Seventy Times Seven: Forgiveness as a Moderator in the Relationship between Anger

and Violent Crime

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Abstract

Forgiveness is an important quality for the maintenance of successful relationships, and it also has physical and emotional benefits. In contrast, anger, while sometimes positive, can also lead to aggressive or violent behavior, particularly when combined with a desire for revenge. Anger has been repeatedly shown to play a significant role in the commission of crimes; what is less clear is the role forgiveness can play in that relationship. Given that forgiveness has been shown to play a role in anger dissipation, it is logical to suppose that its contribution may be considerable. This study investigated whether forgiveness played a moderating role in the anger/crime relationship. Although results were not significant, several interesting relationships among forgiveness, anger, and crime severity were observed.

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Anger and Violent Crime

The concept of forgiveness has existed for millennia. It is upheld as a virtue in

nearly every major world religion and has been discussed and written about in literary

works from the Bible to Greek philosophy to classic Western literature (Macaskill, 2005;

McCullough & Worthington, 1999). Most people—even those who do not believe in

moral absolutes—would agree that forgiveness is a good quality, and that those who are

able to forgive wrongs done to them are good people. But what is it that makes some

individuals more forgiving than others? And what happens to people who do not forgive?

Along with the concept of forgiveness, violent crime has also existed for

millennia. According to Christianity and Islam, the first murder was committed by the

first man born on the earth as a result of a dispute between him and his brother over

whose sacrifice was more acceptable to God (in the Christian tradition) or over a woman

(in the Muslim tradition) ("Comparative Index"). If Cain had been willing to forgive his

brother, would he have killed Abel? Probably not. The connection between unwillingness

to forgive and most violent crimes—past and present—is difficult to ignore. The

following pages will examine this connection, beginning with a general discussion of

tendency to forgive and moving into the connection between unforgiveness and anger,

and finally unforgiveness, anger, and crime.

Literature Review

Forgiveness

Unfortunately, it is impossible to have human relationships without also having

interpersonal conflict. Whether it is over a small matter such as a moment of

thoughtlessness, or a serious offense such as the breaking of an important promise, individuals are always faced with a choice between forgiving those who have wronged them or nursing resentment and seeking revenge. As most people know from personal experience, forgiveness is usually the most productive choice and will, in most cases, help to heal a broken relationship and contribute to overall happiness and wellbeing (Karremans, Van Lange, Ouwerkerkm & Kluwer, 2003). Hope (1987) stated that forgiving someone who has wronged an individual is crucial to his or her process of psychological healing.

But what is forgiveness? Despite its universal acceptance as an important virtue, it is an idea that is much talked about but seldom defined (McCullough & Worthington, 1999). Macaskill (2005) surveyed a large number of Christian clergy and laypersons in order to formulate a comprehensive definition of this concept. Most participants agreed that the forgiver must pardon the offender and relinquish his or her prerogative to seek vengeance. Many also specified that forgiveness should be unconditional on the part of the forgiver—that is, the offender is forgiven whether he or she seeks the forgiveness or not.

A general tendency to forgive was termed by Roberts (1995) as forgivingness— "the capacity to consistently act in a fully forgiving way" (as cited in Neto, 2007, p. 2314). Several factors have been shown to affect an individual's forgivingness, including gender (which has been shown to have only a slight effect), age (tendency to forgive usually increases as age increases), and religious affiliation (those with more religious involvement are more forgiving and less desirous of revenge; Allemand, 2008; Neto, 2007). Logically, if there is a general tendency to forgive, there must also be a general

tendency to withhold forgiveness or even exact revenge against one's offenders. There is

an important distinction, however, between being unlikely to forgive and being likely to

seek vengeance. Brown's (2003) study of dispositional forgiveness and vengeance found

that, while a person may be unwilling to forgive offenses committed against him or her,

this does not make that person automatically likely to enact revenge (as cited in Brown,

2004). This distinction is important as it relates to violent crime, which will be discussed

later.

While forgivingness is a specific and relatively consistent trait, the actual act of

forgiveness is certainly easier said than done. As C.S. Lewis pointed out, "Everyone says

forgiveness is a lovely idea, until they have something to forgive" ("A lovely idea," 2003,

p. 1). So aside from a forgiving nature (i.e., the trait of forgivingness), what characterizes

a situation in which someone would forgive versus a situation in which someone would

not? After all, even unforgiving people sometimes forgive their offenders. McCullough,

Fincham, and Tsang (2003) pointed out that the passage of time is often a necessary

element of true forgiveness, since time is required to mend the hurt caused by the offense

and to ease some of the resentment and potential desire for vengeance felt by the victim.

Forgiveness is also much more likely if a victim sees that an offender has received

justice, whether at the hands of the law or through some other circumstance (Tripp, Bies,

& Aquino, 2007). As can be expected, Boon and Sulsky (1997) also found that both the

severity of the offense as well as the offender's intent—whether he or she committed the

offense on purpose or by accident—figure strongly into the offendee's decision to

forgive. Personality also plays a role in willingness to forgive. Studies examining

correlations between certain personality factors and the tendency to forgive have,

unsurprisingly, found anger to be the strongest correlation (Neto, 2007). In terms of not only being forgiving but also seeking vengeance, Brown (2004) found that individuals who were low in forgiveness and high in narcissism were most likely to be vengeful towards their offenders. One study has even reported that persons with chronic pain have a more difficult time forgiving others than those without it (Carson et al., 2005). Repentance on the part of the offender obviously aids in the forgiveness process (Eaton, Struthers, & Santelli, 2006), but it is not necessary for forgiveness to occur—and indeed, as mentioned previously, it has been argued that *true* forgiveness should not require repentance but should instead be given unconditionally (Macaskill, 2005).

While the practice of forgiveness is certainly a moral and societal good, many studies have shown that it also has both physical (Lawler-Row, Karremans, Scott, Edlis-Matityahou, & Edwards, 2008) and psychological benefits. Whether it is an individual who has endured atrocities such as incest (Freedman & Enright, 1996) or sexual abuse (Walton, 2005), or someone who simply wishes to repair a strained relationship with a family member or loved one (McCullough, Worthington, & Rachal, 1997), forgiveness can promote psychological healing and increased emotional wellbeing in many situations (Karremans et al., 2003). In addition, forgiveness also helps alleviate feelings of resentment and anger, as will be discussed in the following paragraphs.

Anger and Violence

Anger is unarguably a necessary and sometimes useful emotion. However, it can also get out of control and become a serious problem. Despite the volatile nature of this emotion, however, the conceptualization of anger has received little attention from researchers in the past. Gardner and Moore (2008) described the Anger Avoidance

Model, in which an individual's early aversive history results in a tendency to suppress or avoid feelings of anger. This action leads to either cognitive avoidance, in which the person dwells on the person or experience that made him or her angry; or behavior avoidance, in which the person acts out his or her anger in aggressive and inappropriate ways. It is the behavior avoidance tendency, of course, which can lead to serious criminal problems when a person becomes angry.

