

Spring 2016

The Role of Harm, Detectability, and Knowledge of HIV Non-Disclosure Laws in Affecting Punishment Recommendations for HIV Law Violators

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**THE ROLE OF HARM, DETECTABILITY, AND KNOWLEDGE OF HIV
NON-DISCLOSURE LAWS IN AFFECTING PUNISHMENT
RECOMMENDATIONS FOR HIV LAW VIOLATORS**

by

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B.S. December 2011, Old Dominion University

A Thesis Submitted to the Faculty of
Old Dominion University in Partial Fulfillment of the
Requirements for the Degree of

MASTER OF SCIENCE

PSYCHOLOGY

OLD DOMINION UNIVERSITY
May 2016

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ABSTRACT

THE ROLE OF HARM, DETECTABILITY, AND KNOWLEDGE OF HIV NON-DISCLOSURE LAWS IN AFFECTING PUNISHMENT RECOMMENDATIONS FOR HIV LAW VIOLATORS

Christina Marie Dodson
Old Dominion University, 2016
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Many U.S. states have passed HIV non-disclosure laws that criminalize sexual behavior on the part of HIV-positive persons who do not disclose their HIV status to sexual partners. This study broadly focused on the impact of two major philosophical approaches for meting out punishment to law violators: the just deserts and the deterrence perspectives. The study examined how these two approaches may influence laypersons' motivations for punishing someone with HIV who violates an HIV non-disclosure law. In addition, the study examined how knowledge or no knowledge of an HIV non-disclosure law by the law violator influenced punishment recommendations. A 2 (Harm) X 2 (Detectability) X 2 (HIV Law Knowledge) ANOVA design was utilized, with punishment recommendations (i.e., prison sentence and fine) as the dependent measures ($N = 224$). Research questions pertaining to potential explanations (e.g., moral outrage, specific incapacitation, specific deterrence) for participants' punishment assignments were also examined. Results indicated that the most important motivation for meting out punishment was the harm caused by the HIV non-disclosure law violator. The detectability of the law violation and knowledge of the HIV non-disclosure law did not influence punishment recommendations. The findings are consistent with the just deserts perspective that retribution for the harm done by the HIV non-disclosure is a major motivator for punishing violations of the law.

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This thesis is dedicated to my father, Jeffrey Alan Dodson

ACKNOWLEDGMENTS

I would like to thank my mentor, Dr. Valerian Derlega, as well as my committee members, Dr. James Paulson and Dr. Konstantin Cigularov, for their support and helpful feedback throughout the process of completing this thesis.

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INTRODUCTION

The Centers for Disease Control and Prevention ([CDC], 2014) estimates that through the end of 2011, over 1.2 million individuals in the United States were living with HIV infection. However, an estimated 14% of these individuals are undiagnosed, and thus thought to be unaware of their HIV-positive status (CDC, 2014). Since many individuals with HIV are sexually active, they may be potentially infecting new persons with HIV through risky sexual behavior (Galletly & Pinkerton, 2004). Legal avenues to reduce HIV transmission include HIV non-disclosure laws, which criminalize sexual behavior on the part of HIV-positive persons who do not disclose their HIV seropositive status to sexual partners (Galletly & Pinkerton, 2004). Although HIV non-disclosure laws are intended to reduce the spread of HIV infection, proscribing HIV status disclosure remains controversial (Galletly & Pinkerton, 2004). Though public health advocates may recommend the elimination of HIV non-disclosure laws, many prosecutors and state legislators argue for their maintenance. The current research examines laypersons' motives in recommending punishments for HIV non-disclosure law violators. The current research also examines whether the knowledge the law violator has of HIV non-disclosure laws has an effect on these punishment recommendations. Lastly, the current research investigates potential explanations for laypersons' punishment recommendations.

The Case for Criminalizing HIV Non-Disclosure

The first HIV-specific criminal legislation in the U.S. was introduced in 1986 (Lehman et al., 2014), corresponding to a period of time in the late 1980's when the public's fear over the AIDS crisis had reached an apex (Brandt, 1998; Galletly & Pinkerton, 2006). The original intent of the legislation was to assuage the public's fears about the spread of AIDS by utilizing the criminal law to deter and punish individuals with AIDS who might engage in sexual contact with

others that posed a high likelihood of transmission of the disease (Presidential Commission, 1988). The first conviction for AIDS non-disclosure occurred in 1987, when an Army Sergeant was sentenced to five months in military prison for having sexual intercourse with three partners without first disclosing his illness (U.S. Army Court of Military Review, 1989).

As of 2014, 33 states, including Virginia, had passed criminal laws pertaining to various behaviors that might be practiced by HIV-positive persons, including sexual intercourse, donating blood, sharing drug paraphernalia such as needles, and/or soliciting sex workers (Lehman et al., 2014). Although the terminology differs from state to state, the laws in 24 states address the disclosure of one's HIV-positive status. For example, Michigan's law states, "A person who knows he or she has HIV, and who engages in sexual penetration with another person without informing that person of his or her HIV status, is guilty of a felony" (Michigan Code § 333.5210). Indiana's law states that HIV-positive individuals have a "duty to warn" prospective sexual partners about their HIV-positive status (Indiana Code §§ 16-41-7-1, 35-42-1-9). Virginia's law criminalizes those HIV-positive persons who engage in sexual activities such as intercourse, cunnilingus, and fellatio "without having previously disclosed the existence of his or her HIV infection" (Virginia Code § 18.2-67.4:1(B)). The states differ with regard to the severity of the recommended punishment for violations of HIV-specific statutes. While Virginia considers violations of the law a class 1 misdemeanor, Michigan considers violations a felony, and Indiana considers violations either a class B misdemeanor or a class D felony, based on the intent of the law violator.

Upon the inception of HIV-specific legislation, lawmakers posited that it was reasonable to utilize criminal law to achieve the goals of preventing or reducing the spread of HIV, or the risk of exposure to HIV, for uninfected individuals (Gostin, 1989). In 1988, the Presidential

Commission on the Human Immunodeficiency Virus Epidemic recommended that states adopt legislation criminalizing HIV-positive persons who knowingly engage in activities likely to constitute an increased risk of transmission of HIV. In addition, the Presidential Commission recommended that “the statute[s] should impose on HIV-infected individuals who know of their status specific affirmative duties to disclose their condition to sexual partners . . .” (p. 131).

Lawmakers have argued that HIV non-disclosure laws are beneficial in that they delineate behavior (i.e., engaging in sexual activities without first disclosing one’s HIV-positive status) which will not be accepted by society (Gostin; Presidential Commission).

In theory, HIV non-disclosure laws should encourage HIV-positive persons to disclose their HIV-positive status to their sexual partners. Self-disclosure by the HIV-infected partner allows the non-infected partner to make a more informed decision about the risks of engaging in sexual activity with the infected person, and provides him or her with the opportunity to decide to abstain from sex (Galletly & Pinkerton, 2004). Given HIV disclosure by the seropositive person, the at-risk partner is also presumably better able to make an informed choice about the protective measures the couple should take (e.g., using condoms) before having sex (Galletly & Pinkerton, 2004).

The Public Health Expert Argument Against Criminalizing HIV Non-Disclosure

Despite the prevalence of HIV non-disclosure laws, these laws remain a source of debate and controversy (Galletly & Pinkerton, 2004, 2006; Lazzarini, Bray, & Burris, 2002; Lehman et al., 2014). While lawmakers may have a primarily positive view of HIV non-disclosure laws, public health experts are more dubious of their efficacy. One problem with the current HIV non-disclosure legislation is that there is little agreement among various states about what behaviors should constitute a violation of the law. A majority of the states criminalize sexual behavior that

clearly entails a higher level of risk of transmission (i.e., unprotected vaginal and anal intercourse), but many criminalize behaviors that constitute a low (e.g., oral sex) or even insignificant (e.g., exchange of saliva during kissing) risk of transmission. Some states mandate disclosure of one's HIV-positive status specifically, while other states simply prohibit "knowingly" engaging in activities which are "likely" to transmit HIV to another person. In the absence of clear and well-defined standards for appropriate comportment, the application of HIV non-disclosure laws may be open to interpretation in criminal cases (Perone, 2013).

Although the intended goals of the HIV non-disclosure laws may be to enable at-risk individuals to protect themselves and to make more informed decisions about their health, these laws may in reality diminish the advancement of these goals. Many laws do not mandate condom usage by HIV-infected persons or explicitly address condom usage at all. This may give rise to a pattern wherein HIV-infected individuals feel their personal contribution to safer sex practices ends at disclosure, while at-risk individuals may rely on their partner's disclosure, or lack thereof, to decide whether practicing safer sex is necessary (Galletly & Pinkerton, 2004).

Lastly, HIV non-disclosure laws may further entrench stigma towards persons living with HIV infection, through the perpetuation of the idea that a link exists between HIV-positive status and criminal behavior. The perception of stigma may then dispose HIV-positive persons to conceal their HIV status rather than to disclose their status to sexual partners (Galletly & Pinkerton, 2006).

Debate continues about whether it is in the best interests of society to retain or abolish, or at least modify, existing HIV non-disclosure laws (Galletly & Pinkerton, 2006; Perone, 2013). In 2010 President Obama's National HIV/AIDS Strategy [NHAS] for the United States mentioned HIV non-disclosure laws specifically. Citing a possible lack of efficacy and the risk of increased

stigma against HIV-positive persons, President Obama recommended that state legislators revisit their existing HIV-specific laws and consider whether they “continue to further the public interest and public health” (NHAS, 2010, p. 36). However, in the wake of President Obama’s recommendations, the House of Representatives in Washington introduced an amendment to pre-existing legislation that expands the definition of sexually transmitted disease in the context of the original law to include HIV infection. The 2013 amendment renders it illegal for HIV-positive persons to engage in sexual intercourse with another person, “unless such other person has been informed of the presence of the [HIV infection]” (House Bill 1018).

With some lawmakers and many public health advocates on opposing sides with regards to the need for HIV non-disclosure legislation, understanding laypersons’ reactions to these laws becomes essential. It is reasonable to assume that given public support for HIV non-disclosure laws, the recent push by some public health and policy experts to change these laws may be unsuccessful. Understanding laypersons’ motivations for punishing HIV non-disclosure law violators may provide valuable information as to which perspective the public is sympathetic towards.

Motives for Punishing HIV Non-Disclosure Law Violators

There are two philosophical schools of thought regarding society’s motivations for punishing wrongdoers: the “just deserts” perspective and the “deterrence” perspective.

Just deserts. The “just deserts” perspective, first conceptualized by the philosopher Immanuel Kant (1790/1952), is focused on retributive justice. Kant stated that the goal of punishment is to “inflict pain” on law violators for the criminal offense they perpetrated. Kant argued further that punishment should not be meted out to “promote another good” (that is, to deter a repeat offense by the law violator and/or a similar offense by a future law violator), but

should be meted out solely as punishment for committing an infraction of the law. In Kant's view, punishment of law violators exists so that "every one may realize the desert of [the law violator's] deeds" (p. 350).

In other words, although the act of punishing may serve ancillary benefits to society as a whole (e.g., deterring others from committing the same crime), Kant viewed these benefits as being immaterial to the act of punishing (Carlsmith & Darley, 2008). Justification for the punishment of a law violator was viewed by Kant as depending solely on retribution. The biblical phrase "an eye for an eye" encapsulates Kant's perspective on punishment. Within the framework of the "just deserts" view of punishment, Carlsmith, Darley, and Robinson (2002) further posited that society punishes in order to correct injustices perpetrated against members of society, in order to achieve retribution, and in order to ameliorate moral outrage caused by the actions of the law violator.

A study conducted by Carlsmith et al. (2002) illustrated how the amount of harm caused by a law violator affects laypersons' punishment recommendations. To this end, laypersons were presented with vignettes containing details of a criminal case. In some vignettes, participants were told that the law violator committed a crime that caused considerable harm (i.e., dumping toxic debris into a public water source in order to increase profit), while in some vignettes participants were told that the law violator committed a crime that caused less harm (i.e., stealing money from an employer). In Carlsmith et al.'s (2002) study, the idea of harm was conceived as "deservingness," such that a fictional law violator that committed a more harmful crime would be perceived by participants as deserving a harsher punishment as compared to a law violator that committed a less harmful crime. Participants were prompted to assign punishment to the law violator in the form of a scaled jail sentence. Results indicated that participants were more

punitive (i.e., assigned a harsher sentence) when they had been presented with the vignette corresponding to the high harm crime as compared to when they had been presented with the vignette corresponding to the low harm crime (Carlsmith et al., 2002).

