

Summer 2012

The Role of Just Desserts, Deterrence, and an Apology in Recommending Punishment for Violations of HIV Non-Disclosure Laws

William Alexander Woody
Old Dominion University

Follow this and additional works at: https://digitalcommons.odu.edu/psychology_etds



Part of the [Experimental Analysis of Behavior Commons](#), [Law Commons](#), and the [Social Psychology Commons](#)

Recommended Citation

Woody, William A.. "The Role of Just Desserts, Deterrence, and an Apology in Recommending Punishment for Violations of HIV Non-Disclosure Laws" (2012). Master of Science (MS), Thesis, Psychology, Old Dominion University, DOI: 10.25777/jxn9-px71
https://digitalcommons.odu.edu/psychology_etds/179

This Thesis is brought to you for free and open access by the Psychology at ODU Digital Commons. It has been accepted for inclusion in Psychology Theses & Dissertations by an authorized administrator of ODU Digital Commons. For more information, please contact digitalcommons@odu.edu.

**THE ROLE OF JUST DESERTS, DETERRENCE, AND AN APOLOGY IN
RECOMMENDING PUNISHMENT FOR VIOLATIONS OF HIV
NON-DISCLOSURE LAWS**

by

William Alexander Woody
B.A. May 2010, Hendrix College

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

MASTER OF SCIENCES
EXPERIMENTAL PSYCHOLOGY

OLD DOMINION UNIVERSITY
August 2012

Approved by:

Valerian J. Derlega (Director)

Robin J. Lewis (Member)

Louis H. Janda (Member)

ABSTRACT

THE ROLE OF JUST DESERTS, DETERRENCE, AND AN APOLOGY IN RECOMMENDING PUNISHMENT FOR VIOLATIONS OF HIV NON-DISCLOSURE LAWS

William Alexander Woody
Old Dominion University, 2012
Director: Dr. Valerian J. Derlega

HIV non-disclosure laws, which require people with HIV to disclose their HIV serostatus to potential sexual partners, are common in the U.S. This thesis applied philosophical theories of punishment to examine why people would punish these law violators. Specifically, retribution/just deserts (i.e., an eye for an eye) and deterrence (i.e., general crime prevention) were examined as punishment motivations. Additionally, offender apology was investigated as a potential moderator of the effects of retribution on punishment. A 2 (Just Deserts) X 2 (Deterrence) X 2 (Apology) ANOVA design was used with recommendations for a prison sentence and financial fine as the dependent measures ($N = 233$). There was strong support for retribution theory. Apology also moderated the effects of Just Deserts by reducing recommended prison sentences when more serious offenses were committed. There was no support for the use of Deterrence as a motivation for punishment. These findings strengthen the literature supporting the importance of retribution as a motivation for punishment and it documents the novel finding that offender apology moderates the effects of the retribution/just deserts manipulation on punishment recommendations.

This thesis is dedicated to Grandma Alice

ACKNOWLEDGMENTS

This thesis would have been impossible without the tireless efforts of my committee members and especially Dr. Val Derlega. I can only hope to someday be as knowledgeable, supportive, and patient as you have been as my advisor. I would also like to extend a huge thank you to my parents, without whom my continuing education would have been impossible. Your emotional (and financial) support means the world to me.

TABLE OF CONTENTS

	Page
LIST OF TABLES.....	vii
INTRODUCTION.....	1
MOTIVES FOR PUNISHING UNDER HIV-NONDISCLOSURE LAWS.....	3
ROLE OF APOLOGY IN PUNISHMENT RECOMMENDATIONS.....	7
PROPOSED RESEARCH AND HYPOTHESES.....	10
RESEARCH QUESTION.....	12
METHOD.....	13
PARTICIPANTS.....	13
MATERIALS.....	13
PROCEDURE.....	19
RESULTS.....	21
DATA CLEANING.....	21
MANIPULATION CHECKS.....	21
TEST OF THE HYPOTHESES.....	23
TEST OF THE RESEARCH QUESTION.....	26
ADDITIONAL ANALYSES.....	27
DISCUSSION.....	28
HYPOTHESES.....	28
RESEARCH QUESTION.....	33
IMPLICATIONS.....	34
LIMITATIONS.....	35
CONCLUSIONS.....	36
REFERENCES.....	37
APPENDICES.....	41
SONA STUDY DESCRIPTION.....	41
NOTIFICATION DOCUMENT.....	42
RANDOM ASSIGNMENT.....	44
INSTRUCTIONS.....	45
VIGNETTES.....	46
MANIPULATION CHECKS AND DEPENDENT VARIABLES.....	58
DEMOGRAPHIC DATA SHEET.....	62
DEBRIEFING.....	63
VITA.....	64

LIST OF TABLES

Table	Page
1. Just Deserts by Apology Interaction on Recommended Prison Sentences.....	26

INTRODUCTION

Many U.S. states have enacted what are known as HIV non-disclosure laws. These laws criminalize behavior when someone with HIV doesn't disclose to an intimate partner about their HIV positive serostatus (Galletly & Pinkerton, 2004). Although the laws vary both in severity of punishment and in the specifics of what constitutes a violation, the ultimate goal is to help prevent the spread of HIV by legally requiring people with HIV to inform partners of their HIV positive status. This, at least in theory, would give partners information to help them to decide whether or not to have sex with the HIV positive person and about engaging in safer sex practices. The present research examines participants' motivations for punishing people who violate these laws as well as the effects of a law violator's apologies on these recommendations for punishment.

The research proposal was originally inspired by Virginia's HIV non-disclosure law. This law reads:

Any person who, knowing he or she is infected with HIV, syphilis, or hepatitis B, has sexual intercourse, cunnilingus, fellatio, anilingus or anal intercourse without having previously disclosed the existence of his infection to the other person is guilty of a class 1 misdemeanor (Va. Code Ann. § 18.2-67.4:1).

The maximum punishment in the state of Virginia for a violation of this law is 12 months in prison and/or a \$2,500 fine. Many states have HIV non-disclosure laws but the exact nature of these laws varies from state to state. Ohio, for example, has a similar definition to Virginia of what behaviors are prohibited but violations are considered a felony, with a conviction leading to two to eight years in prison and up to \$15,000 in fines (Ohio Rev. Code Ann. § 2903.11(B); Ohio Rev. Code Ann. § 2929.13-14). Some

states include intent to infect as part of their HIV non-disclosure laws. Oklahoma's law includes the clause that a violation occurs when the seropositive person acts "with intent to infect another" (21 Okla. Stat § 1192.1).

Regardless of the exact text of HIV non-disclosure laws, they remain controversial. One issue that critics have raised is that HIV non-disclosure laws serve to increase the stigma associated with having HIV or AIDS (Herek, 1999). This increased stigma may paradoxically serve to facilitate the spread of HIV. In a review of HIV disclosure research, Arnold, Rice, Flannery, and Rotheram-Borus (2008) concluded that the likelihood of someone disclosing their HIV serostatus was related to the degree to which the communities that they were in stigmatized people with HIV. Communities with lower levels of stigma had higher rates of disclosure of HIV serostatus than communities with higher levels of stigma.

Another criticism is that by not differentiating between risky and safe sex options, the laws discourage the use of safe sex practices that reduce the risk of transmission (Galletly & Pinkerton, 2004). For example, using a condom can reduce HIV transmission by 90% (Pinkerton & Abramson, 1997). However, the laws do not differentiate or offer less severe penalties when safe sex practices are used. Critics say that an adjustment to these laws to include provisions for safe sex practices would help to reduce the transmission rate (Galletly & Pinkerton, 2008). Although there is disagreement over the end result of HIV non-disclosure laws, they are in place in 27 states (Galletly & Pinkerton, 2004). Therefore, it is important to understand the reasoning that people may use to punish violators of these laws.

Motives for Punishing under HIV Non-Disclosure Laws

HIV non-disclosure laws were passed to deter people with HIV from concealing their HIV seropositive status from sexual partners. Little is known about the motivations for punishing someone who has violated these laws. However, philosophical theories of punishment provide a promising approach to understanding motives for punishing HIV non-disclosure law violators.

The two major theories of punishment that inform the way researchers understand people's motivations for punishments come from the philosophers Immanuel Kant and Jeremy Bentham. Kant argued for retribution or "just deserts" as being the reason why punishment should be given. This means that the severity of the crime should be reflected in the severity of the punishment. Kant (1790/1952) stated that "punishment can never be administered merely as a means for promoting another good" but rather that it should be "pronounced over all criminals proportionate to their internal wickedness" (p. 397).

On the other hand, Bentham (1843/1962) argued that punishment should serve to benefit society by being severe and public enough to prevent future crimes by scaring possible criminals. This position focuses on utility or "deterrence" as a motive for punishment. The goal is the maintenance of the social order. Making an example of a law violator and harsh measures are used as a method to deter others from committing the same crimes. Sometimes overly harsh punishments are justifiable because of the benefits that they provide by preventing future crimes. Bentham explained this by saying "general prevention ought to be the chief end of punishment, as it is its real justification" (p. 396).

In recent years, researchers have used various experimental methods to investigate the theories of punishment used by people when they are asked to make punishment recommendations for criminal wrongdoing. The research of Carlsmith, Darley, and Robinson (2002) will be discussed in depth here, as the design and results are important for the present research. To have a better sense of people's motivations, Carlsmith et al. adjusted the severity and the extenuating circumstances of the crime to manipulate just deserts motivations and adjusted the amount of publicity and likelihood of detection to manipulate deterrence motivations. For example, to manipulate the "severity of harm" aspect of retribution theory, participants read either a case of small time embezzlement for low severity or a case of toxic waste dumping into a public water source for high severity. The other relevant aspects to just deserts and deterrence theory were manipulated in a similar manner.

