3) Disagree slightly
4) Neither disagree nor agree
5) Agree slightly
6) Agree
7) Strongly Agree

32. Honor requires that you get back at someone who has hurt you. VS
1) Disagree strongly

2) Disagree
3) Disagree slightly
4) Neither disagree nor agree
5) Agree slightly
6) Agree
7) Strongly Agree

33. It is usually better to show mercy than to take revenge. VS-R
1) Disagree strongly
2) Disagree
3) Disagree slightly
4) Neither disagree nor agree
5) Agree slightly
6) Agree
7) Strongly Agree

34. I think that important decisions that are made concerning me are usually just. JWP
1) Disagree strongly
2) Disagree
3) Disagree slightly
4) Neither disagree nor agree
5) Agree slightly
6) Agree
7) Strongly Agree

35. Anyone who provokes me deserves the punishment that I give them. VS
1) Disagree strongly
2) Disagree
3) Disagree slightly
4) Neither disagree nor agree
5) Agree slightly
6) Agree
7) Strongly Agree

36. It is always better to "turn the other cheek." VS-R
1) Disagree strongly
2) Disagree
3) Disagree slightly
4) Neither disagree nor agree
5) Agree slightly
6) Agree
7) Strongly Agree

37. To have a desire for vengeance would make me feel ashamed. VS-R
1) Disagree strongly

2) Disagree
3) Disagree slightly
4) Neither disagree nor agree
5) Agree slightly
6) Agree
7) Strongly Agree

38. Revenge is sweet. VS
1) Disagree strongly
2) Disagree
3) Disagree slightly
4) Neither disagree nor agree
5) Agree slightly
6) Agree
7) Strongly Agree

Part 3. Positive Situations and Behaviors

The following questions are aimed at assessing positive aspects of your life. Again, there are no right or wrong answers, only opinions. And your particular answers will not in any way be traced back to you, so please be as honest as possible. The following questions apply to the previous three months in your life. For each of the following statements and/or questions, please either list your answer, or check the point on the scale that you feel is most appropriate in describing you. If you strongly agree, check 7. If you strongly disagree, check 1. If you feel somewhere in between, check any one of the numbers between 1 and 7. If you feel neutral or undecided, then check 4. Please remember that this is a completely forward moving survey. The program will not let you go back to the previous question or sets of questions, so make sure you are completely happy with your answers before you press "next."

39. List some positive occurrences that have happen to you in the past **3 months**. Separate each by using a comma.

40. In general, I am an optimistic person. PS
1) Disagree strongly
2) Disagree
3) Disagree slightly
4) Neither disagree nor agree
5) Agree slightly
6) Agree
7) Strongly Agree

41. People always say how much nice I am. PS
1) Disagree strongly
2) Disagree
3) Disagree slightly

4) Neither disagree nor agree
5) Agree slightly
6) Agree
7) Strongly Agree

42. I'm a pretty good person. PS
1) Disagree strongly
2) Disagree
3) Disagree slightly
4) Neither disagree nor agree
5) Agree slightly
6) Agree
7) Strongly Agree

43. Helping people makes me feel good. PS
1) Disagree strongly
2) Disagree
3) Disagree slightly
4) Neither disagree nor agree
5) Agree slightly
6) Agree
7) Strongly Agree

44. List what you perceive to be your best qualities. Separate each by using a comma.

Part 4. More Attitudes

Listed below are a number of statements that describe attitudes people have, or situations that different people experience. Again, there are no right or wrong answers, only opinions. And your particular answers will not in any way be traced back to you, so please be as honest as possible. Read each item and decide whether you agree or disagree, or find something characteristic or uncharacteristic of you, and to what extent. If you strongly agree or find the statement extremely characteristic, check 5. If you strongly disagree or find the statement extremely uncharacteristic, check 1. If you feel somewhere in between, check any one of the numbers between 1 and 5. If you feel neutral, or the statement or situation is neither characteristic nor uncharacteristic of you, then check 4. Please remember that this is a completely forward moving survey. The program will not let you go back to the previous question or sets of questions, so make sure you are completely happy with your answers before you press "next."

45. Once in a while I can't control the urge to strike another person. AQ-PA
1) Extremely uncharacteristic of me
2) Uncharacteristic of me
3) Neither characteristic nor uncharacteristic of me
4) Characteristics of me
5) Extremely characteristic of me

46. I flare up quickly but get over it quickly. AQ-A
    1) Extremely uncharacteristic of me
    2) Uncharacteristic of me
    3) Neither characteristic nor uncharacteristic of me
    4) Characteristics of me
    5) Extremely characteristic of me

47. I am sometimes eaten up with jealousy. AQ-H
    1) Extremely uncharacteristic of me
    2) Uncharacteristic of me
    3) Neither characteristic nor uncharacteristic of me
    4) Characteristics of me
    5) Extremely characteristic of me

48. If I hurt someone unintentionally, I would feel almost as guilty as I would if I had done the same thing intentionally. ARS
    1) Strongly disagree
    2) Disagree
    3) Neither agree nor disagree
    4) Agree
    5) Strongly agree

49. Given enough provocation, I may hit another person. AQ-PA
    1) Extremely uncharacteristic of me
    2) Uncharacteristic of me
    3) Neither characteristic nor uncharacteristic of me
    4) Characteristics of me
    5) Extremely characteristic of me