Moral outrage is another factor important to the just deserts approach that has been shown to impact punishment recommendations (Woody, Braitman, Derlega, Winstead, & Neilson, 2015). The harm caused by a crime is often commensurate with the moral outrage felt by people about the harm done by a crime. Research has indicated that moral outrage is a salient motivator when laypersons punish fictional law violators (Woody et al., 2015). In a study examining motivations for punishing, Darley, Carlsmith, and Robinson (2000) found that moral outrage significantly mediated the relationship between the seriousness of the crime and the severity of the punishment recommended by laypersons. Similarly, Woody et al. found, across three studies, that moral outrage was a significant mediator between just deserts and punishment recommendations. Participants recommended longer prison sentences and higher fines in the high, compared to the low, just deserts condition (based on the amount of harm done by the HIV non-disclosure law violator). Woody et al.'s research found that high just deserts (associated with more harm done by the law violator) was associated with more moral outrage directed at the law violator and, in turn, more moral outrage was associated with a more severe punishment recommendation.

Deterrence. In contrast to the just deserts approach, the “deterrence” perspective, first conceptualized by philosopher Jeremy Bentham (1843/1962), is concerned not with retribution, but with prevention (i.e., preventing other wrongdoers from repeating the same actions). Bentham (1843/1962) referred to punishment as an “evil” act perpetrated against an individual through the intentional actions of another. He argued that the idea of “vengeance” must be

distinguished from the idea of punishment.

Bentham's (1843/1962) approach to punishment focuses on deterring future law violators from criminal actions by ensuring that the pain associated with the consequences of committing an offense outweighs the potential pleasure of committing the offense. In other words, traditional punishments (in the form of a fine or jail time) are to be sufficiently costly so as to render criminal activity unprofitable for individuals, thereby deterring potential wrongdoers from breaking the law (Carlsmith et al., 2002). Carlsmith et al. posited that within the deterrence framework punishment serves an inhibitory function, which encourages future law violators to consider the potential benefits and costs of committing an infraction of the law (given the severity of punishment meted out upon a particular law violator) and then to decide against committing the criminal act. In Bentham's view, punishment should not be meted out for the purposes of retribution.

An important factor underlying the deterrence perspective is the level of detectability of the crime (Carlsmith et al., 2002). Theoretically, the probability of detecting a given crime should impact laypersons' punishment recommendations, such that harsher punishments are recommended for crimes that are more difficult to detect as compared to crimes that are easier to detect. This is due to the fact that a crime which is unlikely to be detected would necessitate a harsher punishment in order to deter other law violators from committing the same offense in the future.

Recent Research on Lay Punishment Recommendations

A series of studies conducted by Woody et al. (2015) examined the potential motivations for laypersons' punishment recommendations. The Woody et al. study informs the current study with respect to the experimental design, and thus will be reviewed in detail. In addition, the

Woody et al. study was the first, to our knowledge, to examine laypersons' punishment recommendations specifically for HIV non-disclosure law violators, and the present research is intended to build on that foundation.

In three studies, Woody et al. (2015) presented participants with vignettes which contained details of a court case involving a fictional HIV non-disclosure law violator (i.e., a heterosexual man who had sex with several women without first disclosing his HIV-positive status). The vignettes varied the level of harm ("Just Deserts" in the authors' paradigm, "Harm" in the current paradigm) caused by the law violator by informing participants that the HIV non-disclosure law violator either infected several women with HIV, or infected no women with HIV. The vignettes also varied the level of detectability ("Deterrence" in the authors' paradigm, "Detectability" in the current paradigm) of the crime by telling participants that the HIV non-disclosure law violation was either difficult to detect and the law violator was not likely to be caught for his crime, or that the law violation was relatively easy to detect and the law violator was likely to be caught for his crime.

Participants were prompted to provide punishment recommendations (a prison sentence and/or fine) on 11-point Likert scales. Results across three studies indicated that the primary motivation participants followed when recommending punishment was consistent with the just deserts perspective (Woody et al., 2015). In other words, participants' punishment recommendations for the fictional HIV non-disclosure law violator were associated with the amount of harm caused, suggesting that retribution motivated the punishment recommendations. The present research will build upon Woody et al.'s studies in re-examining the roles of the just deserts and deterrence philosophical approaches in laypersons' punishment recommendations. The study also introduces a new independent variable (the HIV non-disclosure law violator's

knowledge of the law) into the experimental paradigm.

Role of Knowledge in Punishment Recommendations

A central focus of the current study concerns whether the law violator's knowledge of Virginia's HIV non-disclosure law influences laypersons' punishment recommendations. Vidmar and Miller (1980) argue that motivations for punishment, and thus punishment outcomes, rely on the individual's perception of both the law violation and the law violator. In other words, reactions to a criminal case are often dependent on "subjective impressions" rather than the objective details of the case (Vidmar & Miller, p. 570). Typically, a law violator who has committed a crime by accident (i.e., pleads ignorance of the law he or she has violated) is seen as less culpable for the law violation and is thus less likely to be punished. In other words, the perceived intentionality of the law violator appears to play a role in individuals' reactions to a criminal offense (Vidmar & Miller). Given this information, it may be reasonable to expect that a law violator's knowledge of the law will impact the punishment recommended to him (i.e., by altering perceptions of intention, responsibility, etc.).

Furthermore, the just deserts approach to punishment states that extenuating circumstances can influence laypersons' punishment recommendations as well as their motivations for punishing (Carlsmith et al., 2002). This is due to the fact that mitigating circumstances can impact the desire for retribution laypersons experience when learning about a crime that has been committed (Carlsmith et al.; Woody et al., 2015). A law violator's knowledge of the law may be one such mitigating circumstance. For example, a law violator who had prior knowledge of the law yet who still chose to engage in an HIV non-disclosure law violation may be perceived by laypersons as acting more willfully in his or her criminal actions. Thus, laypersons might believe that an HIV non-disclosure law violator who had prior

knowledge of the law is more deserving of punishment as compared to an ignorant law violator.

As the goal of criminal law is to punish individuals who are culpable in committing a law violation (i.e., those individuals who knowingly and willfully engage in criminal conduct) individuals' knowledge of the law should play a role when recommending an appropriate punishment (Alter, Kernochan, & Darley, 2007). If an individual is ignorant of the fact that his or her conduct violates a law, the intentionality of his or her criminal actions is not certain. A law violator's intention in committing a criminal act should inform society's desire to "pay back" a law violator for his or her conduct and society's need to deter the law violator from committing a similar future offense. Therefore, knowledge of the law on the part of the law violator should be one factor that influences laypersons' punishment recommendations.

Research conducted by Alter et al. (2007) examined how an "ignorance of the law" defense impacted the punishment recommendations of laypersons. The researchers presented participants with three hypothetical scenarios, one in which a law violator unknowingly committed a crime (but whose behavior was otherwise moral), one in which a law violator unknowingly committed a crime (but whose behavior was otherwise immoral), and one in which a law violator unknowingly committed a crime (but whose behavior was otherwise neutral). For example, the moral law violator committed the crime of removing protected coral from a coral reef, but did so in order to study the coral for the purposes of combatting the future destruction of the coral reef. The immoral law violator committed the crime of having a large amount of money on his person, with the intent to use the money to purchase illegal drugs. The neutral law violator was a young man who committed the crime of engaging in sexual intercourse with a girl two years his junior, who he knew was not old enough to provide legal consent.

Participants were prompted to provide their punishment recommendations for each law

violator. Participants indicated whether or not they thought each law violator should be convicted of the crime for which he or she was accused and made recommendations about the severity of the punishment. Alter et al. (2007) found that participants recommended that the immoral, as compared to the moral and neutral, law violator be convicted for the criminal conduct significantly more often. The researchers also found that participants recommended significantly stiffer punishments for immoral law violators as compared to moral and neutral law violators. The results indicated that immorality associated with the law violation affected punishment recommendations despite lack of knowledge about the law violation. Nevertheless, Alter et al.'s study provided no evidence about the effects of no knowledge versus knowledge of a law on punishment recommendations.

Although participants' perceptions of the HIV non-disclosure law violator's morality (based on his sexual behaviors per se) will not be examined as an independent variable in the present research, one possibility is that an HIV non-disclosure law violator who is ignorant of the law would be judged as committing a less immoral crime as compared to a law violator who has knowledge of the law. Therefore, the ignorance of the law violator might decrease participants' desire to punish him or her in accordance with the just deserts and/or deterrence approaches to punishment.

Should an HIV-infected person unwittingly violate her or his state's non-disclosure law and face criminal proceedings, pleading ignorance of the law should not, according to legal opinion, be a justifiable defense. This is due to the long-standing legal principle of *ignorantia legis non excusat* (i.e., "ignorance of the law does not excuse"), which sets the standard for an affirmative defense in most criminal cases (Davies, 1998). In other words, even if truthfully ignorant of the relevant law, the law violator can still be punished for his or her criminal actions.

Nevertheless, it is possible that laypersons might be less willing to mete out punishment if a law violator did not have knowledge of the law.

The Present Research and Hypotheses

The current study used vignettes that described a court case involving a fictitious person who is accused of violating Virginia's HIV non-disclosure law. Building on previous research (Carlsmith et al., 2002; Woody et al., 2015), the goal of the present study was to examine laypersons' punishment recommendations within the just deserts and deterrence frameworks. However, there exists a gap in the literature about whether or not a law violator's knowledge of the law may be a mitigating factor affecting laypersons' punishment recommendations. The independent variables in the present research were Harm, Detectability, and HIV Law Knowledge. A 2 (harm vs. no harm) X 2 (high vs. low detectability) X 2 (knowledge or no knowledge of the HIV non-disclosure law) ANOVA design was used, with participants' punishment recommendations as the outcome measures. The hypotheses and research questions of the present research include:

Hypothesis 1. There will be a main effect of Harm on laypersons' punishment recommendations for the HIV non-disclosure law violator. Greater harm caused by the law violator should result in a more severe punishment assignment (i.e., more jail time, higher fines). Research (Carlsmith et al., 2002; Woody et al., 2015) has supported the idea that "just deserts" (i.e., retribution) represents laypersons' primary motivation when assigning punishment to law violators. This earlier research documented that the harm caused to others by a law violation is the major factor influencing laypersons' desire to punish law violators, suggesting that retribution fuels the desire to mete out punishment to the law violator who caused considerable harm to others (Carlsmith et al.; Woody et al.).

Hypothesis 2. There will be a main effect of Detectability of the HIV non-disclosure law violation on laypersons' punishment recommendations. Greater difficulty in detecting the crime should result in a more severe punishment assignment. Bentham (1843/1962) argued that the primary goal of punishment should be to deter future law violators from committing similar criminal actions. Carlsmith et al. (2002) documented that when participants were prompted to make explicit the framework (i.e., just deserts or deterrence) they would apply to inform their punishment recommendations participants endorsed a strong preference for deterrence. However, there has been an absence of support for deterrence as a motivation for punishment in previous research (Carlsmith et al.; Woody et al., 2015). Nevertheless, given the importance in philosophy of Bentham's deterrence perspective it seemed worthwhile to rigorously test this idea in the current study.

Hypothesis 3. There will be a main effect of knowledge of the law on laypersons' punishment recommendations for the HIV non-disclosure law violator. Prior knowledge of Virginia's HIV non-disclosure law by the law violator should lead laypersons to recommend a more severe punishment for the HIV non-disclosure law violation.

Research Questions

The present research will explore the roles of harm, detectability and HIV law knowledge in participants' responses to additional outcome measures. In particular, the present study will examine whether the independent variable manipulations influence: moral outrage, specific incapacitation, specific deterrence, and general deterrence. The study will also examine whether the independent variables influence participants' concerns for their own health and/or the public's health subsequent to reading about the HIV non-disclosure law violation. Participants' perceptions of the HIV non-disclosure law violator's guilt or innocence, and their degree of

endorsement for Virginia's HIV non-disclosure law, will be examined as a function of the independent variable manipulations. Finally, we will assess whether participants' knowledge about the transmissibility of the HIV virus is correlated with their responses on the outcome measures.