Carlsmith et al. (2002) also had participants read about the two different theories (just deserts and deterrence) and assign two different prison sentences based on the respective theories. These scores could then be compared to the sentences participants had previously assigned after reading a case as an indicator of the motivations of the participants. For example, if the originally assigned sentence was closer to the sentence assigned based only on just deserts theory than the sentence assigned based only on deterrence theory, it could be considered evidence for just deserts theory. They found the sentences were assigned based on information important for a just deserts method of assigning punishment rather than information based on a deterrence method.

Carlsmith (2008) conducted follow-up research to replicate whether people endorsed the retribution motivation as the reason for assigning punishment. This

question was investigated by having the participants read cases with factors relevant to just deserts (i.e., severity of offense and extenuating circumstances) and deterrence (i.e., publicity and likelihood of detection). Additionally, participants were asked to state the relative importance of retribution and deterrence in sentencing. Carlsmith found that while participants endorsed both retribution and deterrence as fair and effective ways to determine sentencing, the actual sentences they assigned were only motivated by factors relating to retribution. These findings indicate that retribution is the primary motive when assigning punishment for criminal wrongdoing.

This research has consistently found that retribution, and not deterrence, influences punishment recommendations. Carlsmith (2006) also examined whether or not research participants prioritized information about just deserts over deterrence in seeking information about what sort of punishment to mete out for law violators. Using Behavioral Process Tracing (BPT), it is possible to track what kind of information people actively look for when deciding on a punishment. (This differs from the similar question in Carlsmith (2008) in that BPT is behavioral data while Carlsmith (2008) asked for self-report data). Participants rated factors related to retribution as more important than factors related to incapacitation (i.e., preventing the offender from recidivism) or deterrence. Additionally, when given a choice of which facts about a case they wanted to see, participants chose to see information related to retribution earlier in their deliberation and more frequently than information related to incapacitation or deterrence. These results support the conclusion that people are more attuned to retribution-related factors than other potential reasons for meting out punishment.

Keller, Oswald, Stucki, and Gollwitzer (2010) criticized Carlsmith's BPT experiments for the omission of the nature of the crime that participants were investigating prior to the use of the BPT. The Carlsmith studies did not include what type of crime was committed in the information provided to participants before the participants had a choice of what information to see. The Carlsmith studies instead counted "type of crime" as a retribution factor and it was almost always the first piece of information chosen by participants. Keller et al. claimed that the omission of "type of crime" from the information provided before the BPT procedure artificially inflated the number of retribution items. Keller et al. also adjusted the retribution items to be more similar to the non-retribution items (and vice versa) in terms of "length, concreteness, and comprehensibility" (p. 102) to reduce potential confounds. In their experiments, Keller et al. used the BPT method employed by Carlsmith (2006) but manipulated the severity of the crime that participants were told they would have to assign punishment for. Although the importance of retribution did decrease when the crime was explicitly stated and of low severity, the researchers still found that retribution was the most important factor in motivations for punishment. The findings of the experiments that used the BPT are consistent with previous research showing that retribution is the primary motivation for punishment (e.g., Carlsmith et al., 2002).

Even when compared to other theories of punishment, a just deserts/retribution philosophy seems to be the driving motivation behind the assignment of punishment. Darley, Carlsmith, and Robinson (2000) compared retribution to incapacitation, which is the removal of the offender from society so that the specific offender cannot do any more harm. Only in a situation where the criminal was not fully responsible for his acts due to

a brain tumor did participants make sentence recommendations based on incapacitation rather than retribution. Van Prooijen (2010) compared retribution to compensatory justice, which is focused on helping the victim rather than punishing the offender. Participants recommended higher fines when punishments were framed as punishing the offender than when the fines were presented as compensating the victims. Additionally, when examined using the BPT method, participants sought information related to punishment earlier and more frequently than information related to compensation. While this research proposal does not plan to use the BPT method, it is important to note that the findings regarding motivations for punishment are not an artifact of the vignette paradigm.

The other notable finding from Darley et al. (2000) was the mechanism through which just deserts affected punishments. They found that moral outrage mediated the relationship between just deserts and punishment. In higher just deserts conditions (i.e., when more severe crimes had been committed) people demonstrated more moral outrage which, in turn, predicted higher levels of punishment. This finding makes sense as the perceived severity of the offense is an important part of the just deserts philosophy of punishment and it is especially important in terms of the potential effects of apology—a topic that I will introduce next.

Role of Apology in Punishment Recommendations

Apology is an adaptive skill that has been widely used throughout human history (McCullough, 2008). While this thesis will not delve into evolutionary theory regarding remorse and forgiveness, it is important to note that there is evidence supporting the usefulness of apologies cutting across cultures and even across species. Friedman (2006)

notes, using anecdotal evidence, that apologies or the absence of apologies, have had major impacts in policy and action in areas ranging from politics to legal issues to private industry, and that the most effective companies and leaders make full and sincere apologies for wrong actions. These apologies often serve to defuse the animosity that wronged parties feel and result in more positive relationships.

Friedman's (2006) speculations have been supported by more rigorous scientific methods. Shaw, Wild, and Colquitt (2003) performed a meta-analysis of 54 articles that addressed "explanations" (that included the role of apology in social interactions). Shaw et al. found that the more adequate an explanation, the less a wronged party wanted to retaliate. Additionally, Shaw et al. also noted that an inadequate explanation was worse than no explanation at all, in that it decreased the wronged party's perception of fairness.

Scher and Darley (1997) specifically investigated the effects of different elements of an apology. None of the four elements they used ("illocutionary force indicating device, expression of responsibility, promise of forbearance, and offer of repair," p. 127) were any more effective than the others at reducing blame and sanctioning. However, they did find that there was a cumulative effect of including elements of an apology. That is, there was an inverse relationship between the number of apology elements and blame/sanctioning against an offender. A more complete apology (i.e., an apology where the offender took responsibility, promised to not commit the offense in the future, and offered to undo any damage that had been done) predicted lower blame and sanctioning. This is in line with Shaw et al.'s (2003) finding that increasing explanation adequacy (i.e., how fully a description of the reasoning and circumstances addresses a wrongdoing) reduced retaliation.

Additionally, in a study of people recounting events where they were wronged, Younger, Piferi, Jobe, and Lawler (2004) found that apology and remorse were factors in forgiving and that the absence of remorse and apology were commonly cited as a reason to not forgive someone. Kuha (2003) found that another important factor in wanting an apology for an offense is the perceived seriousness of the offense. Higher levels of perceived offense predicted a higher desire for an apology. Also of note from Kuha's work was a null finding for gender differences in desire for apology.

A small number of experimental studies have investigated the effects of apologies in criminal violations. While an apology generally seems to be effective in mending interpersonal relationships, it seems, if anything, to worsen the outcomes for defendants in court-room cases. The few studies that have investigated this phenomenon found that an apology was interpreted as an admission of guilt. Robinson, Smith-Lovin, and Tsoudis (1994) presented participants with the transcript of a court case concerning a drunk-driving vehicular manslaughter case, where the male defendant was described as either neutral or very emotional and contrite when giving his testimony. However, the researchers did not find an effect of remorse (as manipulated by the testimony description) on recommended sentences.

Boccaccini, Mundt, Clark, and John (2008) used the Kobe Bryant trial (where the NBA star was accused of the rape of a hotel employee) as a way to test the effects of an apology on perceptions of a court case. In their first study, Boccaccini et al. presented participants with vignettes that included information about the court case and asked them to note if they thought Bryant was guilty, and if they believed he should pay a monetary fine for his crime. The vignettes were manipulated to include either an expression of

remorse (“First, I want to apologize directly to the young woman involved in this incident. I want to apologize for my behavior that night and for the consequences she has suffered in the past year. Although this year has been difficult for me personally, I can only imagine the pain she has had to endure,” p. 32) or a statement of vindication (“I have always believed that the truth would come out, and now it has. The truth is that I did not rape this young woman. I have always maintained that I did not rape this young woman. The accusations against me were wrong,” p. 38). Participants who read an expression of remorse were more likely to believe that Bryant was guilty and that he should pay a fine to his accuser. However, while there were differences, it should be noted that few participants overall (33% of the people in the apology condition) believed Bryant was guilty and should pay a fine. Study 2, in Boccaccini et al.’s research, used the same manipulation but explicitly noted that the statements could be used in civil court and found the same results as in Study 1.

Finally, Bornstein, Rung, and Miller (2002) used a vignette describing a case of malpractice. Both the severity of the incident and the timing of the apology were manipulated. The researchers found an interaction where participants who read cases involving more severe incidents and earlier, more frequent, expressions of remorse recommended higher fines than did participants in the other treatment combinations.