50. When frustrated, I let my irritations show. AQ-A
    1) Extremely uncharacteristic of me
    2) Uncharacteristic of me
    3) Neither characteristic nor uncharacteristic of me
    4) Characteristics of me
    5) Extremely characteristic of me

51. At times, I feel I have gotten a raw deal out of life. AQ-H
    1) Extremely uncharacteristic of me
    2) Uncharacteristic of me
    3) Neither characteristic nor uncharacteristic of me
    4) Characteristics of me
    5) Extremely characteristic of me

52. When a person is nasty to me, I feel very little responsibility to treat that person well. ARS-R

1) Strongly disagree
2) Disagree
3) Neither agree nor disagree
4) Agree
5) Strongly agree

53. No matter what a person has done to me, there is no excuse for taking advantage of him or her. ARS
1) Strongly disagree
2) Disagree
3) Neither agree nor disagree
4) Agree
5) Strongly agree

54. If somebody hits me, I hit back. AQ-PA
1) Extremely uncharacteristic of me
2) Uncharacteristic of me
3) Neither characteristic nor uncharacteristic of me
4) Characteristics of me
5) Extremely characteristic of me

55. I sometimes feel like a powder keg ready to explode. AQ-A
1) Extremely uncharacteristic of me
2) Uncharacteristic of me
3) Neither characteristic nor uncharacteristic of me
4) Characteristics of me
5) Extremely characteristic of me

56. When a person is pushed hard enough, there comes a point beyond which anything he or she does is justified. ARS-R
1) Strongly disagree
2) Disagree
3) Neither agree nor disagree
4) Agree
5) Strongly agree

57. Other people always seem to get the breaks. AQ-H
1) Extremely uncharacteristic of me
2) Uncharacteristic of me
3) Neither characteristic nor uncharacteristic of me
4) Characteristics of me
5) Extremely characteristic of me

58. I get into fights a little more than the average person. AQ-PA
1) Extremely uncharacteristic of me

2) Uncharacteristic of me
3) Neither characteristic nor uncharacteristic of me
4) Characteristics of me
5) Extremely characteristic of me

59. I am an even-tempered person. AQ-R-A
1) Extremely uncharacteristic of me
2) Uncharacteristic of me
3) Neither characteristic nor uncharacteristic of me
4) Characteristics of me
5) Extremely characteristic of me

Part 5. Sexual Behavior

The following questions are aimed at assessing your sexual behaviors. Please answer each question, staying as true as possible to your actual tendencies and past experiences. **Your particular answers WILL NOT in any way be traced back to you**, so please be as honest and truthful as possible. Please remember that this is a completely forward moving survey. The program will not let you go back to the previous question or sets of questions, so make sure you are completely happy with your answers before you press "next."

60. CHECK ALL THAT APPLY. In the past 12 months, I have engaged in the following sexual behaviors:
1) Receptive oral intercourse (giving a blow job, giving head, or eating someone out)
2) Insertive oral intercourse (getting a blow job, getting head, or getting eaten out)
3) Receptive anilingus (getting a rim job, having someone use his or her mouth on your anal area)
4) Insertive anilingus (giving a rim job, using your mouth on someone's anal area)
5) Insertive vaginal intercourse (putting your penis in a vagina)
6) Receptive vaginal intercourse (taking a penis in your vagina)
7) Insertive anal intercourse (putting your penis in a rectum, topping)
8) Receptive anal intercourse (taking a penis in your rectum, bottoming)
9) Receptive fisting (taking a fist in your rectum or vagina)
10) Insertive fisting (putting your fist in a rectum or vagina)
11) Receptive urination (being urinated on or in, not by accident)
12) Dominant urination (urinating on or in someone, not by accident)
13) Receptive defecation (being defecated on or in, not by accident)
14) Dominant defecation (defecating on or in someone, not by accident)
15) Receptive erotic asphyxiation (being consensually strangled during or before an orgasm)
16) Dominant erotic asphyxiation (consensually strangling someone during or before an orgasm)
17) Consensual domination (hitting, spanking, whipping, or causing pain for another; verbally abusing another; playing the dominant figure in role-playing games)

18) Consensual submission (getting hit, spanked, whipped, or having pain caused to you; getting verbally abused; playing the submissive figure in role-playing games)
19) Voyeurism (watching another masturbate or have sex without joining them—with or without their consent; watching or reading pornography doesn't count)
20) Exhibitionism (having another or others watch your masturbate or have sex without them joining you—with or without their consent)
21) Receptive sexual assault (being on the receptive end of an unwanted sexual experience, being coerced or forced into a sexual experience)
22) Dominant sexual assault (coercing or forcing another into a sexual experience, dominating another into a sexual experience against their will)
23) I have not engaged in any of these behaviors

61. CHECK ALL THAT APPLY. If you were able to perform certain sexual behaviors **without any consequences (without rejection, fear of judgment, personal retaliation, legal charges, etc.)**, which of the following would you be interested in performing or having performed on you? Basically, if you could, what would you do...?