Research Question 1. Do the independent variables influence the level of moral outrage felt by participants about the HIV non-disclosure law violation? Research has documented that moral outrage mediates the relationship between the just deserts perspective and laypersons' punishment recommendations (Darley et al., 2000; Woody et al., 2015). The research will examine whether the level of moral outrage felt by participants is impacted by the independent variable manipulations.

Research Question 2. Do the independent variables influence participants' desire to incapacitate the HIV non-disclosure law violator? The incapacitation perspective of punishment emphasizes removing a particular individual from society after they have committed a crime, so that she or he does not have the opportunity to reoffend (Carlsmith & Darley, 2008). The research will examine whether participants will use an incapacitation approach in response to the HIV non-disclosure law violation and indicate that it is important to remove the law violator from society. Thus, the study will examine if the desire to incapacitate the HIV non-disclosure law violator is influenced by the independent variable manipulations.

Research Question 3. Do the independent variables influence participants' desire to deter the HIV non-disclosure law violator from repeating an HIV non-disclosure offense in the future? The specific deterrence approach to punishment focuses on preventing a particular individual from reoffending. This is accomplished by deterring him or her from committing future crimes by assigning strict punishment in the present (Carlsmith & Darley, 2008). The

present study will examine if participants will apply the specific deterrence approach when responding to the HIV non-disclosure law violation, and indicate that it is important to deter the law violator from committing future offenses. Thus, the study will determine if a desire for specific deterrence is impacted by the independent variable manipulations.

Research Question 4. Do the independent variables influence participants' desire to deter others from committing an HIV non-disclosure offense in the future? The general deterrence perspective focuses on punishing the law violator in order to prevent other members of society from committing similar offenses in the future (Carlsmith & Darley, 2008). The present study will examine if participants will apply the general deterrence approach when responding to the HIV non-disclosure law violation. Thus, the present study will determine whether a desire to deter other members of society from committing an HIV non-disclosure offense is influenced by the independent variable manipulations.

Research Question 5. Do the independent variables influence participants' concern for their own health subsequent to reading about the HIV non-disclosure violation? One possibility is that experiencing concern for one's health is a salient psychological reaction to reading about the HIV non-disclosure law violation. Therefore, the present study will examine whether concern for one's health is impacted by the independent variable manipulations.

Research Question 6. Do the independent variables influence participants' concern for the public's health subsequent to reading about the HIV non-disclosure violation? It is possible that feeling concern for the public's health is a salient response to reading about the HIV non-disclosure law violation. Thus, the present study will examine whether concern for the public's health is impacted by the independent variable manipulations.

Research Question 7. Do the independent variables influence participants' perceptions

of the HIV non-disclosure law violator's guilt or innocence? One possibility is that participants' perceptions of guilt or innocence vary based on the harm caused by the law violator, the detectability of the crime, and/or the HIV law knowledge of the law violator. Therefore, the present study will examine if participants' judgments of the HIV non-disclosure law violator's guilt or innocence are influenced by the independent variable manipulations.

Research Question 8. Do the independent variables influence participants' support or opposition to Virginia's HIV non-disclosure law? It is possible that participants' degree of support for Virginia's law may be influenced by the harm committed by the HIV non-disclosure law violator, the detectability of the crime, and/or the HIV law knowledge of the law violator. Thus, the present study will examine if participants' support for Virginia's law is influenced by the independent variable manipulations.

Research Question 9. Do relationships exist between participants' existing knowledge about the transmissibility of HIV and the outcome measures in the study? Finally, the partial correlations between participants' existing knowledge and their responses to several outcome measures will be assessed. It is possible that participants who are more or less informed about the transmissibility of HIV would have differing reactions to the outcome measures.

METHOD

Participants

Participants were recruited among undergraduate psychology students at a public university in the southeastern United States. The study was announced to prospective participants via the psychology department online recruiting system. There were 224 participants, including 165 women (73.7% of the sample), 58 men (25.9% of the sample), and 1 participant who did not identify his or her gender. The participants' ages ranged from 18 to 54 years old ($M = 23.73$, $SD = 6.95$, $Mdn = 21$). The majority of the sample self-identified as either Caucasian ($n = 126$, 56.3%) or African American ($n = 71$, 31.7%). In addition, 6 participants identified as Latino/a (2.7%), 6 as Asian (2.7%), 1 as Pacific Islander (0.4%), and 12 as "Other" (e.g., Hindu, Kurdish, mixed/biracial, 5.4%), with 2 participants unidentified. Of the 224 participants, 42 identified themselves as freshman (18.8%), 36 as sophomores (16.1%), 58 as juniors (25.9%), and 88 as seniors (39.3%). Most participants identified themselves as heterosexual ($n = 194$, 86.6%); 14 participants identified as gay/lesbian (6.3%), and 16 participants identified as bisexual (7.1%).

Prospective participants were randomly assigned to treatment conditions in the 2X2X2 design. Chi square analyses were conducted to ensure that participants with similar demographic characteristics were equally distributed across conditions. All but one of the effects were nonsignificant. There was a significant effect of harm on the distribution of whites versus minorities, indicating that participants of different races or ethnicities were not equally distributed across the harm conditions (i.e., harm vs. no harm). In the harm condition 45% ($n = 49$) of the participants were Caucasian, while the remaining 55% ($n = 60$) of the participants were minorities (e.g., African American, Asian American). In the no harm condition 68.1% ($n =$

77) of the participants were Caucasian, while the remaining 31.9% ($n = 36$) were minorities.

Most of the participants (72.8%) reported that they did not know anyone personally who had been diagnosed with HIV, while 13.8% indicated that they did know someone personally who had been diagnosed with HIV, and 13.4% stated that they weren't sure whether they knew anyone who had been diagnosed with HIV.

Power in the Current Study

The statistical software G*Power (version 3.1; Faul, Erdfelder, Lang, & Buchner, 2007) determined a sample size of $N = 128$ participants would be sufficient to detect a two-way interaction (with an alpha level of .05 and power of .80) with a medium effect size. Due to methodological concerns about the operationalization of the independent variables, post hoc power analyses were conducted for the nonsignificant effects for the primary dependent measures. These analyses were conducted due to concerns that the Harm variable was overpowered in the present study, while the Detectability and HIV Law Knowledge variables were underpowered in comparison. The post hoc power analyses indicated that the sample size of 224 permitted 0.01 power at the Bonferroni-corrected alpha of .007 for the Detectability variable for both prison sentence and fine. In addition, the sample size and alpha level permitted power of 0.02 for the Knowledge variable for prison sentence and 0.01 for fine. The post hoc power analyses suggest that power in the present study may not have been sufficient to detect significant effects for the Detectability and Knowledge variables.

Materials

Vignettes. Eight vignettes piloted and validated in prior research (Woody, 2012) were adapted for use in the present study. These vignettes served to manipulate the harm caused by the law violator, the level of detectability of the crime, and the HIV non-disclosure law violator's

knowledge of the law. The study used 2 (Harm: Harm vs. No Harm) X 2 (Detectability: High vs. Low) X 2 (HIV Law Knowledge: Knowledge or No Knowledge) independent variable manipulations.

Each vignette presented a fictional account of an HIV-positive, heterosexual man named John. He was described as having sexual intercourse with various female partners without first disclosing his HIV-positive status. Each vignette presented details of a court case where John was accused of violating the state of Virginia's HIV non-disclosure law. Vignettes were designed to present a narrative wherein John's behavior caused either harm or no harm to his sexual partners, where the likelihood of detecting the HIV non-disclosure law violation was high or low, and where John was described as knowing or not knowing about Virginia's HIV non-disclosure law.

Manipulation of the Independent Variables

Manipulation of the harm independent variable. The Harm independent variable was manipulated by indicating to participants that John caused either harm or no harm to his sexual partners through his actions.

In the harm condition participants read:

John is HIV positive and found out about his HIV diagnosis 12 years ago. He is heterosexual. He did not disclose to any of the women who have been his sexual partners that he was HIV positive. John did not always use a condom when he had sexual intercourse with his partners. There was a high risk of HIV being transmitted to his sexual partners when a condom was not used. Documentation was presented in court that he infected four women with HIV, the virus that causes AIDS.

In the no harm condition participants read:

John is HIV positive and found out about his HIV diagnosis 12 years ago. He is heterosexual. He did not disclose to any of the women who have been his sexual partners that he was HIV positive. John always used a condom when he had sexual intercourse with his partners. There was a low risk of HIV being transmitted to his sexual partners when a condom was used. Documentation was presented in court that he did not infect any women with HIV, the virus that causes AIDS.

The study included three questions to check the effectiveness of the harm independent variable manipulation. Participants provided their responses on seven-point Likert scales. First, “How serious was this offense (i.e., violating Virginia’s HIV nondisclosure law)” with responses ranging from 1 (*Not serious at all*) to 7 (*Extremely serious*). Second, “What was the harm committed by John’s behavior?” with responses ranging from 1 (*No harm at all*) to 7 (*Extreme harm*). Third, “How often did John use a condom?” with responses ranging from 1 (*Never*) to 7 (*Always*).

Manipulation of the detectability independent variable. Manipulation of the Detectability independent variable was accomplished by indicating to participants that the crime John committed was either highly likely or highly unlikely to be detected by authorities.

In the high detectability condition participants read:

An offense of this sort (violating Virginia’s HIV nondisclosure law) is highly likely to be detected and to be reported. People find out and are likely to share with others about someone with HIV having sexual intercourse with partners without disclosing his or her HIV status to the partners. Eventually this information comes to the attention of legal authorities.

In the low detectability condition participants read:

An offense of this sort (violating Virginia's HIV nondisclosure law) is almost impossible to detect or report. It is difficult for people to find out that someone with HIV has been having sexual intercourse with partners without disclosing his or her HIV status to the partners. John's behavior was reported to legal authorities initially due to a set of unlikely coincidences.

The detectability manipulation was checked by prompting participants to respond to the question, "How likely was it that John would be caught for the offense he committed?" Participants provided their response on a seven-point Likert scale, from 1 (*Not likely at all*) to 7 (*Extremely likely*).

Manipulation of the HIV law knowledge independent variable. Manipulation of the HIV Law Knowledge independent variable was accomplished by indicating to participants that John either did or did not have knowledge of the state of Virginia's HIV non-disclosure law when he engaged in sexual activity without first disclosing his HIV status. In the knowledge condition participants read: "In court John stated that he had full knowledge of Virginia's HIV nondisclosure law from the time when he tested positive for HIV." In the no knowledge condition participants read: "In court John stated that he had no knowledge of Virginia's HIV nondisclosure law from the time when he tested positive for HIV."

The HIV law knowledge manipulation was checked by prompting participants to respond to the question, "How knowledgeable was John about Virginia's HIV nondisclosure law after he found out about his HIV-positive diagnosis?" Participants provided their response on a seven-point Likert scale, from 1 (*Not knowledgeable at all*) to 7 (*Very knowledgeable*).

Dependent Measures

Punishment recommendations. After participants read their assigned vignette they were

prompted to provide their punishment recommendations for the HIV non-disclosure law violator. These punishment recommendations comprised the measurement of the dependent variables, with options to assign a variable jail sentence, a monetary fine, or both, to John.

Participants responded to “Suppose you were responsible for recommending a prison sentence for John. Using the scale below give John a sentence between the minimum of no time in prison to the maximum of 50 years in prison” on an 11-point Likert scale. The 11-point scale ranged from 0 (*No time in prison*) to 10 (*50 years in prison*). Participants also responded to “Now suppose you were responsible for recommending a fine for John. Using the scale below give John a fine between the minimum of no fine and the maximum of a \$350,000 fine” on an equivalent 11-point Likert scale, ranging from 0 (*\$0 fine*) to 10 (*\$350,000 fine*).

Additional dependent measures. Possible explanations for the participants’ punishment recommendations were assessed. The variables that were investigated included: moral outrage, specific incapacitation, specific deterrence, general deterrence, concern for one’s health, and concern for the public’s health. In addition, psychological reactions such as the participants’ likelihood of finding the HIV non-disclosure law violator guilty and support for Virginia’s HIV non-disclosure law were assessed.

