12-18-2013

Vicarious Victimization: Examining the Effects of Witnessing Victimization While Incarcerated on Offender Reentry.

Jane Christie Daquin
Georgia State University

ABSTRACT

JANE CHRISTIE DAQUIN

Vicarious Victimization: Examining the Effects of Witnessing Victimization While Incarcerated on Offender Reentry

(Under the direction of DR. LEAH DAIGLE)

Witnessing victimization in prison is a relatively new area of research. Prison victimization research focuses on direct experiences of victimization and its attending consequences; however, studies have not focused on the vicarious victimization experiences of prisoners. Drawing from the prison victimization, witnessing/exposure, and offender reentry literature, and this study will investigate the link between witnessing victimization in prison and individual post-release outcomes. Using multivariate analyses, I examined the extent to which individuals witness victimization in prison and the effects of witnessing victimization on individual post-release outcomes using *The Prison Experience and Reentry* study, a longitudinal study of 1613 males residing in Ohio halfway houses. The findings suggest that a significant proportion of offenders witness victimization while incarcerated. Furthermore, witnessing victimization, particularly witnessing sexual victimization and stealing, was significantly related to post-release outcomes. Policy implications and directions for future research are discussed.

INDEX WORDS: witnessing victimization, prison victimization, reentry

VICARIOUS VICTIMIZATION: EXAMINING THE EFFECTS OF WITNESSING VICTIMIZATION WHILE INCARCERATED ON OFFENDER REENTRY

By

JANE CHRISTIE DAQUIN

B.A., UNIVERSITY AT ALBANY

A Thesis Submitted to the Graduate Faculty

of Georgia State University in Partial Fulfillment

of the

Requirements for the Degree

MASTER OF SCIENCE

ATLANTA, GEORGIA

2013

ACCEPTANCE

This thesis was prepared under the direction of the candidate's Thesis Committee. It has been approved and accepted by all members of the committee, and it has been accepted in partial fulfillment of the requirements for the degree of Master of Science in Criminal Justice in the Andrew Young School of Policy Studies of Georgia State University.

Thesis Chair: Leah E. Daigle

Committee: Brent Teasdale
Mark Reed

Electronic Version Approved:

Mary Beth Walker
Andrew Young School of Policy Studies
Georgia State University
December 2013

DEDICATION

I would like to dedicate my Master's Thesis to my Mother, Father, and Sister for their continued love, support, and encouragement. Thank you for always being there for me.

ACKNOWLEDGMENTS

I would like to thank my thesis chair, Dr. Leah E. Daigle, for her ongoing support and the time spent reviewing and editing my thesis. Without your advice, guidance, and feedback I would not have completed this thesis. I would also like to thank Dr. Brent Teasdale whose advice and willingness to listen has guided me through the entire Master's process. In addition, I would like to thank Dr. Mark Reed, who also served on my committee, and whose feedback and support has been helpful through this process. I would also like to thank Dr. Shelley Johnson Listwan, who graciously provided her data, and who made it possible for me to complete this thesis.

AUTHOR'S STATEMENT

In presenting this thesis as a partial fulfillment of the requirements for an advanced degree from Georgia State University, I agree that the Library of the University shall make it available for inspection and circulation in accordance with it regulations governing materials of this type. I agree that permission to quote from, to copy from, or to publish this thesis may be granted by the author or, in his/her absence, by the profession under whose direction it was written, or in his/her absence, by the Associate Dean, Andrew Young School of Policy Studies. Such quoting, copying, or publishing must be solely for scholarly purposes and will not involve potential financial gain. It is understood that any copying from or publication of this dissertation which involves potential financial gain will not be allowed without written permission of the author.

_____

Signature of Author

NOTICE TO BORROWERS

All theses deposited in the Georgia State University Library must be used in accordance with the stipulations prescribed by the author in the preceding statement.

The author of this thesis is:
Student's Name: _Jane Christie Daquin_____
Street Address: _6072 Woodview Drive_____
City, State, and Zip Code: _Morrow, GA 30260_____

The Chair of the committee for this thesis is:

Professor's Name: _Dr. Leah Daigle_____
Department: _Criminal Justice_____
College: _Andrew Young School of Policy Studies_____

Georgia State University
P.O. Box 4018
Atlanta, Georgia 30302-4018

Users of this thesis who not regularly enrolled as students at Georgia State University are required to attest acceptance of the preceding stipulation by signing below. Libraries borrowing this thesis for the use of their patrons are required to see that each user records here the information requested.

NAME OF USER	ADDRESS	DATE	TYPE OF USE (EXAMINATION ONLY OR COPYING)

CURRICULUM VITA

Jane Christie Daquin
Georgia State University,
Department of Criminal Justice and Criminology
P.O. Box 4018
Atlanta, Georgia 30302-4018
Office: 404.413.1020
jdaquin1@student.gsu.edu

Education:

Bachelor of Arts	Criminal Justice and Sociology
2006 – 2010	University at Albany, Albany, NY

Research Interests:

- Prison victimization
- Exposure to violence
- Offender reentry

Research Experience:

2011 – 2013	Data Collection Team Member, Georgia State University Atlanta Police Department ATLAS Project Supervisor: Dr. Dean Dabney

Works in Progress:

Teasdale, B., Daigle, L., Hawk, S.R., & Daquin, J.C. "Violent Victimization in Prison: The Role of Individual and Contextual Factors."

Professional Development:

- Social Media Lecture, "Using Facebook to Recruit Hard-to-Reach Population". Katherine Finneran, Presented by the Emory Center for Injury Control, 2013
- Hierarchical Linear Modeling Training. Brent Teasdale, Presented by the Department of Criminal Justice and Criminology, Georgia State University, 2011

Service:

Alpha Phi Sigma Chapter, Vice President, 2012 – Present
Criminal Justice Graduate Student Association, Secretary, 2011 – 2012

Professional Associations:

American Society of Criminology
Academy of Criminal Justice Sciences
Southern Criminal Justice Association
Alpha Phi Sigma
The National Society of Collegiate Scholars

TABLE OF CONTENTS

LIST OF TABLES

CHAPTER I: INTRODUCTION

Determining the prevalence of sexual victimization in prisons has garnered much attention in prison victimization research (Beck & Harrison, 2007; Wolff & Shi, 2011). An estimated 4.5 percent (60,500) of the nation's prisoners has experienced one or more incidents of sexual victimization (Beck & Harrison, 2007). Hensley, Tewksbury, and Castle (2003) reported that 14 percent of inmates experienced sexual victimization in their Oklahoma study. Researchers agree that the rate of occurrence of sexual victimization in prison is disquieting, especially given its negative consequences (Tewksbury, 2007).

In addition to sexual victimization, non-sexual victimization (e.g., physical assaults and theft) occurs frequently in prisons. Perez, Gover, Tennyson, and Santos (2010) discovered that approximately 32 percent of the 247 inmates studied reported experiencing physical victimization. Similarly, in a study of 6,964 male inmates ages 18 to 30 housed in twelve correctional facilities, approximately 35 percent reported experiencing physical victimization in the past 6 months (Wolff, Shi, & Siegel, 2009). Taken together, the findings of both the physical and sexual victimization research suggest that victimization of inmates in prison is a common occurrence. One aspect of victimization that has received little attention, however, in the prison literature is witnessing victimization. Given the extent to which offenders are victimized in prison, it is likely that many inmates are exposed to a great deal of violence, even if not directly victimized themselves. Although little is known about the prevalence and consequences

of witnessing victimization during incarceration, witnessing violence in the home and exposure to violence in the community are two bodies of literature that can help inform the study of witnessing victimization in prison. Witnessing violence in the home and exposure to violence in the community both can result in short-term and long-term negative consequences such as posttraumatic stress disorder (PTSD) (Rossman, 2000), aggressive behavior (Diamond & Muller, 2004), depression, substance abuse (Colbert & Krause, 2009), and future violence perpetration (Bell & Jenkins, 1991). Given these negative effects, it is possible that witnessing violence in prison will also result in similar effects for inmates, even after they are released into the community. It is important to understand the effects of witnessing and experiencing victimization since most prisoners are eventually released into the community (McGuire, 2005).

If witnessing victimization carries with it negative consequences, then reentry may be negatively influenced as well. For example, victims of sexual victimization often suffer from psychological and health consequences that may have great influence on their lives post-incarceration (McGuire, 2005; Tewksbury, 2007). As such, inmates who are exposed to violence may be less successful after leaving prison than inmates who have not witnessed violence.

To date, there has been only one study that examines the effects of witnessing victimization in prison on psychological well-being (Boxer, Middlemass, & DeLorenzo, 2009). Although the findings of this study suggest that witnessing victimization in prison influences post-release psychosocial adjustment, it has limitations. First, the study used a small sample (n=124) of males who had been recently released into a single community. Secondly, it is difficult to isolate the effects of witnessing victimization in prison on

behavior and adjustment, as the measure used was a composite that included both personality and behavioral items. Third, the authors only investigated the effects of witnessing violence in prison, even though it is possible that prisoners witness a range of victimizing behaviors while incarcerated. The current study is the first attempt to link witnessing multiple types of victimization in prison and individual criminal justice outcomes as well as psychological adjustment.

This study will contribute to the literature by using data from the Prison Experience and Reentry Study involving 1,613 males who were residing in halfway houses in Ohio (Listwan, Hanely, & Colvin, 2012). It will examine the extent to which inmates witness victimization, including sexual victimization. In addition, it will build upon the literature on exposure to violence and prison victimization by investigating the influence that witnessing victimization has on post-release outcomes.

To investigate this issue, this study will first examine deprivation and importation theory in order to provide an understanding of the prison experience and why it is that victimization occurs in prison. Second, the study will examine victimization experiences in prison. This section is intended to highlight the prevalence of victimization in prison and its attending consequences. Third, this study will examine witnessing violence in the home and exposure to violence in the community. Again, since little is known about witnessing victimization in prison, the witnessing/exposure to violence literature is detailed to shed light on the prevalence of exposure to violence as well as the consequences associated with witnessing violence. Additionally, the connection between witnessing victimization and engaging in crime is discussed. Fourth, offender reentry and

the barriers that hinder successfully reintegration is examined. The link between witnessing victimization in prison and offender reentry is examined.

CHAPTER II: REVIEW OF THE LITERATURE

Deprivation and Importation Theory

To better understand why victimization is likely to occur in prison and who may experience it, and who may witness it, the prison experience is first discussed. Prison officials are tasked with ensuring the safety of offenders housed in correctional facilities. Victimization and misconduct in prisons, however, are not uncommon and may be the result of the prison environment. Researchers have argued that prison generates certain responses, including violence, that are influenced by individual characteristics and experiences in prison (Clemmer, 1940; Irwin & Cressey, 1962; Sykes, 1958). Clemmer (1940) explained that inmates are socialized into the prison subculture through prisonization, the process by which prisoners absorb and integrate the conventions, practices, and culture of the prison. The inmate subculture consists of traditions, norms, languages, customs, beliefs, and roles of inmates (Irwin & Cressey, 1962).

Prisonization appears to be a way by which individuals adapt to the prison environment. Prison is known to be a depriving institution, one in which inmates attempt to adapt to the strain of institutional life. According to the deprivation model, inmate behavior, including misconduct, is an adaptation to institutional life (Sykes, 1958). Clemmer (1940) posited that inmates are first stripped of their status as a member of society and relegated to anonymous figures who learn to adapt to institutional life. Once offenders enter prisons, they are stripped of certain comforts (Sykes, 1958). They are no longer free and are instead subject to the correctional facility's rules. Prisoners forfeit

their autonomy, a sense of total safety and security, personal identities, access to material goods and services, privacy, heterosexual relationships, unrestricted interaction with family and friends, and many other general comforts of life (Sykes, 1958). Inmates attempt to compensate for the feelings of powerlessness and the loss of liberties through behaviors such as rule violation and violence (Guenther, 1978). These losses of liberties are known as the pains of imprisonment (Sykes, 1958). Previous studies have shown that low levels of perceived personal control or autonomy are related to prison misconduct and psychological outcomes such as feelings of helplessness, depression, and anxiety (Goodstein, KacKenzie, & Shotland, 1984; Ruback, Carr, & Hopper, 1986; Wright, 1991).

Sykes (1958) posits that the pains of imprisonment "generate an enormous pressure which is translated into behavior with all the greater vigor because… the body of prisoners is limited in modes of adaptation" (p. 79). Following Sykes' (1958) assertion, tests of the deprivation model generally examine the ways in which individual characteristics and prison experiences influence inmate victimization and misconduct (e.g. prisonization, prison crowding, and time served).

Irwin and Cressey (1962) suggested that the deprivation model missed an important element that influences adaptation to imprisonment. They argued that Sykes (1958) ignored the fact that inmates bring values and identities with them into a facility. The prison subculture is presumed to consist of the same value system that inmates possess outside of prison. That is, Irwin and Cressey (1962) developed an "importation" model to explain how offenders shape prison culture. The importation model views inmate organization and conduct as a reflection of the values and behavioral repertories

that offenders bring with them into the prison (Irwin & Cressey, 1962). Inmates are presumed to bring attitudes and behaviors with them that they attempt to utilize in prisons as they adapt to prison life (McCorkle, 1992). It is possible that the importation model may explain violence and victimization in prison.

Measures of the importation model include pre-prison influences (e.g. age, education, employment, and involvement in criminality). In general, research shows that the importation model may explain the likelihood of having serious infractions in prison (Cao et al. 1997). More specifically, individual characteristics of the inmates (e.g. age and sex) have significant effects on severe rule violations. Research shows that age is a predictor of inmate violations and victimization, with younger inmates being most likely to engage in misconduct, to have more frequent violations, to use violence (Cao et al., 1997; DeLisi, Berg & Hochstetler, 2004; Hochstetler & DeLisi, 2005), and to report victimization (Innes, 1997; Lahm, 2009; McCorkle, 1992). Other predictors of victimization are sex (Perez et al, 2010; Wolff, Blitz, Shi, Siegel & Bachman, 2007), race (Gendreau, Goggin & Law, 1997; Lahm, 2009; Wolff et al., 2007; Wooldredge, 1998), criminal history (Gendreau et al, 1997; Wooldredge, 1998), education (Lahm, 2009; Wolff, Shi & Siegel, 2009; Wooldredge, 1998), sentence length (Hensley, Tewksbury & Castle, 2003; Gendreau et al., 1997; Lahm, 2009), and mental health (James & Glaze, 2006; Wolff et al., 2009). Dhami, Ayton and Loewenstein (2007) found direct effects of quality of life before prison on inmates' adaptation to prison life (e.g. participation in programs, feelings and misconduct), thus providing support for the importation model's hypothesis that those factors of the inmates' life prior to prison influence adaptation.

Thomas (1977) included post-prison expectations as a measure of the importation model and found that it was a significant predictor of prisonization and opposition to the prison staff. Likewise, Lahm (2009) found that post-prison expectations affected inmate behavior, particularly assaultive behavior. For those whose expectations were negative, assaulting a staff member increased as the end of the inmate's sentence neared. It is possible that rather than facing the harsh reality outside of prison, inmates engage in violent behavior against the staff as a way to increase their prison sentence.

Support for both the importation and deprivation models has led researchers to form an integrated model to explain inmate adaptation and behavior. Researchers have examined the interactive effects of the deprivation and importation models (Hochstetler & DeLisi, 2005; Lahm, 2009; Thomas, 1977; Toch, 1977). This model incorporates how the life of the person before prison and his/her individual characteristics along with his/her responses to deprivations help shape his/her experience in prison. Lahm (2008) concluded that age and aggressiveness were robust predictors of inmate-on-inmate assaults across all types of prison contexts, thereby supporting importation theory. The finding that the percentage of non-White prisoners predicted violence among individual prisoners suggests that the prison context affects individual behavior, which supports deprivation theory (Lahm, 2009).

Overall, while the deprivation model has merit for understanding victimization, studies have also found support for the importation model as a predictor of victimization as well. The research shows that although prison-specific factors are important, other influences that are not directly related to the prison environment also have an effect on victimization. In general, there is some support for the relative explanatory power of both

models (Cao, Zhao, & Van Dine, 1997; Hochstetler & DeLisi, 2005; Innes, 1997; McCorkle et al., 1995; Thomas, 1977). Rather than focusing on either the deprivation or importation model, research should examine the effects of both prison and extra-prison factors (i.e. integrated model) on victimization. Clearly these influences are not acting alone and attention to only one model as a means of explaining prison adaption prevents researchers from a more complete understanding of inmates' well-being and behavior.

Importance of importation and deprivation theory. As noted, many institutional and individual-level factors attributed to deprivation and importation theory have been shown to predict physical and sexual victimization. Although age, race, marital status, education, prior prison experience, mental illness, level of security of a correctional facility and involvement in unstructured activities predict experiencing victimization, and possibly witnessing victimization while incarcerated, these factors may also predict who will be likely to have negative post-release outcomes. In order to account for these factors in multivariate models to prevent spuriousness, these factors must be taken into account.

Another focus of this study is to identify the characteristics of the individuals who witness victimization. This literature will serve as a guide and point of comparison for identifying those individuals who witness victimization.

Victimization in prison

Extent of victimization. Despite prisons' charge to protect inmates, victimization in prison still occurs, likely because inmates are importing with them characteristics that lead to victimization and because of the depriving environment of the prison. In attempting to determine the extent to which inmates are victimized, Wooldredge (1998)

found that 48 percent of the 581 respondents from three Ohio correctional facilities reported experiencing either physical or property victimization. In a study of 6,964 male inmates from 12 prisons in a single state, Wolff et al., (2009) found that approximately 35 percent of the males experienced physical victimization during a 6-month period. Similarly, Perez et al. (2010), in their study of 247 inmates, found that 32 percent reported experiencing victimization within the past year. Other estimates of physical victimization range from 36 percent (Copes, Higgins, Tewksbury, & Dabney, 2011) to 66 percent (Wolff & Shi, 2009). Taken together, the research demonstrates that victimization in prison commonly occurs.

Predictors of victimization.