1) Receptive oral intercourse (giving a blow job, giving head, or eating someone out)
2) Insertive oral intercourse (getting a blow job, getting head, or getting eaten out)
3) Receptive anilingus (getting a rim job, having someone use his or her mouth on your anal area)
4) Insertive anilingus (giving a rim job, using your mouth on someone's anal area)
5) Insertive vaginal intercourse (putting your penis in a vagina)
6) Receptive vaginal intercourse (taking a penis in your vagina)
7) Insertive anal intercourse (putting your penis in a rectum, topping)
8) Receptive anal intercourse (taking a penis in your rectum, bottoming)
9) Receptive fisting (taking a fist in your rectum or vagina)
10) Insertive fisting (putting your fist in a rectum or vagina)
11) Receptive urination (being urinated on or in, not by accident)
12) Dominant urination (urinating on or in someone, not by accident)
13) Receptive defecation (being defecated on or in, not by accident)
14) Dominant defecation (defecating on or in someone, not by accident)
15) Receptive erotic asphyxiation (being consensually strangled during or before an orgasm)
16) Dominant erotic asphyxiation (consensually strangling someone during or before an orgasm)
17) Consensual domination (hitting, spanking, whipping, or causing pain for another; verbally abusing another; playing the dominant figure in role-playing games)
18) Consensual submission (getting hit, spanked, whipped, or having pain caused to you; getting verbally abused; playing the submissive figure in role-playing games)
19) Voyeurism (watching another masturbate or have sex without joining them—with or without their consent; watching or reading pornography doesn't count)
20) Exhibitionism (having another or others watch your masturbate or have sex without them joining you—with or without their consent)
21) Receptive sexual assault (being on the receptive end of an unwanted sexual experience, being coerced or forced into a sexual experience)

22) Dominant sexual assault (coercing or forcing another into a sexual experience, dominating another into a sexual experience against their will)
23) I am not interested in engaging in any of these behaviors

62. In the past 12 months, with how many **men** have you had sex—oral and anal sex?
_____ oral sex (your best estimate)
_____ anal sex (your best estimate)

63. In the past 12 months, with how many **women** have you had sex—oral, vaginal, and anal sex?
_____ oral sex (your best estimate)
_____ vaginal sex (your best estimate)
_____ anal sex (your best estimate)

64. To the best of your knowledge, are you currently in a **monogamous** relationship (you don't have any sexual contact with anyone who is not your partner and vice versa)?
1) No
2) Yes

65. In the past 12 months, what percent of the time did you use a condom during either receptive or insertive **oral sex**—a dental dam or condom?
1) Never used protection
2) 10% of the time
3) 20% of the time
4) 30% of the time
5) 40% of the time
6) 50% of the time
7) 60% of the time
8) 70% of the time
9) 80% of the time
10) 90 % of the time
11) 100% of the time
12) I have never had oral sex in the past 12 months.

66. In the past 12 months, what percent of the time did you a condom during either receptive or insertive **vaginal intercourse**—a male or female condom, not birth-control pills or IUD?
1) Never used protection
2) 10% of the time
3) 20% of the time
4) 30% of the time
5) 40% of the time
6) 50% of the time
7) 60% of the time
8) 70% of the time
9) 80% of the time

10) 90 % of the time
11) 100% of the time
12) I have never had vaginal sex in the past 12 months.

67. In the past 12 months, what percent of the time did you use a condom during either receptive or insertive **anal intercourse**—a condom?
1) Never used protection
2) 10% of the time
3) 20% of the time
4) 30% of the time
5) 40% of the time
6) 50% of the time
7) 60% of the time
8) 70% of the time
9) 80% of the time
10) 90 % of the time
11) 100% of the time
12) I have never had anal sex in the past 12 months.

68. In the past 12 months, what percent of the time did you use a condom during either receptive or insertive vaginal or anal intercourse with a **main partner**—your boyfriend or girlfriend, someone you have been serially dating, or a long-term partner?
1) Never used protection
2) 10% of the time
3) 20% of the time
4) 30% of the time
5) 40% of the time
6) 50% of the time
7) 60% of the time
8) 70% of the time
9) 80% of the time
10) 90 % of the time
11) 100% of the time
12) I have never had sex in the past 12 months with this sort of a partner.

69. In the past 12 months, what percent of the time did you use a condom during either receptive or insertive vaginal or anal intercourse with a **casual partner**—a fuck-buddy or a partner you have sex with but without any sort of commitment?
1) Never used protection
2) 10% of the time
3) 20% of the time
4) 30% of the time
5) 40% of the time
6) 50% of the time
7) 60% of the time

8) 70% of the time
9) 80% of the time
10) 90 % of the time
11) 100% of the time
12) I have never had sex in the past 12 months with this sort of a partner.

70. In the past 12 months, what percent of the time did you use a condom during either receptive or insertive vaginal or anal intercourse with an **anonymous partner**—someone you met randomly in a darkroom, bathhouse, through online, etc.?
1) Never used protection
2) 10% of the time
3) 20% of the time
4) 30% of the time
5) 40% of the time
6) 50% of the time
7) 60% of the time
8) 70% of the time
9) 80% of the time
10) 90 % of the time
11) 100% of the time
12) I have never had sex in the past 12 months with this sort of a partner.

71. In the past 12 months, what percent of the time did you use Crystal Meth (Tina) either before or during oral, vaginal, and/or anal intercourse?
1) Never used Crystal Meth before or during intercourse
2) 10% of the time
3) 20% of the time
4) 30% of the time
5) 40% of the time
6) 50% of the time
7) 60% of the time
8) 70% of the time
9) 80% of the time
10) 90 % of the time
11) 100% of the time
12) I have never had any sex in the past 12 months.

72. In the past 12 months, what percent of the time did you use Cocaine either before or during oral, vaginal, and/or anal intercourse?
1) Never used Cocaine before or during intercourse
2) 10% of the time
3) 20% of the time
4) 30% of the time
5) 40% of the time
6) 50% of the time

7) 60% of the time
8) 70% of the time
9) 80% of the time
10) 90 % of the time
11) 100% of the time
12) I have never had any sex in the past 12 months.