     Risk factors. Clearly, not everyone who becomes angry turns violent. As already mentioned, anger can be a healthy emotion when it is managed properly. However, when it is not properly controlled it can be damaging both to the individual and to those around him or her as he or she acts out in violent ways. As with many deviant behaviors, some potential causes of this aggressive response to feelings of anger can be found in early family life. Wolf and Foshee's (2003) study of adolescents revealed that those who had witnessed or experienced domestic violence in their families were more likely to commit violence against their dating partners when angry. This general relationship has been demonstrated in many other studies (Cullterton-Sen et al., 2008; Milletich, Kelley, Doane, & Pearson, 2010; Widom, Schuk, & White, 2006) and indicates that an early home environment involving domestic violence or abuse may play a large role in later expressions of aggression following anger arousal.

     Psychopathology has also been shown to contribute to violence among individuals. Greene, Coles, and Johnson (1994) observed high levels of anger among the most pathological of the abusive personality types they studied. This suggests a potential relationship between the pathological personality type and anger and indicates that

individuals with psychopathological personalities may be at greater risk for expressions of aggression and violence.

Anger reactivity may also be a function of genetics. Alia-Klein et al. (2009) measured brain activity to an emphatically stated "No" using an fMRI and found a correlation between brain response and participants' self-reported levels of anger control. They also examined the monoamine oxidase A (MAOA) gene of each participant. The low-MAOA genotype was found to have a higher anger response, supporting the idea that anger reactivity may be a function of genetics.

Other risk factors or violence include violent media influences, which can lead to a development of aggression-tolerant attitudes (Connolly, Friedlander, Pepler, Craig, & Laporte, 2010); alcoholism (McMurran, 2007); a general lack of empathy (DeGue, DiLillo, & Scalora, 2010); and, of course, bullying during childhood and adolescence (Corvo & deLara, 2010).

As is often the case with risk factors for any behavior, these factors have a cascading or compounding effect. While one or two factors do not bode well for an individual, the experience of several of these factors increases his or her chances of developing a violent or aggressive personality even more (Connolly et al., 2010). While this does not necessarily mean that an individual with multiple risk factors is doomed to become a violent person, the probability that he or she will is substantially increased with each risk factor that is added.

Revenge. While aggressive tendencies and risk factors contribute to acting out in anger, it is the desire for revenge inherent in moments of anger that may play a large role in violence and violent crime. Anger often leads to at least a reflexive desire for revenge

which must be released in some way (Fitzgibbons, 1986). This revenge motivation, of

course, acts as a catalyst for aggression and violence on the part of the victim. After all, it

is out of a desire for revenge that many so-called *crimes of passion* are committed.

Psychoanalytic tradition would suggest that this desire for revenge acts as an ego defense

mechanism, redirecting the rage felt by the individual onto another and thus refraining

from keeping it bottled up inside, where it can do extensive psychological damage

(Goldberg, 2004). Others would suggest that the revenge motivation is born out of a

desire to see justice done after a wrong has been committed. Tripp, Bies, & Aquino

(2007) posited that revenge is much less likely if justice has been administered to an

offender; conversely, the offendee seeks to take justice into his or her own hands (enact

revenge) if the offender does not "get what is coming to him" at the hands of some other

party. Predictably, individuals who are more prone to anger in everyday life are also

much more likely either to condone the taking of revenge or actually to enact it against an

offender themselves (Eisenberger, Lynch, Aselage, & Rohdieck, 2004).

Anger and Crime

　　　Clearly, anger and the revenge motivation that is often produced as a result of it can

contribute to the commission of violent and aggressive actions against others. This

relationship has important implications for criminology, particularly in terms of violent

crime. Although there are other factors influencing the commission of crimes, this study

is primarily concerned with the relationship between anger and crime.

　　　　Unsurprisingly, high levels of anger and low anger control have been shown to be

associated with crime, from juvenile delinquency (Hollins, Marsh, & Bloxsom, 2011;

Sigfusdottir, Gudjonsson, Signurdsson, & 2010) to more serious and violent offenses

such as assault (Bennett & Brookman, 2008) and murder (Kraemer, Lord, & Helibrun, 2004). One study of Turkish prisoners used the State-Trait Anger Expression Inventory to determine anger levels among participants and examine the correlations of anger scores with criminal recidivism. Predictably, trait anger as determined by the survey was significantly correlated with criminal recidivism among participants, although anger control was not different between first time and multiple offenders. Interestingly, the authors of this study chose to interpret these results as a causal relationship with criminal tendencies leading to higher levels of anger. While this is possible, it is just as likely that anger contributes to the commission of crimes rather than the other way around. However, as with any correlative study, causation cannot be inferred from the results, although the observed relationship is both telling and significant (Çorapçioglu & Ergodan, 2004).

While it may seem intuitive that anger would be related to the commission of violent crimes, it is also obvious that not all angry people are criminals. As seen before in the discussion of risk factors, an angry disposition may just be one more step toward criminal activity. However, several studies that have examined the criminological concept of strain theory have found that anger fulfills a unique role as a risk factor. According to strain theory, which was originally developed by Merton in 1938 and modified by Cohen in 1955, an individual is driven to crime and delinquency when he or she realizes that it is impossible to reach goals that society deems desirable, such as wealth or status; when a person is presented with unpleasant or unfavorable circumstances; or when the individual loses something to which he or she assigns a great deal of value (whether it is taken or lost by his or her own doing). This inability to

achieve goals, loss, and/or unpleasant situations create stress or *strain* in the individual and drives him or her to criminal acts in an effort to relieve the strain. Certain risk factors—such as exposure to delinquent peers or being bullied in early years—only serve to exacerbate the strain already felt by the individual (Agnew, 1992; Mazerolle, Piquero, & Capowich, 2003).

Anger plays an important role in strain theory because it magnifies the sense of injustice and wrong felt by the potential criminal and solidifies the need to seek release through criminal and delinquent acts. This concept has been demonstrated many times in the research and consistently shows a significant mediating relationship between strain and/or certain risk factors and criminal behavior, with anger acting as a mediator in the relationship (Aseltine, Gore, & Gordon, 2000; Capowich, Mazerolle, & Piquero, 2001; Mazerolle, Piquero, & Capowich, 2003).