Deprivation theory. From the deprivation perspective, the prison environment and experience may play a role in predicting victimization. In support of this perspective, Wooldredge (1998) found that more visitation and having fewer job hours predicted personal victimization (e.g. inmate-to-inmate assault). Involvement in unstructured activities decreases the level of guardianship provided by correctional officers while increasing exposure to potential offenders, and thus the likelihood of personal victimization (Wooldredge, 1994). In contrast, participation in structured activities predicted property victimization (Perez et al., 2010; Wooldredge, 1998). Engaging in structured activities, such as educational programs, recreation, and working, results in long periods of time away from one's personal belongings.

The security level of the correctional facility as well as sentence length are other predictors of victimization. Inmates in high-security facilities have higher rates of victimization (Perez et al., 2010). High-security facilities house inmates with other

individuals who have a higher propensity for crime, thus resulting in an increase in the level of victimization (Camp et al., 2003). Some research shows that sentence length is positively correlated with victimization (Perez et al, 2010; Wooldredge, 1998). The longer inmates spend in prison, the more they are exposed to potential offenders.

Research also shows that levels of control/autonomy are related to negative outcomes in prison (Goodstein, MacKenzie & Shotland, 1984; Ruback, Carr, & Hopper, 1986). Goodstein et al. (1984) described the three components of personal control: outcome control or the ability to make things happen, the opportunity to make a choice, and predictability of future events. Prison severely limits the personal control of individuals. The highly structured environment of prison limits the amount of personal control inmates possess. Disruptive behavior results from the frustrations inmates experience from the lack of privacy, control and freedom (Wright, 1993). Perceived control is associated with overall well-being. Individuals who have more perceived control report less stress (Ruback et al., 1986). In addition, the more personal control an inmate has, the more successful prison adjustment will be (Ruback et al., 1986; Wright, 1993). It is possible that the inability to prevent victimization is viewed as a lack of personal control and may result in destructive behavioral changes as individuals attempt to prevent future incidents (Maguire, 2005). For victims, this lack of control may lead to psychological consequences, such as aggression or paranoia (Maguire, 2005).

Finally, researchers have examined the role religion plays for prisoners. In general, inmates who participated in religious programs were no different than those who did not participate on institutional adjustment or recidivism (Johnson, Larson, & Pitts, 1997). However, Johnson et al (1997) found that high participation in bible study was

related to lower rates of prison infractions and rearrests in the community. Thomas and Zaitzow (2006) suggest that spirituality is one way in which prisoners cope with the isolation that results from the controlling and depriving nature of prison. Thomas and Zaitzow (2006) posit that increased prison adjustment, measured by the reduction of prison infractions (Johnson et al., 1997) may result from involvement in religion. Participation in religion may also decrease the chances of victimization as individuals spend more time involved in religious programs (e.g. bible study). Religion may also be a way in which victims in prison cope.

Importation Theory. The extant research has also examined the factors that predict physical and property victimization in prisons from an importation perspective. Age is one of the strongest correlates of victimization in prison (McCorkle, 1992; Wolff et al., 2009; Wooldredge, 1994, 1998). The rate of victimization is generally higher for younger inmates (MacKenzie, 1987; Wolff et al., 2009; Wooldredge, 1994, 1998). McCorkle (1992) found that although older inmates report engaging in avoidance behavior to prevent victimization; younger inmates tend to engage in aggressive precautionary behavior, often using violence as a means of establishing a "tough" reputation and preventing victimization.

Sex is also a predictor of victimization. Male inmates report higher rates of victimization than their female counterparts (Perez et al., 2010). In particular, males report higher levels of staff-on-inmate victimization. Male inmates engage in significantly more violence, disruption, and misconduct than female inmates (Harer & Langan, 2001). As a result, it is possible that staff-perpetrated assaults are a response to the disruptive and aggressive behavior of male inmates.

Research on the relationship between race and victimization is mixed (Hensley, Koscheski, & Tewksbury, 2005; Lahm, 2009; Wolff, Blitz, Shi, Siegel, & Bachman, 2007, Wooldredge, 1998). Some studies found that non-Whites are less victimized than other inmates, with higher rates of inmate-on-inmate victimization among Whites and Hispanics (Lahm, 2009; Wolff et al., 2009). In a study of a southwestern correctional facility, Wooldredge (1994) found that Mexican Americans were more likely to be victims. Similarly, Perez et al. (2010) found that non-Whites reported significantly higher rates of victimization, particularly of staff-perpetrated victimization.

The differences in the findings may be a result of the racial composition of the facilities sampled. For both Wooldredge (1994) and Perez et al. (2009), the majority of the sample was non-White. However, in Lahm's (2009) study only 44 percent of the sample were non-White and the findings show that Whites were more likely to be victims. Wooldredge (1994) suggests that crime in prison may be intra-ethnic and intra-racial, which appears to be supported to some degree by both his and Perez et al.'s (2009) studies. Therefore, it is possible that non-Whites are at greater risk when a larger proportion of the facility's population is non-White, whereas Whites may be at greater risk when there is a greater proportion of White inmates.

In addition to the demographic characteristics that are linked to risk of victimization, certain physical and psychological characteristics increase the vulnerability of inmates, thereby increasing their odds of victimization. Research shows that 'vulnerable' populations have higher rates of victimization than the general prison population. Individuals with mental illnesses are 'vulnerable' to victimization in prison (Austin, Fabelo, Gunter, & McGinnis, 2006; Blitz & Shi, 2008). Both male and female

inmates with mental disorders reported higher levels of victimization than inmates without mental disorders (Blitz and Shi, 2008). Austin et al. (2006) also found that the mentally ill reported higher rates of victimization than any other group. Physical characteristics, such as small stature or feminine features, also increase the likelihood of victimization (Chonco, 1989; Tewksbury, 1989). Inmates in these vulnerable populations may be targeted because it is easier to manipulate and exert control over them.

These findings suggest that at least to some extent, the importation model is supported, implying that characteristics brought into the prisons by the inmates, in conjunction with the depriving prison environment, plays a significant role in predicting institutional victimization (Lahm, 2008).

Prison Sexual Victimization

Extent of sexual victimization. In addition to victimization in general, a specific type of victimization that inmates are at risk of experiencing is sexual victimization. In 2003, the U.S. Congress passed the Prison Rape Elimination Act (PREA) in order to study and better understand the extent of sexual victimization in prisons. The purpose of PREA is to identify, prevent, prosecute and respond to sexual victimization in correctional facilities (Dumond & Dumond, 2007). It mandates a zero-tolerance policy for sexual assault in prisons and requires a comprehensive collection of national data on sexual victimization within prisons. As a result of this legislation being adopted, national estimates of the extent of sexual assault in our nation's prisons were for the first time able to be determined.

According to a national study conducted from April to August of 2007 as a result of the mandates of PREA, an estimated 4.5 percent (60,500) of the nation's prisoners

have experienced one or more incidents of sexual victimization (Beck & Harrison, 2007). Using smaller samples, for example, other estimates of the extent of sexual victimization have also been produced. Hensley, Tewksbury and Castle (2003) reported that 14 percent of inmates experienced sexual victimization in their study of Oklahoma prisons. Other estimates include 18.3 percent of inmates reporting sexual assault in a maximum security Southern correctional facility (Hensley, Koscheski, & Tewksbury, 2005), and 22 percent experiencing sexual assault in Nebraska's male prisons (Struckman-Johnson, Struckman-Johnson, Rucker, Bumby & Donaldson, 1996). Other estimates range from approximately 5 percent (Krienert & Fleisher, 2005) to 8 percent of inmates experiencing sexual victimization (Struckman-Johnson & Struckman-Johnson, 2002). It is possible that the difference in the victimization rate is due to the sample sizes of the various studies that ranged from 200 (Wooden & Parker, 1982) to 1,788 (Struckman-Johnson & Struckman-Johnson, 2000).

Research has found that nonconsensual sexual activity within the prisons appear to fall into two types (Beck & Harrison, 2007; Wolff & Shi, 2011). Of the two types, abusive sexual contact, defined as unwanted or unwilling sexual contact with another inmate or staff that includes touching of an inmates' butt, thighs, penis, breast, or vagina in a sexual way, is the most frequently reported type of sexual victimization for both males and females (Beck & Harrison, 2007; Wolff & Shi, 2011). The second type of sexual activity is sexual assault, which includes rape, and is less frequently reported by inmates (Wolff & Shi, 2011). In their study of 7,528 inmates, Wolff and Shi (2011) found that threatening to touch another person's genitals was the most frequently reported, with male inmates reporting higher rates than females. For female inmates, abusive sexual

contact was most frequently reported for both inmate-on-inmate and staff-on-inmate sexual victimization.

Risk Factors of Prison Sexual Victimization. The theoretical explanations (importation and deprivation) of prison victimization can be applied to sexual victimization in prison. The first theoretical explanation, the importation model, suggests that offenders enter prison with certain characteristics that would make them vulnerable to sexual victimization.

Individual-level variables (e.g. sex, race, sexual orientation, physical characteristics, and age) have been used to test the importation model to explain prison sexual victimization (Cao et al., 1997; Hochstetler & DeLisi, 2005). Individual-level factors have been found to increase inmates' risk of sexual victimization in prison. (Hensley et al., 2005; Hensley et al., 2003a; Knowles, 1999; Perez, Gover, Tennyson, & Santos, 2010; Struckman-Johnson & Struckman-Johnson, 2006; Wolff & Shi, 2011). Male inmates were found to have a higher rate of sexual victimization than female inmates (Hensley et al., 2005; Perez et al., 2010; Struckman-Johnson & Struckman-Johnson, 2006). Age and marital status of inmates were also predictors of sexual victimization. Younger inmates were at greater risk of sexual victimization than older inmates (Hensley et al., 2005; Knowles, 1999). Respondents who reported sexual victimization also were more likely to report being single prior to incarceration than other marital statuses (Hensley et al., 2003).

Research has also focused on the race of prisoner. Although some studies show that victims are more often White (Hensley et al., 2003, 2005; Struckman-Johnson & Struckman-Johnson, 2006), other studies show that Black inmates make up a larger

proportion of victims (Perez et al., 2010). Perez et al. (2010) found that non-White inmates were at great risk of staff-perpetrated victimization. The authors suggest that it may be that staff members have a greater bias towards non-White inmates that results in harsher treatment (Perez et al., 2010).

Aside from race, sexual orientation of the victim is an important predictor of victimization. Although some victims identify as heterosexual, homosexual and bisexual inmates make up a large portion of those targeted in male prisons (Davies, 2002; Fowler et al., 2010; Hensley et al, 2005; Man & Cronan, 2001; McGuire, 2005; Struckman-Johnson & Struckman-Johnson, 2006). Hensley et al. (2005) asserts "in a hyper-masculine environment of prison, an identity other than fully heterosexual is perceived as a sign of femininity and weakness" (Hensley et al., 2005, p. 667).

In addition to sexual orientation, physical size and vulnerability distinguishes victims from non-victims in prisons. Victims are more likely to be of small stature (Tewksbury, 1989), physically attractive and/or possess more feminine features (Chonco, 1989). Individuals with mental disorders (Blitz, Wolff, & Shi, 2008) and transgendered inmates (Jenness, Maxson, Matsuda, & Sumner, 2007) are also more likely to be victims than inmates who are not transgendered and individuals without any mental disorders.

Other characteristics that have been explored are the type of offense for which individuals are incarcerated, the length of time served, and participation in programs. Those who reported having committed a crime against a person were more likely to be targets than inmates who committed other types of crime, such as property crimes (Hensley et al., 2005; Struckman-Johnson & Struckman-Johnson, 2006). In addition, research has also found that the longer a person has been in prison, the greater the risk of

sexual victimization perpetrated by other inmates (Perez et al., 2010). Finally, inmates who have a paid job assignment in the facility are less likely to be victims (Perez et al., 2010). These inmates have greater contact with the staff and may have a more positive rapport with them that reduces their risk of sexual victimization. In addition, the more time spent working, the less time is spent with other inmates, thereby decreasing the risk of inmate-on-inmate sexual victimization. Participation in structured activities (work programs and services) can protect inmates from victimization. These activities reduce the amount of time spent in one's cell, while increasing the time spent in the presence of capable guardians, such as correctional officers. The less exposure individuals have to other inmates, the less likely they will experience inmate-on-inmate victimization.

The second theory used to explain sexual victimization is the deprivation model. From the perspective of the deprivation model, sexual victimization occurs because of the depriving nature of the prison environment. Although most research on sexual victimization in prisons has focused on the individual-level characteristics that predict victimization, some studies have examined the institutional-level factors (i.e. deprivation model variables) that increase the risk of sexual victimization. The most commonly examined institutional characteristic is institutional security level. Inmates housed in maximum-security facilities are at greater risk of sexual victimization by staff members (Cooley, 1993; Hensley et al., 2003; Perez et al., 2010). Typically, individuals housed in high-security facilities are more serious offenders. As a result, they are subject to greater staff oversight that increases the opportunities for staff-on-inmate sexual victimization (Perez et al., 2010). Cooley (1993) found that inmates housed in maximum-security

facilities were more likely to experience victimization by staff than inmates housed in lower security facilities.

Inmates' perception of safety is also associated with victimization (Perez et al., 2009; Perez et al., 2010). Not surprising, inmates who reported greater levels of perceived safety also reported lower levels of victimizations. Given the association between fear of future victimization and past victimization, it follows that inmates who reported higher levels of victimization would also report lower levels of perceived safety in the institution.

Consequences of Victimization

The consequences of experiencing sexual victimization are "pervasive, devastating and global" (Dumond, 2003, p. 355). Experiencing sexual victimization is a life-changing event for victims because of its devastating, long-term impact. Victims often suffer physical, psychological, and health consequences. This section examines four types of consequences victims can experience as a result of sexual victimization: physical injury, behavioral changes, contraction of diseases, and psychological/emotional harm.

Physical consequences. The first consequence of sexual victimization is physical injury. Research suggests that sexual assaults of men in the community are generally more likely to be violent and are accompanied by injuries compared to the sexual assaults of women (Kimberling, Rellini, Kelly, Judson, & Learnman, 2002). The most common types of injuries are soft tissue injury and lacerations (Tewksbury, 2007). When compared to the perpetration of sexual assaults against females, perpetrators of male sexual assaults, both in the community and in prison, are also more likely to use a weapon or physically hold down the victim, thus increasing the likelihood of injury

(Kimberling et al., 2007; Struckman-Johnson & Struckman-Johnson, 2006; Weiss, 2010). It is possible that injuries are a result of the assailant trying to control male victims since it is likely easier to overpower females.

Kaufman, Divasto, Jackson, Voorhees and Christy (1980), using data collected from noninstitutionalized male victims who went to the hospital after being assaulted, found that male victims were more likely than female victims to report non-genital injuries. Yet, the authors concluded that male victims of sexual assault were less likely to seek medical attention unless they suffer considerable physical injuries (Kaufman et al., 1980).

Behavioral consequences. The second consequence is changes in the victims' behavior. For prisoners, anxiety and fear of re-victimization may result in behavioral changes, such as avoidance behavior. Behavioral changes are likely related to inmates' perceptions of safety. As mentioned above, victims of sexual assault report lower levels of perceived safety than non-victims (Perez et al., 2010). Fear of future victimization may result in self-guardianship behavior, including lashing out at others, in order to prevent further victimization (McGuire, 2005). Victims may become the aggressor in order to establish a reputation as a means of protection (McCorkle, 1992). Anxiety about re-victimization influences paranoia, thus victims may perceive that others are "out to get them" and they may act accordingly, regardless of whether this is true. Victims may also develop rage that manifests itself as aggression towards others in the prison and in the community upon release (Maguire, 2005).

Health consequences. A third consequence of sexual victimization is contracting diseases. As a whole, prisoners are not the healthiest group of people (Petersilia, 2003).

One potential problem of sexual victimization in prison is that both the victim and perpetrator of sexual assault may come into contact with diseases, such as HIV/AIDS, Hepatitis B and C, tuberculosis, and other transmittable pathogens (Knowles, 1999; McGuire, 2005; Robertson, 2003; Struckman-Johnson & Struckman-Johnson, 2006). According to the Bureau of Justice Statistics, approximately 2 percent (n = 21,987) of the total prison population was HIV positive or had confirmed AIDS at the end of 2008 (Maruschak & Beavers, 2009).

Macalino and colleagues (2004) found that 2 percent of male inmates in Rhode Island prisons were HIV positive, 20 percent had Hepatitis B, and 23 percent had Hepatitis C. Other estimates for Hepatitis C include 34 percent of 469 California prisoners (Fox et al., 2005) and 17 to 25 percent of all prison and jail inmates (Hammett, Harmon, & Rhodes, 2002). Hammett et al. (2002) also estimate that 0.04 percent of prison inmates and 0.17 percent of jail inmates were infected with tuberculosis. The risk of exposure to illness does not only affect prison inmates. When they contract illnesses, either prior to their incarceration or while incarcerated, they pose a serious risk to the community upon release or possibly through visitation (O'Donnell, 2004).

As previously mentioned, sexual victimization is prevalent in American prisons (McGuire, 2005; O'Donnell, 2004; Struckman-Johnson et al., 2006; Wolff et al., 2010). The high rates of sexually transmittable diseases combined with the occurrence of nonconsensual sex increases the probability of infection among inmates as well as prison staff (McGuire, 2005). The lack of availability of prophylactic or other protective measures means that both victims and perpetrators of sexual victimization are at risk of contracting a potentially debilitating or fatal illness (Dumond, 1992; McGuire, 2005;

Vetstein, 1997). The release of inmates each year has transformed the issue of prison sexual victimization from a prison problem to a public health issue (Robertson, 2003).