73. In the past 12 months, what percent of the time did you use Viagra, Cialis, Levitra, or another chemical sexual performance enhancement either before or during oral, vaginal, and/or anal intercourse, without having consulted a physician or having a legitimate prescription?
1) Never used a chemical enhancement before or during intercourse
2) 10% of the time
3) 20% of the time
4) 30% of the time
5) 40% of the time
6) 50% of the time
7) 60% of the time
8) 70% of the time
9) 80% of the time
10) 90 % of the time
11) 100% of the time
12) I have never had any sex in the past 12 months.

74. In the past 12 months, what percent of the time did you use Amyl Nitrate (Poppers) either before or during oral, vaginal, and/or anal intercourse?
1) Never used Amyl Nitrate before or during intercourse
2) 10% of the time
3) 20% of the time
4) 30% of the time
5) 40% of the time
6) 50% of the time
7) 60% of the time
8) 70% of the time
9) 80% of the time
10) 90 % of the time
11) 100% of the time
12) I have never had any sex in the past 12 months.

75. In the past 12 months, what percent of the time would you say you were drunk either before or during oral, vaginal, and/or anal intercourse? (Think: if you got pulled over, you probably couldn't pass a breath-a-lizer)
1) Never drunk before or during intercourse
2) 10% of the time
3) 20% of the time

4) 30% of the time
5) 40% of the time
6) 50% of the time
7) 60% of the time
8) 70% of the time
9) 80% of the time
10) 90 % of the time
11) 100% of the time
12) I have never had any sex in the past 12 months.

76. In the past 12 months, what percent of the time did you smoke Marijuana (pot, weed, hash, etc.) either before or during oral, vaginal, and/or anal intercourse?
1) Never smoked Marijuana before or during intercourse
2) 10% of the time
3) 20% of the time
4) 30% of the time
5) 40% of the time
6) 50% of the time
7) 60% of the time
8) 70% of the time
9) 80% of the time
10) 90 % of the time
11) 100% of the time
12) I have never had any sex in the past 12 months.

77. In the past 12 months, what percent of the time did you take Ecstasy (E, X) either before or during oral, vaginal, and/or anal intercourse?
1) Never took Ecstasy before or during intercourse
2) 10% of the time
3) 20% of the time
4) 30% of the time
5) 40% of the time
6) 50% of the time
7) 60% of the time
8) 70% of the time
9) 80% of the time
10) 90 % of the time
11) 100% of the time
12) I have never had any sex in the past 12 months.

Part 6. More Attitudes

Listed below are a number of statements that describe attitudes people have, or situations that different people experience. Again, there are no right or wrong answers, only opinions. And your particular answers will not in any way be traced back to you, so please be as honest as possible.

Read each item and decide whether you agree or disagree, or find something characteristic or uncharacteristic of you, and to what extent. If you strongly agree or find the statement extremely characteristic, check 5. If you strongly disagree or find the statement extremely uncharacteristic, check 1. If you feel somewhere in between, check any one of the numbers between 1 and 5. If you feel neutral, or the statement or situation is neither characteristic nor uncharacteristic of you, then check 3. Please remember that this is a completely forward moving survey. The program will not let you go back to the previous question or sets of questions, so make sure you are completely happy with your answers before you press "next."

78. You can't blame basically good people who are forced by their environment to be inconsiderate of others. ARS-R

1) Strongly disagree ars4
2) Disagreeaqh4
3) Neither agree nor disagree aqpa5
4) Agree aqa5
5) Strongly agree

79. No matter how much a person is provoked, a person is always responsible for whatever he or she does. ARS

1) Strongly disagree
2) Disagree
3) Neither agree nor disagree
4) Agree
5) Strongly agree

80. Being upset or preoccupied does not excuse a person for doing anything he or she would ordinarily avoid. ARS

1) Strongly disagree
2) Disagree
3) Neither agree nor disagree
4) Agree
5) Strongly agree

81. I wonder why sometimes I feel so bitter about things. AQ-H

1) Extremely uncharacteristic of me
2) Uncharacteristic of me
3) Neither characteristic nor uncharacteristic of me
4) Characteristics of me
5) Extremely characteristic of me

82. If I have to resort to violence to protect my rights, I will. AQ-PA

1) Extremely uncharacteristic of me
2) Uncharacteristic of me
3) Neither characteristic nor uncharacteristic of me
4) Characteristics of me

5) Extremely characteristic of me

83. Some of my friends think I'm a hothead. AQ-A
1) Extremely uncharacteristic of me
2) Uncharacteristic of me
3) Neither characteristic nor uncharacteristic of me
4) Characteristics of me
5) Extremely characteristic of me

84. Occasionally in life people find themselves in a situation in which they have absolutely no control over what they do to others. ARS-R
1) Strongly disagree
2) Disagree
3) Neither agree nor disagree
4) Agree
5) Strongly agree

85. I know that "friends" talk about me behind my back. AQ-H
1) Extremely uncharacteristic of me
2) Uncharacteristic of me
3) Neither characteristic nor uncharacteristic of me
4) Characteristics of me
5) Extremely characteristic of me