Forgiveness and Anger

So how do forgiveness and violent, criminal anger relate to one another? After all, the two concepts are essentially polar opposites. However, research has unsurprisingly shown that both trait (dispositional) and state (situational) forgiveness are negatively correlated with outward expressions of anger (Lawler-Row et al., 2008), as is a tendency towards vengeful rumination and actual motivation to seek revenge (Berry, Worthington, O'Connor, Parrott, & Wade, 2005). Participants in forgiveness intervention programs often see a decrease in trait anger levels (Harris et al., 2006). This inverse relationship between the two, while somewhat intuitive, has been widely researched and the relationship is consistent across studies, individuals, and groups (Gisi & D'Amato, 2000).

This negative correlation, then, suggests that while forgiveness may inhibit feelings of anger, anger may also inhibit forgiveness. Anger has, in fact, been identified as one of the greatest barriers to forgiveness (Barber, Maltby, & Macaskill, 2005). One intriguing facet of this powerful emotion, called rumination, involves continually and angrily dwelling on an offense after it has already been committed, and plays a significant role in the development of a desire for revenge on the part of the victim. In a study of college students, Barber, et al. (2005) found that those who tended to engage in angry rumination also tended to engage in revenge fantasies long after an offense has been committed against them. Barber et al. concluded, predictably, that anger, revenge, and anger rumination all play a large role in unwillingness to forgive, and as such the two concepts are nearly inextricable from each other.

Thus, it would seem that an effective way to be forgiven by someone is to attempt to dissipate his or her anger. Studies have shown that apologies often help alleviate a victim's aggressive behavior towards an offender, while another study reported that when the victim *wanted* an apology but did not receive it, his or her anger was intensified (Obuchi, Agarie, & Kameda, 1989). Interestingly, women are much more willing to dissipate their anger than men are. Women do not seem to like feeling angry and seek ways to relieve such feelings, while men seek stimuli that will allow them to nurture their anger (Knobloch-Westerwick & Alter, 2006). This finding may at least partially explain why men are more likely commit acts of violence, aggression, and/or crime than are women.

Current Study

Although there are many research studies that have examined anger and forgiveness both separately and in relation to one another, few studies of either forgiveness or anger have been conducted with incarcerated populations, and there are none examining the links between anger, forgiveness, and severity of committed crimes. This study seeks to fill that gap and perhaps provide insight into the impact these characteristics can have on criminal behavior as well as provide a basis for future studies with incarcerated individuals.

The present study approaches forgiveness as an intervening variable in the relationship between anger and crime severity. This relationship with crime—particularly violent crime—has been amply demonstrated in the literature and was expected to be demonstrated in this study as well. It was unknown, however, what effect, if any, forgiveness would have when added into the model.

Hypotheses

1. Due to the research cited above regarding the relationship of anger to outward aggression and crime, it is hypothesized that participants with higher scores on the anger measure of the survey will have committed more severe crimes, as determined by Kwan, Ip, and Kwan's (2000) crime index, described below.

2. Due to research describing the dissipating effect forgiveness has on anger, it is hypothesized that a tendency towards forgiveness, as determined by the forgiveness measures of the survey, will act as a moderating variable in the relationship between anger and crime. That is, a participant's level of forgiveness will affect the causal

relationship between anger and crime. Baron and Kenny's (1986) mediator-moderator

variable concept is described in more detail under the Analysis section of the Procedure.

Method

Participants

Participants in this study consisted of 75 inmates of a large, all-male correctional

facility in the southeastern United States. As a level 3/4 (out of 5) security facility, the

correctional center contained inmates who had committed various types of crimes, which

ranged in severity from theft to murder. Participants were recruited for the study through

an informational flyer (see Appendix A) that was distributed by correctional center staff

in the housing facility of the prison approximately three weeks before the administration

of the surveys. The first 75 inmates who volunteered for the study were selected to

participate, with 10 additional volunteers put on reserve in case the original 75 changed

their minds about taking part in the study. For various reasons, only 70 volunteers

actually completed surveys.

Participants ranged in age from 18-24 to over 60, with the majority (31.4%) of

participants being between the ages of 45-54, followed by those ages 35-44 (22.9%) and

25-34 (20%). Ethnic representation was somewhat skewed; the majority of participants

(62.9%) were African American/Black, followed by White/Caucasian (24.3%). Because

the facility was entirely male, all participants were men. Crimes of which the participants

had been convicted varied widely, but the most common was serious assault (19%),

followed by robbery (18%), murder (16%), drug offenses (14%) and possession of arms

(14%). The number of times participants had been incarcerated—including the

incarceration at the time of the study—ranged from 1 to over 4, which the most frequent number being 3 times.

The number of required participants was selected based on a power analysis performed on the statistical software G*Power 3 (Faul, Erdfelder, Lang, & Buchner, 2007). The power analysis for this study was run using an estimated effect size of .45, a power level of .9, and .05 as the alpha level. This analysis resulted in a required sample size of 44. Thus, 75 was selected as the number of requested participants to allow for unusable surveys and/or participants who wished to withdraw their consent to participate during the course of the study.

Measures

The instrument consisted of four separate surveys—one demographic survey, two forgiveness surveys, and one anger survey. The four surveys were administered in a random order which was different for each volunteer. The surveys were collectively called "Social Attitudes Survey." The researchers chose the term "social attitudes" instead of "forgiveness" to eliminate the potential biasing of results that may have occurred with the participants' knowledge of what the survey was actually measuring.

Demographic survey. The demographic survey (see Appendix B) was developed by the researchers for the purpose of this study. Besides asking general questions such as race/ethnicity and age range of participants, the demographic survey asked questions regarding the participants' convictions (both number and type) as well as how long they had been incarcerated in their current facility. The "type of conviction" question was in a multiple choice, check-all-that-apply format and utilized the crimes listed in Kwan, Ip, and Kwan's (2000) crime index. This index was used since Kwan et al. also developed a

severity ranking of the crimes listed in the index, and thus analysis of the severity of

participants' crimes would be much easier. This ranking is discussed in slightly greater

detail in the procedure section of this paper, and can also be seen in Appendix C.

Trait Forgiveness Scale (TFS). The Trait Forgiveness Scale (Berry, et al., 2005)

measures an individual's overall tendency to forgive. It consists of ten 5-point Likert-

scaled statements with answers ranging from strongly disagree to strongly agree.

Statements which test takers are asked to rate include items such as, "I can forgive a

friend for almost anything" and "I feel bitter about many of my relationships." The score

is calculated by reverse coding five items and then adding the ratings together; a higher

score means the test taker has higher levels of trait forgiveness. Reliability tests resulted

in alpha coefficients of between .74 and .80. Convergent validity measures, obtained by

correlating the TFS with another valid forgiveness measure (the Transgression Narrative

Test of Forgiveness), resulted in a statistically significant correlation (Berry, et al., 2005).