Emotional/psychological consequences. Fourth, experiencing sexual victimization can result in severe emotional/psychological consequences. There is no "typical' emotional/psychological response to rape or sexual assault, but responses can include depression (Burnam et al., 1988; Dumond, 1992; Fagan, Wennerstrom & Miller, 1996), substance abuse (Dumond, 1992; Scare, 1997), and even suicidal ideation (Dumond, 1992, 2000, Struckman-Johnson & Struckman-Johnson, 2000). Struckman-Johnson and Struckman-Johnson (2006) found that approximately 37 percent of male inmates, compared to 11 percent of females, who had experienced sexual victimization reported suicidal thoughts. As a result of sexual victimization, victims may experience the onset of depression, anxiety disorders and substance abuse (Tewksbury, 2007). Elliot, Mok, and Briere (2004) found that sexually assaulted men reported higher levels of distress than sexually assaulted women. The most common emotional response of men to sexual victimization is a sense of stigma, shame, and embarrassment (Tewksbury, 2007). Taken together, the research suggests that sexual assault in prisons may be particularly harmful to males.

Exposure to Violence and Witnessing Violence

Because so many inmates experience victimization, it is also possible that many witness at least one incident of victimization during their incarceration. Although the prison victimization literature has examined the extent and consequences of experiencing victimization, little is known about the extent to which prisoners witness victimization or

the characteristics of those who are exposed to victimization. In addition, the potential effects of exposure to violence have not been studied in prison literature.

Extent of exposure to violence and witnessing violence. Although the prison literature has not fully explored witnessing violence, two areas of literature – exposure to violence in the community and witnessing domestic violence in childhood – can be used as a backdrop to understanding witnessing victimization in prisons. National estimates on the prevalence of children who witness intimate partner violence are rare (Overlien, 2010). It has been estimated that approximately 3.3 million children nationwide are exposed to intimate partner violence (Carlson, 1984), with between 9 to 35 percent of persons witnessing this type of victimization during childhood (Feerick & Haugaard, 1999; Forsstrom-Cohen & Rosenbaum, 1985; Maker et al., 1998; Straus, 1992).

In their study of 617 women randomly selected from the voters' registration list in a New England city, Henning, Leitenberg, Coffey, Turner and Bennett (1996) found that 20 percent reported witnessing some form of physical violence as children. Similarly, Kulkarni, Graham-Bremann, Rauch and Seng (2011) stated that 20.6 percent of their sample reported witnessing intimate partner violence during childhood. Maker et al (1998) found a slightly higher rate of witnessing intimate partner violence during childhood, with 35.1 percent of his sample of college women reporting witnessing some form of physical violence. Despite the wide range of the prevalence estimates, the research shows that a significant number of people have been exposed to intimate partner violence during childhood.

The second body of literature focuses on exposure to violence in the community. Exposure to violence in the community is more common than witnessing violence in

households or directly experiencing violence. Richters and Martinez (1993) reported that over 90 percent of the 72 elementary school children sampled were exposed to violence in the community compared to the 30 to 50 percent who had directly experienced violence. Richters and Martinez's (1993) findings show that exposure to violence in the community may be more common than directly experiencing violence. Other estimates of violence exposure in the community range from 20 to 94 percent (Colber & Krause, 2009; Fitzpatrick & Boldizar, 1993; Margolin, Vickerman, Oliver, & Gordis, 2010; Sheidow, Gorman-Smith, Tolan, & Henry, 2001).

A survey of African American children and youth (ages 7-15) in Chicago revealed that 26 percent reported witnessing a shooting and 30 percent witnessed a stabbing during their lifetime (Bell & Jenkins, 1993). Similarly, Schwab-Stone and colleagues (1995) found that more than 40 percent of the 2,248 6^{th}, 8^{th}, and 10^{th} graders sampled reported witnessing a shooting or stabbing in the previous year. These two bodies of literature – exposure in the community and witnessing intimate partner violence – suggest that many individuals are exposed to violence at some point in their lifetime both in the home during childhood and in the community.

Risk factors for exposure to violence and witnessing violence. The most obvious risk factor for witnessing violence in the home is residing in a home in which intimate partner violence may be a frequent occurrence. Exposure to intimate partner violence increases the probability of children witnessing violence (Roberts, Gilman, Fitzmaurice, Decker & Koenen, 2010). Risk of witnessing intimate partner violence during childhood is related to the age of the child (Ybarra et al., 2007). Younger children may be at greater risk of witnessing violence in the home because they generally have

greater interaction with parents and do not have the larger social networks that their older counterparts (Ybarra et al., 2007).

Substance use is another risk factor associated with witnessing violence in childhood. Maker et al., (1998) found that in general, parental drug and alcohol use was associated with witnessing violence. Individuals in the severe violence group – defined as one parent kicking, hitting with a fist, or biting the other parent – reported higher levels of fathers' alcohol use (Maker et al., 1998). Similarly, there was no group difference in the drug use of the mothers, but there were higher levels of fathers' drug use reported. It is possible that drug and alcohol use may contribute to higher instances of intimate partner violence, which would account for the elevated rate of both drug and alcohol use by fathers, since perpetrators are more likely to be the male parent (Maker et al., 1998).

Where an individual lives predicts the odds of exposure to violence in the community. Individuals who reside in urban neighborhoods with higher rates of violent crime are at greater risk of witnessing violence than others (Richters & Martinez, 1993). The odds of being exposed to violence are dependent on the frequency of the occurrence of violent events in the community. Exposure to violence also appears to be tied to income. Findings show that there is a high degree of exposure among lower class youth (Buka, et al., 2001; Fitzpatrick & Boldizar, 1993; Richter & Martinez, 1993). Across most studies, the highest rates of exposure to violence were reported by respondents residing in lower income neighborhoods (Fitzpatrick & Boldizar, 1993; Gorman-Smith, Henry, & Tolan, 2004; Richter & Martinez, 1993).

There are also sex differences for exposure to violence. Exposure to community violence studies show that males are at greater risk of being victims and witnesses of

violence than females (Bradshaw, Ghandour, Rodgers, & Garbarino, 2009; Fitzpatrick & Boldizar, 1993).

Consequences of witnessing violence at home and exposure in the community. Whether an individual is exposed to violence in the home (i.e. witnessing IPV) or in the community, there are numerous deleterious consequences. Exposure to domestic violence during childhood has been found to have long-term negative consequences (Diamond & Muller, 2004; Maker et al., 1998; Spriggs et al., 2011). Witnessing violence during childhood is linked to emotional and behavioral consequences. Studies report higher levels of aggression, depression, anger, antisocial behavior and anxiety in individuals who witnessed violence compared to individuals who did not (Maker et al., 1998; Overlien, 2010).

Psychological/emotional consequences. It is well established that experiencing violence increases the risk of numerous mental health problems (e.g. depression, anxiety and posttraumatic stress disorder) (Colbert & Krause, 2009; Diamond & Muller, 2004; Maker et al., 1998). A growing body of research shows that individuals who witness or are exposed to violence, both at home and in the community, may also be at risk of mental health problems. Since witnessing violence has been widely recognized as a traumatic event (Bell & Jenkins, 1993; Sheidow et al., 2001), it follows that individuals who witness violence may suffer from some of the same consequences as those who experience other traumatic, violent acts.

Witnessing/exposure to violence affects psychological well-being of both children and adults. Adamson and Thompson (1998) found children exposed to intimate partner violence were more likely to respond to conflict using aggression. Children with a history

of violence exposure reacted with greater emotional intensity, and boys exposed to violence in particular were likely to respond with greater intensity of anger (Adamson & Thompson, 1998). Frequency of exposure to martial violence is also linked to the severity of PTSD symptoms (Rossman, 2000). In one study examining coercion in prison (includes direct and witnessed victimization), Listwan et al. (2010) found coercion to be negatively associated with posttraumatic cognition and symptoms, as well as traumatic symptoms. This finding indicates that exposure to victimization or directly experiencing victimization negatively affects the psychological well-being of individuals in prison in ways that are similar to exposure to violence in the home or the community.

Exposure to violence is linked to depression, and substance abuse (Colbert & Krause, 2009; Martinez & Richters, 1993), posttraumatic stress disorder (Buka et al., 2001; Fitzpatrick & Boldizar, 1993; Martinez & Richters, 1993), and anxiety (Gaylord-Harden et al, 2011). Schwab-Stone et al. (1995) found that 74 percent of the 2,248 youth surveyed reported feeling unsafe as a result of witnessing violence in the community. Bradshaw and colleagues' (2009) findings suggest that even low levels of violence exposure increases aggressive behavior at school. Exposure to violence may also be linked to PTSD symptomology. Fitzpatrick and Boldizar (1993) found that a significant proportion of the 221 African-American youth surveyed who witnessed violence reported irritability, difficulty sleeping, hyper vigilance, and nightmares.

Behavioral consequences of exposure to violence. Exposure to violence is also associated with increased levels of aggressive behavior (Buka et al., 2001; Margolin et al., 2010). Evidence suggests that exposure to severe community violence and witnessing intimate partner violence is associated with perpetration and victimization. Exposure to

community violence is significantly related to violence perpetration (Bell & Jenkins, 1991; Gorman-Smith et al., 2004). For example, Maker et al. (1998) found that witnesses of severe violence were more likely to be the perpetrator of violent behavior against their partners compared to non-witnesses and witnesses of moderate violence. Studies have found that individuals who witness intimate partner violence experience greater violence in their dating relationships. Witnesses of severe violence experienced more violence in their dating relationship than those who witnessed only moderate levels of violence (Maker et al., 1998).

Consequences of witnessing psychological abuse. Although research shows deleterious effects of witnessing physical violence, this is not the only type of violence that results in negative outcomes for individuals. Diamond and Muller (2004) have examined the differences in the effects of witnessing psychological abuse in comparison to witnessing physical abuse. They found that witnessing either physical or psychological abuse during childhood was significantly related to higher levels of psychopathology (Diamond & Muller, 2004). This finding suggests that witnessing nonphysical interpersonal aggression may have harmful negative effects similar to the effects of witnessing physical violence.

Factors that condition witnessing and exposure to violence. In addition to the factors that predict witnessing/exposure to violence, there may be factors that influence the extent to which and the ways in which witnessing victimization carries negative consequences. Cummings and colleagues (1984) found that younger children display more intense externalizing and internalizing behavioral responses than school-age children. The research suggests that younger children may experience greater distress

from witnessing parental violence because they do not possess the cognitive skills needed to cope with the effects of witnessing parental conflict (Adamson & Thompson, 1998; Fantuzzo, Boruch, Beriama, Atkins, & Marcus, 1997).

Studies examining both males and females show that there are some gender differences in effects. The gender of the child and the perpetrator differentially affect the consequences of witnessing violence in general (Colbert & Krause, 2009; Diamond & Muller, 2004; Fitzpatrick & Boldizar, 1993). Diamond and Muller (2004) reported that intimate partner violence perpetrated by fathers predicted PTSD and internalizing behavior, whereas intimate partner violence perpetrated by mothers predicted symptoms of externalizing behavior. For males only, long-term psychopathology was predicted by witnessing domestic violence even after controlling for psychological abuse (Diamond & Muller, 2004).

Although most of the exposure literature focuses primarily on children, there is evidence showing that exposure to violence in the community may potentially influence individuals in later life. Colbert and Krause (2009) used a national sample of retired individuals over the age of 65 from the Center for Medicare and Medicaid beneficiary list to examine whether exposure to violence affected individuals in all age ranges. Witnessing violence early in life was associated with depressive and somatic symptoms for both males and females, although the effects appear to be greater for women (Colbert & Krause, 2009). In contrast, males who witnessed a violent act at any time in their lifetime were more likely to consume alcohol in later life compared to women (Colbert & Krause, 2009).

There are numerous negative consequences associated with witnessing violence. Individuals may experience long-term consequences such as depression, antisocial behavior, PTSD, and aggression. In addition, witnessing and exposure to violence have been linked to future victimization and perpetration of violence, particularly intimate partner violence. The literature on prison victimization demonstrates that there appear to be similar effects for individuals who are victimized while incarcerated. As previously stated, individuals who are victimized in prison reported experiencing physical injury, as well as depression, aggression and anxiety (Dumond, 1992; McGuire, 2005; Struckman-Johnson & Struckman-Johnson, 2006; Wolff et al., 2009). Taken together, it appears that regardless of whether an individual is exposed to violence in the home, community, or prison, the long-term deleterious consequences may be similar.

Little is known, however, about the potential protective factors that may decrease exposure to or witnessing violence for those who are at increased risk. As Richters and Martinez (1993) asserted, some individuals are at risk simply because of the neighborhood in which they reside; yet not all individuals are exposed to violence. This finding may be useful in understanding why some individuals are exposed to victimization in prison.

Further, the extent to which inmates are exposed to violence while incarcerated has not been determined. It is important to investigate the extent to which prisoners are witnessing victimization. Similar to the importance of understanding the impacts that experiencing victimization has on reentry, it is important to understand the consequences of witnessing victimization. Research on witnessing violence in general suggests that it may have some of the same deleterious consequences as being directly victimized

(Feerick & Haugaard, 1999; Kulkarni, Graham-Bremann, Rauch, & Seng, 2011). As such, inmates who are exposed to violence may be less successful after leaving prison than inmates who have not witnessed violence.

General Strain Theory and witnessing victimization

Witnessing violence in prison may lead to negative outcomes for inmates after release, because it is a strain. One explanation for the link between this type of strain and negative outcomes can be found in general strain theory (GST). General strain theory focuses on the micro-level explanations for crime and delinquency by examining the individual's personal experience with various types of strain: (1) failure to achieve positively valued goals, (2) the removal of positively valued stimuli, and (3) the presentation of negative stimuli.

According to Agnew (1992), strain can cause negative emotional reactions, such as anger, anxiety, disappointment, depression, and fear. Anger, however, is the most widely studied because it increases the chances of delinquency and crime because it increases the level of perceived injury, creates a desire for revenge, energizes the individual to engage in corrective behavior, and lowers inhibition (Agnew, 1992, pp. 59-60). Anger can help an individual justify their criminal actions (Blevins, Listwan, Cullen, & Jonson, 2010). These negative emotions create pressure to engage in corrective behavior, with delinquency and crime being a possible response, and using other coping strategies to alleviate strain (Agnew, 2002). General strain theory recognizes that strain does not lead ineluctably to crime and delinquency (Blevins et al., 2010). There are a variety of responses to strain, including cognitive, behavioral, and emotional coping. Agnew (1992, p.66) identified three cognitive coping strategies that enable an individual

to rationalize the stressor. The first is to minimize the importance of the strain by placing less importance on the particular goal. Second, the individual can maximize the positive while minimizing the negative outcomes as a way to ignore that there was a negative event. Finally, an individual may accept the negative outcomes as fair. Behavioral coping strategies include actively seeking out positive stimuli (e.g. social support, religion) or trying to escape negative stimuli, which may involve seeking out revenge in a nondelinquent manner. Finally, emotional coping strategies involve "individuals… acting directly on the negative emotions that result from adversity" (Agnew, 1992, p. 69).

Coping strategies vary greatly by individual-level factors. Prisoners prefer coping strategies that emphasize self-reliance and personal autonomy (Adam, 1992). Individuals with poor coping skills lack the ability to respond to strain in a prosocial manner, and thus resort to delinquency (e.g. violence or substance use) as a way to alleviate the pressures of strain (Hoffmann & Su, 1997; Mazerollle, Burton, Cullen, Evans, & Payne, 2000),

Agnew's (1992) original presentation of GST focused solely on experienced strain. In his later work, he examined vicarious and anticipated strain involving physical victimization (Agnew, 2002). Anticipated strain refers to an individual's expectation that his/her current strain will continue or that s/he will experience new strains in the future (Agnew, 2002). Vicarious strain refers to "the real-life strains experienced by others around the individual" (Agnew, 2002, p. 603). Following Agnew's (2002) premise, witnessing victimization while incarcerated is a source of vicarious strain.

As previously mentioned, some consequences of both experiencing victimization and witnessing violence in the community are depression, anxiety, aggression, and

posttraumatic stress disorder. Witnessing victimization in prison may be possible given the close proximity of the prisoners. Agnew (2002) argued that the perceived magnitude and threat of the strains that are directly witnessed or heard by an individual should be more pronounced, given their proximity to the individual directly experiencing the strain. Based on the research on GST, it is possible that strain caused by witnessing victimization is likely to lead to adverse effects, such as depression, anxiety, and anger, which could result in negative post-release outcomes. Substance use, arrest, parole violations, and readmittance to prison are likely to result from individuals attempting to alleviate the pressure brought on by vicarious strain (i.e. witnessing victimization while incarcerated). Vicarious strain may also cause individuals to fear that they will experience harm in the future, resulting in engagement in delinquent behavior (e.g., crime, substance use) as a way of preventing anticipated strain. Crime is also a way in which individuals attempt to alleviate the negative emotions caused by vicarious strain.

Offender Reentry

Most incarcerated offenders, at least 95 percent, do eventually return to the community (Hughes & Wilson, 2002). Among the prisoners who are released are those who have been exposed to violence. Each year approximately 600,000 offenders are released from prison (Hughes & Wilson, 2002; Petersilia, 2003; Travis & Petersilia, 2001). Individuals released from prison are mostly males who are on average thirty-four years of age with an eleventh-grade education level (Travis & Petersilia, 2001). Minorities, particularly Blacks, make up a large proportion of this population (Clear, Rose & Ryder, 2001). Many offenders returning to the community have been convicted of public order, drug and property offenses (Petersilia, 2003).

An aspect of reentry that has garnered much attention is recidivism (i.e. reoffending). The assumption that prisoners being released are a threat to public safety has fueled much research on recidivism (Austin & Hardyman, 2004; Hughes & Wilson, 2002; Langan & Levin, 2002; Petersilia, 2003). In 1994, the Bureau of Justice Statistics conducted the most comprehensive national-level recidivism study to date (Langan & Levin, 2002). In this study, rearrest, reconviction, and reincarceration of 272,111 prisoners in 15 states over the course of 3 years were examined (Langan & Levin, 2002). It was found that over two-thirds (67.5 percent) of released prisoners were rearrested for a new offense. In addition, 46.9 percent were reconvicted and 25.4 percent were resentenced to prison for a new crime (Langan & Levin, 2002). The risk of reoffending was the highest in the first year (Langan & Levin, 2002; Mears & Mestre, 2012). Within the first six months of release, 29.9 percent of the sample had been rearrested for a felony or serious misdemeanor. Within the first year, the total rearrested grew to 44.1 percent and 59.2 percent within the second year (Langan & Levin, 2002). Younger, Black, male inmates, and those with longer criminal records (i.e. five or more prior arrests) were more likely to be rearrested than other inmates after they are released (Langan & Levin, 2002; Lin, Grattet, & Petersilia, 2010; Petersilia, 2003). Despite the assumption that ex-prisoners contribute significantly to crimes, parolees were only responsible for approximately 5 percent of all serious crime arrests (Langan & Levin, 2002).