Proposed Research and Hypotheses

The present research relies on a hypothetical case where a man with HIV has violated the HIV non-disclosure law. Research participants (in the role of jurors) were asked to make punishment recommendations. The major independent variables were Just Deserts, Deterrence, and Apology. Because the literature on motivations for punishment

is more consistent than the apology literature, especially as it applies to criminal situations, I will be using the punishment literature to make predictions. Apology will be integrated into this literature, and is of particular interest, because it may have an effect on moral outrage. While moral outrage is not necessarily the same idea as “blame”, it may function in the same way, where an apology would reduce moral outrage, which would in turn reduce severity of participants’ punishment recommendations. The following hypotheses and research question were examined in the proposed study:

1. There will be a main effect of Just Deserts on the punishment recommendations for violations of the HIV non-disclosure laws. Participants in the high Just Deserts condition should recommend longer sentences and higher fines than those in the low Just Deserts condition.
2. While it is impossible to prove a null finding, based on the previous research, no effects of Deterrence on punishment recommendations are expected.
3. Moral Outrage will mediate the effects of Just Deserts on prison sentences and fines. Participants in the high Just Deserts condition should have higher scores on Moral Outrage. In turn, higher scores on Moral Outrage should predict longer sentences and higher fines.
4. Apology will have a main effect on prison sentences and fines. Participants who read a vignette with an apology should recommend shorter sentences and lower fines than participants who read a vignette with no apology.
5. Moral Outrage will mediate the effects of Apology on prison sentences and fines. The presence of an apology should lower Moral Outrage. In turn, lower scores on Moral Outrage will predict lower sentences and fines.

Research Question

Just deserts has been a reliable predictor of punishment recommendation in past research. As a research question, the research will examine if the use of an apology moderates the effects of just deserts on recommending punishment. Because the presence of an apology should indicate lower “internal wickedness” (Kant, 1790/1952; p. 397), one possibility is that there will be no difference in punishment recommendation in the low Just Deserts condition. On the other hand, in the high Just Deserts condition, punishments should be lower when participants read an apology than when they do not read an apology. However, the previous literature regarding apology (e.g., Bornstein et al., 2002) in criminal cases predicts that an offender apology would actually increase the amount of punishment assigned when there is a more severe violation (i.e., the high level of Just Deserts). These conflicting predictions will be investigated as a research question.

METHOD

Participants

Participants were recruited using an online research system for students enrolled in psychology courses at a large southeastern university in the U.S. There were 233 participants, with 52 men, 178 women, and 3 undetermined. Participants' ages ranged from 18 to 59 ($M = 24.02$, $SD = 8.93$). The majority of the sample was either White ($N = 124$) or African American ($N = 64$). The participants were reasonably well distributed between the four class years (Freshman: $N = 43$; Sophomore: $N = 41$; Junior: $N = 60$; Senior: $N = 87$).

Materials

Development of vignettes for the manipulation of the independent variables.

Eight vignettes were created to manipulate the variables in the experimental portion of the design. These vignettes represented high and low levels of Just Deserts, high and low levels of Deterrence, and presence or absence of apology. Thus, the study employed a 2 (Just Deserts) X 2 (Deterrence) X 2 (Apology) design.

The manipulations in the study vignettes were patterned after Carlsmith et al. (2002), with the exception that in the present study each vignette described a case in which the HIV non-disclosure law had been violated. That is, the male law violator in the vignette was on trial for engaging in sexual activities without disclosing his HIV serostatus to multiple partners. In Carlsmith's pilot study, participants were asked to identify what aspects of a case corresponded to each theory. For example, participants might classify a comment about media coverage as being important for deterrence theory, or information about the severity of the crime as being related to just deserts theory.

Participants were able to correctly identify the pertinent theory an average of 72% of the time; the frequencies of classification in a theory of punishment was shown to be significantly different using a χ^2 analysis, with all p -values less than .001. In other words, participants generally agreed among themselves about what aspects of a case related to each theory as well as that they understood how each theory worked. Thus, Carlsmith et al. validated that the manipulations in the vignettes were effective. The manipulation of just deserts and deterrence in the present study uses Carlsmith et al.'s operationalization of these variables.

Vignettes were used in this study for several reasons. By manipulating the different levels of each relevant concept, it is possible to assess their relative effects on recommended punishment. Participants are exposed to multiple potential predictors of punishment recommendations and the ANOVA framework combined with the vignette paradigm allows us to separate the effects of each potential predictor on punishment recommendations. For example, it makes sense that if factors related to Deterrence are what matter in terms of punishment, then manipulating that factor between vignettes should predict different punishments.

It should also be noted that manipulating the independent variables in the vignettes allowed us to “prime” participants to think in terms of just deserts and deterrence as motivations for punishment. It also primed participants to think about the role of an apology in recommending punishments. Ultimately, the goal of the research is to examine how manipulating participants' sensitivity to different types of punishment philosophies as well as the presence or absence of an apology influences punishment recommendations. See Appendix VIGNETTES for the full text of all manipulations.

Just Deserts manipulation. Just deserts theory was manipulated by indicating that either serious harm in the absence of mitigating circumstances occurred (“he infected four women with the virus”/“did not always use a condom”) or little harm in the absence of mitigating circumstances occurred (“he did not infect any women”/ “always used a condom”).

In the high Just Deserts condition:

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 wasn’t used. Documentation was presented in the court case that he infected four women with the virus that causes AIDS.

In the low Just Deserts condition:

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 when he had sexual intercourse with them. 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 the court case that he did not infect any women with the virus that causes AIDS.

The just deserts manipulation was assessed for seriousness (“How serious was this crime?”), harm (“What was the harm committed in this case?”), and extenuating

circumstances (How often did John use a condom?), based on the responses to seven-point Likert scales. Participants in the high just deserts condition should have higher scores on both items compared to the participants in the low just deserts conditions.

Deterrence manipulation. Deterrence theory was manipulated by describing the violations as hard to detect but received media coverage (“A crime of this sort is almost impossible to detect or to be reported”/“the sentence and fine [if any] you assign will get wide publicity”) or were easily detectable but did not receive media coverage (“A crime of this sort is highly likely to be detected and to be reported”/“Media in this community don’t routinely publish sentencing reports”).

In the high Deterrence condition:

A crime of this sort is almost impossible to detect or to be reported. It is difficult for people to find out that someone with HIV has been having sex with other sexual partners and not disclosing their infection to the sexual partner. John’s behavior was reported to legal authorities initially because of a set of unlikely coincidences. In this case, the sentence and fine (if any) you assign will get wide publicity because network television shows like Larry King Live and Nancy Grace are doing an intensive series on crimes, criminals, and courts. By doing this, they give the public a sense of the realities of crimes and the criminal court system. The series has attracted much attention.

In the low Deterrence condition:

A crime of this sort 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 sex with other sexual partners and not disclosing their infection to the sexual partner.

Eventually this information comes to the attention of legal authorities. In this case, the sentence and fine (if any) you assign will get almost no publicity. Media in this community don't routinely publish sentencing reports.

The deterrence manipulation was assessed for publicity ("How likely was it that John would be caught?") and the likelihood of the criminal being caught ("How much publicity was this case likely to generate?") based on responses to seven-point Likert scales. Participants in the high deterrence condition should have lower scores on likelihood of being caught and higher scores on publicity as compared to participants in the low deterrence condition.

Apology manipulation. Apology was manipulated by either including or not including an apology by the HIV non-disclosure law violator. The apology manipulation was derived from the research literature on the components of an effective apology (e.g., Blum Kulka & Olshtain, 1984; Lazare, 2004; Olshtain, 1989; Scher & Darley, 1997). The apology manipulation included statements of remorse, admissions of responsibility, offers of repair, and a statement that the perpetrator would always disclose their HIV serostatus in the future to a potential sexual partner.

Participants read the following statement in the Apology condition:

John was given a chance to speak to his sexual partners and made the following statement: 'I am truly sorry for the danger I have placed you in by not telling you that I have HIV. Only I am responsible for this situation and there is no excuse. I know there is not much I can do to repair any damage I have done and I am truly sorry for this. I have pledged to become an advocate and worker in helping to improve the lives of people with HIV. I realize that I cannot undo what is done

but I can say that I will never fail to tell a potential partner in the future and that I am sorry for all that I have put you through.

Participants read the following statement in the No Apology condition:

John was given a chance to speak to his sexual partners but he chose to say nothing.

The effectiveness of the apology manipulation was assessed using the composite score of six questions that address the components of an apology (Scher & Darley, 1997): “How much did John apologize for violating the HIV non-disclosure law?”; “How much did John acknowledge what he had done?”; “How well did John explain what he had done?”; “How sincere was John?”; “How remorseful was John?”; and “How meaningful were John’s offers to make up for what he had done?”

Responses to these six questions were assessed on seven-point Likert scales. Participants who read the vignettes that contain an apology should have higher scores on these six items, and if the manipulation is effective, on the other items as well as compared to the participants who did not read an apology. There is a potential range from 6 to 42 on this composite. Inter-item correlations ranged from .64 to .88, and the Cronbach’s alpha was .95.

Mediator. Moral outrage was assessed using the sum of the scores for the answers to three questions (“To what degree were you morally outraged by this offense?”; “How angry did the case make you?”; “How upset did the case make you?”) and responses were measured using a 7-point Likert scales with anchors at 1 (*Not outraged at all*) and 7 (*Extremely outraged*), for a total moral outrage score ranging from 3 to 21. Inter-item correlations ranged from .73 to .85, and the Cronbach’s alpha was .92.

Dependent variables. The dependent variables (based on participants' punishment recommendation) were measured by having participants assign prison sentences as well as fines. Both dependent variables were measured using 11-point Likert scales. The prison sentence scale had anchors at 0 (*No time in prison*) and 10 (*50 years in prison*). The fine scale had anchors at 0 (*\$0 fine*) and 10 (*\$350,000 fine*). These are a wider range than the punishment options found in the Virginia legal code. These punishment recommendations use a wider continuum than the options allowed for in Virginia law because Neilson (2010) found ceiling effects in research participants' punishment recommendations based on Virginia's HIV non-disclosure law. Recall that in Virginia, the maximum punishment for an HIV non-disclosure law violation is 12 months in prison and \$2500 in fines.