Moral outrage. Moral outrage was measured using a composite moral outrage score comprised of participants’ responses to three questions on seven-point Likert scales. The composite moral outrage score potentially ranged from 3 to 21. First, “To what degree were you morally outraged by this offense (i.e., the HIV nondisclosure law violation)?”, with responses ranging from 1 (*Not outraged at all*) to 7 (*Extremely outraged*). Second, “How angry did John’s case make you?”, from 1 (*Not angry at all*) to 7 (*Extremely angry*). Third, “How upset did John’s case make you?”, from 1 (*Not upset at all*) to 7 (*Extremely upset*). A higher total score indicated

more moral outrage and a lower total score indicated less moral outrage. Cronbach's alpha for the moral outrage scale was .92.

Specific incapacitation. Specific incapacitation was measured by having participants respond to the question, "How important is it that John be removed from society so that he does not have the opportunity to engage in HIV nondisclosure when having sex with others in the future?" Participants provided their responses on a seven-point Likert scale, ranging from 1 (*Not important at all*) to 7 (*Extremely important*).

Specific deterrence. Specific deterrence was assessed by having participants respond to the question, "How important is it that John receives a severe punishment *now* for the purposes of deterring him from violating Virginia's HIV nondisclosure law in the future?" Participants provided their responses on a seven-point Likert scale, ranging from 1 (*Not important at all*) to 7 (*Extremely important*).

General deterrence. General deterrence was assessed by having participants respond to the question, "How important is it that other people with HIV be prevented from committing this offense in the future?" Participants provided their responses on a seven-point Likert scale, ranging from 1 (*Not important at all*) to 7 (*Extremely important*).

Personal threat. The perception of personal threat (i.e., concern for one's health) was assessed by having participants respond to the question, "How concerned are you about a possible threat to *your* physical health or safety based on reading about the case of John?" Participants provided their responses on a seven-point Likert scale, ranging from 1 (*Not concerned at all*) to 7 (*Extremely concerned*).

Public threat. The perception of public threat (i.e., concern for the public's health) was assessed by having participants respond to the question, "How concerned are you about a

possible threat to *the public's* physical health or safety based on reading about the case of John?"

Participants provided their responses on a seven-point Likert scale, ranging from 1 (*Not concerned at all*) to 7 (*Extremely concerned*).

Participants' endorsement of HIV non-disclosure laws. Participants indicated their likelihood of finding John guilty on a seven-point Likert scale. Participants responded to, "What is the likelihood that you would have found John guilty of violating Virginia's HIV nondisclosure law based on the information provided?" with responses ranging from 1 (*Extremely likely to find him not guilty*) to 7 (*Extremely likely to find him guilty*). Participants also indicated their support for Virginia's HIV non-disclosure law on a seven-point Likert scale ("How much do you endorse the idea that there should be an HIV nondisclosure law in Virginia mandating someone with HIV to disclose his or her HIV-positive status to sexual partners before having sex?") ranging from 1 (*Strongly oppose such a law*) to 7 (*Strongly support such a law*).

HIV Knowledge Questionnaire (HIV-KQ-18). Participants were administered the short-form (18-item) HIV-KQ-18 (Carey & Schroder, 2002) to assess their knowledge about the transmissibility of HIV. Participants were asked to respond with "True," "False," or "I don't know" to each item. An example item reads, "A person can get HIV by sharing a glass of water with someone who has HIV." Participants' responses were scored as a function of the number of correct responses to form an individual HIV Knowledge total score. Potential scores ranged from 0 (i.e., indicating that the participant answered none of the questions correctly) to 18 (i.e., indicating that the participant answered all questions correctly). The HIV-KQ-18 was found to have high internal consistency and test-retest reliability across numerous samples (Carey & Schroder). Cronbach's alpha for the HIV-KQ-18 was .79.

Procedure

Participants completed the study through the university's online research system. Participants were able to access the study at a time and in a setting of their choosing during the data collection period. Participants were first presented with a description statement and notification document providing critical information about the study (see Appendices A and B for the complete texts). After reading the documents and consenting to participate, participants were randomly assigned to read one of the eight vignettes using the day of the month their birthday fell on (see Appendix C). After being randomly assigned to a treatment condition, participants read brief instructions and their assigned vignette (see Appendices D and E). Participants then completed manipulation checks, provided their punishment recommendations, and responded to the other outcome measures (see Appendix F). After participants completed this portion of the study they responded to a short demographic questionnaire (see Appendix G), which included the HIV-KQ-18. Participants were then debriefed (see Appendix I), thanked, and prompted to exit the online research system.

RESULTS

Data Cleaning

In preparation for the data analysis the data were cleaned to ensure that the necessary statistical assumptions were met. Boxplots indicated that there were no outliers in the data set for either dependent variable. Skewness and kurtosis for both dependent variables were within normal limits, supporting the assumption of normality for the data set. Histograms of the distribution of both dependent variables also supported the assumption of normality. Homogeneity of variance was assessed via Levene's test. Levene's indicated that the homogeneity of variance assumption was met for the data set, for both prison sentence, $F(7, 216) = 1.75, p = .098$, and fine, $F(7, 216) = 0.82, p = .568$. One case with incomplete data on the dependent measures was excluded using listwise deletion. As the case accounted for 0.4% of the total data, listwise deletion was considered appropriate.

Dummy-coding. In addition, data were dummy-coded for the purposes of the analyses in order to separate each participant into his or her respective condition based on the vignette he or she read during the study. Each independent variable (i.e., Harm, Detectability, and HIV Law Knowledge) was dichotomized into "High" or "Low" conditions, with participants in the "High" conditions receiving a value of "2" and participants in the "Low" conditions receiving a value of "1."

Choosing a Bonferroni-Corrected Significance Level for the Data Analyses

Due to the number of analyses conducted, a Bonferroni-corrected alpha of .007 was used to determine the significance of the effects. Justification for the use of a more conservative p -value lies in the number of outcome measures analyzed in the current study. The corrected alpha level was determined by taking the conventional alpha level of .05 and dividing it by the total

amount of tests in each analysis of variance (i.e., seven tests).

Manipulation Checks

The independent variable manipulations were checked using 2 (Harm) X 2 (Detectability) X 2 (HIV Law Knowledge) ANOVAs.

Harm manipulation. The harm manipulation was successful. There was a significant harm main effect for “What was the harm committed by John’s behavior?”, $F(1, 215) = 62.58, p < .001, \eta_p^2 = .225$. There was also a significant harm main effect for “How serious was this offense (i.e., violating Virginia’s HIV nondisclosure law)?”, $F(1, 215) = 8.85, p = .003, \eta_p^2 = .040$. As expected, participants gave higher ratings of the harm committed by John in the harm ($M = 6.61, SE = 0.15$) versus the no harm ($M = 4.90, SE = 0.15$) condition. In addition, participants gave higher ratings of the seriousness of the crime in the harm ($M = 6.39, SE = 0.13$) versus the no harm ($M = 5.86, SE = 0.12$) condition. Lastly, participants correctly indicated that a condom was used less often in the harm ($M = 3.09, SE = 0.13$) versus the no harm ($M = 6.46, SE = 0.13$) conditions, $F(1, 216) = 330.25, p < .001, \eta_p^2 = .605$. No additional main effects or interactions were significant.

Detectability manipulation. The detectability manipulation was successful. There was a significant detectability main effect for “How likely was it that John would be caught for the offense he committed?”, $F(1, 216) = 72.39, p < .001, \eta_p^2 = .251$. Participants gave a higher rating of the likelihood of the HIV non-disclosure law violator being caught in the high detectability ($M = 5.12, SE = 0.17$) as compared to the low detectability conditions ($M = 3.12, SE = 0.16$). In addition, there was a significant harm main effect, such that participants in the high harm condition rated John as more likely to be caught ($M = 4.51, SE = .17$) than participants in

the low harm condition ($M = 3.73$, $SE = .16$), $F(7, 216) = 11.04$, $p = .001$, $\eta_p^2 = .049$. No additional main effects or interactions were significant.

HIV Law Knowledge manipulation. The knowledge manipulation was successful. There was a significant knowledge main effect for “How knowledgeable was John about Virginia’s HIV nondisclosure law after he found out about his HIV-positive diagnosis?”, $F(1, 216) = 640.73$, $p < .001$, $\eta_p^2 = .748$. Participants indicated that the law violator had greater knowledge of the law in the HIV law knowledge condition ($M = 6.43$, $SE = 0.13$) than in the no HIV law knowledge condition ($M = 1.73$, $SE = 0.13$). No additional main effects or interactions were significant.

Tests of the Hypotheses

Hypothesis 1 predicted a main effect of Harm on laypersons’ punishment recommendations. It was predicted that participants in the high, compared to the low, harm condition would assign harsher punishments (i.e., more jail time, higher fines) to the law violator. As predicted, there was a main effect of Harm on the recommended prison sentence (see Table 1). Participants in harm ($M = 6.78$, $SE = 0.28$) compared to no harm ($M = 3.67$, $SE = 0.27$) conditions recommended significantly longer prison sentences. There was also a main effect of Harm on fine recommendations, such that participants in the harm condition recommended significantly higher fines ($M = 8.58$, $SE = 0.25$) than participants in the no harm condition ($M = 5.73$, $SE = 0.25$) (see Table 2). Thus, Hypothesis 1 was supported for both dependent variables.

Table 1

Effects of Harm, Detectability, and HIV Law Knowledge on Recommended Prison Sentence

Source	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>	η_p^2
Harm (A)	1	528.83	64.93*	.000	.231
Detectability (B)	1	.10	0.01	.910	.000
Knowledge (C)	1	12.61	1.55	.215	.007
A x B	1	1.07	0.13	.718	.001
A x C	1	19.34	2.37	.125	.011
B x C	1	.10	0.01	.912	.000
A x B x C	1	.93	0.11	.736	.001
Error	216	8.14			

Note: The Bonferroni-corrected alpha level of .007 was used to evaluate the significance of the effects.

Table 2

Effects of Harm, Detectability, and HIV Law Knowledge on Recommended Fine

Source	<i>df</i>	<i>MS</i>	<i>F</i>	<i>p</i>	η_p^2
Harm (A)	1	443.65	64.38*	.000	.230
Detectability (B)	1	2.42	0.35	.554	.002
Knowledge (C)	1	3.39	0.49	.484	.002
A x B	1	.23	0.03	.854	.000
A x C	1	.21	0.03	.860	.000
B x C	1	1.64	0.24	.626	.001
A x B x C	1	5.85	0.85	.358	.004
Error	216	6.89			

Note: The Bonferroni-corrected alpha level of .007 was used to evaluate the significance of the effects.

Hypothesis 2 stated that there would be a main effect for Detectability on laypersons' punishment recommendations. It was predicted that participants in low detectability conditions would assign more severe punishments (i.e., more jail time, higher fines) than participants in high detectability conditions. Contrary to what was predicted, there was not a significant effect of Detectability on the recommended prison sentence or the recommended fine (see Tables 1 and 2). Thus, Hypothesis 2 was not supported for either dependent variable.

Hypothesis 3 stated that there would be a main effect of HIV Law Knowledge on participants' punishment recommendations. It was predicted that participants in HIV law knowledge conditions (i.e., participants who were told that the law violator knew of the HIV

non-disclosure law before committing the offense) would assign more severe punishment recommendations (i.e., more jail time, higher fines) than participants in no HIV law knowledge conditions (i.e., participants who were told that the law violator did not know of the HIV non-disclosure law before committing the offense). Contrary to what was predicted, the HIV Law Knowledge main effect was not significant for recommended prison sentence or recommended fine (see Tables 1 and 2). Thus, Hypothesis 3 was not supported for either dependent variable.

Tests of the Research Questions

The research questions examined the roles of Harm, Detectability, and HIV Law Knowledge in participants' responses to several outcome measures. Specifically, we examined whether or not the independent variables influenced moral outrage, specific incapacitation, specific deterrence, general deterrence, concern for one's health, and concern for the public's health. In addition, participants' ratings of the likelihood of finding John guilty of violating Virginia's HIV non-disclosure law were examined to assess whether the ratings differed based on the independent variable manipulations. Lastly, participants' ratings of their support or opposition towards Virginia's HIV non-disclosure law were assessed to see whether ratings varied based on the independent variable manipulations. See Table 3 for a summary of the analyses followed by a brief discussion of each result individually.