Enright Forgiveness Inventory (EFI). The Enright Forgiveness Inventory is a

survey designed to determine the extent to which the test taker has forgiven a person who

has wronged him or her in the past. It is widely used in forgiveness research both in the

United States and internationally due to its effectiveness and universal applicability. The

test contains three subscales: Affect (EFI-A), Cognition (EFI-C), and Behavior (EFI-B),

which measure the different aspects of forgiveness (emotional, cognitive, and

behavioral). The EFI was designed for use with individuals from adolescence to

adulthood and requires at least a fifth grade reading level. The current version of the EFI

contains 65 Likert-scaled questions plus five beginning questions that direct the test taker

to identify an individual who hurt him or her "unfairly and deeply." The 65 questions that

follow are then based on the test taker's feelings, thoughts, and behavior towards the

identified individual. The first section instructs the test taker to rate 20 emotions that

could potentially fit in the blank for "I feel _____ toward him/her" on a 6-point Likert

scale (strongly disagree to strongly agree). Some emotions listed include "warm,"

"kindness," "resentment," and "cold." The second section requires the examinee to rate

20 behaviors such as "show friendship," "treat gently," and "act negatively" for the

statement, "Regarding this person, I do or would _____." The third section directs the

test taker to rate the extent to which the identified wrongdoer is "evil," "worthless," or

"worthy of respect." The test yields of score of between 60-360, with a higher score

indicating a greater level of forgiveness. Reliability estimates were assigned to the three

subscales of the EFI using test-retest reliability, resulting in scores of .81, .70, and .91,

respectively, as well as an overall score reliability of .98-.99 (Barnes, 2004; Enright &

Rique, 200/2004).

State-Trait Anger Expression Inventory-2 (STAXI-2). The STAXI-2 is a 57-

item survey designed to assess the experience and expression of anger in test takers. With

six scales and five subscales, the STAXI-2 is an efficient and effective measure of state

(current) anger, trait (characteristic) anger, and the expression and control of anger. The

expression scale is further broken down into outward and inward expressions of anger, as

is the anger control scale. Each item is rated on a 4-point Likert scale; the first section

involves the respondent's ratings of "How I feel right now," and includes options such as

"I am furious," "I feel like breaking things," and "I feel like cursing out loud." The

second section instructs test takers to describe "How I generally feel," and they rate

feelings such as "I have a fiery temper" and "When I get mad, I say nasty things." The

third section is "How I generally react when angry or furious" and lists "I control my

temper," "I keep things in," and "I pout and sulk." Internal consistency reliability

measures report alpha coefficients from .73-.95 for the entire test, and from .73-.93 for

the subscales (Freeman & Klecker, 2003).

Procedure

        Survey administration. Permission to conduct this study in the correctional

facility required submission of an extensive research proposal to the state department of

corrections' research approval unit in the mid-Atlantic United States. After gaining

approval, the researchers arranged to enter the facility for the administration of the survey

on a Friday morning at 9:00 am. As already discussed, volunteers had been recruited

prior to the researchers' arrival at the facility, and upon arrival, approximately 75 of the

volunteers had been assembled in the gymnasium. Volunteers first signed the informed

consent forms (Appendix D) and brief instructions were given to everyone before the

inmates completed the survey. Each survey was assigned a number so that no participant

names would be associated with any survey; this ensured greater honesty on the part of

participants, particularly for the question on the EFI which asked test takers to identify a

hurtful event from their past. Survey administration lasted approximately 30-45 minutes,

and inmates were permitted to leave following the completion of the survey.

        Analysis. For hypothesis 1, participants' reported crimes were coded and ranked by

severity according to Kwan, Ip, and Kwan's (2000) crime index (Appendix C); all index

scores (for both past and current offenses) were added together to create a total severity

score. A correlation analysis was run using SPSS statistical software to compare state

anger scores with crime severity and number of offenses and determine whether those

with higher trait anger scores had committed more severe crimes, and/or had been convicted and incarcerated more often.

For hypothesis 2, Baron and Kenny's (1986) moderator analysis was performed using multiple regression. As described in Baron and Kenny's article on this technique, a mediation/moderation model will determine whether forgiveness accounts for the anger-crime relationship (mediation), or whether this relationship depends on the participant's level of forgiveness (moderation). A moderation variable controls and influences the outcome (in this case, crime) but cannot necessarily be said to be a direct cause; that is, "the causal relationship between two variables [anger and crime] changes as a function of the moderator variable [forgiveness]" (p. 1174). Mediating variables, in contrast, explain definitively *why* certain events or phenomena are the case and can be said to cause the perceived change in outcome (crime). For purposes of this study, the moderation analysis was used first, although a mediation analysis was run as a secondary analysis, post-hoc, since no moderation effect was found.

Results

Measurements

Internal consistency reliability of the scales used revealed a high level of reliability for all scales and subscales. Alpha coefficients were as follows: TFS = .85 (M=34.99; SD=9.08); STAXI-2 State Anger Scale = .96 (M=22.64; SD=11.11); STAXI-2 Trait Anger Scale = .90 (M=18.29; SD=7.1); STAXI-2 Anger Expression Scale = .87 (M=34.57; SD=9.25); STAXI-2 Anger Control Scale = .92 (M = 51.99; SD = 9.40); EFI (Total) = .98 (M=256.41; SD=70.07); EFI-A = .95; EFI-B = .96; EFI-C = .97.

To prepare the data for analysis, frequencies were first run to determine the number of missing values and perhaps eliminate all participants with substantial numbers of missing values. As this would have led to the elimination of over 25 participants, it was instead decided that all missing values would be replaced with the mean values of that participant's other responses.

Hypothesis 1

When the correlation analyses were run on all scales of the STAXI-2 with the crime severity scores, no statistically significant relationship was found (State Anger: $r = .174$, $p = .149$; Trait Anger: $r = .058$, $p = .636$; Anger Expression/Control: $r = .188$, $p = .119$; see Table 1). Thus, the hypothesis was not supported.

Table 1

Means, Standard Deviations, and Intercorrelations of *State and Trait Anger, State and Trait Forgiveness, Anger Expression, and Crime Severity*

Variable	M	SD	1	2	3	4	5	6
1. State Anger	22.64	11.11	-	.75**	-.27*	-.49**	.67**	.17
2. Trait Anger	18.29	7.10	.75**	-	-.25*	-.49**	.72**	.06
3. State Forgiveness	256.41	70.07	-.27*	-.25*	-	.37*	-.32*	-.07
4. Trait Forgiveness	34.99	9.08	-.49**	-.49**	.37*	-	-.77**	-.31*
5. Anger Expression	30.58	14.97	.67**	.72**	-.32*	-.77**	-	.19
6. Crime Severity	42.58	34.20	.17	.06	-.07	-.31*	.19	-

Note: $N = 70$; * p < .05, ** p < .001

Hypothesis 2

Before the moderation analysis began, each of the independent variables (state anger, trait anger, anger expression/control, state forgiveness, and trait forgiveness) was centered. The interaction term for the variables was then computed by multiplying the centered, total scores for each measure to create three interaction terms: state anger/forgiveness, trait anger/forgiveness, and anger expression/control with trait and state forgiveness.