Carlsmith et al. (2002) found that measures of recommended severity of punishment and recommended length of prison sentence were highly correlated with an average r -value of .76. While a measure of recommended fine is infrequently used in the research on the psychology of punishment, it seems likely that recommendations for a fine should be highly related to the length of a suggested prison sentence. However, given that fines can be recommended separate from prison sentences, it is important to measure both. For this research, the two dependent variables correlated at $r = .59$.

Procedure

After accessing the study online, participants read a notification document that described their rights and responsibilities as research participants (See Appendices SONA STUDY DESCRIPTION & NOTIFICATION DOCUMENT). Participants were then randomly assigned to one of the eight treatment conditions using their birthday day of the

month (See Appendix RANDOM ASSIGNMENT). They then read the case and completed questions related to the manipulation checks, the dependent measures, and the potential mediator (see Appendices INSTRUCTIONS, VIGNETTES, and MANIPULATION CHECKS AND DVS). Finally, they completed measures of demographic information and were debriefed (see Appendices DEMOGRAPHIC DATA SHEET and DEBRIEFING).

RESULTS

Data Cleaning

Because ANOVA was used to address some of the hypotheses, the data was cleaned to ensure that the necessary assumptions are met. The scales were checked for outliers, which would be removed if they are more than two standard deviations away from the mean. No data were removed. Additionally, the distributions of the dependent variables were checked for normality using graphs of the distribution and measures of skew and kurtosis. There were no violations of normality. Finally, homogeneity of variance was tested for using Levene's test. However, consistent with the previous research done regarding motivations for punishment, we found no problems with outliers, deviations from normality, or heterogeneity of variance. Because the test for indirect effects used a bootstrapping procedure, assumptions of normality did not need to be met for the variables in these tests, and hence there was no extra data cleaning necessary for those analyses.

Manipulation Checks

The manipulation checks were analyzed using 2 (Just Deserts) X 2 (Deterrence) X 2 (Apology) ANOVAs. The Just Deserts manipulation was successful. There was a significant main effect of Just Deserts on “What was the harm committed in this case?” ($F(1, 223) = 154.95, p < .001, \eta_p^2 = .41$) and “How serious was this crime?” ($F(1, 223) = 37.17, p < .001, \eta_p^2 = .14$). There were higher ratings in the high Just Deserts condition (as compared to the low Just Deserts condition) on both Harm ($M = 6.49, SE = 0.13$ vs. $M = 4.10, SE = 0.14$) and Seriousness ($M = 6.09, SE = 0.13$ vs. $M = 4.91, SE = 0.14$). The high Just Deserts condition ($M = 3.09, SE = 0.12$) also resulted in lower rating on Condom

Use than the low Just Deserts condition ($M = 6.59$, $SE = 0.12$), $F(1, 223) = 434.77$, $p < .001$, $\eta_p^2 = .66$, indicating a successful manipulation. None of the other main effects or interactions were significant on the Seriousness, Harm, and Condom Use measures.

The Deterrence manipulation was also effective. There was a significant main effect of Deterrence on both “How much publicity was this case likely to generate?” ($F(1, 225) = 113.58$, $p < .001$, $\eta_p^2 = .34$), and “How likely was it that John would be caught?” ($F(1, 225) = 154.95$, $p < .001$, $\eta_p^2 = .41$). Consistent with Deterrence theory (Bentham, 1843/1962), the high Deterrence condition resulted in higher ratings than the low Deterrence condition on Publicity ($M = 5.51$, $SE = 0.14$ vs. $M = 3.21$, $SE = 0.16$). Participants in the high Deterrence condition gave lower ratings than participants in the low Deterrence condition on scores of Likelihood of Detection ($M = 2.46$, $SE = 0.14$ vs. $M = 3.99$, $SE = 0.16$). None of the other main effects or interactions were significant on the measures of Publicity and Likelihood of Detection.

The ANOVA indicated that there was a main effect of the Apology manipulation on the Apology manipulation check, $F(1, 221) = 545.80$, $p < .001$, $\eta_p^2 = .71$. As expected, participants who read an apology had higher scores compared to those who did not read an apology on the Apology manipulation check ($M = 27.72$, $SE = 0.57$ vs. $M = 8.30$, $SE = 0.61$). Interestingly, there was also a main effect of Just Deserts on the Apology composite, $F(1, 221) = 17.89$, $p < .001$, $\eta_p^2 = .08$. Participants perceived that John was more apologetic in the low Just Deserts condition than in the high Just Deserts conditions ($M = 19.77$, $SE = 0.61$ vs. $M = 16.25$, $SE = 0.57$).

Test of the Hypotheses

Hypothesis 1 predicted a main effect of Just Deserts on both prison sentence and fines. Participants in the high Just Deserts condition should recommend higher sentences and fines than those in the low Just Deserts condition. This hypothesis was analyzed using two 2 (Just Deserts) X 2 (Deterrence) X 2 (Apology) ANOVAs; these univariate analyses were conducted with prison sentence and fine as the dependent variables. The hypothesis was supported for both dependent variables. There was a main effect of Just Deserts on prison sentence, $F(1, 225) = 77.78, p < .001, \eta_p^2 = .26$. Participants in the high Just Deserts condition ($M = 6.66, SE = 0.27$) recommended longer prison sentences than participants in the low Just Deserts condition ($M = 3.22, SE = 0.28$). There was also a main effect of Just Deserts on the fine recommendation, $F(1, 225) = 59.40, p < .001, \eta_p^2 = .21$. Participants in the high Just Deserts condition ($M = 8.52, SE = 0.28$) recommended higher fines than participants in the low Just Deserts condition ($M = 5.34, SE = 0.30$).

Hypothesis 2 tested the prediction that there should be no effects of Deterrence on punishment recommendations. Like Hypothesis 1, this prediction was analyzed using 2 (Just Deserts) X 2 (Deterrence) X 2 (Apology) Factorial ANOVAs on the prison sentence and fine measures. There was sufficient power ($N = 231, \beta < .05$) to find an effect, if one existed. The main effect of Deterrence was not significant on prison sentence, $F(1, 225) = 0.04, p = .845, \eta_p^2 = .00$, or fine, $F(1, 225) = 0.31, p = .577, \eta_p^2 = .00$. Thus, there was no support for the notion that deterrence is a motivation for meting out punishment.

Hypothesis 3 predicted that Moral Outrage should mediate the effects of Just Deserts on prison sentences and fines. Participants in the high Just Deserts condition

should have higher scores on Moral Outrage. In turn, higher scores on Moral Outrage should predict higher sentences and fines. This hypothesis was assessed using a bootstrapping procedure to examine indirect effects (Preacher & Hayes, 2004; 2008). There is a significant indirect effect if the confidence interval does not contain zero. One thousand bias corrected bootstrap samples were used to create 95% confidence intervals. For ease of interpretation, the Just Deserts independent variable was dummy-coded so that 0 = low Just Deserts and 1 = high Just Deserts. Unstandardized betas are presented here.

There was a significant indirect effect of Just Deserts on prison sentence through the moral outrage composite, 95% CI [0.56, 1.34]. As predicted, participants in the high Just Deserts condition had higher scores on the moral outrage composite than those in the low Just Deserts condition, $B = 3.69$, $t(231) = 5.85$, $p < .001$. Additionally, as hypothesized, higher moral outrage composite scores predicted longer recommended prison sentences, $B = 0.24$, $t(231) = 6.53$, $p < .001$. There was still a direct effect of Just Deserts on recommended prison sentence, $B = 2.52$, $t(231) = 6.58$, $p < .001$.

There was also a significant indirect effect of Just Deserts on the financial fine through the moral outrage composite, 95% CI [0.46, 1.28]. Again, as predicted, participants in the high Just Deserts condition had higher scores on the moral outrage composite than those in the low Just Deserts condition, $B = 3.69$, $t(231) = 5.85$, $p < .001$. Additionally, as hypothesized, higher moral outrage composite scores predicted longer recommended prison sentences, $B = 0.22$, $t(231) = 5.30$, $p < .001$. There was still a direct effect of Just Deserts on recommended fine, $B = 2.26$, $t(231) = 5.37$, $p < .001$.

Hypothesis 4 predicted an Apology main effect on prison sentences and fines. Participants who read a vignette with an apology should recommend lower sentences and fines than participants who read a vignette with no apology. This hypothesis was analyzed using 2 (Just Deserts) X 2 (Deterrence) X 2 (Apology) Factorial ANOVAs with the prison sentence and the financial fine as the dependent variables. There was no main effect of Apology on prison sentence, $F(1, 225) = 0.18, p = .668, \eta_p^2 = .00$. Participants did not differ on their recommended prison sentences whether or not they read an apology by the HIV non-disclosure law violator. There was a main effect of Apology on the fine, $F(1, 225) = 10.15, p = .002, \eta_p^2 = .04$. Participants recommended a lower fine when the offender apologized ($M = 6.27, SE = .28$) than when he did not apologize ($M = 7.58, SE = .30$). Thus, this hypothesis was partially supported.

Hypothesis 5 predicted that Moral Outrage will mediate the effects of Apology on prison sentences and fines. The presence of an apology should lower Moral Outrage. In turn, lower scores on Moral Outrage will predict lower sentences and fines. This hypothesis was also assessed using a bootstrapping procedure to examine indirect effects (Preacher & Hayes, 2004; 2008). For ease of interpretation, the Apology IV was dummy-coded so that 0 = no apology and 1 = apology. Unstandardized betas are presented here.