Table 3

Analyses of Variance Summary Table for the Effects of Harm, Detectability, and HIV Law Knowledge on Tests of the Research Questions

Source	Moral Outrage	Specific Incapacitation	Specific Deterrence	General Deterrence	Concern for Own Health	Concern for Public's Health	Ratings of Guilt	Support for VA's HIV law
Harm (A)	23.36 (<i>p</i> = .000)	64.48 (<i>p</i> = .000)	24.45 (<i>p</i> = .000)	.84 (<i>p</i> = .359)	4.55 (<i>p</i> = .034)	6.41 (<i>p</i> = .012)	12.46 (<i>p</i> = .001)	.02 (<i>p</i> = .888)
Detectability (B)	.04 (<i>p</i> = .833)	1.01 (<i>p</i> = .316)	1.02 (<i>p</i> = .315)	.12 (<i>p</i> = .730)	.82 (<i>p</i> = .366)	1.70 (<i>p</i> = .193)	.38 (<i>p</i> = .539)	.07 (<i>p</i> = .791)
HIV Law Knowledge (C)	1.90 (<i>p</i> = .169)	3.16 (<i>p</i> = .077)	2.47 (<i>p</i> = .118)	9.70 (<i>p</i> = .002)	.16 (<i>p</i> = .687)	.03 (<i>p</i> = .854)	3.81 (<i>p</i> = .052)	2.48 (<i>p</i> = .117)
A x B	.52 (<i>p</i> = .472)	.10 (<i>p</i> = .749)	.25 (<i>p</i> = .619)	1.80 (<i>p</i> = .181)	.04 (<i>p</i> = .846)	.67 (<i>p</i> = .412)	.04 (<i>p</i> = .847)	1.59 (<i>p</i> = .209)
A x C	1.92 (<i>p</i> = .168)	2.53 (<i>p</i> = .113)	.20 (<i>p</i> = .658)	2.02 (<i>p</i> = .157)	.59 (<i>p</i> = .442)	.22 (<i>p</i> = .636)	2.66 (<i>p</i> = .104)	.04 (<i>p</i> = .848)
B x C	1.01 (<i>p</i> = .316)	.83 (<i>p</i> = .363)	.01 (<i>p</i> = .928)	.24 (<i>p</i> = .622)	2.93 (<i>p</i> = .089)	.41 (<i>p</i> = .521)	.88 (<i>p</i> = .348)	.08 (<i>p</i> = .780)
A x B x C	7.53 (<i>p</i> = .007)	.67 (<i>p</i> = .412)	3.51 (<i>p</i> = .062)	5.51 (<i>p</i> = .020)	.005 (<i>p</i> = .946)	5.39 (<i>p</i> = .021)	4.52 (<i>p</i> = .035)	3.51 (<i>p</i> = .062)

Note: Values in the table represent *F*-ratios. *Df*'s for the ANOVAs ranged from 1, 213 to 1, 216. The Bonferroni-corrected alpha level of .007 was used to evaluate the significance of the effects.

Moral outrage. Did the level of moral outrage endorsed by participants vary depending on the independent variable manipulations? The research question was tested using a 2 (Harm) X 2 (Detectability) X 2 (HIV Law Knowledge) ANOVA, with the participants' moral outrage composite scores as the outcome measure. Results indicated that there was a Harm main effect on Moral Outrage, $F(1, 214) = 23.36, p < .001, \eta_p^2 = .098$, such that participants in the harm condition endorsed more moral outrage ($M = 5.37, SE = 0.16$) than participants in the no harm condition ($M = 4.32, SE = 0.15$). However, the Harm main effect was qualified by a significant three-way interaction among the Harm, Detectability, and HIV Law Knowledge variables, $F(1, 214) = 7.53, p = .007, \eta_p^2 = .034$.

A simple effects analysis was utilized to decompose the significant three-way interaction of Harm, Detectability, and HIV Law Knowledge on Moral Outrage. Results indicated that there were differences on ratings of moral outrage between the harm and no harm conditions when detectability of the crime was low and the law violator had knowledge of the law. Specifically, participants endorsed significantly higher moral outrage in the harm, as compared to the no harm, conditions when detectability was low and knowledge was present, $F(1, 214) = 7.66, p = .006$. In addition, there were differences on ratings of moral outrage between the harm and no harm conditions when detectability of the crime was high and the law violator did not have knowledge of the law. Specifically, participants endorsed significantly higher moral outrage in the harm, as compared to the no harm, conditions when detectability was high and knowledge was not present, $F(1, 214) = 22.09, p < .001$ (see Table 4).

Table 4

Means and Standard Deviations of Harm Conditions as a Function of Different Detectability and Knowledge Combinations on Moral Outrage

Detectability	Knowledge	Harm	<i>M</i>	<i>SD</i>	
Low Detectability	No Knowledge	No Harm	4.48	1.80	} n.s.
		Harm	5.08	1.71	
	Had Knowledge	No Harm	4.27	1.73	} Sig.
		Harm	5.46	1.52	
High Detectability	No Knowledge	No Harm	3.55	1.67	} Sig.
		Harm	5.67	.91	
	Had Knowledge	No Harm	4.97	1.68	} n.s.
		Harm	5.28	1.51	

Note: Significant differences based on simple effects analyses.

Specific incapacitation. Did participants endorse varying views about removing John from society based on the independent variable manipulations? Results indicated that there was a Harm main effect on Specific Incapacitation, such that participants rated incapacitating John as more important in the harm ($M = 5.11$, $SE = .17$) than in the no harm condition ($M = 3.24$, $SE = .16$), $F(1, 215) = 64.48$, $p < .001$, $\eta_p^2 = .231$. No further main effects or interactions were significant at the corrected alpha level of .007.

Specific deterrence. Did participants differ in their endorsement of the importance of deterring John with a severe punishment now as a result of the independent variable manipulations? Results indicated that there was a Harm main effect on Specific Deterrence, such

that participants in the harm condition rated deterring John with a severe punishment now as more important ($M = 5.78$, $SE = .17$) than participants in the no harm condition ($M = 4.61$, $SE = .16$), $F(1, 213) = 24.45$, $p < .001$, $\eta_p^2 = .103$. No further main effects or interactions were significant.

General deterrence. Did participants vary in their endorsement of the importance of deterring other individuals from committing HIV non-disclosure offenses as a result of the independent variable manipulations? Results indicated that there was a HIV Law Knowledge main effect on General Deterrence, such that participants in the HIV law knowledge condition rated deterring others as more important ($M = 6.56$, $SE = .11$) than participants in the no HIV law knowledge condition ($M = 6.07$, $SE = .12$), $F(1, 215) = 9.70$, $p = .002$, $\eta_p^2 = .043$. No further main effects or interactions were significant.

Concern for own health. Did participants endorse varying amounts of concern for their own health as a result of the independent variable manipulations? None of the effects were significant.

Concern for public health. Did participants endorse varying amounts of concern for the public's health as a result of the independent variable manipulations? None of the effects were significant.

Ratings of John's guilt. Did participants' ratings of their likelihood of finding John guilty of violating Virginia's HIV non-disclosure law differ based on the independent variable manipulations? Results indicated that there was a Harm main effect on Guilt ratings, such that participants in the harm condition were significantly more likely to find John guilty of violating

the law ($M = 6.14$, $SE = .15$) than participants in the no harm condition ($M = 5.39$, $SE = .15$), $F(1, 215) = 12.46$, $p = .001$, $\eta_p^2 = .055$. No further main effects or interactions were significant.

Support for Virginia's HIV non-disclosure law. Did participants' ratings of their support for or opposition to Virginia's HIV non-disclosure law vary based on the independent variable manipulations? Results indicated that no main effects or interactions were significant.

HIV knowledge. Partial correlations were conducted between participants' HIV Knowledge scores and the outcome measures in the study. Since the participants were exposed to the independent variable manipulations prior to responding to the HIV-KQ-18, conducting correlations that controlled for the effects of the independent variables was deemed appropriate. Results indicated that HIV Knowledge was positively correlated with participants' perceptions of the seriousness of John's crime, with their endorsement of the importance of preventing John from committing an HIV non-disclosure in the future, with their endorsement of the importance of general deterrence, with their perceptions of threat to the public's health, with their likelihood of finding John guilty of violating Virginia's HIV non-disclosure law, and with their endorsement of the continued presence of an HIV non-disclosure law in Virginia (see Table 5).

Table 5

Partial Correlations between Participants' HIV Knowledge Scores and the Outcome Measures

Outcome Measures	HIV Knowledge Score
How serious was this offense (i.e., violating Virginia's HIV nondisclosure law?)	.27**
How likely was it that John would be caught for the offense he committed?	.06
What was the harm committed by John's behavior?	.10
How often did John use a condom?	.07
How knowledgeable was John about Virginia's HIV nondisclosure law after he found out about his HIV-positive diagnosis?	.03
How important is it that John be removed from society so that he does not have the opportunity to engage in HIV nondisclosure when having sex with others in the future?	.10
How important is it that John be prevented from committing this offense in the future?	.21*
How important is it that other people with HIV be prevented from committing this offense in the future?	.27**
How important is it that John receives a severe punishment <i>now</i> for the purposes of deterring him from violating Virginia's HIV nondisclosure law in the future?	.08
How concerned are you about a possible threat to <i>your</i> physical health or safety based on reading about the case of John?	-.03
How concerned are you about a possible threat to <i>the public's</i> physical health or safety based on reading about the case of John?	.18*
What is the likelihood that you would have found John guilty of violating Virginia's HIV nondisclosure law based on the information provided?	.21**
How much do you endorse the idea that there should be an HIV nondisclosure law in Virginia mandating someone with HIV to disclose his or her HIV-positive status to sexual partners before having sex?	.27**
After reading about the case of John do you feel you will be more proactive/planful in the future in protecting your sexual health and well-being (i.e., asking partners about their HIV status and/or if they have an STD prior to engaging in sexual intercourse)?	.11

Note: * $p < .05$. ** $p \leq .001$.

DISCUSSION

In the Discussion, I will review the main results of the statistical tests and their implications. First, I will summarize the results of the major tests of the hypotheses. Next, I will review the results of the tests of the research questions.

Findings Associated with the Major Hypotheses

The first hypothesis predicted a main effect of Harm on participants' punishment recommendations for the HIV non-disclosure law violator, where greater harm caused by the law violator should result in a more severe punishment assignment (i.e., more jail time, higher fines). This hypothesis was supported. Participants in the harm, compared to the no harm, conditions recommended significantly longer prison sentences and significantly higher fines for the HIV non-disclosure law violator.

This finding is consistent with prior research about participants' punishment recommendations, indicating that just deserts is an important motivator when people assign punishment to law violators (Carlsmith et al., 2002; Woody et al., 2015). This finding also supports the idea that the harm caused to others by the law violator is one of the most important motivators dictating laypersons' desire for retribution. When severe harm is caused to others by the law violator's actions, the phrase "an eye for an eye" conveys how laypersons apply the just deserts philosophical perspective to the act of punishing the law violator.

The second hypothesis predicted a main effect of Detectability of the HIV non-disclosure law violation on participants' punishment recommendations, where greater difficulty in detecting the crime should result in a more severe punishment assignment. This hypothesis was not supported. Consistent with prior research (Carlsmith et al., 2002; Woody et al., 2015) the deterrence perspective was not found to significantly influence participants' punishment

recommendations. This finding is somewhat surprising given peoples' self-reported preference for deterrence theory (Carlsmith et al.) and the seeming importance of deterring others from committing similar crimes. However, it is possible that the desire to deter future law violators as a motivation for punishment doesn't operate alone, but in the context of other influencing variables. For instance, deterrence might motivate laypersons' punishment recommendations via concern about the harm done by the law violator.