86. There are people who pushed me so far we came to blows. AQ-PA
1) Extremely uncharacteristic of me
2) Uncharacteristic of me
3) Neither characteristic nor uncharacteristic of me
4) Characteristics of me
5) Extremely characteristic of me

87. Sometimes I fly off the handle for no good reason. AQ-A
1) Extremely uncharacteristic of me
2) Uncharacteristic of me
3) Neither characteristic nor uncharacteristic of me
4) Characteristics of me
5) Extremely characteristic of me

88. I am suspicious of overly friendly strangers. AQ-H
1) Extremely uncharacteristic of me
2) Uncharacteristic of me
3) Neither characteristic nor uncharacteristic of me
4) Characteristics of me
5) Extremely characteristic of me

89. Extenuating circumstances never completely remove a person's responsibility for his or her actions. ARS

1) Strongly disagree
2) Disagree
3) Neither agree nor disagree
4) Agree
5) Strongly agree

90. You can't expect a person to act much differently from anyone else. ARS-R

1) Strongly disagree
2) Disagree
3) Neither agree nor disagree
4) Agree
5) Strongly agree

91. It doesn't make much sense to be very concerned about how we act when we are sick and feeling miserable. ARS-R

1) Strongly disagree
2) Disagree
3) Neither agree nor disagree
4) Agree
5) Strongly agree

92. I can think of no good reason for ever hitting a person. AQ-R-PA

1) Extremely uncharacteristic of me
2) Uncharacteristic of me
3) Neither characteristic nor uncharacteristic of me
4) Characteristics of me
5) Extremely characteristic of me

93. I have threatened people I know. AQ-PA

1) Extremely uncharacteristic of me
2) Uncharacteristic of me
3) Neither characteristic nor uncharacteristic of me
4) Characteristics of me
5) Extremely characteristic of me

94. I have trouble controlling my temper. AQ-A

1) Extremely uncharacteristic of me
2) Uncharacteristic of me
3) Neither characteristic nor uncharacteristic of me
4) Characteristics of me
5) Extremely characteristic of me

95. I sometimes feel that people are laughing at me behind my back. AQ-H

1) Extremely uncharacteristic of me
2) Uncharacteristic of me
3) Neither characteristic nor uncharacteristic of me
4) Characteristics of me
5) Extremely characteristic of me

96. I have become so mad that I have broken things. AQ-PA
1) Extremely uncharacteristic of me
2) Uncharacteristic of me
3) Neither characteristic nor uncharacteristic of me
4) Characteristics of me
5) Extremely characteristic of me

97. When people are especially nice, I wonder what they want. AQ-H
1) Extremely uncharacteristic of me
2) Uncharacteristic of me
3) Neither characteristic nor uncharacteristic of me
4) Characteristics of me
5) Extremely characteristic of me

7. Medical History

The following questions are aimed at assessing your medical history. Please answer each question, staying as true as possible to your actual history. Again, in no way can or will your answers be traced back to you and this is all anonymous. Please remember that this is a completely forward moving survey. The program will not let you go back to the previous question or sets of questions, so make sure you are completely happy with your answers before you press "next."

98. CHECK ALL THAT APPLY. Over the **past year**, I have had or currently have the following sexually transmitted diseases:
1) HIV
2) Chlamydia
3) Gonorrhea
4) Crabs, scabies, or pubic lice
5) Genital herpes
6) Genital warts or asymptomatic HPV
7) Hepatitis (any strain)
8) Syphilis
9) Protozoal or Fungal infection
10) Other

99. Are you currently on Highly Active Antiretroviral Therapies (HAART)?
1) No
2) Yes

100. Do you have some form of health insurance, not Medicare or Medicaid?
1) No
2) Yes

101. Have you ever been diagnosed with a chronic disease of the immune system that is not a type of cancer (for example, Lupus)?
1) No
2) Yes, I have been diagnosed with _____ (fill in the disease)

102. Have you ever been diagnosed with cancer that was/is **unrelated** to advanced HIV infection?
1) No
2) Yes, I have been diagnosed with _____(fill in the type of cancer)

103. CHECK ALL THAT APPLY. With which of the following psychological disorders have you been diagnosed?
1) Bipolar disorder
2) Post traumatic stress disorder
3) Clinical depression (not temporary or seasonal depression)
4) Schizophrenia
5) Anorexic
6) Bulimia
7) Attention deficit disorder or attention deficit hyperactivity disorder
8) Manic depression
9) Personality disorder (e.g., borderline personality disorder)
10) Social anxiety disorder
11) Drug or alcohol abuse or addiction
12) Sexual addiction
13) Gambling addiction
14) I have never been diagnosed with a psychological disorder

104. I am currently on either anti-depression or anti-anxiety medication:
1) No
2) Yes

105. I usually get a medical examination or physical:
1) I haven't had a physical in years
2) On average, every 5 years
3) On average, every 2 years
4) On average, every year
5) On average, every six months or less
6) On average, every 3 months
7) On average, every month

106. I get tested for HIV:
    1) I am seropositive
    2) I haven't been tested in years
    3) On average every 5 years
    4) On average every 2 years
    5) On average every year
    6) On average every 6 months
    7) On average every 3 months
    8) On average once a month

107. I get tested for STD's, **excluding** HIV:
    1) I haven't been tested in years
    2) On average every 5 years
    3) On average every 2 years
    4) On average every year
    5) On average every 6 months
    6) On average every 3 months
    7) On average once a month

The following questions are aimed at assessing your behaviors and communication patterns with respect to being HIV-positive. Some of the questions are extremely sensitive and will ask you to really think about the disease and how you have been living with it. Again, in no way can or will your answers be traced back to you and this is all anonymous. Please remember that this is a completely forward moving survey. The program will not let you go back to the previous question or sets of questions, so make sure you are completely happy with your answers before you press "next."