There was no significant indirect effect of Apology on prison sentence through moral outrage, 95% CI [-0.60, 0.31]. Participants did not differ on the moral outrage composite based on the Apology manipulation, $B = -0.49, t(231) = -0.72, p = .470$.

There was no significant indirect effect of Apology on fine through the moral outrage composite, 95% CI [-0.55, 0.25]. As with the prison sentence DV, there was not a difference in moral outrage based on the Apology manipulation, $B = -0.49, t(231) =$

-0.72, $p = .470$. This hypothesis was not supported.

Test of the Research Question

The Research Question examined whether the Just Deserts manipulation would be moderated by the Apology manipulation. One possibility was that the Apology manipulation would be effective at reducing recommended punishments on the high level of the Just Deserts manipulation but not on the low level of the Just Deserts manipulation. The other possibility was that the Apology manipulation would increase recommended punishment at the high level of the Just Deserts manipulation. There was a significant interaction between Just Deserts and Apology for the prison sentence, ($F(1, 225) = 5.97$, $p = .015$, $\eta_p^2 = .03$) but not for the fine, ($F(1, 225) = 2.03$, $p = .155$, $\eta_p^2 = .01$). Because of the non-significant F -test for the fine, post-hoc analyses were not computed for it. Post hoc pairwise t -tests using a Bonferroni correction indicated that under low Just Deserts, the recommended prison sentence did not differ in the apology versus the no apology condition. However, under high Just Deserts, the recommended prison sentence was significantly shorter in the apology than in the no apology condition. See Table 1.

Table 1
Just Deserts by Apology Interaction on Recommended Prison Sentence

	IV Level	Just Deserts Condition	
		Low Just Deserts	High Just Deserts
Apology Condition	No Apology	2.83 _a (0.39)	7.20 _b (0.39)
	Apology	3.55 _a (0.39)	6.12 _c (0.35)

Note: Means without the same subscript differ at $\alpha < .05$. Standard errors are presented in parentheses.

Additional Analyses

Given that Hypothesis 5 was not supported, another potential mediator for the effects of Apology on recommended fine was analyzed: risk of recidivism. This was assessed in this study by asking “What is the risk of this type of crime being committed by John in the future?” A test for indirect effects revealed that risk of recidivism fully mediated the relationship between Apology and fine recommendation, 95% CI [-1.02, -0.26]. The direct path from Apology to fine recommendation was not significant $B = -0.59$, $t(224) = -1.28$, $p = .201$. Participants who read a vignette with an apology versus no apology gave a lower rating of risk which, in turn, was associated with a recommendation for a lower fine.

DISCUSSION

The results were generally supportive of the hypotheses tested. Also, the significant Just Deserts by Apology interaction on recommended prison sentence was an important finding based on the test of the research question. In the discussion section, I will address the implications of the results associated with the various hypotheses and the research question.

Hypotheses

Hypothesis 1 stated: There will be a main effect of Just Deserts on the punishment recommendations for violations of the HIV non-disclosure laws. Participants in the high Just Deserts condition should recommend longer sentences and higher fines than those in the low Just Deserts condition.

Hypothesis 1 was supported. Participants in the high Just Deserts condition recommended longer prison sentences and higher financial fines than participants in the low Just Deserts Condition. This finding is consistent with previous research indicating that that just deserts/retribution is a powerful motivation in determining punishment (e.g., Carlsmith, 2002, 2008). This finding is also important because the scenarios used in this study are quite different from those used in prior research into motivations for punishment. Prior studies focused on crimes involving toxic waste dumping and embezzlement. Violations of HIV non-disclosure laws, as depicted in the present scenarios, have a direct effect on human beings because they involve the transmission of a life-threatening disease while previous manipulations tend to focus on abstract law violations (such as embezzling money, which is still criminal but not a direct attack on any one person) or have only indirect consequences on people (such as dumping toxic

waste, which may only in the future poison people). Hence, the present findings extend the findings of previous research (e.g., Carlsmith et al., 2002) indicating that just deserts is a robust predictor of punishment recommendations.

Hypothesis 2 stated: While it is impossible to prove a null finding, based on the previous research, no effects of Deterrence on punishment recommendations are expected.

This null hypothesis was not rejected. There was no evidence that Deterrence had an effect on recommended punishment or fines. This null finding is probably not even an issue of power, as the Deterrence manipulation literally explained none of the variance in either the prison sentence or fine dependent variable. This null finding is also in line with previous research indicating that deterrence factors such as publicity and likelihood of detection have no effect on the assignment of punishment (e.g., Carlsmith, 2008).

Hypothesis 3 stated: Moral Outrage will mediate the effects of Just Deserts on prison sentences and fines. Participants in the high Just Deserts condition should have higher scores on Moral Outrage. In turn, higher scores on Moral Outrage should predict higher sentences and fines.

Hypothesis 3 was supported. Participants in the high, compared to the low, Just Deserts condition expressed higher moral outrage scores that in turn lead to higher sentence and fine recommendations. These results are also consistent with findings in Darley et al.'s (2000) study that moral outrage mediates the association between just deserts and punishment recommendations. On the other hand, it is also worth noting that moral outrage only partially mediated the relationship between the just deserts

manipulation and punishment recommendation. There was also a direct path between the just deserts manipulation and the punishment recommendation.

A potential avenue for future research might be to assess how HIV stigma and knowledge of the actual effects and treatments for HIV may affect moral outrage (Galletly & Pinkerton, 2008). Ignorance about HIV (i.e., using stereotypes about transmission and effects of the disease rather than modern knowledge about effects and treatments) may drive people to be more outraged and thus to recommend higher punishment in reaction to HIV non-disclosure law violations.

It should also be noted that both the “harm committed” and the “extenuating circumstances” aspects of just deserts theory were combined into the manipulation of Just Deserts used in the present study. While I believe the results definitely support the importance of just deserts as a motivation for punishment, it would be theoretically interesting to separately examine these components of retribution theory. This study and the previous literature have tended to treat these two components as a combined effect. It may be that “harm committed” and “extenuating circumstances” are related in separate ways (and jointly, as this study found) to recommendations of punishment.

Hypothesis 4 stated: Apology will have a main effect on prison sentences and fines. Participants who read a vignette with an apology should recommend shorter sentences and lower fines than participants who read a vignette with no apology.

Hypothesis 4 was partially supported. Participants who read an apology recommended lower fines than those who did not read an apology. However, there was no difference in recommended prison sentence based on the apology manipulation. Two points should be made about this finding: First, this finding directly contradicts the

previous research using vignettes about apologies in court cases (e.g., Boccaccini, et al., 2008; Bornstein, et al., 2002; Robinson, et al., 1994). This previous research indicated that apologies by criminal defendants either have no effect or served to increase punishment. A potential explanation for this discrepancy is the strength of the manipulation in the present study. The Robinson et al. study had a more subtle manipulation by only changing notes about the confessor's facial expressions and body language (acting either emotionless or ashamed and contrite), while the Boccaccini et al. and Bornstein et al. studies used one to two sentences that offered remorse, but did not represent a full-blown apology. The present study used a paragraph-long, theoretically-strong apology to instantiate the apology manipulation which may help to explain the difference in the results between the studies.

There are mixed results in the criminal justice literature on the effects of apology. However, the present findings on apology are consistent with the literature regarding apologies in personal relationships. These studies found that apologies may pacify the victims who were exposed to a wide range of offenses across a variety of personal and professional relationships (Shaw et al., 2003). Given the rigorous manipulation in the present research, it would be interesting to examine the effectiveness of the present research's operationalization of apology on reactions to law violators as well as perpetrators of abusive behaviors or improprieties in domestic and professional relationships.

There is a need for caution in drawing conclusions about the effects of Apology in the current study. There was an apology main effect on recommended fine but not on the prison sentence. The law violator was given a lower fine when he apologized than when

he did not apologize, but there was no difference in the recommended prison sentence, regardless of the offender's apology. It should also be noted that the Apology manipulation only explained 4% of the variance in the fine recommendation, constituting only a small statistical effect, according to Cohen (1992). Hence, there is evidence that an offender apology can be meaningful in terms of punishment, but the degree to which it functionally matters still needs to be examined.

Hypothesis 5 stated: Moral Outrage will mediate the effects of Apology on prison sentences and fines. The presence of an apology should lower Moral Outrage. In turn, lower scores on Moral Outrage will predict lower sentences and fines.

Unexpectedly, Hypothesis 5 was not supported. The Apology manipulation did not affect participants' moral outrage scores. This hypothesis was adapted from retribution theory; it suggests that moral outrage is a pathway linking Apology and punishment. The apology literature suggests that an apology by the violator of the HIV non-disclosure law may reduce the desire to retaliate (Shaw et al., 2003). Hence, it seemed reasonable to predict that the desire to seek retaliation in reaction to the just deserts manipulation would be mediated by moral outrage.

However, the post hoc analysis did find that risk of recidivism mediated the relationship between Apology and fine. The presence of an apology predicted lower perceived risk of John committing the same crime in the future; in turn, lower perceived risk was associated with a lower recommended fine. This path makes logical sense, as a sincerely remorseful person may be less likely to commit the same crime in the future, and therefore he or she requires less punishment. Apology may also indicate lower "internal wickedness" (Kant, 1790/1943; p. 397). However, only 7.8% of the variance in

recommended fine was explained with this path. Other potential mediators should be explored as well to understand the mechanics of how an offender's apology may reduce recommendations for punishment.