The third hypothesis predicted a main effect of HIV Law Knowledge on participants' punishment recommendations for the HIV non-disclosure law violator, where prior knowledge of Virginia's HIV non-disclosure law should lead participants to recommend a more severe punishment for the law violator. This hypothesis was not supported. Having or not having knowledge of Virginia's HIV non-disclosure law did not influence participants' punishment recommendations. Although perhaps surprising, this finding is in keeping with legal principles which state that ignorance of a law is not a justifiable defense for violating the law. It is possible that participants did not consider pleading ignorance of Virginia's HIV non-disclosure law "a good enough excuse" to justify the law violator's behavior. Although the vignettes presented to participants varied the levels of each independent variable, all the vignettes made clear that the law violator engaged in sexual intercourse without disclosing his HIV-positive status. It is possible that this act was perceived as inherently immoral or unethical by the participants, even when the law violator's actions resulted in fairly benign consequences. This explanation is consistent with research by Alter et al. (2007) who found that laypersons punished immoral law violators who were ignorant of the law as severely as if they had known of the law.

Findings Associated with the Research Questions

There were several research questions associated with the present research. In this section I will briefly summarize the findings for each research question.

Moral outrage. The first research question examined if participants would endorse varied levels of moral outrage as a function of the independent variable manipulations. Consistent with previous research (Darley et al., 2000; Woody et al., 2015) participants endorsed more moral outrage in the harm, as compared to the no harm, conditions. However, this effect was qualified by a significant three-way interaction among the independent variables. There were significant differences in moral outrage between the harm and no harm conditions under certain combinations of the other independent variables. Namely, there was a significant difference between the harm and no harm conditions when detectability was low and HIV law knowledge was present. There was also a significant difference between the harm and no harm conditions when detectability was high and HIV law knowledge was not present. There were no significant differences between the harm conditions under the low detectability, no HIV law knowledge and the high detectability, had HIV law knowledge combinations of conditions.

The first finding, that there was a significant difference between harm conditions when detectability was low and HIV law knowledge was present, makes intuitive sense. Recall that participants experienced significantly more moral outrage when the HIV non-disclosure law violator harmed his sexual partners, when he was unlikely to be caught for his crime, and when he was aware that his actions violated the law. Serious harm done to others by the law violator is the major factor influencing laypersons' desire to "pay back" a law violator for his or her actions (Carlsmith et al., 2002; Woody et al., 2015). However, when the likelihood of detecting a crime, and thus of catching the law violator, is low, the desire for retribution goes unsatisfied. It is

reasonable to assume that participants would experience increased moral outrage when the law violator did serious harm to others yet was unlikely to be punished for his actions. Furthermore, the law violator knew that his actions constituted a violation of the law. This suggests that the law violator acted with intention (i.e., that he knowingly disregarded the law when deciding to engage in sexual intercourse without first disclosing his HIV-positive status). It is again reasonable to assume that given the other factors present (i.e., serious harm, unlikely to be caught) flagrant disregard for the mandates of the law would increase participants' sense of moral outrage.

There was also a significant difference between harm conditions when detectability was high and HIV law knowledge was not present. Recall that participants were significantly more morally outraged when the HIV non-disclosure law violator caused harm to others, when the likelihood of detecting the crime was high, and when the law violator did not have knowledge of the HIV law. This finding is more difficult to interpret. Perhaps given the consequences of his actions (i.e., harm done to others) and the high likelihood of being apprehended, participants felt that the law violator "should have known better." It is presently unclear why this particular combination of the independent variables elicited a higher degree of moral outrage from the participants in this study. Future research might seek to replicate this effect and explore potential explanations for its occurrence.

Specific incapacitation. The second research question examined whether participants differed in their views on the importance of incapacitating the HIV non-disclosure law violator based on the independent variable manipulations. Results indicated that participants in the harm, as compared to the no harm, conditions rated removing the law violator from society as more important. This finding is consistent with the conceptualization of specific incapacitation put

forth by Carlsmith and Darley (2008). Incapacitation functions to remove the particular law violator from society for a long period of time, most typically through imprisonment. In this theory, the risk of recidivism is the primary factor informing laypersons' punishment recommendations. It is reasonable to expect that a law violator who causes severe harm to others would be perceived as having a higher risk of committing criminal actions in the future. A long prison sentence is also consistent with retributive motives (i.e., a long prison sentence may be seen as "paying back" the law violator for the harm he caused).

Specific deterrence. The third research question examined if participants differed in their endorsement of the importance of deterring the HIV non-disclosure law violator specifically. Results showed that participants in the harm, as compared to the no harm, conditions gave higher ratings to the importance of applying a severe punishment in the present in order to prevent the HIV non-disclosure law violator from committing a similar crime in the future. It is reasonable to posit that given a large amount of harm done to others by the HIV non-disclosure law violator, participants might be more motivated to deter him from committing a similar offense in the future. This finding is important because it suggests that laypersons' application of deterrence theory may depend on other salient details of the crime, such as the amount of harm caused to others by the law violator. However, it is important to note that the concept of specific deterrence (Carlsmith & Darley, 2008) is distinct from the classic interpretation of Bentham's deterrence theory, which is generally concerned with deterring others, not a specific individual, from committing similar criminal actions (Bentham, 1843/1962).

General deterrence. The fourth research question examined if participants differed in their application of general deterrence as a punishment strategy based on the independent variable manipulations. Results showed that participants in HIV law knowledge, as compared to

no HIV law knowledge, conditions rated deterring others from committing a similar offense in the future as more important. This finding is somewhat unclear. One might speculate that an individual law violator committing a crime with full knowledge of the law he is violating might influence participants' desire to incapacitate him, or to use a specific deterrence approach. However, the connection between an individual law violator's knowing about the law he is violating when he commits a crime and the desire to deter others from committing similar offenses in the future is not transparent. Perhaps participants extrapolated reading about an HIV non-disclosure law violator who had full knowledge of the law to all persons capable of HIV non-disclosure. In other words, participants may have generalized the details of this case, and decided that all individuals who know about HIV non-disclosure laws are not likely to heed them. In this case, the desire to deter others from committing similar offenses in the future might seem reasonable.

Concern for own/public health. The fifth research question examined whether participants experienced concern for their own health based on the independent variable manipulations. Although it seemed reasonable to expect participants to react to the HIV non-disclosure law violation by feeling some sense of personal threat, none of the effects were significant. Effects were also not significant for the sixth research question, which examined whether participants experienced concern for the public's health based on the independent variable manipulations. Perhaps participants were unable to relate to the presented vignette, or felt that the possibility of becoming a victim of an HIV non-disclosure crime was far-fetched. Likewise, given the decline in concern about HIV transmission since the AIDS epidemic in the late 1980's and early 1990's, perhaps participants did not feel that the public is at much risk for

HIV non-disclosure violations. It is also possible that the questions used to assess perceptions of personal and public health threat were inadequate.

Ratings of John's guilt. The seventh research question examined whether participants' perceptions of the HIV non-disclosure law violator's guilt or innocence varied based on the independent variable manipulations. Results indicated that participants in the harm, as compared to the no harm, conditions were more likely to say that they would find the HIV non-disclosure law violator guilty of violating Virginia's law. Consistent with previous literature, this finding supports the idea that the just deserts approach is a salient motivator when laypersons assign sentences to law violators (Carlsmith et al., 2002). It seems reasonable that a law violator who caused harm to others would be judged as guiltier than a law violator who caused no harm to others.

Support for Virginia's HIV non-disclosure law. The eighth research question examined if participants expressed varying degrees of endorsement for Virginia's HIV non-disclosure law based on the independent variable manipulations. Results indicated that none of the effects were significant. However, support for the continued presence of an HIV non-disclosure law in Virginia was high, with nearly 80% of participants providing the highest possible rating of their support for the law. This suggests that across treatment conditions and regardless of extenuating circumstances (e.g., such as knowledge of the HIV non-disclosure law), participants highly endorsed the maintenance of an HIV non-disclosure law in Virginia.

HIV knowledge. The ninth and final research question examined if participants' responses to the outcome measures in the study varied based on their existing knowledge about the transmissibility of the HIV virus, while partialing out the influence of the independent variables. Results showed that knowledge about HIV transmissibility was significantly related to

several of the outcome measures, including participants' perceptions of the seriousness of John's crime, threat to the public's health, and the importance of preventing John from committing a similar offense in the future. In addition, knowledge about HIV transmissibility was significantly related to participants' endorsement of the importance of general deterrence, the continued presence of an HIV non-disclosure law in Virginia, and the likelihood of finding John guilty of violating Virginia's law. The results suggest that people who have greater knowledge about how HIV is transmitted are more sensitive to the risks posed by an HIV-positive person's sexual behavior. For instance, participants with more knowledge about how the HIV infection is transmitted were more concerned about the threat to the public's health posed by the law violator's HIV non-disclosure, and were also more concerned with deterring others from committing similar offenses. The results also suggest that participants with greater knowledge about how HIV is spread adopt a more critical and punitive attitude towards the HIV non-disclosure law violator, as reflected in participants' concerns about preventing John from committing an HIV non-disclosure in the future and participants' likelihood of finding John guilty of violating Virginia's law.

A Note about Research Questions vs. Hypotheses

Parenthetically, in terms of the design of the study certain measures were treated as the basis for research questions. However, given past research (Woody et al., 2015) certain variables (moral outrage, for instance) could have been better conceptualized as additional hypotheses.

Implications

The findings of the present research suggest several practical implications about HIV non-disclosure laws. First, the findings suggest that public health advocates' attempts to repeal HIV non-disclosure laws are not likely to be supported, at least by certain segments of the

population (i.e., college students). Participants demonstrated a consistent willingness to punish the HIV non-disclosure law violator in this study. Approximately 78% of participants provided ratings of five or above on a seven-point Likert-type item asking them to rate their likelihood of finding the HIV non-disclosure law violator in the vignettes guilty of violating Virginia's HIV non-disclosure law. These findings are in line with previous research about laypersons' punishment recommendations for HIV non-disclosure law violators, where participants also exhibited a robust willingness to punish the HIV non-disclosure law violator for his crimes (Woody et al., 2015). Furthermore, nearly 80% of the current study's participants provided the strongest possible endorsement for the continued presence of an HIV non-disclosure law in Virginia. This suggests that at least in Virginia, laypersons' perceptions of the merit of HIV non-disclosure laws are not consistent with the criticisms of HIV non-disclosure laws offered by public health advocates.

In addition, this research suggests that participants may indirectly apply the legal principle of "*ignorantia legis*" when recommending punishments for an HIV non-disclosure law violator. In the present research participants did not differ in their punishment recommendations when encountering an HIV non-disclosure law violator's plea of ignorance of the law. Many states' HIV non-disclosure laws contain some sort of statement, such as "knowingly" or "willfully," to describe the necessary intent of the HIV non-disclosure law violator. However, to our participants, flagrant disregard in committing an infraction of the HIV non-disclosure law was punished similarly to an unintentional infraction of the law.

The findings of the present research also suggest that participants may be primed to think in terms of deterrence under some circumstances. For instance, participants were more concerned about deterring others from committing an HIV non-disclosure law violation when told that the

HIV non-disclosure law violator had knowledge of the law. This finding suggests that participants may be more sensitive to the deterrence framework as a function of factors such as the knowledge of the law violator. Despite these findings, our participants did not apply the deterrence approach to recommending punishments for the HIV non-disclosure law violator. Given the importance of preventing others in society from committing similar offenses, a question that may be critical in future research is how to promote deterrence.

Lastly, our findings provide further support to the literature base stating that the just deserts perspective (i.e., the desire for retribution) underlies laypersons' desire to punish law violators (Carlsmith et al., 2002; Woody et al., 2015).

Limitations

One limitation of the present research is the use of a convenience sample of college undergraduate students as the research participants. It is uncertain whether individuals in the general population would have the same reactions to the HIV non-disclosure law violation, or express the same level of support for their state's HIV non-disclosure law (if applicable). Whether the findings of the current study can be generalized to the population of the United States is unclear. In addition, a large percentage of the sample were female. Although gender differences in punishment recommendations was not a focus of this study, it would be appropriate in future research to examine systematically gender as a moderating variable affecting punishment recommendations. Overall, a sample more representative of the U.S. population would strengthen the generalizability of the findings.