In addition to the risk of reoffending, offenders face other obstacles once released from prison. As previously stated, the prison population as a whole is not the healthiest. The offender population has higher rates of physical and mental illnesses as well as illiteracy, compared to the general population (Petersilia, 2003). The rates of

communicable disease among inmates, including sexually transmitted diseases, are much higher than those of the general population (McGuire, 2005; Robertson, 2003; Petersilia, 2003). Deinstitutionalization has resulted in the increased criminalization of persons with mental illnesses (Petersilia, 2003). Individuals suffer from mental illnesses that range from depression to anxiety and psychotic disorders that can hinder successful reentry (Gunnison & Helfgott, 2011). Higher rates of substance abuse are also prevalent among this population, compared to rates in the general population (Fazel, Bains & Doll, 2006; James & Glaze, 2006). Substance abuse problems and mental illnesses often co-occur and an estimated 13 percent of the prison population has both a substance abuse and a mental health problem (Petersilia, 2003).

Upon release, these individuals face numerous challenges that hinder successful reintegration into society. Ex-prisoners face legal barriers that restrict the type of jobs they can obtain and their access to public welfare and housing subsidies (Petersilia, 2003). Consequently, the opportunity to obtain legitimate employment is hampered by legal restrictions and educational limitations. The loss of social standing and the stigmatization associated with being incarcerated also impact reentry and individuals' ability to obtain employment and housing. Despite their desire to succeed, offending often becomes the only available means with which to survive.

Massoglia and Warner (2011) argue that successful integration begins before the individual is released into the community. As the prison population has grown, however, the resources available for rehabilitation programs has not, resulting in limited funds dedicated to providing programs for inmates. Similarly, post-prison supervision has shifted from an assistance model towards a surveillance and control model that places

less emphasis on assisting and supporting individuals with successful integration (Massoglia & Warner, 2011; Petersilia, 2003). The implication of this shift toward surveillance and control is that parole agencies no longer provide services geared toward aiding in successful reentry (Petersilia, 2003). Inmates are essentially alone as they attempt to wade through the legal, social, psychological and physical barriers they face.

The offender population already has a variety of problems that may affect their ability to engage in socially approved activities (e.g. going to school or obtaining legitimate employment); however, little is known about the possible effects exposure to violence may have on prisoners who are released. The literature on witnessing intimate partner violence shows that there are significant long-term effects (Cummings, Zahn-Waxler & Radke-Yarrow, 1984; Diamond & Muller, 2004; Feerick & Haugaard, 1999; Kulkarni Graham-Bremann, Rauch & Seng, 2011). Adults who witnessed violence during their childhood report experiencing depression, aggression, posttraumatic stress disorder, and antisocial behavior.

The deleterious consequences of witnessing victimization, especially sexual victimization, while incarcerated may negatively impact ex-prisoners' reentry into the community. Understanding the effects of witnessing institutional violence may provide better insight into the challenges that offenders face and what services are needed both within correctional institutions and in the community to combat the problem.

Given the importance of studying witnessing victimization in prison, this study will examine the extent to which individuals witness victimization in prison the effects of witnessing victimization on post-prison outcomes using the Prison Experience and Reentry study conducted in 2006 to answer the following research questions:

1. What is the extent to which individuals witness victimization, including sexual victimization, while incarcerated?
2. What are the effects of witnessing victimization while incarcerated on criminal justice outcomes?
3. What are the effects of witnessing victimization on mental health?
4. What are the effects of witnessing victimization on substance abuse and employment?

Hypotheses

This study was designed to examine the extent to which ex-prisoners witnessed victimization while incarcerated and the effects witnessing victimization has on individual post-release outcomes. In order to investigate the link between witnessing victimization while incarcerated and individual criminal justice outcomes the following hypotheses were developed:

1. Given the prevalence of violence and victimization in prisons, a significant percentage of parolees will report witnessing at least one type of victimization.
2. Witnessing any type of victimization will be related to negative post-release outcomes.
3. It is expected that individuals who witnessed any type of victimization during incarcerated will have greater posttraumatic cognitions and trauma symptoms.
4. Witnessing sexual victimization, emotional victimization, and fighting should have a greater influence on post-release outcomes than witnessing stealing.
5. Witnessing sexual victimization will be related to negative post-release outcomes compared to witnessing physical and psychological victimization or not witnessing any victimization.

CHAPTER III: METHODS

Data

The data for this research come from the Prison Experience and Reentry study conducted in 2006 (Listwan et al., 2012). Data were gathered in two stages. The first stage included a face-to-face interview of former Ohio inmates residing in halfway houses during 2006 and 2007. In the interview, respondents were given four questionnaires to measure emotional well-being, social support, and coping skills. The questionnaires also measured socio-demographic characteristics; perceptions of the prison environment; prison victimization; participation in work, treatment and religion in prison; and reentry expectations and supports available upon release. If a participant indicated that he had experienced any victimization, he completed an incident-level questionnaire. Two incident-level questionnaires were created to capture victimization incidents during the interview: one for witnessed incidents and one for direct/completed acts.

The second stage of data collection occurred between 2008 and 2009. It included a review of the participants' parole record, as well as halfway house and incarceration data. The participants' official records were examined to assess other community variables (e.g. employment, treatment exposure), and barriers to successful reentry (e.g. securing housing and/or the existence of supports). The data included adherence to release conditions (e.g. employment), behavior on supervision (e.g., technical violations/arrest), and treatment service delivery while in the halfway house. Finally,

recommitment to prison data were obtained through the Ohio Department of Rehabilitation and Corrections.

Sample

The sample includes adult males who were recently released from Ohio's Department of Rehabilitation and Corrections penal institutions. These men were labeled "transitional control" or "post release control". Transitional control refers to inmates who were sent to halfway houses to complete up to 180 days of their prison term. Transitional control programs provide the resources necessary for successful transition into the community, such as vocational training, treatment, and education (Listwan et al., 2012). Post-release control refers to individuals who receive a period of supervision after leaving prison. In Ohio, every sentence including a term of imprisonment must include a period of post-release control (Listwan et al., 2012).

Participants were recruited from halfway houses across the state of Ohio. The sample was derived through a four stage sampling design. In the first stage, using the previous year's halfway house census data, it was determined that approximately 2,811 individuals were placed in halfway houses across the state between July 2004 and June 2005 (Listwan et al., 2012).

The second stage included the selection of halfway houses. Of the 26 halfway houses located throughout the state, only 22 were included. Four of the halfway houses were excluded for several reasons: one only served women, another refused to participate, and two others were excluded due to the remoteness of the locations (Listwan et al., 2012). Using the 2004-2005 census data, the proportion of individuals who served time in each of the halfway house regions was determined. These proportions were used

to determine target sample sizes for each region. Target sample sizes were then derived for each region to obtain the desired sample of 1,650 participants (Listwan et al., 2012).

The third and fourth stages included obtaining a list of eligible participants from each halfway house based on released date and selecting participants. At the time there were 2,341 individuals who were eligible to participate. These individuals were contacted, but only 1,642 agreed to participate. Twenty-nine of the participants were interviewed twice, and were subsequently deleted, bringing the final sample size to 1,613.

Measures

Dependent Variables. The current study examines the impact witnessing victimization in prison has on prisoner reentry. The dependent variables used in this study include: arrest, parole violation, parole revocation, reincarceration, any negative criminal justice outcome, substance abuse, employment in the community, reentry expectations, posttraumatic cognitions, and trauma symptoms.

Arrest. To examine the impact of witnessing victimization on reoffending, a measure of arrest was created. Using a record check, arrest was measured in two ways, which included parole officer case notes and on-line record checks. If a participant had a non-traffic offense that occurred during the 2.5-year follow up period, the arrest variable was coded as 1. If no non-traffic offenses occurred, then the variable was coded as 0.

Parole violation. To examine parole outcome, a variable was created to measure whether respondents received a parole violation. Parole violation was coded as 1 for those who received a violation and 0 for those without a parole violation. Information on whether an individual had received a parole violation was collected using parole officer case notes and the Ohio Department of Rehabilitation and Corrections records.

Parole revocation. To examine parole completion status, a variable was created to measure whether respondents' parole was revoked. Parole revocation was coded as 1 for those whose parole was terminated and 0 for those whose parole was not terminated. Parole completion status information was obtained by reviewing parole officer case notes.

Reincarceration. A variable was created to measure whether respondents were re-incarcerated during the study period. Re-incarceration data were collected by the Ohio Department of Rehabilitation and Corrections. A person was coded as 1 if he had been re-incarcerated during the follow-up period and as 0 if he had not.

Any negative criminal justice outcome. A variable was created to measure whether a participant had received any negative criminal justice outcome. For this measure, a 1 was given if an individual had a 'yes' for at least one of the following: arrest, parole violations, or reincarceration. Those without an arrest, parole violation, or reincarceration were coded as 0.

Substance use. To examine current substance use, respondents were asked if they were currently using drugs and/or alcohol. Responses were coded 0 for 'no' and 1 for 'yes'.

Employment in the community. To examine employment status, respondents were asked whether they were currently employed at the time of the interview. Individuals who were not employed were coded as 0, and those who were employed were coded 1.

Reentry expectations. To measure expectations and future plans of individuals, respondents were asked several questions regarding what they expected or planned to do

once they left the halfway house. Questions included: “do you think it will be difficult for you to find a good place to live after you leave the halfway house”, “will someone pick you up from the halfway house when you get out”, and “do you think it will be difficult to pay your rent and other bills when you leave the halfway house”. The response set for “will someone pick you up was reverse coded so that responses were coded 0 for ‘yes’ and 1 for ‘no’. Responses for having difficulty paying bills and finding housing were coded as 0 for ‘no’ and 1 for ‘yes’. A new variable was then created to capture reentry expectations. The three original measures were combined and if the respondent responded 0 to all of the items they were coded as 0 and 1 (negative expectations) if they responded 1 for any of the items.

Posttraumatic cognition and trauma symptoms. The extant literature has demonstrated that witnessing violence results in adverse psychological consequences (Adamson & Thompson, 1998; Listwan et al., 2010; Rossman, 2000). To measure psychological outcomes related to trauma, a variable was created using the *Posttraumatic Cognitions Inventory* (Foa, Ehlers, Clark, Tolin, & Orsillo, 1999), a 36-item scale that measures “cognitions related to psychological trauma” (Listwan et al., 2010, p. 1146). Each item measures how much a respondent agrees or disagrees with the statement. Responses were coded as 1 for ‘totally disagree’, 2 for ‘disagree very much’, 3 for ‘disagree slightly’, 4 for ‘neutral’, 5 for ‘agree slightly’, 6 for ‘agree very much’, and 7 for ‘totally agree’. A scale was created by adding the responses together, with higher scores indicating greater psychological trauma. Scores ranged from 36 to 252 (see appendix A for individual items). The Cronbach’s Alpha reliability coefficient is .92 for the overall PTCI scale.

The second psychological outcome measure was created by using answers to the *Trauma Symptoms Checklist* (Briere & Runtz, 1989), "a 40-item scale that measures trauma symptoms, including anxiety, depression, disassociation, post-abuse trauma, sleep disturbances, and sexual problems" (Listwan et al., 2010, p. 1146). The checklist asks individuals to indicate how often they have experienced each symptom in the last two months. Responses were coded as 0 for 'never', 1 for 'rarely', 2 for 'sometimes', and 3 for 'often'. Responses were added together into one variable, with higher scores indicating greater amounts of trauma symptoms experienced by the respondent. Scores range from 0 to 90 (see appendix B for individual items). The Cronbach's Alpha reliability coefficient is .93 for the overall TSC-40 scale.

Independent Variables. The primary independent variable of interest is witnessing victimization. Participants were asked about five different types of victimization they could have witnessed while incarcerated. The types were: theft, physical assaults, verbal assaults, coerced sexual activity, and forced sexual activity. To combat reluctance to divulge information, respondents were not asked directly in the interview about their victimization. Instead, a number of response cards were created. The laminated cards were created for each victimization type and included all of the examples noted on the data collection forms. Some examples include "have you ever seen anyone take something from another person during the last 12 months you were in prison," and "did you see an inmate make another inmate through coercion or 'talk him into' do something sexual that he may not have wanted to do?" Each example on the card was numbered. The respondent was handed the cards by the interviewer and asked to

indicate which number(s) applied to something they saw or directly experienced during the last 12 months of their incarceration (see appendix C for individual items).

In this study, four witnessing variables were utilized. The measures were witnessing emotional victimization, fighting, stealing, and sexual victimization. For each of the four types of witnessed victimization, if a respondent indicated that he had seen a victimization incident (e.g. witnessed stealing) he was coded as 1, otherwise he was coded as 0. For witnessing sexual victimization, a new variable was created that combined coerced sexual activity and forced sexual activity (e.g., rape). Witnessed sexual victimization was coded a 1 if a respondent reported (1) witnessing coerced sexual activity, (2) witnessing forced sexual activity, or (3) witnessing both types of sexual victimization, otherwise it was coded as 0.

Control Variables. Other variables that may impact reentry were also included as controls. As done in previous research, age, race, marital status, mental illness, level of education, prior incarceration, and religion were included as control variables (Listwan, et al., 2010).

Age. Age in years at the time of the interview was included. Research shows that age is a predictor of recidivism, with younger individuals being at greater risk to reoffend (Gendreau, Little, & Goggin, 1996; Loza, 2003).

Race. The race of respondents was recorded during the interview. Race originally was coded as the following: 1 for 'White, non-Hispanic', 2 for 'Black, non-Hispanic', and 3 for 'other'. The variable was recoded as 0 for 'non-White', and 1 for 'White'.

Marital status. To measure marital status, respondents were asked whether they were in an intimate relationship at the time of the interview. Responses were coded as 1

for ‘married’, 2 for ‘single’, 3 for ‘divorced’, 4 for ‘separated’, 5 for ‘single, but living with some’, 6 for ‘single, but dating someone’, and 7 for ‘other’. The variable was recoded as 0 for ‘married’ and 1 for ‘not married’.

Mental illness. To examine mental health, respondents were asked whether they had been diagnosed with a mental illness by prison officials while incarcerated. Individuals who reported being diagnosed with a mental illness in prison were coded as 1, and those who were not diagnosed were coded as 0.

Education. To measure level of education, respondents were asked, “how far in school did you go?” Responses were coded as 1 for ‘less than high school’, 2 for ‘high school’, 3 for ‘GED’, 4 for ‘some college’, 5 for ‘Bachelor’s’ and 6 for ‘grad degree’. The variable was recoded to reflect having less than a high school degree (coded as 0) and having a high school degree or greater (coded as 1).

Prior prison. To measure whether a respondent had been incarcerated before the incident that led to their being in prison last, respondents were asked whether they (a) had been incarcerated in the same prison before, and (b) had been incarcerated in a different prison before. A new measure of prior prison experience was created, which combined these two measures of prior prison experience. No prior prison experience was coded as 0 for respondents who had not been incarcerated in either the same prison or a different prison prior to the current incarceration, and coded as 1 for respondents who indicated they had been previously incarcerated.

Religion. To measure religious participation, respondents were asked whether they participated in religious services while incarcerated. No participation was coded as 0 and participation in religious services was coded as 1.

Analytical Plan

Analysis for this study was done in two stages. In the first stage, bivariate analyses (Chi-square or t-tests) with the independent variables – witnessing any victimization and witnessing sexual victimization – and the dependent variables was conducted to determine whether witnessing victimization is related to the outcomes.

In the second stage, multivariate logistic regression analysis was conducted. Since some of the dependent variables in this study are dichotomous, logistic regression is the appropriate statistical technique to use (Walker & Maddan, 2013). Additionally, ordinary least square regression (OLS) was conducted for the dependent variables that are continuous. Using the findings from the bivariate analysis, I conducted a series of multivariate logistic regression and OLS models to examine whether witnessing victimization influences reentry outcomes.

One issue that arises when using data in which persons are clustered within sampling units is that the observations are not independent from each other. In this case, ex-inmates from one prison are more likely to be similar than inmates from another prison. To control for this issue, robust standard errors were used when estimating the multivariate regression models in STATA, which increased the standard errors for the coefficients and reduced the likelihood of rejecting a null hypothesis when it is true (Wooldridge, 2009).

CHAPTER IV: RESULTS

Sample Description

Table 1 describes the sample and the prevalence rates of each type of witnessed victimization. Nearly all of the respondents reported witnessing at least one form of victimization during the last 12 months they were incarcerated, with the most common type experienced being emotional victimization. Ninety-three percent of respondents reported witnessing emotional victimization during the last 12 months they were incarcerated. A large majority also reported witnessing fighting (91%), and approximately 81% witnessed stealing. Sexual victimization was the least experienced, with only 22% of the sample witnessing this type of victimization.

On average, parolees were 34 and a half years old, and about 75% had a high school diploma or higher. Almost half (47%) of the sample was White and 89% were not married. The majority (53%) had been incarcerated prior to the incident that led to their last incarceration. Fifty-four percent reported attending religious services, and 18% were diagnosed with a mental illness while incarcerated.

In terms of post-release outcomes, approximately 35% of the sample were arrested while on parole, 32% had at least one parole violation, 21% had their parole revoked, 41% were readmitted to prison, and 60% had at least one of the negative criminal justice outcomes reported above. Only 4% of the sample reported substance use. Additionally, 40% of the sample was employed in the community. Slightly more than four in ten parolees reported negative reentry expectations. The average scores on the PTCI and TSC-40 scales were 93 and 27, respectively, indicating that as a whole, the

Ind ividuals in the sample were experiencing few posttraumatic cognitions and trauma symptoms.