Research Question

The Research Question stated: Just deserts has been a reliable predictor of punishment recommendation in past research. As a research question, the research will examine if the use of an apology moderates the effects of just deserts on recommending punishment. Because the presence of an apology should indicate lower "internal wickedness" (Kant, 1790/1952; p. 397), one possibility is that there will be no difference in punishment recommendation on the low level of Just Deserts. On the high level of Just Deserts, punishments should be lower when participants read an apology than when they do not read an apology. However, the previous literature regarding apology (e.g., Bornstein et al., 2002) in criminal cases would predict that an offender apology would actually increase the amount of punishment assigned when there is a more severe violation (i.e., the high level of Just Deserts). These conflicting predictions will be investigated as a research question.

There was partial support for the Apology manipulation moderating the effects of the Just Deserts manipulation on punishment. Interestingly, there was an interaction on the recommended prison sentence measure but not on the fine measure. Recall that there was a main effect of apology on the recommended fines but not the recommended prison sentences. There was no difference in prison sentence as a function of the Apology manipulation in the low Just Deserts. This finding makes logical sense, as there is less to apologize for and less reason to punish the law violator in the low Just Deserts condition.

On the other hand, an apology, compared to no apology, lowered the recommended prison sentence in the high Just Deserts condition. This finding is compelling in demonstrating the role of apologies in offsetting the impact of high Just Deserts. However, caution should be used in drawing practical implications from these findings, as the interaction only explained 3% of the variance.

It should be noted that effects incorporating the offender apology manipulation strengthen the case for retribution as the driving motivation for punishment. Recall Kant's (1790/1952) notion that punishment should be "pronounced over all criminals proportionate to their internal wickedness" (p. 397). Whether or not someone offers a meaningful apology is an indicator of "internal wickedness." As offenders who apologized were given shorter prison sentences at the high compared to the low Just Deserts condition, this finding is consistent with the idea that an offender's "internal wickedness" is important in how a punishment is determined.

Implications

The results of study also point to practical implications about HIV non-disclosure laws and apologies. There is no evidence that potential jurors considered the deterrence motive when assigning punishments. HIV non-disclosure laws were originally designed with deterrence in mind, and, while the perspective of prospective jurors is not necessarily the same as that of potential law violators, it is interesting that deterrence played no role in the mock jurors' punishment recommendations. There is emerging evidence that even when explicitly trying to avoid the use of retribution when assigning punishment, people cannot help but to use retribution to determine appropriate sentencing (Watamura, Wakebe, & Maeda, 2011). While this is not exactly the same as considering

a potential law violator's mindset, especially for less publicized laws like HIV non-disclosure laws, future lawmakers should take care to better assess how deterrence designed laws function practically in court cases.

Another implication is that apologies may be effective in reducing criminal sentences. In the present study, main effects and interactions incorporating the Apology manipulation found that participants recommended lower sentences when the law violator apologized. There was little doubt as to the guilt of the law violator in the scenarios in this research, and in these situations (i.e., where an apology is not synonymous with a confession) demonstrations of remorse may be effective in reducing assigned punishment.

Limitations

Several limitations of this research should be noted. First, the validity of applying this research to jury situations is questionable. This research procedure did not involve a "real" trial and the participants were not actual jurors. All sentences and fines were assigned individually, which does not reflect how jurors actually make recommendations in a jury trial in U.S. courts. While this study is successful in documenting the role of just deserts and deterrence in recommending punishments by individuals, it does not apply to how a group of people would interact together to make punishment recommendations. Additionally, depending on the U.S. state, the violation of HIV non-disclosure laws may not even be tried by a jury. In Virginia, for example, HIV non-disclosure laws are prosecuted as a misdemeanor offense and the case is only heard by a judge.

Another potential concern is the use of college students as the research population. It is an open question whether people in the general population would react in

the same way to violations of HIV non-disclosure laws as the college students. People with more life experience may be more open to deterrence theory and/or other theories of punishment in meting out specific punishment recommendations.

Conclusions

Despite this study's limitations, the research documented several findings that are important in understanding motivations for punishment. First, the research is useful because it demonstrates the effects of just deserts on punishment recommendations in a new domain (i.e., criminal violations of HIV non-disclosure laws). Second, the research documented an unpredicted, indirect effect of offender apology on financial fine recommendations through the risk of offender recidivism. Third, the research demonstrates that apology moderates the effects of just deserts on prison sentence recommendations. Hence, my study demonstrates how apologies may reduce the desire to retaliate, especially when the law violator has done considerable harm to the victims and he or she apologizes for the law violation.

REFERENCES

- Arnold, M. E., Rice, E., Flannery, D., & Rotheram-Borus, M. J. (2008). HIV disclosure among adults living with HIV. *AIDS Care*, 20, 80-91.
doi:10.1080/09540120701449138
- Bentham, J. (1962). *Principles of penal law*. In J. Bowring (Ed.), *The works of Jeremy Bentham* (p. 396). NY: Russell and Russell. (Original work published 1843.)
- Blum-Kulka, S., & Olshtain, E. (1984). Requests and apologies: A cross-cultural study of speech act realization patterns (CCSARP). *Applied Linguistics*, 5, 196-213.
- Boccaccini, M. T., Mundt, C. A., Clark, J. W., & John, S. (2008). I want to apologize but I don't want everyone to know: A public apology as pretrial publicity between a criminal and civil case. *Law & Psychology Review*, 32, 31-53.
- Bornstein, B. H., Rung, L. M., & Miller, M. K. (2002). The effects of defendant remorse on mock juror decisions in a malpractice case. *Behavioral Sciences and the Law*, 20, 393-409. doi:10.1002/bsl.496
- Carlsmith, K. (2008). On justifying punishment: The discrepancy between words and actions. *Journal of Social Justice Research*, 21, 119-137.
doi:10.1007/s11211-008-0068-x
- Carlsmith, K. M. (2006). The role of retribution and utility in determining punishment. *Journal of Experimental Social Psychology*, 42, 437-451.
doi:10.1016/j.jesp.2005.06.007
- Carlsmith, K. M., & Darley J. M. (2009). Psychological aspects of retributive justice. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 40, pp. 193-236). Amsterdam, The Netherlands: Academic Press.

- Carlsmith, K. M., Darley, J. M., & Robinson, P. H. (2002). Why do we punish? Deterrence and just deserts as motives for punishment. *Journal of Personality and Social Psychology*, 83, 284-299. doi:10.1037//0022-3514.83.2.284
- Cohen, J. (1992). A power primer. *Psychological Bulletin*, 112, 155-159.
doi: 10.1037/0033-2909.112.1.155
- Darley, J. M., Carlsmith, K. M., & Robinson, P. H. (2000). Incapacitation and just deserts as motives for punishment. *Law and Human Behavior*, 24(6), 659-683.
doi: 10.1023/A:1005552203727
- Faul, F., Erdfelder, E., Buchner, A., & Lang, A.-G. (2009). Statistical power analyses using G*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods*, 41, 1149-1160.
- Friedman, H. H. (2006). The power of remorse and apology. *Journal of College and Character*, 7, 1-14.
- Galletly, C. L., & Pinkerton, S. D. (2004). Toward rational criminal HIV exposure laws. *Journal of Law, Medicine & Ethics*, 52, 327-337.
- Galletly, C.L., & Pinkerton, S.D. (2006). Conflicting messages: How criminal disclosure laws undermine public health efforts to control the spread of HIV. *AIDS and Behavior*, 10, 451-461.
- Herek, G. M., & Capitano, J. P. (1999). AIDS stigma and sexual prejudice. *American Behavioral Scientist*, 42, 1130-1147.
- Kant, I. (1952). The science of right (W. Hastie, Translator.). In R. Hutchins (Ed.), *Great books of the Western world: Vol. 42 Kant* (pp. 397-446). Chicago, IL: Encyclopedia Britannica. (Original work published 1790.)

- Keller, L. B., Oswald, M. E., Stucki, I., & Gollwitzer, M. (2010). A closer look at an eye for an eye: Laypersons' punishment decisions are primarily driven by retributive motives. *Social Justice Research, 23*, 99-116.
doi:10.1007/s11211-010-0113-4
- Kuha, M. (2003). Perceived seriousness of an offense: The ignored extraneous variable. *Journal of Pragmatics, 35*, 1803-1821. doi:10.1016/S0378-2166(03)00054-7
- Neilson, B. N. (2010). *The motivations for punishing under HIV non-disclosure laws: An empirical consideration*. Unpublished honor's thesis, Old Dominion University.
- Ohio Rev. Code Ann. § 2903.11(B)
- Ohio Rev. Code Ann. § 2929.13-14
- Olshtain, E. (1989). Apologies across languages. In S. Blum-Kulka, J. House, & G. Kasper (Eds.), *Cross-cultural pragmatics* (pp. 155-173). Norwood, NJ: Ablex.
- Pinkerton, S. D., & Abramson, P. R. (1997). Effectiveness of condoms in preventing HIV transmission. *Social Science and Medicine, 44*, 1303-1312.
- Preacher, K. J., & Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior Research Methods, Instruments, and Computers, 36*, 717-731.
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods, 40*, 879-891.
- Robinson, D. T., Smith-Lovin, L., & Tsoudis, O. (1994). Heinous crime or unfortunate accident? The effects of remorse on responses to mock criminal confessions. *Social Forces, 73*, 175-190

- Scher, S. J., & Darley, J. M. (1997). How effective are the things people say to apologize? Effects of the realization of the apology speech act. *Journal of Psycholinguistic Research*, 26, 127-140.
- Shaw, J. C., Wild, E., & Colquitt, J. A. (2003). To justify or excuse?: A meta-analytic review of the effects of explanations. *Journal of Applied Psychology*, 88, 444-458. doi: 10.1037/0021-9010.88.3.444
- Van Prooijen, J. W. (2010). Retributive versus compensatory justice: Observers' preference for punishing in response to criminal offenses. *European Journal of Social Psychology*, 40, 72-85.
- Virginia Code. Chapter 449 § 18.2-67.4:1. Approved April 12, 2004. Accessed from <http://leg1.state.va.us/cgi-bin/legp504.exe?041+ful+CHAP0449>
- Watamura, E., Wakebe, T., & Maeda, T. (2011). Can jurors free themselves from retributive objectives? *Psychological Studies*, 56, 232-240.
doi:10.1007/s12646-011-0079-9
- Younger, J. W., Piferi, R. L., Jobe, R. L., & Lawler, K. A. (2004). Dimensions of forgiveness: The views of laypersons. *Journal of Social and Personal Relationships*, 21, 837-855. doi: 10.1177/0265407504047843
- 21 Okla. Stat § 1192.1.