Another limitation lies in the use of a Bonferroni-corrected alpha level for evaluating the significance of the ANOVA tests. Results for the research questions of the current study would have differed given the use of a conventional significance level of $p = .05$. For instance, a Harm

main effect for the research question pertaining to concern for one's health would have been judged as significant. In addition, a main effect of Harm, as well as a three-way interaction among the independent variables for the research question regarding concern for the public's health would have been judged as significant. There would have been a significant three-way interaction among the independent variables for the research question about general deterrence (in addition to the Harm main effect reported in the Results section). Finally, for ratings of the likelihood of finding John guilty, a three-way interaction among the independent variables would have been judged as significant (in addition to the reported Harm main effect).

Note that results for the main dependent measures in this study (i.e., punishment recommendations) would not have differed given the use of a conventional significance level. Due to the number of outcome measures and the number of analyses conducted in the present study, the use of a Bonferroni-corrected significance level was deemed appropriate.

Another possible limitation lies in the use of the vignettes to inform participants about the details of the HIV non-disclosure law violation. It is possible that by presenting the information pertaining to the harm caused by the HIV non-disclosure law violator to participants first, the vignettes primed participants to think only in the context of the harm caused to others. In other words, it is possible that the operationalization of the harm variable was powerful enough to prevent participants from adequately processing the information pertaining to the detectability and knowledge variables. Future research might examine participants' punishment recommendations when presented solely with information associated with the detectability and knowledge variables, to establish as a baseline what participants think about punishing in the absence of any harm information.

Another limitation in the current study is that the effects of harm on the outcome measures were partially confounded. Participants in the harm condition were more likely to perceive that the law violation was “detectable” compared to participants in the no harm condition. Despite the randomization of participants to the different treatment conditions, participants in the harm condition were more likely than participants in the no harm condition to be Caucasians than ethnic/racial minorities. Difficulties occurred with randomization based on race/ethnicity, such that participants were not equally distributed across conditions for one of the independent variables (i.e., Harm).

Conclusions

Despite the aforementioned limitations, the present research recorded several important findings. First, the current study builds on previous research by supporting the idea that retribution is laypersons’ primary motivation when recommending punishments for HIV non-disclosure law violators. Second, the research recorded a surprising lack of an effect of knowledge of the HIV non-disclosure law by the law violator on laypersons’ punishment recommendations. Lastly, the study suggests that laypersons may be primed to think about general deterrence under some circumstances (i.e., based on the HIV-positive person’s knowledge about HIV non-disclosure laws).

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APPENDIX A

SONA STUDY DESCRIPTION

Sona One Line Abstract- This study is about a court case involving someone with HIV.

Sona Description- In this study you will be asked to read a hypothetical court case from here in Virginia. You will also be asked to complete a questionnaire concerning your reactions to the case. This study should take about 45 minutes to complete. You will receive 1 SONA Credit for your participation.

Eligibility Requirements- You must be 18 years of age or older to participate in this study. *You should not participate in this study if you have already participated in Project Impression this semester.*

APPENDIX B

NOTIFICATION DOCUMENT

PROJECT TITLE: Project Social Perception

INTRODUCTION

The purpose of this form is to give you information that may affect your decision about whether to say YES or NO to participating in this research, and to record the consent of those who say YES. Project Social Perception will be conducted online using the SONA System.

RESEARCHERS

Valerian J. Derlega, Ph.D., Old Dominion University, Psychology Department, Responsible Project Investigator

Christina Dodson, Old Dominion University, Psychology Department

DESCRIPTION OF RESEARCH STUDY

If you decide to participate you will be expected to read a hypothetical court case and complete a survey. The scenario is about 3 paragraphs in length. You will also provide information that may be relevant to your interpretations and decisions. If you agree to participate then your participation will last for approximately 45 minutes. Up to 500 subjects will participate in this study. This study has been reviewed by the Old Dominion University Institutional Review Board.

EXCLUSIONARY CRITERIA

To be eligible to participate in this study you must be 18 years of age or older and a psychology student at Old Dominion University. Also, you must not have participated in a related study, Project Impression, this semester.

RISKS AND BENEFITS

RISKS: In this survey you will read about a man who is infected with HIV. Therefore, one risk of participation is that reading this material may cause momentary discomfort. In addition, completing this survey may result in increased awareness about aspects of yourself, such as opinions you may hold. Therefore, one risk of participation lies in the possibility that this increased self-awareness may cause momentary distress. All participant information will remain confidential. As with any research, there is some possibility that you may be subject to risks that have not yet been identified.

BENEFITS: There is no direct benefit for participating in this study. However, you will learn about Virginia's HIV nondisclosure law through your participation in this study. In addition, you may also benefit by gaining increased understanding about yourself throughout the process of this study.

COSTS AND PAYMENTS

If you decide to participate in this study, you will receive 1 Psychology Department research credit, which may be applied to course requirements or extra credit in certain psychology

courses. Equivalent credits may be obtained in other ways. You do not have to participate in this study, or any Psychology Department study, to receive this credit.

NEW INFORMATION

If the researchers uncover new information during this study that would reasonably change your decision about participating they will provide it to you.

CONFIDENTIALITY

You will use the SONA Online Research System to complete this study. All identifying and potentially identifying information will be removed from the data before it is seen by the researchers. You will provide your anonymous, randomized SONA Identification Number, which is different from your University Identification Number, in order to be awarded credit for participation. In addition, SONA ID information will be collected in a separate file from the data. Therefore, data cannot be associated with ID numbers and is anonymous. Your SONA ID cannot be traced back to you. There will be no way for the researchers to identify you through your participation in this study.

WITHDRAWAL PRIVILEGE

It is okay for you to say NO to participating in this study. Even if you say YES now you are free to say NO later. You may walk away or withdraw from this study at any time. Your decision will not affect your relationship with Old Dominion University or otherwise cause a loss of benefits to which you might otherwise be entitled. The researchers reserve the right to withdraw your participation in this study at any time if they observe potential problems with your continued participation.

VOLUNTARY PARTICIPATION

By participating in this research study you are agreeing to several things. You are agreeing that you have read this form in its entirety. You are agreeing that you are satisfied that you understand this form, the research study, and its risks and benefits. The researchers should have answered any questions you may have had about this research. If you have any questions later on, the researchers should be able to answer them:

Dr. Valerian Derlega at vderlega@odu.edu or Christina Dodson at cdods003@odu.edu. You may also contact the Chair of the IRB, George Maihafer, at gmaihafe@odu.edu or the Office of Research at (757) 683-3460.

APPENDIX C
RANDOM ASSIGNMENT

Please indicate the day of the month on which you were born:

1-4

5-8

9-12

13-16

17-20

21-24

25-28

29-31

APPENDIX D

INSTRUCTIONS

- The next part of this study involves reading about a hypothetical court case involving someone who was prosecuted for violating Virginia's HIV nondisclosure law. This Virginia law mandates that people with HIV must reveal their HIV-positive status to their sexual partners.
- Please pay close attention to all details.

APPENDIX E

VIGNETTES

Version A1 (High Harm/High Detectability/Knowledge)

The following contains details about a court case concerning a man named John who is accused of violating Virginia's HIV nondisclosure law. The HIV nondisclosure law in Virginia requires that HIV-positive individuals disclose their HIV-positive status to their sexual partner(s). While reading the case you can assume that circumstances arose that brought John's case to the attention of the authorities. To the best of your ability please answer the questions that follow based on your reactions to the court case.

John is HIV positive and found out about his HIV diagnosis 12 years ago. He is heterosexual. He did not disclose to any of the women who have been his sexual partners that he was HIV positive. John did not always use a condom when he had sexual intercourse with his partners. There was a high risk of HIV being transmitted to his sexual partners when a condom was not used. Documentation was presented in court that he infected four women with HIV, the virus that causes AIDS.

An offense of this sort (violating Virginia's HIV nondisclosure law) is highly likely to be detected and to be reported. People find out and are likely to share with others about someone with HIV having sexual intercourse with partners without disclosing his or her HIV status to the partners. Eventually this information comes to the attention of legal authorities.

In court John stated that he had full knowledge of Virginia's HIV nondisclosure law from the time when he tested positive for HIV.

Version B1 (Low Harm/High Detectability/Knowledge)

The following contains details about a court case concerning a man named John who is accused of violating Virginia's HIV nondisclosure law. The HIV nondisclosure law in Virginia requires that HIV-positive individuals disclose their HIV-positive status to their sexual partner(s). While reading the case you can assume that circumstances arose that brought John's case to the attention of the authorities. To the best of your ability please answer the questions that follow based on your reactions to the court case.

John is HIV positive and found out about his HIV diagnosis 12 years ago. He is heterosexual. He did not disclose to any of the women who have been his sexual partners that he was HIV positive. John always used a condom when he had sexual intercourse with his partners. There was a low risk of HIV being transmitted to his sexual partners when a condom was used. Documentation was presented in court that he did not infect any women with HIV, the virus that causes AIDS.

An offense of this sort (violating Virginia's HIV nondisclosure law) is highly likely to be detected and to be reported. People find out and are likely to share with others about someone with HIV having sexual intercourse with partners without disclosing his or her HIV status to the partners. Eventually this information comes to the attention of legal authorities.

In court John stated that he had full knowledge of Virginia's HIV nondisclosure law from the time when he tested positive for HIV.

Version C1 (High Harm/Low Detectability/Knowledge)

The following contains details about a court case concerning a man named John who is accused of violating Virginia's HIV nondisclosure law. The HIV nondisclosure law in Virginia requires that HIV-positive individuals disclose their HIV-positive status to their sexual partner(s). While reading the case you can assume that circumstances arose that brought John's case to the attention of the authorities. To the best of your ability please answer the questions that follow based on your reactions to the court case.

John is HIV positive and found out about his HIV diagnosis 12 years ago. He is heterosexual. He did not disclose to any of the women who have been his sexual partners that he was HIV positive. John did not always use a condom when he had sexual intercourse with his partners. There was a high risk of HIV being transmitted to his sexual partners when a condom was not used. Documentation was presented in court that he infected four women with HIV, the virus that causes AIDS.

An offense of this sort (violating Virginia's HIV nondisclosure law) is almost impossible to detect or report. It is difficult for people to find out that someone with HIV has been having sexual intercourse with partners without disclosing his or her HIV status to the partners. John's behavior was reported to legal authorities initially due to a set of unlikely coincidences.

In court John stated that he had full knowledge of Virginia's HIV nondisclosure law from the time when he tested positive for HIV.

Version D1 (Low Harm/Low Detectability/Knowledge)

The following contains details about a court case concerning a man named John who is accused of violating Virginia's HIV nondisclosure law. The HIV nondisclosure law in Virginia requires that HIV-positive individuals disclose their HIV-positive status to their sexual partner(s). While reading the case you can assume that circumstances arose that brought John's case to the attention of the authorities. To the best of your ability please answer the questions that follow based on your reactions to the court case.

John is HIV positive and found out about his HIV diagnosis 12 years ago. He is heterosexual. He did not disclose to any of the women who have been his sexual partners that he was HIV positive. John always used a condom when he had sexual intercourse with his partners. There was a low risk of HIV being transmitted to his sexual partners when a condom was used. Documentation was presented in court that he did not infect any women with HIV, the virus that causes AIDS.

An offense of this sort (violating Virginia's HIV nondisclosure law) is almost impossible to detect or report. It is difficult for people to find out that someone with HIV has been having sexual intercourse with partners without disclosing his or her HIV status to the partners. John's behavior was reported to legal authorities initially due to a set of unlikely coincidences.

In court John stated that he had full knowledge of Virginia's HIV nondisclosure law from the time when he tested positive for HIV.

Version A2 (High Harm/High Detectability/No Knowledge)

The following contains details about a court case concerning a man named John who is accused of violating Virginia's HIV nondisclosure law. The HIV nondisclosure law in Virginia requires that HIV-positive individuals disclose their HIV-positive status to their sexual partner(s). While reading the case you can assume that circumstances arose that brought John's case to the attention of the authorities. To the best of your ability please answer the questions that follow based on your reactions to the court case.

John is HIV positive and found out about his HIV diagnosis 12 years ago. He is heterosexual. He did not disclose to any of the women who have been his sexual partners that he was HIV positive. John did not always use a condom when he had sexual intercourse with his partners. There was a high risk of HIV being transmitted to his sexual partners when a condom was not used. Documentation was presented in court that he infected four women with HIV, the virus that causes AIDS.