Table 1. Descriptive Statistics

Variable	N	% (n)	M	SD
Key Independent variables				
Witnessing emotional (1 = yes)	1581	93.1 (1501)		
Witnessing stealing (1 = yes)	1581	80.7 (1302)		
Witnessing fighting (1 = yes)	1601	91.3 (1472)		
Witnessing sexual victimization (1 = yes)	1526	21.9 (354)		
Dependent variables				
Arrest (1 =yes)	1469	34.8 (561)		
Parole violation (1 =yes)	1443	31.9 (515)		
Parole revoked (1 = yes)	1500	20.7 (334)		
Reincarceration (1= yes)	1591	41.4 (667)		
Any negative criminal justice outcome (1 =yes)	1604	59.9 (966)		
Substance use (1 = yes)	1533	4.3 (69)		
Employment in the community (1 = Employed)	1605	40.0 (645)		
Reentry expectations (1 = Negative expectations)	1608	40.9 (659)		
Posttraumatic cognition	1339		93.1	31.6
Trauma symptoms	1367		27.4	18.1
Control Variables				
Age	1612		34.5	10.1
Race (1 = White)	1606	46.6 (751)		
Marital Status (1 = Not Married)	1581	89.0 (1436)		
Education (1 = HS or Higher)	1607	75.3 (1214)		
Religion (1 = yes)	1609	54.6 (881)		
Prior prison (1 =yes)	1599	53.1 (856)		
Mental illness (1 =yes)	1594	17.5 (283)		

N= 1613

Bivariate

The goal of this study is to examine the effects of witnessing victimization on post-release outcomes. The first step of this analysis was to examine whether witnessing victimization was related to post-release outcomes. To do this analysis, bivariate analyses were performed between each type of witnessing victimization and post-release outcome. The results of these analyses are shown in Table 2. Using the chi-square tests for independence, it was found that witnessing emotional victimization was statistically significantly related to two post-release outcomes. First, 39% of those who witnessed emotional victimization were arrested compared to 27% of those who did not witness emotional victimization. Twenty-three percent of individuals who witnessed emotional victimization had their parole revoked compared to 12% of those who did not witness emotional victimization.

Column 2 in Table 2 shows the results of Chi-square tests for the relationship between witnessing stealing and post-release outcomes. Notably, more post-release outcomes were related to witnessing stealing while incarcerated than witnessing emotional victimization. Of the individuals who witnessed stealing 41% were arrested, 37% had a parole violation, 23% had their parole revoked, 43% were reincarcerated, 5% used drugs or alcohol, and 62% had at least one negative criminal justice outcomes. Comparably, of the individuals who did not witness stealing 27% were arrested, 30% had a parole violation, 16% had their parole revoked, 33% were reincarcerated, 2% used drugs or alcohol, and 50% had at least one of the negative criminal justice outcomes,

Table 2. Bivariate analysis examining the relationship between witnessing stealing and emotional victimization and post-release outcomes

	Witnessed Emotional			Witnessed Stealing		
	% (N)		X^2	% (N)		X^2
Variable	No	Yes		No	Yes	
Arrest	26.8 (19)	38.9 (533)	4.231*	27.1 (68)	40.7 (484)	16.176***
Parole Violation	31.4 (22)	35.8 (481)	.552	30.1 (74)	36.8 (430)	3.981*
Parole Revocation	12.3 (9)	22.5 (315)	4.206*	16.2 (42)	23.2 (281)	6.179**
Reincarceration	35.9 (28)	41.7 (618)	1.038	33.2 (91)	43.2 (555)	9.268***
Substance Use	2.7 (2)	4.7 (67)	.666	1.9 (5)	5.1 (64)	4.995**
Employment	40.5 (32)	39.9 (597)	.011	36.8 (102)	40.7 (528)	1.413
Negative CJ Outcomes	53.8 (43)	60.2 (898)	1.310	49.6 (138)	62.1 (804)	14.871***
Reentry Expectations	92.4 (73)	91.9 (1330)	.024	90.8 (248)	92.1 (1155)	.479

*p < .05, **p < .01, ***p < .001

Column 1 in Table 3 shows that having any negative criminal justice outcome was the only correlate of witnessing fighting. Approximately 61% of the respondents who witnessed fighting had at least one negative criminal justice outcome. Notably, column 2 shows that similar to witnessing stealing, most post-release outcomes were related to witnessing sexual victimization. Of the individuals who witnessed sexual victimization 48% were arrested, 43% had a parole violation, 27% had their parole revoked, 47% were reincarcerated and 69% had at least one negative criminal justice outcome. Comparably, of the individuals who did not witness sexual victimization, 36%

were arrested, 34% had a parole violation, 21% had their parole revoked, 41% were reincarcerated, and 58% had at least one negative criminal justice outcome.

Table 3. Bivariate analysis examining the relationship between witnessing fighting and sexual victimization and post-release outcomes

	Witnessed Fighting			Witnessed Sexual Victimization		
	% (N)		X_2	% (N)		X^2
Variable	No	Yes		No	Yes	
Arrest	32.7 (37)	38.6 (520)	1.532	35.9 (381)	48.2 (158)	15.862***
Parole Violation	31.5 (35)	36.0 (476)	.894	33.5 (350)	42.5 (136)	8.602**
Parole Revocation	18.3 (22)	22.5 (308)	1.093	20.7 (225)	26.9 (90)	5.739**
Reincarceration	36.8 (46)	42.2 (613)	1.360	40.6 (470)	47.1 (163)	4.702*
Substance Use	1.7 (2)	4.8 (67)	2.241	4.4 (49)	5.7 (19)	.953
Employment	33.6 (430	40.6 (595)	2.380	39.3 (460	40.6 (143)	.184
Negative CJ Outcomes	52.0 (66)	60.8 (890)	3.757*	57.6 (671)	69.4 (245)	15.656***
Reentry Expectations	87.4 (111)	92.1 (1307)	3.399	92.1 (1037)	91.1 (316)	.376

*p < .05, **p < .01, ***p < .001

Table 4 shows the bivariate analyses between the Posttraumatic Cognitions Inventory (PTCI) and the Trauma Symptoms Checklist (TSC-40) and the key independent variables. Using independent sample t tests, it was found that witnessing emotional victimization was significantly related to the PTCI scale. There was a significant difference in PTCI scores between individuals who witnessed stealing (94.26) and individuals who did not witness stealing (87.48), indicating that individuals who

witnessed stealing have more posttraumatic cognitions compared to individuals who did not witness stealing. Similarly, individuals who witnessed emotional victimization had a greater average score, (94 compared to 87), indicating that those who witnessed emotional victimization have more trauma symptoms compared to individuals who did not witness emotional victimization.

Table 4. Bivariate analysis examining the relationship between witnessing emotional victimization and stealing and psychological adjustment

		Witnessing Emotional			Witnessing Stealing		
		No	Yes	t (df)	No	Yes	t(df)
PTCI	$\bar{X}$ (SD)	90.75 (36.60)	93.22 (31.45)	-0.586 (1314)	87.48 (31.59)	94.26 (31.59)	-2.92** (1315)
TSC-40	$\bar{X}$ (SD)	23.34 (20.60)	27.72 (18.04)	-1.81* (1343)	25.87 (18.77)	27.85 (18.01)	-1.515 (1343)

*p < .05, **p < .01, ***p < .001

Notably, in Table 5 there were significant differences between individuals who witnessed and those who did not witness sexual victimization on both the PTCI and TSC-40 scale. Individuals who witnessed sexual victimization scored higher on both the PTCI and the TSC-40 scales. The findings indicate that individuals who witnessed sexual victimization have more posttraumatic cognitions and more trauma symptoms than individuals who did not witness sexual victimization. Witnessing fighting was not statistically related to either the PTCI or TSC-40 scale.

Table 5. Bivariate analysis examining the relationship between witnessing fighting and sexual victimization and psychological adjustment

		Witnessing Fighting			Witnessing Sexual		
		No	Yes	t (df)	No	Yes	t(df)
PTCI	$\bar{X}$ (SD)	89.78 (32.79)	93.33 (31.54)	-1.07 (1332)	90.65 (29.45)	100.49 (37.92)	-4.66*** (1271)
TSC-40	$\bar{X}$ (SD)	26.30 (21.43)	27.46 (17.84)	-0.536 (113.86)	26.28 (17.39)	31.35 (19.85)	-4.00*** (447.64)

*p < .05, **p < .01, ***p < .001

Multivariate

Binary logistic regression was performed to assess the influence of a number of factors on the likelihood of negative post-release outcomes.[1] Table 6 shows the full model for any negative criminal justice outcome, arrest, and parole violation. The results for the analysis predicting any negative criminal justice outcome are presented in Column 1. Only one variable was significant. Parolees who reported witnessing stealing while incarcerated faced odds of any negative criminal justice outcome that were 94% higher than those who had not witnessed stealing.

The results of the analyses predicting arrest are shown in Column 2 of Table 6. Four variables were statistically significantly related to arrest. One witnessing victimization variable was significant. Parolees who reported witnessing sexual victimization faced odds of rearrest that were 46% higher than those who had not witnessed a sexual victimization. Two demographic variables were related to arrest. Older respondents faced lower odds of re-arrest compared to younger respondents. For every year increase in age, the odds of being arrested declined by 2%. In addition, the odds of being arrested for parolees who were not married were 40% higher than for those who reported being married. The strongest predictor of being arrested while on parole was mental illness, with an odds ratio of 1.53, indicating that respondents who were diagnosed with a mental illness while incarcerated were 53% more likely to be arrested than respondents who were not diagnosed with a mental illness.

Column 3 shows the results for the analysis predicting parole violation. One witnessing victimization variable and one demographic variable were statistically

[1] Items that were not significant at either the bivariate or the multivariate level were not included in the findings for the multivariate analyses.

significantly related to parole violation. Parolees who reported witnessing sexual victimization faced odds of receiving a parole violation that were 35% greater than parolees who did not witness sexual victimization. Additionally, the odds of receiving a parole violation were 55% higher for parolees diagnosed with a mental illness compared to those who were not diagnosed with a mental illness.

Table 6. Logistic regression examining the influence of witnessing victimization on post-release outcomes, arrest, and parole violation

Variable	Any Negative CJ Outcome		Arrest		Parole Violation	
	OR	95% C.I.	OR	95% C.I.	OR	95% C.I.
Key Independent						
Witnessed Emotional	--	--	1.40	0.78-2.61	--	--
Witnessed Stealing	1.94*	1.09-3.46	1.41	0.95-2.10	1.09	0.75-1.60
Witnessed Fighting	--	--	--	--	--	--
Witnessed Sexual	1.82	0.56-5.91	1.46***	1.18-1.80	1.35*	1.01-1.81
Controls						
Age	1.00	0.97-1.03	0.98**	0.97-0.99	0.99	0.98-1.00
Marital Status[2]	--	--	1.40*	1.00-1.97	1.13	0.80-1.59
Race	1.32	0.79-2.22	0.97	0.72-1.31	1.07	0.74-1.54
Religion	0.86	0.40-1.84	1.00	0.81-1.23	1.06	0.89-1.26
Education	1.16	0.61-2.23	0.97	0.72-1.33	0.98	0.80-1.19
Prior Prison	0.82	0.51-1.30	1.02	0.76-1.37	0.92	0.69-1.21
Mental Illness	0.79	0.36-1.76	1.53***	1.19-1.97	1.55***	1.21-1.99
Constant	19.36***	4.82-77.78	0.43	0.18-1.06	0.57	0.32-1.03
Model Statistics						
Log pseudolikelihood	-171.85		-859.26		-838.97	
Wald χ^2	17.55*		58.83***		46.87***	
Pseudo R^2	0.022		0.027		0.01	

p<.05, ** p < .01, *** p < .001

The results of the analysis predicting parole revocation are shown in Column 1 of Table 7. None of the witnessing victimization variables included in the model were significant. Two demographic variables were related to parole revocation. Older respondents were less likely to have had their parole revoked than younger respondents.

[2] Marital status was a perfect predictor in the model for Any Negative Criminal Justice Outcome and was not included in the model.

For every year increase in age, the odds of having one's parole revoked declined by a factor of .96. In addition, the odds of having a parole revocation for parolees diagnosed with a mental illness were 59% higher than for parolees without a mental illness.

Column 2 shows the results for analyses predicting reincarceration. Although none of the witnessing victimization variables were significant, three demographic variables were significantly related to reincarceration. Age was related to reincarceration. For every year increase in age, the odds of being reincarcerated declined by a factor of .99. The strongest predictor of reincarceration was mental illness; parolees with a mental illness faced odds of reincarceration that were 34% higher than parolees without a mental illness.

Table 7. Logistic regression examining the influence of witnessing victimization on parole revocation, reincarceration, and substance use

Variable	Parole Revocation		Reincarceration		Substance Use	
	OR	95% C.I.	OR	95% C.I.	OR	95% C.I.
Key Independent						
Witnessed Emotional	1.82	0.92-3.60	--	--	--	--
Witnessed Stealing	1.13	0.65-1.94	1.17	0.85-1.62	4.33*	1.13-16.69
Witnessed Fighting	--	--	--	--	--	--
Witnessed Sexual	1.32	0.98-1.78	1.19	0.97-1.46	--	--
Controls						
Age	0.96***	0.95-0.98	0.97***	0.96-0.98	0.99	0.96-1.02
Marital Status	1.11	0.66-1.86	1.14	0.79-1.65	1.57	0.43-5.70
Race	0.81	0.57-1.15	0.96	0.78-1.19	1.46	0.83-2.56
Religion	0.89	0.67-1.18	0.77**	0.64-0.94	0.60*	0.38-0.96
Education	0.97	0.72-1.30	1.04	0.81-1.35	1.37	0.79-2.38
Prior Prison	0.90	0.67-1.21	0.90	0.75-1.07	1.55*	1.02-2.36
Mental Illness	1.59*	1.15-2.20	1.34*	1.01-1.78	1.15	0.59-2.22
Constant	0.48	0.16-1.43	1.92	098-3.77	0.01***	0.00-0.03
Model Statistics						
Log pseudolikelihood	-688.72		-948.93		-258.59	
Wald χ^2	173.81***		91.43***		41.80***	
Pseudo R^2	0.03		0.03		0.05	

* p<.05, ** p < .01, *** p < .001

Column 3 of Table 7 shows the results of analyses predicting substance use. Three variables were significantly related to substance use. The strongest predictor of substance use was witnessing stealing while incarcerated. Parolees who reported witnessing stealing had 4.33 the odds of reporting substance use, compared with those who did not report witnessing stealing. The odds of reporting substance use were 40% lower for those who reported attending religious services while incarceration. Additionally, parolees who reported prior prison experience had 55% greater odds of reporting substance use than parolees who had not been previously incarcerated.

Ordinary least squares regression was performed to assess the influence of predictors on a number of variables (posttraumatic cognitions and trauma symptoms). The results for the analysis predicting posttraumatic cognitions are shown in Column 1 of Table 8. Three variables were related to scores on the posttraumatic cognitions scale (PTCI). Witnessing sexual victimization was related to higher PTCI scale scores. Witnessing sexual victimization corresponded to a 7.92 unit increase in PTCI scale scores holding all else constant. Parolees with a high school education or higher had significantly lower PTCI scores than parolees without a high school education. Additionally, mental illness was also related to higher PTCI scale scores. Having a mental illness was associated with a 20.91 unit increase in PTCI scale scores holding all else constant. The findings indicate that witnessing sexual victimization and being diagnosed with a mental illness are significantly related to greater posttraumatic cognitions, while having a high school degree or more education is related to reduced posttraumatic cognitions.

Column 2 in Table 8 shows the results for the analysis predicting trauma symptoms. Three variables were significantly related to the scores of the trauma symptoms checklist. Witnessing sexual victimization corresponds to a 3.74 unit increase in TSC-40 scores. For every year increase in age, there was a .11 unit increase in TSC-40 scores, indicating that older parolees who witnessed sexual victimization have greater trauma symptoms. Additionally, having a mental illness was associated with a 14.83 unit increase in TSC-40 scores holding all else constant. The findings indicate that parolees who were older, reported witnessing sexual victimization, and parolees diagnosed with a mental illness had greater trauma symptoms than their counterparts.

Table 8. Ordinary least squares regression examining the influence of witnessing victimization on psychological adjustment

Variable	PTCI				TSC-40			
	b	S.E.	t	95% C.I.	b	S.E.	t	95% C.I.
Key Independent								
Witnessed Emotional	0.56	3.94	0.13	-7.48 - 8.53	--	--	--	--
Witnessed Stealing	--	--	--	--	2.17	1.62	1.34	-1.14 -5.47
Witnessed Fighting	--	--	--	--	--	--	--	--
Witnessed Sexual	7.92	2.01	3.95***	3.84-12.01	3.74	0.85	4.41***	2.01-5.47
Controls								
Age	-0.12	0.13	-0.93	-0.40 - 0.15	0.11	0.05	2.20*	0.00-0.21
Marital Status	3.45	3.06	1.13	-2.78 - 9.68	1.27	1.35	0.94	-1.49 -4.04
Race	-0.71	2.13	-0.33	-5.04 - 3.62	1.21	0.90	1.35	-0.62 -3.04
Religion	-2.29	1.98	-1.16	-6.31 - 1.73	1.98	1.03	1.92	-0.12 -4.07
Education	-5.66	1.77	-3.16**	-9.27 – 2.05	-0.58	0.91	-0.64	-2.44 -1.38
Prior Prison	0.43	1.56	0.28	-2.74 - 3.60	0.29	1.21	0.24	-2.18 -2.75
Mental Illness	20.91	2.76	7.58***	15.29-26.52	14.83	1.39	10.65***	11.99-17.67
Constant	93.61	6.39	14.64***	80.60-106.62	15.74	3.20	4.92***	9.22-22.27
Model Statistics								
F value	16.15***				31.91***			
R^2	0.09				0.12			

p<.05, ** p < .01, *** p < .001

CHAPTER V: DISCUSSION

Prison victimization has received much attention from researchers and practitioners. The prison victimization literature suggests that victimization, both personal and property, is a daily occurrence in prison (Beck & Harrison, 2007; Perez et al., 2010; Wolff et al., 2009); however, previous studies have focused on direct experiences of victimizations. As a result, little is known about witnessing victimization during incarceration and its attending consequences, even though a great deal of research exists on witnessing violence in the home and in the community. The extant literature suggests that witnessing victimization may have some of the same adverse effects as experiencing victimization (Diamond & Muller, 2004; Feerick & Haugaard, 1999; Kulkarni et al., 2011).