SONA STUDY DESCRIPTION

Sona One Line Abstract – This study aims to explore how and why people punish, specifically in application to Virginia state laws.

Sona Description - In this study, you will be asked to read a hypothetical scenario of a crime committed in Virginia and use the law to assign a punishment to the offender. You will also be asked to complete a questionnaire regarding your own traits and your opinions of the offense. The study should take about 45 minutes to complete. You will receive 1 SONA Credit for participating.

Eligibility Requirements - Be 18 years of age or older.

NOTIFICATION DOCUMENT

PROJECT TITLE: Project State Jury

INTRODUCTION

The purposes of this form are to give you information that may affect your decision whether to say YES or NO to participation in this research, and to record the consent of those who say YES. Project Jury will be conducted online using the SONA System.

RESEARCHERS.

Alex Woody, Old Dominion University, Psychology Department

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

DESCRIPTION OF RESEARCH STUDY

Several studies have been conducted looking into the motivations of punishment. None of them have applied the sources of motivation and punishment to the Virginia State Law.

If you decide to participate, you will be expected to read a hypothetical scenario and complete a survey using your judgment of the scenario and the Virginia State Law. The scenario is about 3 paragraphs in length. As we are interested in how you behave as a juror, 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 about 45 minutes. This study has been reviewed by the College of Sciences Human Subjects Committee.

EXCLUSIONARY CRITERIA

To be eligible for this study you must be 18 years of age or older and a psychology student at Old Dominion University.

RISKS AND BENEFITS

RISKS: Completing this survey may result in increased awareness about yourself. One risk of participation, therefore, is the possibility that increased self-awareness may cause momentary distress. There is some possibility that momentary distress may also arise from uncomfortable material presented in the study. The researcher tried to reduce these risks by making all scenarios hypothetical and all subject information confidential. As with any research, there is some possibility that you may be subject to risks that have not yet been identified.

BENEFITS: The main benefit to you for participating in this study is 1 Psychology Department research credit in one of your psychology courses. Others may benefit by learning about themselves in the process of the 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, in order to obtain this credit

NEW INFORMATION

If the researchers find new information during this study that would reasonably change your decision about participating, then they will give it to you.

CONFIDENTIALITY

All information obtained about you in this study is *strictly confidential* unless disclosure is required by law. The researchers will take reasonable steps to keep private information, such as surveys and demographic data, confidential. The researcher will remove identifiers from the information and store all information in a locked filing cabinet. The results of this study may be used in reports, presentations and publications, but the researcher will not identify you.

WITHDRAWAL PRIVILEGE

It is OK for you to say NO. Even if you say YES now, you are free to say NO later, and walk away or withdraw from the 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 saying several things. You are saying that you have read this form or have had it read to you, 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 the research. If you have any questions later on, then the researchers should be able to answer them:

Alex Woody at wwood023@odu.edu.

RANDOM ASSIGNMENT

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

1-4

5-8

9-12

13-16

17-20

21-24

25-28

29-31

INSTRUCTIONS

- The next part is reading a criminal case
- Read this case as if you were a juror and had a role in sentencing the person on trial
- Pay close attention to ALL details
- The specifics of the case are very important in your role as a juror and how you decide to punish them

VIGNETTES

Version A1 (High Just Deserts/High Deterrence/High Apology)

The following describes details about a court case concerning a man named John. The researchers ask that you please read the case as if you were a juror recommending a sentence and fine if you think that is appropriate. While reading the case, assume that circumstances came up that brought John's case to the attention of authorities. To the best of your ability, please answer the questions that follow based on your judgment of 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 wasn't used. Documentation was presented in the court case that he infected four women with the virus that causes AIDS.

A crime of this sort is almost impossible to detect or to be reported. It is difficult for people to find out that someone with HIV has been having sex with other sexual partners and not disclosing their infection to the sexual partner. John's behavior was reported to legal authorities initially because of a set of unlikely coincidences. In this case, the sentence and fine (if any) you assign will get wide publicity because network television shows like Larry King Live and Nancy Grace are doing an intensive series on crimes,

criminals, and courts. By doing this, they give the public a sense of the realities of crimes and the criminal court system. The series has attracted much attention.

John was given a chance to speak to his sexual partners and made the following statement: "I am truly sorry for the danger I have placed you in by not telling you that I have HIV. Only I am responsible for this situation and there is no excuse. I know there is not much I can do to repair any damage I have done and I am truly sorry for this. I have pledged to become an advocate and worker in helping to improve the lives of people with HIV. I realize that I cannot undo what is done but I can say that I will never fail to tell a potential partner in the future and that I am sorry for all that I have put you through."

Version B1 (Low Just Deserts/High Deterrence/High Apology)

The following describes details about a court case concerning a man named John. The researchers ask that you please read the case as if you were a juror recommending a sentence and fine if you think that is appropriate. While reading the case, assume that circumstances came up that brought John's case to the attention of authorities. To the best of your ability, please answer the questions that follow based on your judgment of 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 when he had sexual intercourse with them. 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 the court case that he did not infect any women with the virus that causes AIDS.

A crime of this sort is almost impossible to detect or to be reported. It is difficult for people to find out that someone with HIV has been having sex with other sexual partners and not disclosing their infection to the sexual partner. John's behavior was reported to legal authorities initially because of a set of unlikely coincidences. In this case, the sentence and fine (if any) you assign will get wide publicity because network television shows like Larry King Live and Nancy Grace are doing an intensive series on crimes,

criminals, and courts. By doing this, they give the public a sense of the realities of crimes and the criminal court system. The series has attracted much attention.

John was given a chance to speak to his sexual partners and made the following statement: "I am truly sorry for the danger I have placed you in by not telling you that I have HIV. Only I am responsible for this situation and there is no excuse. I know there is not much I can do to repair any damage I have done and I am truly sorry for this. I have pledged to become an advocate and worker in helping to improve the lives of people with HIV. I realize that I cannot undo what is done but I can say that I will never fail to tell a potential partner in the future and that I am sorry for all that I have put you through."

Version C1 (High Just Deterrence/Low Deterrence/High Apology)

The following describes details about a court case concerning a man named John. The researchers ask that you please read the case as if you were a juror recommending a sentence and fine if you think that is appropriate. While reading the case, assume that circumstances came up that brought John's case to the attention of authorities. To the best of your ability, please answer the questions that follow based on your judgment of 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 wasn't used. Documentation was presented in the court case that he infected four women with the virus that causes AIDS.

A crime of this sort 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 sex with other sexual partners and not disclosing their infection to the sexual partner. Eventually this information comes to the attention of legal authorities. In this case, the sentence and fine (if any) you assign will get almost no publicity. Media in this community don't routinely publish sentencing reports.

John was given a chance to speak to his sexual partners and made the following statement: "I am truly sorry for the danger I have placed you in by not telling you that I have HIV. Only I am responsible for this situation and there is no excuse. I know there is not much I can do to repair any damage I have done and I am truly sorry for this. I have pledged to become an advocate and worker in helping to improve the lives of people with HIV. I realize that I cannot undo what is done but I can say that I will never fail to tell a potential partner in the future and that I am sorry for all that I have put you through."

Version D1 (Low Just Deserts/Low Deterrence/High Apology)

The following describes details about a court case concerning a man named John. The researchers ask that you please read the case as if you were a juror recommending a sentence and fine if you think that is appropriate. While reading the case, assume that circumstances came up that brought John's case to the attention of authorities. To the best of your ability, please answer the questions that follow based on your judgment of 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 when he had sexual intercourse with them. 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 the court case that he did not infect any women with the virus that causes AIDS.

A crime of this sort 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 sex with other sexual partners and not disclosing their infection to the sexual partner. Eventually this information comes to the attention of legal authorities. In this case, the sentence and fine (if any) you assign will get almost no publicity. Media in this community don't routinely publish sentencing reports.

John was given a chance to speak to his sexual partners and made the following statement: "I am truly sorry for the danger I have placed you in by not telling you that I have HIV. Only I am responsible for this situation and there is no excuse. I know there is not much I can do to repair any damage I have done and I am truly sorry for this. I have pledged to become an advocate and worker in helping to improve the lives of people with HIV. I realize that I cannot undo what is done but I can say that I will never fail to tell a potential partner in the future and that I am sorry for all that I have put you through."