108. If you are seropositive, to the best of your memory, how did you contract HIV?
    1) I am seronegative
    2) I contracted it through unprotected oral intercourse with a main partner
    3) I contracted it through unprotected oral intercourse with a casual partner
    4) I contracted it through unprotected oral intercourse with an anonymous partner
    5) I contracted it through unprotected vaginal or anal intercourse with my main partner
    6) I contracted it through unprotected vaginal or anal intercourse with a casual partner
    7) I contracted it through unprotected vaginal or anal intercourse with an anonymous partner
    8) I contracted it through some unprotected sexual contact in which I came in contact with infected blood or semen (e.g., through fisting) with a main partner
    9) I contracted it through some unprotected sexual contact in which I came in contact with infected blood or semen (e.g., through fisting) with a casual partner
    10) I contracted it through some unprotected sexual contact in which I came in contact with infected blood or semen (e.g., through fisting) with an anonymous partner
    9) I contracted it through IV-drug use
    10) I contracted it through a medical blood transfusion
    11) I contracted it in-utero

12) I honestly have no clue how I contracted it

109. If you are seropositive, consider the previous question and then answer: how **certain** are you of the way it was transmitted to you? So, how certain are you of your answer to the previous question?
1) I honestly have no clue how I contracted HIV
2) 10% sure
3) 20% sure
4) 30% sure
5) 40% sure
6) 50% sure
7) 60% sure
8) 70% sure
9) 80% sure
10) 90 % sure
11) 100% sure
12) I am seronegative

110. If HIV was transmitted to you by sexual contact or IV-drug use needle sharing, how certain are you that you could name that person who transmitted it to you?
1) I honestly have no clue who transmitted HIV to me
2) 10% sure
3) 20% sure
4) 30% sure
5) 40% sure
6) 50% sure
7) 60% sure
8) 70% sure
9) 80% sure
10) 90 % sure
11) 100% sure
12) I am seronegative

111. How certain are you that you know when HIV was transmitted to you?
1) I honestly have no clue when HIV was transmitted to me
2) 10% sure
3) 20% sure
4) 30% sure
5) 40% sure
6) 50% sure
7) 60% sure
8) 70% sure
9) 80% sure
10) 90 % sure
11) 100% sure

12) I am seronegative

112. CHECK ALL THAT APPLY: If you are seropositive, to whom have you told about your HIV status?
1) Mother
2) Father
3) Brother(s)
4) Sister(s)
5) Aunt(s)
6) Uncle(s)
7) Cousin(s)
9) Grandparent(s)
8) I am seronegative

113. If you are seropositive, think about all of your sexual experiences, how certain do you feel it is that you've infected another person with HIV?
1) I'm certain I haven't infected anyone
2) 10% certain I have
3) 20% certain I have
4) 30% certain I have
5) 40% certain I have
6) 50% certain I have
7) 60% certain I have
8) 70% certain I have
9) 80% certain I have
10) 90 % certain I have
11) 100% certain I have
12) I'm seronegative.

114. If you are seropositive, in the past 12 months, what percent of the time did you disclose your HIV status to your **main partner(s)**—your boyfriend(s) or girlfriend(s), someone you have been serially dating, or a long-term partner?
1) I never disclosed my status.
2) 10% of the time
3) 20% of the time
4) 30% of the time
5) 40% of the time
6) 50% of the time
7) 60% of the time
8) 70% of the time
9) 80% of the time
10) 90 % of the time
11) 100% of the time
12) I have never had someone I consider to be a serial or main partner.

115. If you are seropositive, in the past 12 months, what percent of the time did you disclose your HIV status to a **casual partner(s)**—a fuck-buddy or a partner you have sex with but without any sort of commitment?
    1) I never disclosed my status.
    2) 10% of the time
    3) 20% of the time
    4) 30% of the time
    5) 40% of the time
    6) 50% of the time
    7) 60% of the time
    8) 70% of the time
    9) 80% of the time
    10) 90 % of the time
    11) 100% of the time
    12) I have never had someone I consider to be a casual partner.

116. If you are seropositive, in the past 12 months, what percent of the time did you disclose your HIV status to an anonymous partner(s)—someone you met randomly in a darkroom, bathhouse, through online, etc.?
    1) I never disclosed my status.
    2) 10% of the time
    3) 20% of the time
    4) 30% of the time
    5) 40% of the time
    6) 50% of the time
    7) 60% of the time
    8) 70% of the time
    9) 80% of the time
    10) 90 % of the time
    11) 100% of the time
    12) I have never had someone I consider to be an anonymous partner.

8. Attitudes about Sexual Behaviors

The following questions are aimed at assessing your attitudes about sex and sexual behavior. Please answer each question, staying as true as possible to your actual beliefs. Again, in no way can or will your answers be traced back to you. Read each item and decide whether you agree or disagree. If you strongly agree, check 5. If you strongly disagree, check 1. If you feel somewhere in between, check any one of the numbers between 1 and 5. If you feel neutral, then check 4. Please remember that this is a completely forward moving survey. The program will not let you go back to the previous question or sets of questions, so make sure you are completely happy with your answers before you press "next."