The linear regression analysis was run in three steps, with the total crime severity scores as the criterion (dependent) variable. Demographic information (race/ethnicity, age, and religious service attendance) was entered in the first step; the variables of interest in the second step (i.e., state anger and state forgiveness, trait anger and trait forgiveness, anger expression/control with state/trait forgiveness), and the interaction term in the third step. Since the first step (demographic information) did not change for any of the four regression models, the results remained the same. Because of this, the results for the first step are only mentioned for the first regression model.

In the first step of the first regression model, the demographic variables were not significant predictors of crime severity, $F(3,66) = 2.29$, $p = .087$, $R^2 = .094$. In the next step, which entered trait anger and trait forgiveness, the variables contributed to a significant amount of the variance in crime severity, R^2 change $= .095$, $F(5,64) = 3.74$, $p = .018$; $R^2 = .189$. The final step, which entered the interaction term, did not find a moderating effect in the relationship between state anger and crime severity, R^2 change $= .003$, $F(6,63) = .200$, $p = .656$; $R^2 = .191$.

In the second step of the second regression model, which entered state anger and state forgiveness, the variables did not contribute to a significant amount of the variance in crime severity, R^2 change = .022, $F(5,64) = .811$, $p = .449$; $R^2 = .117$. The final step, which entered the interaction term, did not find a moderating effect in the relationship between trait anger and crime severity, R^2 change = .000, $F(6,63) = .014$, $p = .906$; $R^2 = .117$.

In the second step of the third regression model, anger expression/control scores were entered along with state forgiveness from the EFI, but did not contribute to a significant amount of the variance, R^2 change = .016, $F(5,64) = .585$, $p = .560$; $R^2 = .110$. The final step, which entered the interaction term, did not find a moderating effect of state forgiveness in the relationship between anger expression/control and crime severity, R^2 change = .002, $F(6,63) = .108$, $p = .744$; $R^2 = .112$.

In the second step of the final regression model, anger expression/control scores were entered along with trait forgiveness from the TFS and were found to contribute to a significant amount of the variance, R^2 change = .100, $F(5,64) = 3.97$, $p = .024$; $R^2 = .194$. The final step, which entered the interaction term, did not find a moderating effect of trait forgiveness in the relationship between anger expression/control and crime severity, R^2 change = .001, $F(6,63) = .085$, $p = .772$; $R^2 = .195$.

Because none of the regression models demonstrated significant moderation, hypothesis 2 was not supported.

Discussion

Contrary to expectations, neither hypothesis was supported. Possible reasons for this are many and varied, and are discussed in the limitations section, below. However, a

few results of the analysis, though not statistically significant and/or not supporting the

hypotheses, bear mention here. Although neither state nor trait forgiveness was found to

have a moderating effect in the relationship between anger and crime, there *was* a

significant correlation between scores on the Trait Forgiveness Scale and crime severity,

$r = -.313$, $p = .008$ (see Table 1). No other scales used in this study were significantly

correlated with crime severity. Although no conclusions can be drawn from a

correlational relationship, the fairly strong correlation between trait forgiveness and

crime severity is an interesting finding, suggesting that individuals who are high in trait

forgiveness may commit less severe crimes (and vice versa). Additionally, as expected

from the literature, forgiveness increased with age, which may indicate that either

incarcerated individuals increase in forgiveness as years in prison pass, or that people

have a general tendency to increase in forgiveness as they get older. As mentioned in the

limitations, below, this outcome may have played a role in the lack of moderation found

in the analysis.

Surprisingly, neither state nor trait anger was found to be related to crime severity.

This lack of correlation partially explains the lack of a moderating effect of forgiveness;

however, as seen in Table 1, trait forgiveness was significantly correlated with every

measure used in the study—state and trait anger, anger expression, and state forgiveness.

This indicates that forgiveness is at least somehow related to anger, even if it does not

interact with anger and crime severity.

Limitations

Due to the complex and extensive nature of this study, several limitations exist.

Most notably is the time-order relationship of the variables that were investigated. The

calculated crime severity scores were based on event(s) that occurred a substantial amount of time before the administration of the anger and forgiveness surveys, which resulted in an attempt to predict the outcome of the dependent variable (crime severity) based on data gathered long after the crimes had actually been committed. Unfortunately, the only way to avoid this limitation would be to administer the anger and forgiveness surveys immediately after the participant committed his crime, which would be both impractical and would most likely result in a host of other potential limitations.

Additionally, it would have been best if the surveys could have been administered to inmates in several other correctional centers, and perhaps prisons in different parts of the country. It would also have been useful to survey individuals in jails, where it would be more likely to find people who had committed less severe crimes than those found among the participants at the facility used in this study. This would have provided a wider range of both people and crimes and would thus have lent greater validity to the study and a more diverse population in terms of both crimes committed and dispositional forgiveness/anger. Similarly, sample size may have acted to bias the results, limiting the range of participant characteristics available for analysis and allowing for outliers to skew the results of the analysis more radically.

Another potential confounding factor is the age of the participants. As was seen from the demographic survey, many of the participants were older adults, and many had been in prison (whether in the current facility or in other facilities) for many years. As pointed out by one of the few young inmates who completed the survey, years spent in prison give a person a time to "soften up;" that is, there is a good chance that participants who had been in prison for a long time may have *become* more forgiving and less

disposed to anger as the years of their sentence have passed, while they might have been much less forgiving and more angry when they actually committed the crimes in question.

A final important limitation involves the nature of volunteer recruitment. In any setting, recruiting participants simply by requesting volunteers automatically leads to some bias, particularly if only the first *x* number of volunteers is taken. It is logical to suppose that people who volunteer for a study may already be somehow slightly different from those who do not, and those who volunteer first may be even more different. In the case of this study, the survey was posed as an opportunity for the inmates to make a difference in the lives of future potential criminals (see Appendix A for the recruitment flyer). Since the factors of interest (forgiveness and lack of anger) are positive social characteristics, it may be that the personality or temperament of individuals who would volunteer for a study presenting itself as something to effect positive social change are already somewhat socially positive.