An offense of this sort (violating Virginia's HIV non-disclosure law) is highly likely to be detected and to be reported. People find out and are likely to share with others about someone with HIV having sexual intercourse with partners without disclosing his or her HIV status to the partners. Eventually this information comes to the attention of legal authorities.

In court John stated that he had no knowledge of Virginia's HIV nondisclosure law from the time when he tested positive for HIV.

Version B2 (Low Harm/High Detectability/No Knowledge)

The following contains details about a court case concerning a man named John who is accused of violating Virginia's HIV nondisclosure law. The HIV nondisclosure law in Virginia requires that HIV-positive individuals disclose their HIV-positive status to their sexual partner(s). While reading the case you can assume that circumstances arose that brought John's case to the attention of the authorities. To the best of your ability please answer the questions that follow based on your reactions to the court case.

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An offense of this sort (violating Virginia's HIV non-disclosure law) is highly likely to be detected and to be reported. People find out and are likely to share with others about someone with HIV having sexual intercourse with partners without disclosing his or her HIV status to the partners. Eventually this information comes to the attention of legal authorities.

In court John stated that he had no knowledge of Virginia's HIV nondisclosure law from the time when he tested positive for HIV.

Version C2 (High Harm/Low Detectability/No Knowledge)

The following contains details about a court case concerning a man named John who is accused of violating Virginia's HIV nondisclosure law. The HIV nondisclosure law in Virginia requires that HIV-positive individuals disclose their HIV-positive status to their sexual partner(s). While reading the case you can assume that circumstances arose that brought John's case to the attention of the authorities. To the best of your ability please answer the questions that follow based on your reactions to the court case.

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In court John stated that he had no knowledge of Virginia's HIV nondisclosure law from the time when he tested positive for HIV.

Version D2 (Low Harm/Low Detectability/No Knowledge)

The following contains details about a court case concerning a man named John who is accused of violating Virginia's HIV nondisclosure law. The HIV nondisclosure law in Virginia requires that HIV-positive individuals disclose their HIV-positive status to their sexual partner(s). While reading the case you can assume that circumstances arose that brought John's case to the attention of the authorities. To the best of your ability please answer the questions that follow based on your reactions to the court case.

John is HIV positive and found out about his HIV diagnosis 12 years ago. He is heterosexual. He did not disclose to any of the women who have been his sexual partners that he was HIV positive. John always used a condom when he had sexual intercourse with his partners. There was a low risk of HIV being transmitted to his sexual partners when a condom was used. Documentation was presented in court that he did not infect any women with HIV, the virus that causes AIDS.

An offense of this sort (violating Virginia's HIV nondisclosure law) is almost impossible to detect or report. It is difficult for people to find out that someone with HIV has been having sexual intercourse with partners without disclosing his or her HIV status to the partners. John's behavior was reported to legal authorities initially due to a set of unlikely coincidences.

In court John stated that he had no knowledge of Virginia's HIV nondisclosure law from the time when he tested positive for HIV.

APPENDIX F
MANIPULATION CHECKS AND DEPENDENT MEASURES

1. How serious was this offense (i.e., violating Virginia's HIV nondisclosure law)?

1	2	3	4	5	6	7
Not serious at all			Extremely serious			

2. How likely was it that John would be caught for the offense he committed?

1	2	3	4	5	6	7
Not likely at all			Extremely likely			

3. What was the harm committed by John's behavior?

1	2	3	4	5	6	7
No harm at all			Extreme harm			

4. How often did John use a condom?

1	2	3	4	5	6	7
Never			Always			

5. How knowledgeable was John about Virginia's HIV nondisclosure law after he found out about his HIV-positive diagnosis?

1	2	3	4	5	6	7
Not knowledgeable at all			Very knowledgeable			

6. Suppose you were responsible for recommending a prison sentence for John. Using the scale below give John a sentence between the minimum of no time in prison to the maximum of 50 years in prison.

0	1	2	3	4	5	6	7	8	9	10
No time in prison										50 years in prison

7. Now suppose you were responsible for recommending a fine for John. Using the scale below give John a fine between the minimum of no fine and the maximum of a \$350,000 fine.

0	1	2	3	4	5	6	7	8	9	10
\$0 fine										\$350,000 fine

8. What is the risk of this type of offense (i.e., violating Virginia's HIV nondisclosure law) being committed by John in the future?

1	2	3	4	5	6	7
No risk at all						Extreme risk

9. What is the risk of this type of offense being committed by others in the future?

1	2	3	4	5	6	7
No risk at all						Extreme risk

10. How important is it that John be removed from society so that he does not have the opportunity to engage in HIV nondisclosure when having sex with others in the future?

1	2	3	4	5	6	7
Not important at all						Extremely important

11. How important is it that John be prevented from committing this offense in the future?

1	2	3	4	5	6	7
Not important at all						Extremely important

12. How important is it that other people with HIV be prevented from committing this offense in the future?

1 2 3 4 5 6 7

Not important at all

Extremely important

13. How important is it that John receives a severe punishment *now* for the purposes of deterring him from violating Virginia's HIV nondisclosure law in the future?

1 2 3 4 5 6 7

Not important at all

Extremely important

14. To what degree were you morally outraged by this offense (i.e., the HIV nondisclosure law violation)?

1 2 3 4 5 6 7

Not outraged at all

Extremely outraged

15. How angry did John's case make you?

1 2 3 4 5 6 7

Not angry at all

Extremely angry

16. How upset did John's case make you?

1 2 3 4 5 6 7

Not upset at all

Extremely upset

17. How concerned are you about a possible threat to *your* physical health or safety based on reading about the case of John?

1 2 3 4 5 6 7

Not concerned at all

Extremely concerned

18. How concerned are you about a possible threat to *the public's* physical health or safety based on reading about the case of John?

1 2 3 4 5 6 7

Not concerned at all

Extremely concerned

19. What is the likelihood that you would have found John guilty of violating Virginia's HIV nondisclosure law based on the information provided?

1 2 3 4 5 6 7

Extremely likely to find
him *not* guilty

Extremely likely to find
him guilty

20. How much do you endorse the idea that there should be an HIV nondisclosure law in Virginia mandating someone with HIV to disclose his or her HIV-positive status to sexual partners before having sex?

1 2 3 4 5 6 7

Strongly oppose such a law

Strongly support such a law

APPENDIX G
DEMOGRAPHIC DATA SHEET

Please answer all of the following about yourself to the best of your ability. You are not obligated to respond; however, your responses will enhance this study and are much appreciated.

Age in years: _____

Gender: _____

Race/Ethnicity:
(Circle one)

White/Caucasian

African American/Black

Hispanic/Latino American

Asian American

Pacific Islander

Other: _____

Year in school:
(Circle one)

Freshman

Sophomore

Junior

Senior

Sexual identity:
(Circle one)

Heterosexual/Straight

Gay/Lesbian

Bisexual

Transgender

1. Do you personally know anyone who has been diagnosed with HIV/AIDS?

1—Yes

2—No

2. After reading about the case of John do you feel you will be more proactive/planful in the future in protecting your sexual health and well-being (i.e., asking partners about their HIV status and/or if they have an STD prior to engaging in sexual intercourse)?

1 2 3 4 5 6 7

Highly unlikely to be more
proactive/planful

Highly likely to be more
proactive/planful

SONA ID: _____

REMEMBER: if you do not provide your SONA ID (which is NOT your University Identification Number) it will be impossible to give you credit for your participation. *There is no way to link your SONA ID number to any personally identifying information.*

APPENDIX H

HIV KNOWLEDGE QUESTIONNAIRE

HIV-KQ-18

For each statement, please circle "True" (T), "False" (F), or "I don't know" (DK). If you do not know, please do not guess; instead, please circle "DK."

	True	False	I don't know
1. Coughing and sneezing DO NOT spread HIV.	T	F	DK
2. A person can get HIV by sharing a glass of water with someone who has HIV.	T	F	DK
3. Pulling out the penis before a man climaxes/cums keeps a woman from getting HIV during sex.	T	F	DK
4. A woman can get HIV if she has anal sex with a man.	T	F	DK
5. Showering, or washing one's genitals/private parts, after sex keeps a person from getting HIV.	T	F	DK
6. All pregnant women infected with HIV will have babies born with AIDS.	T	F	DK
7. People who have been infected with HIV quickly show serious signs of being infected.	T	F	DK
8. There is a vaccine that can stop adults from getting HIV.	T	F	DK
9. People are likely to get HIV by deep kissing, putting their tongue in their partner's mouth, if their partner has HIV.	T	F	DK
10. A woman cannot get HIV if she has sex during her period.	T	F	DK
11. There is a female condom that can help decrease a woman's chance of getting HIV.	T	F	DK
12. A natural skin condom works better against HIV than does a latex condom.	T	F	DK
13. A person will NOT get HIV if she or he is taking antibiotics.	T	F	DK
14. Having sex with more than one partner can increase a person's chance of being infected with HIV.	T	F	DK
15. Taking a test for HIV one week after having sex will tell a person if she or he has HIV.	T	F	DK
16. A person can get HIV by sitting in a hot tub or a swimming pool with a person who has HIV.	T	F	DK
17. A person can get HIV from oral sex.	T	F	DK
18. Using Vaseline or baby oil with condoms lowers the chance of getting HIV.	T	F	DK

APPENDIX I

DEBRIEFING

In the study you just participated in we were interested in your motivations for punishing. Specifically, we are interested in HIV transmission laws known as HIV nondisclosure laws and public opinion regarding those laws. These are real laws; many states in the U.S. (including Virginia) have laws that mandate that HIV-positive individuals disclose their HIV-positive status to prospective partners before having sex. Should the individual fail to disclose his or her HIV-positive status prior to engaging in sexual intercourse he or she is committing a crime. It is irrelevant whether HIV is transmitted to the sexual partner or not, it is the act of failing to disclose a positive HIV-status that is the crime. HIV nondisclosure law violations can be classified as felonies or misdemeanors depending on the state, and punishment may include jail time and/or a monetary fine. The scenario you just read was based on a fictional account of a man being convicted of a criminal offense for not disclosing his HIV status to his partners; however, there were some variations in the scenarios among participants. Some participants read that the man did transmit HIV to his partners; some participants read that the man did not transmit HIV to any of his partners. Additionally, some participants read versions of the case wherein the man did or did not have knowledge of Virginia's HIV nondisclosure law. We wanted to assess if there was a difference in perception between these scenarios.

THANK YOU FOR YOUR PARTICIPATION AND COMPLETION OF THE SURVEY. REMEMBER THAT THERE IS NO WAY TO LINK YOUR ANSWERS TO THIS SURVEY TO ANY PERSONALLY IDENTIFYING INFORMATION. PLEASE ENSURE THAT YOU ENTERED YOUR SONA ID IN ORDER TO RECEIVE CREDIT FOR YOUR PARTICIPATION. IF YOU HAVE ANY QUESTIONS REGARDING THIS STUDY, PLEASE CONTACT THE RESEARCHERS AT vderlega@odu.edu OR cdods003@odu.edu.

THANK YOU!

VITA

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EDUCATION

Master's of Science Psychology
Old Dominion University
Graduation: May 2016 (Expected)

Thesis: The Role of Harm, Detectability, and Knowledge of HIV Non-Disclosure Laws in Affecting Punishment Recommendations for HIV Law Violators

Bachelor's of Science Major: Psychology
Minor: Sociology
Old Dominion University
Graduated: May 2011

TEACHING EXPERIENCE

Teaching Assistant (August 2014 – May 2016)
Psychology Department
Old Dominion University, Norfolk, VA

Preparing Future Faculty Program (August 2014 – May 2015)
Old Dominion University, Norfolk, VA
Attended lectures and workshops on topics related to professional skills. Talks attended included: collaboration across disciplines in research, the role of ethics in research, work/life balance, and assessment practices.

PROFESSIONAL POSTERS & PRESENTATIONS

Dodson, C., & Derlega, V. (2015). *The Role of Knowledge of HIV Non-Disclosure Laws in Punishment Recommendations for Law Violators*. A poster presented at Old Dominion University's Graduate Research Achievement Day: Norfolk, VA.