117. Sex is most enjoyable for me if I never have to see the person again afterwards. (commitment to partner)-R

1) Strongly disagree
2) Disagree
3) Neither agree nor disagree
4) Agree
5) Strongly agree

118. Having sex makes me feel great. (Feelings about sex)

1) Strongly disagree
2) Disagree
3) Neither agree nor disagree
4) Agree
5) Strongly agree

119. I prefer a casual partner or "fuck buddy" to an actual romantic relationship. (commitment to partner)-R

1) Strongly disagree
2) Disagree
3) Neither agree nor disagree
4) Agree
5) Strongly agree

120. Most of the time, I feel good when I'm having sex. (feelings about sex)

1) Strongly disagree
2) Disagree
3) Neither agree nor disagree
4) Agree
5) Strongly agree

121. I only really enjoy sex when I'm committed to someone. (commitment to partner)

1) Strongly disagree
2) Disagree
3) Neither agree nor disagree
4) Agree
5) Strongly agree

122. I look forward to my next sexual experience. (feelings about sex)

1) Strongly disagree
2) Disagree
3) Neither agree nor disagree
4) Agree
5) Strongly agree

123. People who think that sex is more trouble than it's worth are wrong. (feelings about sex)

1) Strongly disagree
2) Disagree
3) Neither agree nor disagree
4) Agree
5) Strongly agree

124. I think it's important to know a person's last name if I'm sleeping with them. (commitment to partner)

1) Strongly disagree
2) Disagree
3) Neither agree nor disagree
4) Agree
5) Strongly agree

125. I think it's important to talk about STD's or HIV before having sex. (willingness to disclose)

1) Strongly disagree
2) Disagree
3) Neither agree nor disagree
4) Agree
5) Strongly agree

126. It is not my own fault if I contract an STD or HIV. (responsibility of conversion)-R

1) Strongly disagree
2) Disagree
3) Neither agree nor disagree
4) Agree
5) Strongly agree

127. My partner shouldn't feel obligated to indicate if he or she is HIV-positive. (responsibility of conversion)

1) Strongly disagree
2) Disagree
3) Neither agree nor disagree
4) Agree
5) Strongly agree

128. I would tell my serostatus to any partner before engaging them in sexual behaviors. (willingness to disclose)

1) Strongly disagree
2) Disagree
3) Neither agree nor disagree
4) Agree
5) Strongly agree

129. I believe that talking about HIV does more harm than good in the bedroom. (willingness to disclose) –R

1) Strongly disagree
2) Disagree
3) Neither agree nor disagree
4) Agree
5) Strongly agree

130. Sex is overrated. (feelings about sex) – R

1) Strongly disagree
2) Disagree
3) Neither agree nor disagree
4) Agree
5) Strongly agree

131. I prefer an anonymous partner to either a casual or main partner. (commitment to partner)-R

1) Strongly disagree
2) Disagree
3) Neither agree nor disagree
4) Agree
5) Strongly agree

132. I consider talking about STD's or HIV simply as part of the routine of sex. (willingness to disclose)

1) Strongly disagree
2) Disagree
3) Neither agree nor disagree
4) Agree
5) Strongly agree

133. If I contracted HIV, I would place the most blame on the person who gave me the infection. (responsibility of conversion) – R

1) Strongly disagree
2) Disagree
3) Neither agree nor disagree
4) Agree
5) Strongly agree

134. Sex is so much better when there are no strings attached. (commitment to partner)-R

1) Strongly disagree
2) Disagree
3) Neither agree nor disagree
4) Agree
5) Strongly agree

135. Sex is a necessary evil. (feelings about sex)-R
1) Strongly disagree
2) Disagree
3) Neither agree nor disagree
4) Agree
5) Strongly agree

136. I just wouldn't be able to talk about HIV to possible sexual partners if I had it. (willingness to disclose) – R
1) Strongly disagree
2) Disagree
3) Neither agree nor disagree
4) Agree
5) Strongly agree

137. Blaming others for the consequences of sexual behavior is wrong. (responsibility of conversion)
1) Strongly disagree
2) Disagree
3) Neither agree nor disagree
4) Agree
5) Strongly agree

138. I am accountable for my own sexual behaviors, even if they cause me trouble. (responsibility of conversion)
1) Strongly disagree
2) Disagree
3) Neither agree nor disagree
4) Agree
5) Strongly agree

139. It's hard enough to talk about sexual health with a partner, let alone STD's. (willingness to disclose) – R
1) Strongly disagree
2) Disagree
3) Neither agree nor disagree
4) Agree
5) Strongly agree

140. If I don't use a condom, it's really my own fault if I get an STD or HIV. (responsibility of conversion)
1) Strongly disagree
2) Disagree
3) Neither agree nor disagree
4) Agree

5) Strongly agree

9. Unprotected sex scenarios

The following scenarios are aimed at assessing your attitudes about sex and sexual behavior. Please answer each question, staying as true as possible to your actual beliefs. Read each scenario and then indicate whether the character is justified. Imagining yourself in the situation will probably be helpful. And again, in no way can or will your answers be traced back to you. Read each scenario and decide whether the character's behaviors are justified. If you think they are strongly justified, check 5. If you think they are strongly unjustified, check 1. If you feel somewhere in between, check any one of the numbers between 1 and 5. If you feel that the behaviors were neither justified nor unjustified, then check 3. Please remember that this is a completely forward moving survey. The program will not let you go back to the previous question or sets of questions, so make sure you are completely happy with your answers before you press "next."