One reason that witnessing victimization may cause negative consequences is because it is a source of strain. Research on general strain theory (hereafter GST) demonstrates that experiencing strain causes negative emotional responses that may lead to crime and delinquency (Agnew, 1992; Blevins et al., 2010). Agnew's (2002) later work on GST extended the theory to include vicarious and anticipated strain. Vicarious strain results from witnessing strain being experienced by others around the individual (Agnew, 2002). Given the assumptions of GST, witnessing the victimization of others may be a significant source of strain for prisoners, and thus related to negative post-release outcomes. That is, if witnessing victimization is a source of strain for prisoners, it may have significant impact on their ability to successfully reintegrate into society once released from prison. Ultimately, it may cause negative emotional responses and stress

that can lead to adverse psychological consequences (e.g. depression and anger) and involvement in crime (Agnew, 2002).

The current study is the first attempt to examine the link between witnessing victimization in prison and individual criminal justice outcomes. Specifically, it examined the influence of witnessing several types of victimization in prison on a number of post-release outcomes. It was hypothesized that individuals who witnessed victimization would be more likely to have negative post-release outcomes, including being arrested, having parole violations and revocation, returning to prison, substance use, not having a job, and having posttraumatic cognitions and trauma symptoms.

This study has three main findings. First, nearly all parolees reported witnessing at least one of type of victimization during their incarceration, with witnessing emotional victimization (93%) and witnessing fighting (91%) being the most common, followed by witnessing stealing (81%) and witnessing sexual victimization (22%), respectively. This finding is not surprising given the prevalence of victimization in prisons and the way in which inmates live. The prison structure (e.g. cells and common areas) makes it so that prisoners interact and are in close, regular proximity (Kerbs & Jolley, 2007), which may make it easier for other inmates to witness the occurrence of victimization. Wolff and Shi (2009) found that although an inmate's cell was the most frequently reported location in which physical and sexual victimization occurred, a significant proportion of victimization incidents occurred in the areas where inmates frequently congregate, which include the yard, dining areas, showers, the library, and corridors. Lahm (2009) found that the security level of the facility predicted property victimization risk, with inmates in maximum-security prisons being 59% less likely to experience property victimization,

suggesting that the freer movement in lower security prisons increases the risk of property victimization. Additionally, the design of correctional facilitates help to facilitate certain types of victimization. Kerbs and Jolley (2007) found that property victimization was common for older inmates, particularly those residing in low-security facilities and open barrack-style housing. They argued that such open floor plans facilitated theft, especially when the inmate was away at the dining hall (Kerbs & Jolly, 2007). These findings suggest that the physical structure of prison may be the reason a significant portion of this sample reported witnessing fighting, stealing, and emotional victimization. Not only do these three types of victimization appear to commonly occur; it appears that these types of victimization are occurring in locations within prisons where many inmates are able to witness them.

Second, witnessing any type of victimization was found to be related to negative post-release outcomes. At the bivariate level, witnessing stealing and sexual victimization were related to nearly all of the post-release outcomes. Witnessing stealing was related to being arrested, having a parole violation, having one's parole revoked, being reincarcerated, substance use, having any of the negative criminal justice outcomes, and greater posttraumatic cognitions. Similarly, witnessing sexual victimization was associated with all of the outcomes with the exception of substance use. Unlike witnessing stealing, witnessing sexual victimization was associated with greater posttraumatic cognitions and trauma symptoms. In contrast, witnessing emotional victimization and fighting were only related to a few of the outcomes. Witnessing emotional victimization was related to being arrested, having a parole revocation, and

having greater trauma symptoms. Witnessing fighting was only related to having any of the negative criminal justice outcomes.

Third, although all of the witnessing variables were significant at the bivariate level, only two appear to be consistently and significantly related to negative post-release outcomes at the multivariate level. Almost all of the parolees reported witnessing fighting and emotional victimization; however, witnessing fighting and emotional victimization were not related to any of the outcomes at the multivariate level, which is not consistent with the witnessing violence/exposure to violence literature. Research shows that witnessing physical violence and psychological abuse in the community are related to negative emotional reactions, such as depression, PTSD, aggression, and anger (Diamond & Muller, 2004). It was hypothesized that witnessing fighting and emotional victimization would have similar deleterious consequences for the parolees. The absence of a relationship between witnessing these two types of victimization and post-release outcomes may because there is little variation in the responses for both measures. Of the 1,581 respondents who answered whether or not they witnessed emotional victimization, only 80 respondents did not witness this type of victimization. Similarly, of the 1601 respondents who indicated whether or not they witnessed fighting, 129 did not witness fighting. There may actually be differences between those who witnessed and those who did not witness in terms of the post-release outcomes; however, so few parolees did not witness emotional victimization and fighting that it is difficult to determine any differences statistically.

Conversely, it may be that to prisoners, witnessing psychological and physical victimization is so common it does not have an effect. Almost all of the parolees in the

sample witnessed fighting and emotional victimization, suggesting that they are common. It may be that because almost everyone is witnessing these types of victimization, witnessing these types of victimization incidents has no effect on an individual's ability to reintegrate into society.

Witnessing stealing and sexual victimization, on the other hand, were related to some of the post-release outcomes. Witnessing stealing was a significant predictor at both the bivariate and multivariate levels of substance use and negative criminal justice outcomes. Parolees who witnessed stealing were significantly more likely to report substance use at the time of the interview compared to those who did not witness stealing. Similarly, witnessing stealing significantly increased the odds of a respondent having any of the negative criminal justice outcomes. The effects of witnessing stealing may be tied to the depriving nature of prisons. Upon entrance to prison, inmates are stripped of their autonomy, personal identities, privacy, and access to material goods (Sykes, 1958). Their worldly possessions consist of what little they can amass during incarceration. Witnessing theft reinforces the fact that they are in a situation in which they have little control or power, and at any time, they may be stripped of their few belongings, which may result in feelings of hopelessness. Low levels of perceived personal control and autonomy are linked to psychological consequences, such as depression, anxiety, and feelings of helplessness (Goodstein et al., 1984; Ruback et al., 1986; Wright, 1991). These consequences may translate into antisocial behaviors, including criminal behavior, that are reflective of an individuals' ability to reintegrate into society. Supportive of general strain theory, witnessing stealing victimization may be a form of vicarious strain that leads to a variety of negative responses (Agnew, 1992). One way in which

individuals may respond to this type of strain is to engage in crime, which may include violence, substance use, or crime.

Alternatively, the link between witnessing stealing and substance use outcomes may be a product of vicarious reinforcement, where witnessing stealing may reinforce criminal behavior after release (e.g. theft). Prisoners already have criminal beliefs and it may be that witnessing criminality in prison simply reinforces those beliefs, resulting in an increased likelihood of criminal behavior upon release. Tittle (2012) found that past reinforcement of definitions favorable to crime was significantly associated with current definitions and an increased probability of criminal behavior. Additionally, previous research shows that theft co-occurs with substance use (Ball, Shaffer, & Nurco, 1983; Hall, Bell, & Carless, 1993), which may explain why those persons who witness stealing may engage in substance use. These individuals (those who witness stealing) may be inclined to steal themselves and, after leaving prison, may also be substance users.

Of all the types of victimization, witnessing sexual victimization appears to be most related to how prisoners function in the community. Witnessing sexual victimization was significantly related to most of the post-release outcomes as well as greater posttraumatic cognitions and trauma symptoms. This finding supports the assumption that witnessing sexual victimization is a source of vicarious strain and can lead to similar negative emotional reactions as directly experiencing strain (Agnew, 2002). It is also possible that witnessing someone in close proximity being victimized might reinforce the fact that at any point they can become the victim. In this instance, a parolee may be experiencing anticipated strain. In essence, witnessing sexual

victimization causes the individual to anticipate being the victimization at some point in the future.

Witnessing sexual victimization is apparently very traumatic for males. Although any form of victimization can result in adverse emotional reactions, sexual victimization, specifically of males, challenges traditional views of masculinity. Traditional views of masculinity, which dictates that men should be strong, assertive, sexually dominant, and heterosexual, influences society's misconceptions about male rape, both inside and outside of prison (Davies, 2002). Rape is often used as a form of dominance, rather than for the sake of sex itself. In prison, rape is a way to assert masculinity and signify power (Fleisher & Krienert, 2009). Sexual victimization demonstrates the aggressor's superior strength and knowledge, while identifying the victim as weaker and less knowledgeable (Man & Cronan, 2001). Being the victim goes against this ideal of males as the more powerful and dominant sex. Males who are victims are perceived as weak (Man & Cronan, 2001).

In addition to the potential effects on masculinity of witnessing sexual victimization, the anticipation of becoming a victim may have significant consequences for individuals. For inmates, just witnessing sexual victimization and the anticipation of potentially becoming a victim may result in severe strain. McGuire (2005) asserts that victims tend to engage in self-guardianship behaviors, including lashing out at others as a way to prevent further victimization. Anxiety and paranoia results from the fear of future victimization. Similarly, McCorkle (1992) found that inmates often engage in either avoidance behavior or using proactive techniques (e.g. carrying a weapon) in order to reduce their risk of victimization. It is possible that individuals who witness sexual

victimization experience the same anxiety and paranoia. The stress of having to protect one's self from victimization combined with witnessing incidents of victimization may have psychological consequences that have not yet been examined. Additionally, the anticipation of victimization as well as witnessing this emasculation of other inmates may cause the individual to attempt to assert their manliness through demonstrations of masculinity (Weiss, 2010). Poor coping resources combined with beliefs of victimization as a form of emasculation may cause prisoners who witnessed sexual victimization to respond with aggression and anger as a means of reasserting masculinity and alleviating the strain of victimization. The witnessing literature shows that witnessing violence is associated with violence perpetration (Maker et al., 1998). This finding suggests that prisoners who witness victimization may rely on the use of violence as a response to vicarious strain. The use of aggression in response to sexual victimization may lead to criminal behaviors (e.g. hitting someone) (Ganem, 2010).

The consequences of witnessing victimization have significant impact on post-release adjustment. In a study of ex-prisoners currently residing in the community, Boxer et al. (2009) found that exposure to violence while incarcerated was significantly related to post-release adjustment. Experiencing violence in prison, either through direct experience or witnessing, was significantly related to a composite measure of personality and behavior items (Boxer et al., 2009). This finding suggests that witnessing violence in prison is related to aggressive behaviors, such as hitting someone, that may result in parole violations and/or revocation, and ultimately rearrest. Additionally, exposure to violence is linked to emotional distress. Certain mental disorders, such as depression, may interfere with everyday life, thereby hindering parolees'' ability to maintain

employment and stable housing, and therefore prohibiting their successful reintegration into society (Petersilia, 2003).

Such responses are most likely to occur when a person lacks effective coping resources. Specifically, poor coping skills prevent individuals from responding to strain in a prosocial manner (Mazerolle et al., 2000). Strain is less likely to lead to crime when an individual has good coping resources (Agnew, 1992). Particularly relevant to the current study, parolees may not possess good coping resources such as effective problem solving skills and having nondelinquent social networks (Agnew, 1992). Insomuch that they lack good coping skills and resources and respond to strain with negative emotionality, parolees who witness victimization are at risk of engaging in behaviors that could lead to arrest, parole violations/revocations, reincarceration, and substance use. Future research should consider the link between witnessing violence in prison and coping on post-release outcomes for parolees.

This assertion has been supported in the literature. Strain can result in negative emotional responses, such as anger (Agnew, 2002). Ganem (2010) asserts that responses to anger may come in the form of aggression. Anger encourages criminal involvement and predicts one's intent to hit someone (Ganem, 2010). Witnessing victimization may be a source of vicarious strain, and without good coping resources, prisoners lack the ability to cope in a prosocial manner and may become angry. This anger likely leads to crime, which results in arrest, parole violation/revocation, and reincarceration. Additionally, individuals who experience sexual victimization may experience antisocial behaviors and substance abuse (Tewksbury, 2007). If the consequences of witnessing victimization are similar to those of experiencing victimization, it is likely that prisoners

who witness victimization, specifically sexual victimization, will engage in behavior that may lead to negative criminal justice outcomes.

Limitations

Although it is important to examine witnessing victimization as another aspect of victimization, this study is not without limitations. The current study relied on a preexisting dataset that contained victimization and post-release data from male parolees residing in halfway houses in only one state. Having data on only males and from only one state precludes generalizing the findings to all parolees in halfway houses throughout the country.

A second limitation of this study is the cross-sectional nature of the victimization data. Face-to-face interviews were conducted between 2006 and 2007 with parolees who had recently been released from prison (within six months of their release date); however, the questions measuring psychological well-being and reentry expectations were only asked during the single interview with each respondent in the sample. As such, data on well-being while in prison should be included as a baseline measure of psychological well-being and to allow for a comparison of well-being over time. Second, follow up interviews with all of the respondents would have provided greater insight into the long-term effects of witnessing victimization on psychological well-being and reintegration. Follow-up interviews are needed to better understand the persistence of the effects of witnessing victimization in prison. In their study using a nationally-representative sample of individuals 65 years and older, Colbert and Krause (2009) found that on average, witnessing violence occurred roughly 40 years prior to the study, yet the effects of witnessing a violent act reverberate across the life course and are still felt decades later.

The consequences of witnessing victimization in prison may have the same lasting effects for ex-prisoners that may increase their risk of recidivism and also negatively impact their overall psychological well-being.

The witnessing literature shows that witnessing violence in childhood has severe long-term effects (Diamond & Muller, 2004; Maker et al., 1998), which includes future perpetration and risk of victimization (Bell & Jenkins, 1991; Gorman-Smith et al., 2004; Maker et al., 1998), higher levels of aggression, depression, antisocial behavior, and anxiety (Buka et al., 2001; Colbert & Krause, 2009; Diamond & Muller, 2004; Maker et al., 1998; Overlien, 2010). Although the findings are consistent with the witnessing literature, since respondents were only interviewed once, there is no way to know if the psychological effects of witnessing in prison are short or long-term. It is possible that the effects of witnessing were felt more severely immediately following their release (and therefore at the time of the interview) but may have declined over time. Longitudinal research that uses long-term follow-ups should be conducted to investigate this possibility.

Another limitation of this study is the lack of measures for barriers to reentry after the parolees were released into the community. The reentry expectations questionnaire was prospective and only asked if parolees believed they would have difficulties upon release from the halfway house, which included whether parolees would have a difficult time finding housing and paying bills as well as having someone to pick them up from the halfway house. To better understand the effects of witnessing victimization in prison on reentry, more information is needed on whether or not parolees were able to find and maintain housing, whether or not they were able to pay their bills, and what type of

support they have in community to help with their reintegration. Finding stable housing and employment have been identified as some of the most difficult obstacles to successful reentry (Helfgott, 1997; Levenson & Hern, 2007; Petersila, 2003). With the unemployment rate among ex-offenders between 25% and 40%, ex-offenders have few employment prospects (Petersilia, 2003).

Additionally, the employment measure was obtained from official records and self-reported during the interview; however, it only measures whether the respondent was employed. The employment measure does not capture the type, quality, and length of employment. Again, to better understand the effects of witnessing victimization, future research should employ a more detailed measure of employment, which would allow for the examination of the nature of employment for ex-offenders and how witnessing victimization influences the job opportunities of parolees. As previously mentioned, ex-offenders have a difficult time finding employment. It is possible that the consequences of witnessing victimization in prison (e.g. posttraumatic cognitions) further hinder their ability to find legitimate employment, and eventually results in them having to rely on illegitimate means of support.

Recommendations for Future Research

Little is known about the witnessing victimization experiences of prisoners. The findings of this study indicate that there is a need for more research. First, future research should include a larger, nationally representative sample. It is possible that the findings of this study are unique to the parolee population of the state of Ohio. Replication of this study with a representative sample of the ex-prisoner population may provide greater insight into this phenomenon. In addition, the differences in the parole process for each

state may impact post-release outcomes. Some states immediately release parolees into the community. According to the Prisoner Experience and Reentry (Listwan et al., 2012), every sentence including a term of imprisonment must include a period of supervision after leaving prison. Since all of the parolees in this study are under post-release control, they may be different than parolees in other states. It may be that first residing in transition homes before returning to the community increases parolees' chances of successful reentry since they are required to adhere a set of rules, including not using any substances and obtaining employment.

As previously mentioned, one of the main findings was that witnessing stealing was significantly related to a number of post-release outcomes. Specifically, the findings of this study suggest that witnessing theft has significant deleterious consequences. There is a dearth of research on the effects of witnessing property victimization in both the prison and general witnessing victimization literature. Although property victimization is generally included in the study of prison victimization, researchers often focus on examining the effects of physical victimization on prisoners' well-being. Additionally, the witnessing/exposure to violence literature focuses exclusively on the effects of witnessing psychological and/or physical abuse and fails to include individuals who have witnessed property victimization. Additional research is needed to understand whether the negative consequences of witnessing property victimization are unique to prisons. It is possible that witnessing theft in prison has serious consequences due to the depriving environment that prevents prisoners from having many possessions. Conversely, witnessing theft outside of prison may have equally negative consequences.

Future research is also needed to better understand who is at risk of witnessing victimization. The extant prison victimization literature has identified the factors that increase an inmate's risk of victimization. It may be that the factors that predict one's risk of victimization are the same factors that increase an individual's chances of witnessing victimization. If the risk factors of experiencing victimization are the same as witnessing victimization, it is possible that those who report witnessing victimization are also the individuals who are experiencing victimization as well. In this case, witnessing victimization may be a proxy for directly experiencing victimization given that very few reported direct sexual victimization. In the current study, of the 1585 respondents who indicated whether or not they had directly experienced sexual victimization, 14 reported that they had experienced sexual victimization. Additionally, the effects of being victimized may compound the effects of witnessing victimization, in which case it makes it difficult to accurately capture the potential consequence of witnessing victimization in prison.