Version A2 (High Just Deserts/High Deterrence/Low Apology)

The following describes details about a court case concerning a man named John. The researchers ask that you please read the case as if you were a juror recommending a sentence and fine if you think that is appropriate. While reading the case, assume that circumstances came up that brought John's case to the attention of authorities. To the best of your ability, please answer the questions that follow based on your judgment of 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 wasn't used. Documentation was presented in the court case that he infected four women with the virus that causes AIDS.

A crime of this sort is almost impossible to detect or to be reported. It is difficult for people to find out that someone with HIV has been having sex with other sexual partners and not disclosing their infection to the sexual partner. John's behavior was reported to legal authorities initially because of a set of unlikely coincidences. In this case, the sentence and fine (if any) you assign will get wide publicity because network television shows like Larry King Live and Nancy Grace are doing an intensive series on crimes, criminals, and courts. By doing this, they give the public a sense of the realities of crimes and the criminal court system. The series has attracted much attention.

John was given a chance to speak to his sexual partners but chose not to say anything

Version B2 (Low Just Deserts/High Deterrence/Low Apology)

The following describes details about a court case concerning a man named John. The researchers ask that you please read the case as if you were a juror recommending a sentence and fine if you think that is appropriate. While reading the case, assume that circumstances came up that brought John's case to the attention of authorities. To the best of your ability, please answer the questions that follow based on your judgment of 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 when he had sexual intercourse with them. 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 the court case that he did not infect any women with the virus that causes AIDS.

A crime of this sort is almost impossible to detect or to be reported. It is difficult for people to find out that someone with HIV has been having sex with other sexual partners and not disclosing their infection to the sexual partner. John's behavior was reported to legal authorities initially because of a set of unlikely coincidences. In this case, the sentence and fine (if any) you assign will get wide publicity because network television shows like Larry King Live and Nancy Grace are doing an intensive series on crimes, criminals, and courts. By doing this, they give the public a sense of the realities of crimes and the criminal court system. The series has attracted much attention.

John was given a chance to speak to his sexual partners but chose not to say anything.

Version C2 (High Just Deserts/Low Deterrence/Low Apology)

The following describes details about a court case concerning a man named John. The researchers ask that you please read the case as if you were a juror recommending a sentence and fine if you think that is appropriate. While reading the case, assume that circumstances came up that brought John's case to the attention of authorities. To the best of your ability, please answer the questions that follow based on your judgment of 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 wasn't used. Documentation was presented in the court case that he infected four women with the virus that causes AIDS.

A crime of this sort 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 sex with other sexual partners and not disclosing their infection to the sexual partner. Eventually this information comes to the attention of legal authorities. In this case, the sentence and fine (if any) you assign will get almost no publicity. Media in this community don't routinely publish sentencing reports.

John was given a chance to speak to his sexual partners but chose not to say anything.

Version D2 (Low Just Deserts/Low Deterrence/Low Apology)

The following describes details about a court case concerning a man named John. The researchers ask that you please read the case as if you were a juror recommending a sentence and fine if you think that is appropriate. While reading the case, assume that circumstances came up that brought John's case to the attention of authorities. To the best of your ability, please answer the questions that follow based on your judgment of 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 when he had sexual intercourse with them. 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 the court case that he did not infect any women with the virus that causes AIDS.

A crime of this sort 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 sex with other sexual partners and not disclosing their infection to the sexual partner. Eventually this information comes to the attention of legal authorities. In this case, the sentence and fine (if any) you assign will get almost no publicity. Media in this community don't routinely publish sentencing reports

John was given a chance to speak to his sexual partners but chose not to say anything.

MANIPULATION CHECKS AND DVs

1) How serious was this crime?

1 2 3 4 5 6 7

Not serious at all

Extremely serious

2) How likely was it that John would be caught?

1 2 3 4 5 6 7

Not likely at all

Extremely likely

3) How much publicity was this case likely to generate?

1 2 3 4 5 6 7

No publicity at all

Large amount of publicity

4) What was the harm committed in this case?

1 2 3 4 5 6 7

No harm at all

Extreme harm

5) How often did John use a condom?

1 2 3 4 5 6 7

Never

Always

5) How much did John apologize for violating the HIV non-disclosure law?

1 2 3 4 5 6 7

Not at all

An earnest apology

6) How much did John acknowledge what he had done?

1	2	3	4	5	6	7
---	---	---	---	---	---	---

Not at all

Completely

7) How well did John explain what he had done?

1	2	3	4	5	6	7
---	---	---	---	---	---	---

Not very well

Extremely important

8) How sincere was John when speaking to his victims?

1	2	3	4	5	6	7
---	---	---	---	---	---	---

Not sincere at all

Extremely sincere

9) How remorseful was John?

1 2 3 4 5 6 7

Not remorseful at all

Extremely remorseful

10) How meaningful were John's offers to make up for what he had done?

1	2	3	4	5	6	7
---	---	---	---	---	---	---

Not meaningful at all

Extremely meaningful

11) Suppose you were responsible for giving John a sentence. 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

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

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

13) What is the risk of this type of crime being committed by John in the future?

1 2 3 4 5 6 7

No risk at all

Extreme risk

14) What is the risk of this type of crime being committed by others in the future?

1 2 3 4 5 6 7

No risk at all

Extreme risk

15) How important is it that John be removed from society so that he does not have the opportunity to do this again?

1 2 3 4 5 6 7

Not important at all

Extremely important

16) To what degree were you morally outraged by this offense?

1 2 3 4 5 6 7

Not outraged at all

Extremely outraged

18) How angry did the case make you?

1 2 3 4 5 6 7

Not angry at all

Extremely angry

19) How upset did the case make you?

1 2 3 4 5 6 7

Not upset at all

Extremely upset

17) How important is it that John be prevented from committing this crime in the future?

1 2 3 4 5 6 7

Not important at all

Extremely important

18) How important is it that other people with HIV be prevented from committing this crime in the future?

1 2 3 4 5 6 7

Not important at all

Extremely important

19) Now given your knowledge about HIV non-disclosure laws, how likely are you to tell a sexual partner about your HIV positive status if you were infected?

1 2 3 4 5 6 7

Not likely at all

Extremely likely

20) Suppose that there were not HIV non-disclosure laws, how likely are you to tell a sexual partner about your HIV positive status if you were infected?

1 2 3 4 5 6 7

Not likely at all

Extremely likely

21) If given the opportunity, would you have found John guilty?

Yes

No

Not sure

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 enhance the study and are much appreciated.

Age in years: _____

Gender: _____

Religion: _____

Race/ Ethnicity: White / Caucasian
(Circle one)
 African American
 Hispanic / Latino American
 Asian American
 Other _____

Year in School: Freshman
(Circle one)
 Sophomore
 Junior
 Senior

Do you personally know anyone who has been or is currently serving a jail sentence?

Yes No

Do you personally know anyone who is infected with HIV/AIDS?

Yes No

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 identifying information.

DEBRIEFING

In this study that you just participated in, we were interested in your motivations for punishing. Specifically, we are interested in HIV transmission laws known as HIV non-disclosure laws and public opinion regarding these laws. These are real laws; 23 states in the US have laws that state if someone with HIV does not tell their sexual partner about his/her HIV---positive status prior to having sexual intercourse, than they are committing a crime. It does not matter if HIV is transmitted or not, the act of not telling is violating the law. Virginia is one of the 23 states to have this law. All of the stories that you read were based on a fictional scenario of a man being convicted of a crime for not disclosing his HIV status to his partners; however, there were some variations in the story among participants. Some people read about a person that did transmit HIV; others read about a person that did not transmit HIV. Additionally, some participants read about a case where the perpetrator apologized while some did not. We wanted to know if there is 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 ON HERE TO YOUR NAME. PLEASE BE THAT YOU ENTERED YOUR SONA ID IF YOU WISH TO RECEIVE CREDIT. IF YOU HAVE ANY QUESTIONS REGARDING THIS STUDY, PLEASE CONTACT ME AT wwood023@odu.edu.

THANK YOU!

VITA

William Alexander Woody

Old Dominion University

Department of Psychology

Norfolk, VA 23529-0267

Phone: 405-831-9165

wwood023@odu.edu

Education:

M. S., Experimental Psychology, 2012 (Expected)

Old Dominion University

Thesis: The Role of Just Deserts, Deterrence, and an Apology in Recommending Punishment for Violations of HIV Non-Disclosure Laws

B.A., Psychology, Cum Laude, 2010

Hendrix College

Teaching Experience:

Teaching Assistant at Old Dominion University, Fall 2010-Summer 2011

Lab Instructor at Old Dominion University, Fall 2011-Spring 2012

Publications:

Lewis, R. J., Kelley, M. L., Millettich, R. J. & Woody, A. (2012). Minority stress, substance use, and intimate partner violence among sexual minority women. *Aggression and Violent Behavior, 17*, 247-256. doi: 10.106/j.avb.2012.02.004

Under Review:

Wilson, S. A., Derlega, V. J., Lewis, R. J., Woody, A., Braitman, A., & Barbee, A. P. College students' reactions to the disclosure of HIV test results: Effects of the discloser's HIV status, sexual orientation, and the research participants' gender.

In Preparation and Ongoing:

Woody, A., Braitman, A., Derlega, V. J., Neilson, B., & Iwai, C. The motivations for punishing under HIV non-disclosure laws.

Derlega, V. J., Woody, A., Hacker, D., Holmes, K., & Harrison, S. A prospective study of racial socialization and resilience as buffers against stress from racial microaggressions.