Implications

Forgiveness and anger research with incarcerated populations is a rich and an as-yet-largely-unexplored area of psychological and sociological interest. As forgiveness research gains recognition within the social sciences, investigators should be directing their focus to populations in which such research—and the knowledge gained from it— can do the most good. Gaining a better understanding of the catalysts and motivations behind criminal activity is certainly in the best interests of society, and this knowledge can and should be applied to at-risk populations in efforts to discourage both repeat offenses and the creation of the next generation of violent criminals and delinquents.

Applications of the current study are perhaps most clearly focused in forgiveness interventions for already convicted and/or incarcerated individuals. While anger is certainly a major factor in the commission of crimes, forgiveness may have an effect on this relationship (and, in fact, in this study, trait forgiveness had a negative correlation with crime severity). Thus, forgiveness education—especially for those who have committed violent offenses—would be an important addition to a correctional institution setting. While interventions such as anger management courses, which may already be offered in many institutions, could be effective, education in forgiveness could play a role that is just as vital in the discouragement of criminal recidivism.

Forgiveness education may also be beneficial among youth in high-risk and high-crime areas through social and after-school programs. Young people in such environments are most likely unexposed to practices of forgiveness among their friends and family, and the promotion of this virtue among such individuals could have an important impact on the creation of new young criminals. Although this study did not address this specifically, it may be an aspect to consider in future research.

Conclusion

In the Christian tradition, one of Jesus's disciples asked how many times he ought to forgive someone who sinned against him, and suggested seven times as what seemed to him to be a very generous amount. "I do not say to you, up to seven times," Jesus replied, "but up to seventy times seven" (Matthew 18:21-22 NKJV). Jesus and many other leaders of major world religions—including Buddha, Krishna, and Muhammed— recognized the vital importance of interpersonal forgiveness. Modern research has repeatedly upheld the psychological and sociological advantages of a virtue which has

been encouraged across millennia as an important factor of human relationships. Sadly,

research has also demonstrated the disastrous consequences that the lack of forgiveness

can wreak on individual lives as anger and the desire for revenge go unchecked and may

contribute to a path of violence and crime. It is in both individual interest and the interest

of society as a whole to educate people, from ordinary citizens to incarcerated prisoners,

about the importance of forgiving an offender—even up to 490 times.

References

Agnew, R. (1992). Foundation for a general strain theory of crime and delinquency.

Criminology, 30(1), 47-85.

Alia-Klein, N., Goldstein, R.Z., Tormasi, D., Woicik, P.A., Williams, B., Craig, I.W., . . .

Wokow, N.D. (2009). Neural mechanisms of anger resolution as a function of

genetic risk for violence. *Emotion, 9*(3), 385-396.

Allemand, M. (2008). Age differences in forgiveness: The role of future time perspective.

Journal of Research in Personality, 42, 1137-1147.

Aseltine, Jr., R.H., Gore, S., & Gordon, J. (2000). Life stress, anger, anxiety, and

delinquency: An empirical test of General Strain Theory. *Journal of Health and

Social Behavior, 41*, 256-275.

Barber, L., Maltby, J., & Macaskill, A. (2005). Angry memories and thoughts of revenge:

The relationship between forgiveness and anger rumination. *Personality and

Individual Differences, 39*, 253-262.

Barnes, L.L.B. (2004). Review of the Enright Forgiveness Inventory. In The fifteenth

mental measurements yearbook. Retrieved from EBSCO Mental Measurements

Yearbook database.

Bennett, T., & Brookman, F. (2008). Violent street crime: Making sense of seemingly

senseless acts. *International Review of Law, Computers, & Technology, 22*(1-2),

171-180.

Berry, J.W., Worthington, E.L., Jr., O'Connor, L.E., Parrott, L., III, Wade, N.G. (2005).

Forgivingness, vengeful rumination, and affective traits. *Journal of Personality,

73*(1), 183-225.

Boon, S.D., & Sulsky, L.M. (1997). Attributions of blame and forgiveness in romantic

    relationships: A policy capturing study. *Journal of Social Behavior and*

    Personality, 12(1), 19-44.

Brown, R.P. (2004). Vengeance is mine: Narcissism, vengeance, and the tendency to

    forgive. *Journal of Research in Personality, 38*, 576-584.

Capowich, G.E., Mazerolle, P., & Piquero, A. (2001). General strain theory, situational

    anger, and social networks: An assessment of conditioning influences. *Journal of*

    Criminal Justice, 29, 445-461.

Carson, J.W., Keefe, F.J., Goli, V., Fras, A.M., Lynch, T.R., Thorp, S.R., & Buechler,

    J.L. (2005). Forgiveness and chronic low back pain: A preliminary study

    examining the relationships of forgiveness to pain, anger, and psychological

    distress. *The Journal of Pain, 6*(2), 84-91.

Comparative index to Islam. (n.d.). Retrieved from http://www.answering-

    islam.org/Index/C/cain_and_abel.html.

Connolly, J., Friedlander, L., Pepler, D., Craig, W., & Laporte, L. (2010). The ecology of

    adolescent dating aggression: Attitudes, relationships, media use, and socio-

    demographic risk factors. *Journal of Aggression, Maltreatment, and Trauma, 19*,

    469-491.

Çorapçioglu, A., & Erdogan, S. (2004). Cross-sectional study on expression of anger and

    factors associated with criminal recidivism in prisoners with prior offences.

    Forensic Science International, 140 167-174.

Corvo, K., & deLara, E. (2010). Towards an integrated theory of relational violence: Is bullying a risk factor for domestic violence? *Aggression and Violent Behavior, 15*, 181-190.

DeGue, S., DiLillo, D., & Scalora, M. (2010). Are all perpetrators alike? Comparing risk factors for sexual coercion and aggression. *Sexual Abuse: A Journal of Research and Treatment, 22*(4), 402-426.

Eaton, J., Struthers, C.W., & Santelli, A.G. (2006). The mediating role of perceptual validation in the repentance-forgiveness process. *Personality and Social Psychology Bulletin, 32*, 1389-1401.

Eisenberger, R., Lynch, P., Aselage, J., & Rohdieck, S. (2004). Who takes the most revenge? Individual differences in negative reciprocity norm endorsement. *Personality and Social Psychology Bulletin, 30*, 787-799.

Enright, R. D. & Rique, J. (2000/2004). *The Enright Forgiveness Inventory manual*. Madison, WI: International Forgiveness Institute.

Faul, F., Erdfelder, E., Lang, A., & Buchner, A. (2007). G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods, 39*(2), 175-191.

Fitzgibbons, R. P. (1986). The cognitive and emotive use of forgiveness in the treatment of anger. *Psychotherapy*, *23*, 629–633.