More research is also needed on the frequency of witnessing victimization and what effects witnessing multiple incidents of victimization may have. It may be that the effects of witnessing victimization differ in terms of how often and how many times an individual has witnessed someone being victimized. Hochstetler, Murphy, and Simons (2004) found that frequent victimization in prison increased depressive symptoms. Given this finding, it is possible that the more victimization incidents an individual witnesses, the greater the posttraumatic cognitions and trauma symptoms.

Finally, this study only examines the effects of witnessing victimization on male ex-prisoners; however, victimization is just as prevalent in female prisons (Struckman-

Johnson & Struckman-Johnson, 2002; Wolff & Shi, 2009). It has been argued that male and female inmates are different (Giallombardo, 1966; Burkhart, 1973). Male and female offenders are generally incarcerated for different types of crimes. A recent study by the Bureau of Justice Statistic reported that the majority of female state prisoners were serving time for drug or property offenses (25% and 29%, respectively) compared to 54% of male state prisoners who were serving time for a violent offense (Carson & Sabol, 2012). Research shows that serving time for a violent offense increases the risk of victimization (Gover et al., 2008; Lahm, 2009). Additionally, offense type also predicts violent misconduct. Steiner and Wooldredge (2009) found that for female inmates, being incarcerated for a violent offense increased that the odds of assaults, whereas incarceration for a drug offense decreased the odds. Solinas-Saunders (2012) found that, compared to males in the sample, female inmates were less likely to commit verbal and physical assaults, and inmates convicted of a violent offense were more likely to commit verbal and physical assaults. These findings suggest that male and female inmates engage in different types of crime both within correctional facilities and in the community. The differences in the type of infractions inmates engage in suggest that male and female inmates may witness different types of victimization in prison. Although the findings of this study suggest that witnessing theft and sexual victimization matters the most, this may be unique to male inmates. For example, witnessing assault may be particularly problematic for females since female inmates are more likely to come to prison with abuse histories compared to male inmates. A study conducted by the Bureau of Justice Statistics found that 25% of females in state prisons and 14% in federal prisons reported abuse as both a child and an adult, whereas roughly 3% of males in state prisons and 1%

in federal prison reported abuse as a child and an adult (Harlow, 1999). Witnessing violence may have more traumatic outcomes for female inmates, particularly those with a history of abuse, than for males.

Future research is needed to identify the types of victimization female inmates witness most and should examine the effects of witnessing victimization with samples that include both male and female inmates.

Conclusions

This study sought to provide a better understanding of an aspect of victimization that has received little attention – witnessing victimization in prison. In addition, it examined whether witnessing victimization while incarcerated influenced the reintegration of parolees in halfway houses. The current study found that individuals' experiences in prison are related to their transition into the community. The consequences associated with witnessing victimization while incarcerated may exacerbate the barriers that already make the transition home difficult.

The current findings suggest that not only are prisoners witnessing victimization, its effects are influencing their post-release adjustment. Risk Assessment and treatment/intervention are needed both within correctional institutions and after release for psychological problems and strain that could negatively impact reentry. Therapy can be used to help prisoners cope with the negative emotions that result from witnessing victimization. Again, prisoners probably lack effective coping skills, and therefore they are likely to act out in anger and frustration. Therapy can be a way for prisoners to talk about what they are feeling and to learn how to express emotions in ways that will not lead to crime.

Screening prisoners and matching them to appropriate interventions is especially important. Even where post-release control is available, the control is more focused on surveillance and supervision than on rehabilitation and providing assistance. Consequently, post-release agencies should be more attuned to what is causing recidivism, which includes witnessing victimization in prison. As such, this risk factor should be included in risk assessments and intervention protocol.

REFERENCES

Agnew, R. (1992). Foundation for a general strain theory of crime and delinquency. *Criminology, 30*(1), 47-87.

Agnew, R. (2002). Experienced, vicarious, and anticipated strain: An exploratory study on physical victimization and delinquency. *Justice Quarterly, 19*(4), 603-632.

Adamson, J. L., & Thompson, R. A. (1998). Coping with interparental verbal conflict by children from nonviolent homes. *Journal of Family Violence, 13*(2), 213-232.

Austin, J., Fabelo, T., Gunter, A., McGinnis, K. (2006). *Sexual violence in the Texas prison system.* (Report No. NJC215774). Washington, DC: U.S. Department of Justice.

Austin, J., & Handyman, P. L. (2004). The risks and needs of the returning prisoner population. *Review of Policy Research, 21*(1), 13-29.

Ball, J. C., Shaffer, J. W., & Nurco, D. N. (1983). The day-to-day criminality of heroine addicts in Baltimore: A study of the continuity of offence rates. *Drug and Alcohol Dependence, 12*(2), 119-142.

Barnett, M. A., Sinisi, C. S., & Quackenbush, S. W. (2002). Perceptions of a known rape victim: Role of subject's gender and personal experience with rape. *The Journal of Social Psychology, 131*(1), 139-141

Baumer, E., Felson, R., & Messner, S. (2003). Changes in police notification for rape (1973-2000). *Criminology, 41*(3), 841-872

Beck, A. J., & Harrison, P. M. (2007). *Sexual victimization in state and federal prisons reported by inmates, 2007* (Report No. NCJ 2194414). Washington, DC: U.S. Department of Justice.

Bell, C. C., & Jenkins, E. J. (1991). Traumatic stress and children. *Journal of Health Care for the Poor and Underserved, 2*(1), 175-188.

Bell, C. C., & Jenkins, E. J. (1993). Community violence and children in Chicago's Southside. *Psychiatry, 56*(1), 46-54.

Blevins, K. R., Listwan, S. J., Cullen, F. T., & Jonson, C. L. (2010). A general strain theory of prison violence and misconduct: An integrated model of inmate behavior. *Journal of Contemporary Criminal Justice, 26*(2), 148-166.

Blitz, C. L., Wolff, N., & Shi, J. (2008). Physical victimization in prison: The role of mental illness. *International Journal of Law and Psychiatry, 31*(5), 385-393.

Boxer, P., Middlemass, K., & DeLorenzo, T. (2009). Exposure to violent crime during incarceration: Effects on psychological adjustment following releases. *Criminal Justice and Behavior,* 36(8), 793-807.

Bradshaw, C. P., Ghandour, L. A., Rodger, C. R. R., & Garbarino, J. (2009). Social-cognitive mediators of the association between community violence exposure and aggressive behavior. *School Psychology Quarterly, 24*(3), 199-210.

Buka, S. L., Stichick, T. L., Birdthistle, I., & Earls, F. J. (2001). Youth exposure to violence: Prevalence, risk, and consequences. *American Journal of Orthopsychiatry, 71*(3), 298-310.

Burkhart, K. W. (1973). *Women in Prison.* Garden City, NJ: Doubleday & Company.

Burnam, M. A., Stein, J. A., Golding, J. M., Siegel, J. M., Sorenson, S. B., Forsythe, A. B., & Telles, C. A. (1988). Sexual assault and mental disorders in a community population. *Journal of Consulting and Clinical Psychology, 56*(6), 843-850.

Camp, S. D., Gaes, G. G., Langan, N. P., & Saylor, W. G. (2003). The influences of prisons on inmate misconduct: A multilevel investigation. *Justice Quarterly, 20*(3), 501-533.

Cao, L., Zhao, J., & Van Dine, S. (1997). Prison discipline tickets: A test of the deprivation and importation models. *Journal of Criminal Justice, 25*(2), 103-113.

Carlson, B. E. (1984). *Children's observations of interparental violence.* In A. R. Roberts (Ed.), Battered women and their families, (pp. 147-167), New York: Springer.

Carmody, D. C., & Washington, L. M. (2001). Rape myth acceptance among college women: The impact of race and prior victimization. *Journal of Interpersonal Violence, 16*(5), 424-436.

Carson, E. A., & Sabol, W. J. (2012). *Prisoners in 2011* (Report No.NCJ 239808). Washington, DC: U.S. Department of Justice.

Clear, T., Rose, D. R., & Ryder, J. A. (2001). Incarceration and the community: The problem of removing and returning offenders. *Crime and Delinquency, 47*(3), 335-351.

Clemmer, D. (1940). *The Prison Community.* Boston, NY: Holt, Rinehart & Winston.

Colbert, S. J., & Krause, N. (2009). Witnessing violence across the life course, depressive symptoms, and alcohol use among older persons. *Health Education & Behavior, 36*(2), 259-277.

Colvin, M. (2007). Applying differential coercion and social support theory to prison organizations: The case of the penitentiary in New Mexico. *The Prison Journal, 87*(3), 367-387.

Cooley, D. (1993). Criminal victimization in male federal prisons. *Canadian Journal of Criminology, 35*(4), 479-496.

Copes, H., Higgins, G. E., Tewksbury, R., & Dabney, D. A. (2011). Participation in the prison economy and likelihood of physical victimization. *Victims and Offenders, 6*(1), 1-18.

Cummings, E. M., Zahn-Waxler, C., & Radke-Yarrow, M. (1984). Developmental changes in children's reactions to anger in the home. *Journal of Child Psychology and Psychiatry, 25*(2), 63–74.

Cummins, R. C. (1988). Perceptions of social support, receipt of supportive behaviors, and locus of control as moderators of the effects of chronic stress. *American Journal of Community Psychology, 16*(5), 685-700.

Davies, M. (2002). Male sexual assault victims: A selection review of the literature and implications for support services. *Aggression and Violence Behavior, 7*(3), 203-214.

DeLisi, M., Berg, M. T., & Hochstetler, A. (2004). Gang members, career criminals and prison violence: Further specification of the importation model of inmate behavior. *Criminal Justice Studies, 17*(4), 369-383.

Dhami, M. K., Ayton, P., & Loewenstein, G. (2007). Adaptation to imprisonment: Indigenous or imported? *Criminal Justice and Behavior, 34*(8), 1085-1100.

Diamond, T., & Muller, R. T. (2004). The relationship between witnessing parental conflict during childhood and later psychological adjustment among university students: Disentangling confounding risk factors. *Canadian Journal of Behavioural Science, 36*(4), 295-309.

Dumond, R. (1992). The sexual assault of male inmates in incarcerated settings. *International Journal of Sociology of Law, 20*(2), 135-157.

Dumond, R. W. (2000). Inmate sexual assault: The plague that persists. *The Prison Journal, 80*(4), 407-414.

Dumond, R. W. (2003). Confronting America's most ignored crime problem: The Prison Rape Elimination Act of 2003. *The Journal of the American Academy of Psychiatry and the Law, 31*(3), 354-360.

Dumond, R., & Dumond, D. A. (2007). Correctional health care since the passage of PREA. *Corrections Today, 69*(5), 76-79.

Fantuzzo, J., Boruch, R., Beriama, A., Atkins, M., & Marcus, S. (1997). Domestic violence and children: Prevalence and risk in five major cities. *Journal of the American Academy of Child and Adolescent Psychiatry, 36*(1), 116–12.

Elliott, D. M., Mok, D. S., & Briere, J. (2004). Adult sexual assault: Prevalence, symptomatology, and sex differences in the general population. *Journal of Trauma Stress, 17*(3), 203-211.

Fazel, S., Bains, P., & Doll, H. (2006). Substance abuse and dependence in prisoners: A systematic review. *Addiction, 101*(2), 181-191.

Feerick, M. M., Haugaard, J. J. (1999). Long-term effects of witnessing marital violence for women: The contribution of childhood physical and sexual abuse. *Journal of Family Violence, 14*(4), 344-398.

Fitzpatrick, K. M., & Boldizar, J. P. (1993). The prevalence and consequences of exposure to violence among African-American youth. *Journal of the American Academy of Child and Adolescent Psychiatry, 32*(2), 424-430.

Fleisher, M. S., & Krienert, J. L. (2009). *The myth of prison rape: Sexual culture in American prisons.* Lanham, MD: Rowman & Littlefield Publisher, Inc.

Forsstrom-Cohen, B., & Rosenbaum, A. (1985). The effects of parental martial violence on young adults: An exploratory investigation. *Journal of Marriage and Family, 47*(2), 467-472.

Fowler, F. K., Blackburn, A. G., Marquart, J. W., & Mullings, J. L. (2010). Would they officially report an in-prison sexual assault? An examination of inmate perceptions. *The Prison Journal, 90*(2), 220-243.

Fox, R. K., Currie, S. L., Evans, J., Wright, T. L., Tobler, L., Phelps, B., Busch, M. P., & Page-Shafer, K. A. (2005). Hepatitis C virus infection among prisoners in the California state correctional system. *Clinical Infectious Diseases, 41*(1), 177-186.

Ganem, N. M. (2010). The role of negative emotion in general strain theory. *Journal of Contemporary Criminal Justice,* 26(2), 167-185.

Gaylord-Harden, N. K., Cunningham, J. A., & Zelencik, B. (2011). Effects of exposure to community violence on internatlizing symptoms: Does desensitization to violence occur in african American youth? *Journal of Abnormal Child Psychology, 39*(1), 711-719.

Gendreau, P., Goggin, C. E., & Law, M. A. (1997). Predicting prison misconducts. *Criminal Justice and Behavior, 24*(4), 414-431.

Gendreau, P., Little, T., & Goggin, C. (1996). A meta-analysis of the predictors of adult offender recidivism: What works! *Criminology, 34*(4), 575-607.

Giallombardo, R. (1966). *Society of Women: A Study of a Women's Prison.* New York, NY: John Wiley & Sons.

Goodstein, L., MacKenzie, D. L., & Shotland, R. L. (1984). Personal control and inmate adjustment to prison. *Criminology 22*(1) 343-369.

Gorman-Smith, D., & Tolan, P. (1998). The role of exposure to community violence and development problems among inner-city youth. *Development and Psychopathology, 10*(1), 101-116.

Gorman-Smith, D., Henry, D. B., & Tolan, P. H. (2004). Exposure to community violence and violence perpetration: The protective effects of family functioning.

Gover, A. R., Perez, D. M., & Jennings, W.G. (2008). Gender differences in factors contributing to institutional misconduct. *The Prison Journal, 88*(3) 378-403.

Griffin, M. L., & Hepburn, J. R. (2006). The effect of gang affiliation on violent misconduct among inmates during early years of confinement. *Criminal Justice and Behavior, 33*(4), 419-448.

Guenther, A. (1978). Impact of confinement. In N. Johnson & L. Savitz (Eds.), *Justice and Corrections* (pp. 596-603). New York, NY: John Wiley.

Gunnison, E., & Helfgott, J. B. (2011). Factors that hinder offender reentry success: A view from community corrections officers. *International Journal of Offender Therapy and Comparative Criminology, 55*(2), 287-304.

Hall, W., Bell, J., & Carless, J. (1993). Crime and drug among applicants from methadone maintenance. *Drug and Alcohol Dependence,* 31(2), 123-129.

Hammett, T. M. (2006). HIV/AIDS and other infectious diseases among correctional inmates: Transmission, burden, and an appropriate response. *American Journal of Public Health, 96*(6), 974-978.

Harlow, C. W. (1999). *Prior abuse reported by inmates and probationers* (Report No. NCJ 172879). Washington, D.C.: U.S. Department of Justice.

Hay, C., & Evans, M. M. (2006). Violent victimization and involvement in delinquency: Examining predictions from general strain theory. *Journal of Criminal Justice, 34*(3), 261-274.

Helfgott, J. (1997). Ex-offender needs versus criminal opportunity in Seattle, Washington. *Federal Probation, 61*(2), 12-24.

Henning, K., Leitenberg, H., Coffey, P., Turner, T. & Bennett, R.T. (1996). Long-term psychological and social impact of witnessing physical conflict between parents. *Journal of Interpersonal Violence, 11*(2), 35-51.

Hensley, C., Koscheski, M., & Tewksbury, R. (2005). Examining the characteristics of male sexual assault targets in a southern maximum-security prison. *Journal of Interpersonal Violence, 20*(6), 667-679.

Hensley, C., & Tewksbury, R. (2005). Wardens' perceptions of prison rape. *The Prison Journal, 85*(2), 186-197.

Hensley, C., Tewksbury, R., & Castle, T. (2003). Characteristics of prison sexual assault targets in male Oklahoma correctional facilities. *Journal of Interpersonal Violence, 18*(6), 595-606.

Hochstetler, A., & DeLisi, M. (2005). Importation, deprivation, and varieties of serving time: An integrated-lifestyle-exposure model of prison offending. *Journal of Criminal Justice, 33*(1), 257-266.

Hochstetler, A., Murphy, D. S., & Simons, R. L. (2004). Damaged goods: Exploring predictors of distress in prison inmates. *Crime and Delinquency, 50*(3), 436-457.

Hoffmann, J. P., & Su, S. S. (1997). The conditional effects of stress on delinquency and drug use: A strain theory assessment of sex differences. *Journal of Research in Crime and Delinquency, 34*(1), 46-78.

Hughes, T., & Wilson, D. J. (2002). *Reentry trends in the United States: Inmates returning to the community after serving time in prison.* Washington, DC: U.S. Department of Justice.

Innes, C. A. (1997). Patterns of misconduct in the federal prison system. *Criminal Justice Review, 22*(2), 157-174.

Irwin, J., & Cressey, D. R. (1962). Thieves, convicts and the inmate culture. *Social Problems, 10*(2), 142-155.

James, D. J., & Glaze, L. E. (2006). *Mental health problems of prison and jail inmates* (Report No. NCJ 213600). Washington, DC: U.S. Department of Justice.

Jenness, V., Maxson, C. L., Matsuda, K. N., & Sumner, J. M. (2007). *Violence in California correctional facilities: An empirical examination of sexual assault.* Irvine, CA: University of California-Irvine, Center for Evidence-Based Corrections.

Kaufman, A., Divasto, P., Jackson, R., Voorhees, R., & Christy, J. (1980). Male rape victims: Noninstitutionalized assault. *American Journal of Psychiatry, 137*(2), 221-223.