141. Tommy's a little drunk and he brings home a partner he just met at a bar. Tommy is HIV-positive and is fairly certain that the partner he's bring home is positive too. They have unprotected sex, and in the morning, the partner reveals that he is actually negative. Tommy doesn't say anything about his status to prevent a scene from breaking out. (willingness to justify nondisclosure)

1) The behaviors were extremely unjustified
2) The behaviors were unjustified
3) The behaviors were slightly unjustified
4) The behaviors were neither justified nor unjustified
5) The behaviors were slightly justified
6) The behaviors were justified
7) The behaviors were extremely justified

142. To say that John is really angry and upset is an understatement. He found out today that he's HIV-positive after all. He runs into a casual fuck buddy whose HIV status he doesn't know. The buddy suggests that they head to John's place for some fun. John is still angry but at the same time, he thinks this might help him feel better. They start fooling around and then John starts to position himself to have unprotected sex. He starts thinking, "if I've got this thing, fuck everyone else." (willingness to justify nondisclosure)

1) The behaviors were extremely unjustified
2) The behaviors were unjustified
3) The behaviors were slightly unjustified
4) The behaviors were neither justified nor unjustified
5) The behaviors were slightly justified
6) The behaviors were justified
7) The behaviors were extremely justified

143. Richard is HIV-positive. To blow off some steam, he enjoys going to the bathhouse after a long week of work. Richard encounters a very attractive partner with whom he really wants to

have sex. They start talking and this attractive partner suggests that he doesn't like using condoms but happens to be HIV-negative. To secure sex, Richard misleads this partner into believing that he, too, is negative. They have unprotected sex. (willingness to justify nondisclosure)

1) The behaviors were extremely unjustified
2) The behaviors were unjustified
3) The behaviors were slightly unjustified
4) The behaviors were neither justified nor unjustified
5) The behaviors were slightly justified
6) The behaviors were justified
7) The behaviors were extremely justified

144. Ian knows he is HIV-positive but has not yet told anyone about it. He likes the power of being able to still say he's negative. And it makes him feel a little better with each unprotected sexual conquest he makes to think that maybe he's leaving his mark on other people. (willingness to justify nondisclosure)

1) The behaviors were extremely unjustified
2) The behaviors were unjustified
3) The behaviors were slightly unjustified
4) The behaviors were neither justified nor unjustified
5) The behaviors were slightly justified
6) The behaviors were justified
7) The behaviors were extremely justified

145. They are back in Dave's apartment after their fourth date. And things are getting pretty heavy. Dave really, really likes this partner but feels that if he tells of his positive HIV status that he'll quickly be single again. When this partner asks Dave if they really need to use a condom (a question he interpreted as code for, "are your positive"), Dave says, "no need." (willingness to justify nondisclosure)

1) The behaviors were extremely unjustified
2) The behaviors were unjustified
3) The behaviors were slightly unjustified
4) The behaviors were neither justified nor unjustified
5) The behaviors were slightly justified
6) The behaviors were justified
7) The behaviors were extremely justified

146. Bobby is on vacation in Mexico and meets a very attractive partner with whom he would like to have sex. The partner does not speak English very well so Bobby doesn't feel that he needs to verbalize that he is HIV-positive. They have unprotected sex. (willingness to justify nondisclosure)

1) The behaviors were extremely unjustified
2) The behaviors were unjustified
3) The behaviors were slightly unjustified
4) The behaviors were neither justified nor unjustified

5) The behaviors were slightly justified
6) The behaviors were justified
7) The behaviors were extremely justified

147. Don has been living with HIV for about 6 months. He meets an HIV-negative partner who claims to want to have unprotected sex with positive partners because it turns him on to possibly be getting infected. He asks Don to be such a partner, but Don refuses. (willingness to justify nondisclosure) - R

1) The behaviors were extremely unjustified
2) The behaviors were unjustified
3) The behaviors were slightly unjustified
4) The behaviors were neither justified nor unjustified
5) The behaviors were slightly justified
6) The behaviors were justified
7) The behaviors were extremely justified

148. Andy has been lying about his being HIV-positive for years. He feels that if people knew about his status, he'd probably only be able to have sex with other positive partners and to be frank, he doesn't want his sexual potential cut in half. (willingness to justify nondisclosure)

1) The behaviors were extremely unjustified
2) The behaviors were unjustified
3) The behaviors were slightly unjustified
4) The behaviors were neither justified nor unjustified
5) The behaviors were slightly justified
6) The behaviors were justified
7) The behaviors were extremely justified

149. It's early in the morning and Michael hears the partner he picked up at a bar last night in his bathroom. Upon the partner's return, Michael says, "I hate to drop this on you, especially since we didn't use protection last night but; I'm HIV-positive." (willingness to justify nondisclosure)- R

1) The behaviors were extremely unjustified
2) The behaviors were unjustified
3) The behaviors were slightly unjustified
4) The behaviors were neither justified nor unjustified
5) The behaviors were slightly justified
6) The behaviors were justified
7) The behaviors were extremely justified

THANK YOU SO MUCH! YOU'RE ALL FINISHED. AGAIN, REMEMBER THAT EVERYTHING ON THIS QUESTIONNAIRE IS COMPLETELY ANONYMOUS AND THERE IS NO WAY THAT THE INFORMATION DISCLOSED CAN BE TRACED BACK TO YOU.