Freedman, S.R., & Enright, R.D. (1996). Forgiveness as an intervention goal with incest survivors. *Journal of Consulting and Clinical Psychology, 64*(5), 983-992.

Freeman, S.J., & Klecker, B.M. (2003). Review of the State-Trait Anger Expression

  Inventory. In The fifteenth mental measurements yearbook. Retrieved from

  EBSCO Mental Measurements Yearbook database.

Gardner, F.L., & Moore, Z.E. (2008). Understanding clinical anger and violence: The

  anger avoidance model. *Behavior Modification, 32*(6), 897-912.

Gisi, T.M, & D'Amato, R.C. (2005). What factors should be considered in rehabilitation:

  Are anger, social desirability, and forgiveness related in adults with traumatic

  brain injuries? *International Journal of Neuroscience, 105*, 121-133.

Goldberg, J.G. (2004). Fantasies of revenge and the stabilization of the ego: Acts of

  revenge and the ascension of thanatos. *Modern Psychoanalysis, 29*(1), 3-21.

Greene, A.F., Coles, C.J., & Johnson, E.H. (1994). Psychopathology and anger in

  interpersonal violence offenders. *Journal of Clinical Psychology, 50*(6), 906-912.

Hope, D. (1987). The healing paradox of forgiveness. *Psychotherapy, 24*(2), 240-244.

Hollins, C.R., Marsh, C., & Bloxsom, C.A.J. (2011). Anger and self-reported

  delinquency in university students. *The European Journal of Psychology Applied

  to Legal Context, 3*(1), 1-10.

Karremans, J.C., Van Lange, P.A.M., Ouwerkerkm, J.W., & Kluwer, E.S. (2003). When

  forgiving enhances psychological well-being: The role of interpersonal

  commitment. *Journal of Personality and Social Psychology, 84*(5), 1011-1026.

Knobloch-Westerwick, S., & Alter, S. (2006). Mood adjustment to social situations

  through mass media use: How men ruminate and women dissipate angry moods.

  Human Communication Research, 32, 58-73.

Kraemer, G.W., Lord, W.D., & Heilbrun, K. (2004). Comparing single and serial

      homicide offenses. *Behavioral Sciences and the Law, 22*, 325-343.

Kwan, Y.K., Ip, W.C., & Kwan, P. (2000). A crime index with Thurstone's scaling of

      crime severity. *Journal of Criminal Justice, 28*, 237-244.

Lawler-Row, K.A., Karremans, J.C., Scott, C., Edlis-Matityahou, M., & Edwards, L.

      (2008). Forgiveness, physiological reactivity and health: The role of anger.

      International Journal of Psychophysiology, 68, 51-58.

Lovely idea, a. (2003). *Reflections*. Retrieved from

      http://www.cslewisinstitute.org/files/webfm/reflections/Jun03.pdf.

Macaskill, A. (2005). Defining forgiveness: Christian clergy and general population

      perspectives. *Journal of Personality, 73*(5), 1237-1266.

Mazerolle, P., Piquero, A.R., & Capowich, G.E. (2003). Examining the links between

      strain, situational and dispositional anger, and crime. *Youth and Society, 35*, 131-

      157.

McCullough, M.E., Fincham, F.D., Tsang, J. (2003). Forgiveness, forbearance, and time:

      The temporal unfolding of transgression-related interpersonal motivations.

      Journal of Personality and Social Psychology, 84(3), 540-557.

McCullough, M.E., & Worthington, E.L. (1999). Religion and the forgiving personality.

      Journal of Personality, 67(6), 1141-1164.

McCullough, M.E., Worthington, E.L., & Rachal, K.C. (1997). Interpersonal forgiving in

      close relationships. *Journal of Personality and Social Psychology, 73*(2), 321-

      336.

McMurran, M. (2007). The relationships between alcohol-aggression proneness, general

      alcohol expectancies, hazardous drinking, and alcohol-related violence in adult

      male prisoners. *Psychology, Crime, and Law, 13*(3), 275-284.

Milletich, R., Kelley, M., Doane, A., & Pearson, M. (2010). Exposure to interparental

      violence and childhood physical and emotional abuse as related to physical

      aggression in undergraduate dating relationships. *Journal of Family Violence,*

      25(7), 627-637.

Neto, F. (2007). Forgiveness, personality, and gratitude. *Personality and Individual*

      Differences, 43, 2313-2323.

Obuchi, K., Agarie, N., & Kameda, M. (1989). Apology as aggression control: Its role in

      mediating appraisal of and response to harm. *Journal of Personality and Social*

      Psychology, 56(2), 219-227.

Sigfusdottir, I.D., Gudjonsoon, G.H., & Sigurdsson, J.F. (2010). Bullying and

      delinquency: The mediating role of anger. *Personality and Individual Differences,*

      48, 391-396.

Tripp, T.M., Bies, R.J., & Aquino, K. (2007). A vigilante model of justice: Revenge,

      reconciliation, forgiveness, and avoidance. *Social Justice Research, 20*(1), 10-34.

Walton, E. (2005). Therapeutic forgiveness: Developing a model for empowering victims

      of sexual abuse. *Clinical Social Work Journal, 33*(2), 193-207.

Widom, C.S., Schcuk, A.M., White, H.R. (2006). An examination of pathways from

      childhood victimization to violence: The role of early aggression and problematic

      alcohol use. *Violence and Victims, 21*(6), 675-690.

Wolf, K.A. & Foshee, V.A. (2003). Family violence, anger expression styles, and

adolescent dating violence. *Journal of Family Violence,18*(6), 309-316.

Appendix A

Informational Flyer

You are invited to be in a research study being performed by a psychology professor and student at Liberty University who are investigating whether a person's social attitudes affect their likelihood of committing a crime or crimes. This study will take place in Buckingham Correctional Facility.

What are the benefits of participating in this study?

If we find a certain relationship between social attitudes and crime, it might pave the way for further studies that could investigate the possibility of using a social education program with first-time offenders to decrease the probability of a repeat offense. This would benefit society as a whole as it would assist to decrease crime, and would benefit future offenders by decreasing their possibility of being arrested again after committing a crime.

What do I have to do to participate in this project?

If you agree to be in this study, you will complete a brief questionnaire that will measure your general social attitudes. This questionnaire will be taken paper-and-pencil and will take about 30 minutes to complete.

Will my identity and responses be confidential?

We have taken precautionary steps to protect the confidentiality of anyone who participates in this survey. Participant's names will not be shown to the researchers. The results of data collection will be used for research purposes only. The Department of Corrections and Buckingham Correctional Facility will **NOT** see your responses; **ONLY** the research team will see them. All information that is provided by you will remain confidential.

Can I change my mind?

Participation in this study is completely voluntary. If you do decide to participate, you are free to skip any question or to withdraw at any time while you are taking the survey.

Contacts and Questions:

The researchers conducting this study are Dr. Chad Magnuson and Elisabeth Spratto. If you have questions, **you are encouraged** to contact us in writing at the Liberty University Psychology Department, 1971 University Blvd, Lynchburg, VA 24502, or by email at cmagnuson@liberty.edu.

To Volunteer:

Notify the Warden's Office if you want to participate in this study.

Appendix B

Demographic Survey

1. What is your gender? (circle one)   Male   Female

2. What is your race/ethnicity? (please check one)

_____African American/Black

_____American Indian/Alaska Native

_____Asian

_____Hispanic/Latino

_____Pacific Islander/Native Hawaiian

_____White/Caucasian

_____Other

_____Prefer not to answer

3. What is your age? (circle one)

18-24

25-34

35-44

45-54

55-60

60+

4. Is this your first time being incarcerated? (circle one)

Yes

No

5. *Only if you answered no*, how many times have you been incarcerated before this?

(circle one)

1

2

3

4 or more

6. Please mark any prior convictions that you have been previously incarcerated for:

(check all that apply)

1st incarceration	2nd incarceration	3rd incarceration	
_____	_____	_____	Rape
_____	_____	_____	Indecent Assault
_____	_____	_____	Murder
_____	_____	_____	Serious Assault
_____	_____	_____	Robbery
_____	_____	_____	Blackmail and Intimidation
_____	_____	_____	Snatching
_____	_____	_____	Burglary
_____	_____	_____	Theft
_____	_____	_____	Deception, Fraud, or Forgery
_____	_____	_____	Drug Offense
_____	_____	_____	Criminal Damages
_____	_____	_____	Possession of Arms
_____	_____	_____	Unlawful Society Offense
_____	_____	_____	Bribery and Corruption
_____	_____	_____	Other

7. ***Only if*** you checked "other" in the question you just answered, please write down what

you were convicted of:

    1st incarceration: _____

_____

_____

_____

    2nd incarceration: _____

_____

_____

_____

    3rd incarceration: _____

_____

_____

_____

6. How long have you in been in Buckingham Correctional Facility for your current

conviction? (check one)

      _____less than 6 months

      _____between 6 months and 1 year

      _____between 1 and 2 years

      _____between 2 and 5 years

      _____between 5 and 10 years

      _____10 years or more

7. For what conviction are you in prison right now? (check all that apply)

_____Rape

_____Indecent Assault

_____Murder

_____Serious Assault

_____Robbery

_____Blackmail and Intimidation

_____Snatching

_____Burglary

_____Theft

_____Deception, Fraud, or Forgery

_____Drug Offense

_____Criminal Damages

_____Possession of Arms

_____Unlawful Society Offense

_____Bribery and Corruption

_____Other (write your conviction(s) here)_____

_____

_____

_____

_____

8. How often do you attend religious/church services within your facility?

     _____Never

     _____Almost Never

     _____Sometimes

     _____Almost Always

     _____Always

Appendix C

Kwan, Ip, and Kwan's (2000) Crime Index and Severity Scores

Crime	Severity Ranking
Theft	1.11
Snatching	2.10
Criminal Damages	2.32
Possession of Arms	2.55
Burglary	3.32
Indecent Assault	3.94
Deception, Fraud, Forgery	4.85
Unlawful Society Offense	6.26
Bribery and Corruption	6.44
Serious Assault	7.14
Blackmail/Intimidation	8.43
Robbery	10.41
Drug Offense	11.92
Rape	12.53
Murder	16.68

Appendix D

Informed Consent Form

You are invited to be in a research study being performed by a psychology professor and student at Liberty University who are investigating whether a person's social attitudes affect their likelihood of committing a crime or crimes. You were selected as a possible participant because of your status as a currently or recently incarcerated individual. We ask that you read this form and ask any questions you may have before agreeing to be in the study.

What do you have to do to participate in this project?

If you agree to be in this study, we would ask you to complete four brief questionnaires that will measure your general social attitudes. This questionnaire will be taken paper-and-pencil—like a test—and will take approximately 30 minutes to complete. All questionnaires and collected information will only be seen by the research team. No names will be recorded and no identifying information will be requested. The information will be stored in a secure location and will only be used for research purposes.

Are there any risks to me if I participate in this study?

We foresee minimal risks to you through participation in the study. The questionnaire will not threaten your safety in any way. An investigator on the research team has administered this survey to many different populations and has never observed any risk or detrimental effects. You may, however, feel mildly uncomfortable as you think about a personal hurt identified, as one of the questions asks. If you begin to feel a level of discomfort that is unacceptable to you, you may discontinue completing the survey at any time and withdraw your consent to participate. Additionally, if you feel the need to discuss any unpleasant thoughts or memories brought to mind as a result of this study, you may contact the Department of Corrections' Mental Health Services center at your facility.

What are the benefits of participating in this study?

If we find a certain relationship between social attitudes and crime, it might pave the way for further studies that could investigate the possibility of using a social education program with first-time offenders to decrease the probability of a repeat offense. This would benefit society as a whole as it would assist to decrease crime, and would benefit future offenders by decreasing their possibility of being arrested again after committing a crime.

Will my identity and responses be confidential?

We have taken precautionary steps to protect the confidentiality of anyone who participates in this survey. Participant's names will not be shown to the researchers. Each questionnaire will be assigned a number, and that number (no names), will be used on all

reports. The results of data collection will be used for research purposes only. The research team will see the responses only. All collected data will be securely stored in an investigator's office. All information that is provided by you will remain confidential. Research records will be stored securely and only researchers will have access to the records. While data may be used for future studies, the confidentiality of your identity and responses will be maintained.

Can I change my mind?

Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with Liberty University or with the Department of Corrections or the Virginia Parole Board. If you decide to participate, you are free to not answer any question or withdraw at any time without affecting those relationships.

Contacts and Questions:

The researchers conducting this study are Dr. Chad Magnuson and Elisabeth Spratto. If you have questions, **you are encouraged** to contact us in writing at the Liberty University Psychology Department, 1971 University Blvd, Lynchburg, VA 24502, or by email at cmagnuson@liberty.edu.

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher(s), **you are encouraged** to contact the Institutional Review Board, Dr. Fernando Garzon, Chair, 1971 University Blvd, Suite 2400, Lynchburg, VA 24502 or email at fgarzon@liberty.edu.

You will be given a copy of this information to keep for your records.

Statement of Consent:

I have read the above information. I have asked questions and have received answers. I consent to participate in the study.

Signature:_____ Date: _____