Kimberling, R., Rellini, A., Kelly, V., Judson, P. L., & Learnman, L. A. (2002). Gender differences in victim and crime characteristics of sexual assault. *Journal of Interpersonal Violence, 17*(5), 526-532.

Knowles, G. J. (1999). Male prison rape: A search for causation and prevention. *The Howard Journal, 38*(3), 267-282.

Krienert, J. L., & Fleisher, M. S. (2005). "It ain't happening here": Working to understand prison rape. *The Criminologist, 30*(6), 3-6.

Kulkarni, M. R., Graham-Bremann, S., Rauch, S. A. M., & Seng, J. (2011). Witnessing versus experiencing direct violence in childhood as correlates of adulthood PTSD. *Journal of Interpersonal Violence, 26*(6), 1264-1281.

Lahm, K. F. (2008). Inmate-on-inmate assault: A multilevel examination of prison violence. *Criminal Justice and Behavior, 35*(1), 120-137.

Lahm, K. F. (2009). Inmate assaults on prison staff: A multilevel examination of an overlooked form of prison violence. *The Prison Journal, 89*(2), 131-150.

Langan, P. A., & Levin, D. J. (2002). *Recidivism of prisoners released in 1994.* (Report No. 193427). Washington, DC: Department of Justice.

Lin, J., Grattet, R., & Petersilia, J. (2010). "Back-end sentencing" and reimprisonment: Individual, organizational, and community predictors of parole sanctioning decisions. *Criminology, 48*(3), 759-795.

Lin, W., Cochran, J. K., & Mieczknwski, T. (2010). Direct and vicarious violent victimization and juvenile delinquency: An application of general strain theory. *Sociological Inquiry, 81*(2), 195-222.

Listwan S. J., Colvin, M., Hanley, D., & Flannery, D. (2010). Victimization, social support, and psychological well-being: A study of recently released prisoners. *Criminal Justice and Behavior, 37*(10), 1140-1159.

Lstwan, S. J., Hanley, D., & Colvin, M. (2012). *The prison experience and reentry: Examining the impact of victimization on coming home* (Document No. 238083). Washington, DC: U.S. Department of Justice.

Loza, W. (2003). Predicting violent and nonviolent recidivism of incarcerated offenders. *Aggression and Violent Behavior, 8*(1), 175-203.

MacKenzie, D. L. (1987). Age and adjustment to prison: Interactions with attitudes and anxiety. *Criminal Justice and Behavior, 14*(4), 427-447.

Maker, A. H., Kemmelmeier, M., & Peterson, C. (1998). Long-term psychological consequences in women of witnessing parental physical conflict and experience abuse in childhood. *Journal of Interpersonal Violence, 13*(5), 574-589.

Man, C. D., & Cronan, J. P. (2001). Forecasting sexual abuse in prison: The prison subculture of masculinity as a backdrop for "deliberate indifference". *The Journal of Criminal Law & Criminology, 92*(1), 127-185.

Margolin, G., Vickerman, K. A., Oliver, P. H., & Gordis, E. B. (2010). Violence exposure in multiple interpersonal domains: Cumulative and differential effects. *Journal of Adolescent Health, 47*(3), 198-205.

Martinez, P., & Richters, J. E. (1993). The NIMH community violence project II: Children's distress symptoms associated with violence exposure. *Psychiatry, 56*(1), 22-35.

Maruschak, L. M., & Beavers, R. (2009). *HIV in prisons, 2007-08.* (Report No. NCJ 228307). Washington, DC: U.S. Department of Justice.

Massoglia, M., & Warner, C. (2011). The consequences of incarceration: Challenges for scientifically informed and policy-relevant research. *Criminology and Public Policy, 10*(3), 851-863.

Mazerolle, P., Burton, V. S., Cullen, F. T., Evans, T. D., & Payne, G. L. (2000). Strain, anger, and delinquent adaptations: Specifying general strain theory. *Journal of Criminal Justice, 28*(1), 89-101.

Mazerolle, P., & Piquero, A. (1998). Linking exposure to strain with anger: An investigation of deviant adaptions. *Journal of Criminal Justice, 26*(3), 195-211.

McCorkle, R. C. (1992). Personal precautions to violence in prison. *Criminal Justice and Behavior, 19*(2), 160-173.

McCorkle, R. C., Miethe, T. D., & Drass, K. A. (1995). The roots of prison violence: A test of the deprivation, management, and "not-so-total" institutional models. *Crime and Delinquency, 41*(3), 317-331.

McGuire, M. D. (2005). The impact of prison rape on public health. *Californian Journal of Health Promotion, 3*(2), 72-83.

Mears, D. P., & Mestre, J. (2012). Prisoner reentry, employment, signaling, and the better identification of desisters. *Criminology & Public Policy, 11*(1), 5-15.

O'Donnell, I. (2004). Prison rape in context. *British Journal of Criminology, 44*(2), 241-255.

Overlien, C. (2010). Children exposed to domestic violence: Conclusions from the literature and challenges ahead. *Journal of Social Work, 10*(1), 80-97.

Perez, D. M., Gover, A. R., Tennyson, K. M., & Santos, S. D. (2010). Individual and institutional characteristics related to inmate victimization. *International Journal of Offender Therapy and Comparative Criminology, 54*(3), 378-394.

Petersilia, J. (2001). Prisoner reentry: Public safety and reintegration challenges. *The Prison Journal, 81*(3), 360-375.

Petersilia, J. (2003). *When prisoners come home: Parole and prisoner reentry.* New York, NY: Oxford Press University.

Richters. J. E., & Martinez, P. E. (1993). Violent communities, family choices, and children's chances: An algorithm for improving the odds. *Development and psychopathology, 5*(4), 609-627.

Robertson, J. E. (2003). Rape among incarcerated men: Sex, coercion, and STDs. *AIDS Patient Care and STDs, 17*(8), 423-430.

Roberts, A. L., Gilman, S. E., Fitzmaurice, G., Decker, M. R., & Koenen, K. C. (2010). Witness of intimate partner violence in childhood and perpetration of intimate partner violence in adulthood. *Epidemiology, 21*(6), 809-818.

Rossman, B.B. (2000). Time heals all: How much and for whom? *Journal of Emotional Abuse, 2*(1), 31-50.

Ruback, B. R., Carr, T. S., & Hopper, C. H,. (1986). Perceived control in prison: Its relation to reported crowding, stress, and symptoms. *Journal of Applied Social Psychology 16*(1), 375-386.

Schwab-Stone, M. E., Ayers, T. S., Kasprow, W., Voyce, C., Barone, C., Shriver, T., & Weissberg, R. P. (1995). No safe haven: A study of violence exposure in an urban community. *Journal of the American Academy of Child and Adolescent Psychiatry, 34*(10), 1343-1352.

Sheidow, A. J., Gorman-Smith, D., Tolan, P. H., & Henry, D. B. (2001). Family and community characteristics: Risk factors for violence exposure in inner-city youth. *Journal of Community Psychology, 29*(3), 345-360.

Solinas-Saunders, M., & Stacer, M.J. (2012). Prison resources and physical/verbal assaults in prison: A comparison of male and female inmates. *Victims & Offenders,* 7(3), 279-311.

Spriggs, A. L., Halpern, C. T., & Martin, S. L. (2011). Continuity of adolescent and early adult partner violence victimization: Association with witnessing violent crime in adolescence. *Journal of Epidemiology & Community Health, 63*(9), 741-748.

Steiner, B., & Wooldredge, J. (2009). Individual and environmental effects on assaults and nonviolent rule breaking by women in prison. *Journal of Research in Crime and Delinquency, 46*(4), 437-467.

Straus, M. A. (1992). Children as witnesses to martial violence: A risk factor for lifelong problems among a nationally representative sample of American men and women. In D. F. Schwartz (Eds.), *Children and violence: Report of the twenty-third Ross roundtable on critical approaches to common pediatric problems in collaboration with the Ambulatory Pediatric Association.* Columbus, OH: Ross Laboratories.

Steiner, B., & Wooldredge, J. D. (2008). Inmates versus environmental effects on prison rule violations. *Criminal Justice and Behavior, 35*(4), 378- 394.

Struckman-Johnson, C., & Struckman-Johnson, D. (2000). Sexual coercion rates in seven mid-western prison facilities for men. *The Prison Journal, 80*(1), 379-390.

Struckman-Johnson, C., & Struckman-Johnson, D. (2002). Sexual coercion reported by women in three Midwestern prisons. *Journal of Sex Research, 39*(3), 217-227.

Struckman-Johnson, C., & Struckman-Johnson, D. (2006). A comparison of sexual coercion experiences reported by men and women in prison. *Journal of Interpersonal Violence, 21*(2), 1591-1615.

Struckman-Johnson, C., Struckman-Johnson, D., Rucker, L., Bumby, K., & Donaldson, S. (1996). Sexual coercion reported by men and women in prison. *The Journal of Sex Research, 33*(1), 67-76.

Sykes, G. (1958). *The Society of Captives: A Study of a Maximum-Security Prison*. Princeton, NJ: Princeton University Press.

Tewksbury, R. (1989). Fear of sexual assaults in prison inmates. *The Prison Journal, 69*(1), 62-71.

Tewksbury, R. (2007). Effects of sexual assaults on men: Physical, mental, and sexual consequences. *International Journal of Men's Health, 6*(1), 22-35.

Thomas, C. W. (1977). Theoretical perspectives on prisonization: A comparison of the importation and deprivation models. *The Journal of Criminal Law and Criminology, 68*(1), 135-145.

Thomas, J., & Zaitzow, B. H. (2006). Conning or conversion: The role of religion in prison coping. *The Prison Journal, 86*(2), 242-259.

Toch, H. (1977). *Living in Prison: The Ecology of Survival*. New York, NY: The Free Press.

Travis, J., & Petersilia, J. (2001). Reentry reconsidered: A new look at an old question. *Crime and Delinquency, 47*(3), 291-313.

Vetstein, R. D. (1997). Rape and AIDS in prison: On a collision course to a new death penalty. *Suffolk University Law Review,* 30, 862-903.

Weiss, K. (2010). Male sexual victimization: Examining men's experiences of rape and sexual assault. *Men and Masculinities, 12*(3), 275-298.

Wheeler, S. (1961). Socialization in correctional communities. *American Sociological Review, 26*(5), 697-712.

Wolff, N., Blitz, C., Shi, J., Siegel, J., & Bachman, R. (2007). Physical violence inside prison: Rates of victimization. *Criminal Justice and Behavior, 34*(1), 588-599.

Wolff, N., & Shi, J. (2009). Victimization and feelings of safety among male and female inmates with behavioral health problems. *The Journal of Forensic Psychiatry and Psychology, 20*(S1), S56-77.

Wolff, N., & Shi, J. (2011). Patterns of victimization and feelings of safety inside of prison: The experience of male and female inmates. *Crime and Delinquency, 57*(1), 29-55.

Wolff, N., Shi, J., Blitz, C., & Siegel, J. (2007). Understanding sexual victimization inside prisons: Factors that predict risk. *Criminology and Public Policy, 6*(3), 201-231.

Wolff, N., Shi, J., & Siegel, J. (2009).Patterns of victimization among male and female inmates: Evidence of an enduring legacy. *Violence and Victims, 24*(4), 469-484.

Wooden, W. S., & Parker, J. (1982). *Men behind bars: Sexual exploitation in prison.* New York, NY: Plenum Press.

Wooldredge, J. D. (1994). Inmate crime and victimization in a southwestern correctional facility. *Journal of Criminal Justice, 22*(4), 367-381.

Wooldredge, J. D. (1998). Inmate lifestyles and opportunities for victimization. *Journal of Research in Crime and Delinquency, 35*(4), 480-502.

Wooldridge, J. (2009). *Introductory Econometrics: A Modern Approach.* 4th ed. South-Western College Pub. Mason, OH.

Wright, K. N. (1991). The violent and victimized in the male prison. *Journal of Offender Rehabilitation 16*(3/4), 1-26.

Wright, K. N. (1993). Prison environment and behavioral outcomes. *Journal of Offender Rehabilitation, 20*(1/2), 93-113.

Ybarra, G. J., Wilkens, S. L., & Lieberman, A. F. (2007). The Influence of Domestic Violence on Preschooler Behavior and Functioning. *Journal of Family Violence, 22*(1), 33-42.

APPENDIX A: POSTTRAUMATIC COGNITIONS INVENTORY (PTCI)

We are interested in the kind of thoughts which you may have had after a something really bad happened in prison the last time you were incarcerated. Below are a number of statements that may or may not be what you think. Please read each statement carefully and tell us how much you AGREE or DISAGREE with each statement. People react to bad things in many different ways. There is no right or wrong answers to these statements.

For each item listed below the responses were the following:

1 = Totally disagree	**3 = Disagree slightly**	**6 = Agree very much**
2 = Disagree very much	**4 = Neutral**	**7 = Totally agree**
	5 = Agree slightly	

Items

1. The event happened because of the way I acted
2. I can't trust that I will do the right thing
3. I am a weak person
4. I will not be able to control my anger and will do something terrible
5. I can't deal with even the slightest upset
6. I used to be a happy person but now I am always miserable
7. People can't be trusted
8. I have to be on guard all of the time
9. I feel dead inside
10. You can never know who will harm you
11. I have to be especially careful because you never know what can happen next
12. I am inadequate
13. I will not be able to control my emotions, and something terrible will happen
14. If I think about an event, I will not be able to handle it
15. The event happened to me because of the sort of person I am
16. My reactions since the event mean that I am going crazy
17. I will never be able to feel normal emotions again
18. The world is a dangerous place
19. Somebody else would have stopped the event from happening

20. I am permanently changed for the worst
21. I feel like an object, not a person
22. Somebody else would not have gotten into this situation
23. I can't rely on other people
24. I feel isolated and set apart from others
25. I have no future
26. I can't stop bad things from happening to me
27. People are not what they seem
28. My life has been destroyed by the trauma
29. This is something wrong with me as a person
30. My reactions since the event show that I am a lousy coper
31. There is something about me that made the event happen
32. I will not be able to tolerate my thoughts about the event, and I will fall apart
33. I feel like I don't know myself anymore
34. You never know when something terrible will happen
35. I can't rely on myself
36. Not good can happen to me anymore

APPENDIX B: TRAUMA SYMPTOMS CHECKLIST - 40 (TSC-40)

How often have you experienced each of the following in the last two months?

Responses to the items below include the following:
0 = Never 1 = Rarely 2 = Sometimes 3 = Often

Items

1. Headaches
2. Insomnia (trouble getting to sleep)
3. Weight loss (without dieting)
4. Stomach problems
5. Sexual problems
6. Feeling isolated from others
7. Flashbacks (sudden, vivid, distracting memories)
8. Restless sleep
9. Low sex drive
10. Anxiety attacks
11. Sexual overactivity
12. Loneliness
13. Nightmares
14. Spacing out (going away in your mind)
15. Sadness
16. Dizziness
17. Not feeling satisfied with your sex life
18. Trouble controlling your temper
19. Waking up early in the morning and can't get back to sleep
20. Uncontrollable crying
21. Fear of men
22. Not feeling rested in the morning
23. Having sex that you didn't enjoy
24. Trouble getting along with others
25. Memory problems

26. Desire to physically hurt yourself
27. Fear of women
28. Waking up in the middle of the night
29. Bad thoughts or feelings during sex
30. Passing out
31. Feeling that things are ‘unreal’
32. Unnecessary or over-frequent washing
33. Feelings of inferiority
34. Feeling tense all the time
35. Being confused about your sexual feelings
36. Desire to physically hurt others
37. Feelings of guilt
38. Feelings that you are not always in your body
39. Having trouble breathing
40. Sexual feelings when you shouldn’t have them

APPENDIX C: WITNESSED VICTIMIZATION ITEMS

As we go through the list, please think about whether any of these incidents happened to you while incarcerated in the last twelve months. Will ask whether you witnessed a particular event.

Responses to the following items include:
0 = No **1 = Yes**

1. Have you ever see anyone take something from another person during the last 12 months you were in prison?
2. Have you ever seen other people fight in prison during the last 12 months you were in prison?
3. Have you ever seen someone being disrespected or talk down to during the last 12 months you were in prison?
4. Did you see an inmate make another inmate (through coercion or "talk him into") do something sexual that he may not have wanted to do?
5. Did you ever see any other inmate try to force someone (by hurting him, holding him down, or telling him he was going to hurt him) to do something sexual that he did not want to do?

APPENDIX D: CORRELATION MATRIX

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1. Witness Stealing	--																				
2. Witness Fighting	.270	--																			
3. Witnessed Emotional	.229	.305	--																		
4. Witness sexual victimization	.198	.131	.083	--																	
5. Substance Use	.055	.017	-.007	.001	--																
6. Employment	-.001	.009	-.024	-.011	.004	--															
7. Reentry	-.054	-.049	.035	.075	-.010	-.055	--														
8. Any Negative CJ Outcome	.075	.040	.051	.091	.065	-.048	.022	--													
9. Arrest	.096	.015	.063	.106	.090	-.076	-.026	.648	--												
10. Parole violation	.040	.009	.023	.062	.102	-.040	.073	.589	.375	--											
11. Parole Revoked	.072	-.015	.031	.041	.025	-.095	-.014	.433	.538	.266	--										
12. Reincarceration	.048	-.005	.024	.043	.062	-.059	-.036	.667	.470	.275	.582	--									
13. TSC Scale	.044	-.020	.018	.088	.010	-.092	.249	.061	.011	.079	.040	.051	--								
14. PTCI Scale	.096	.002	.013	.103	.052	-.106	.232	.094	.032	.132	.044	.073	.620	--							
15. Mental Illness	.005	-.035	.024	.059	.026	-.084	.142	.087	.076	.057	.099	.057	.327	.270	--						
16. Religion	-.020	-.009	-.019	-.012	-.063	.010	.068	-.056	-.033	-.004	-.038	-.082	.049	-.079	-.055	--					
17. Marital Status	.036	-.013	-.030	-.047	.022	-.019	.089	.062	.043	.029	.013	.053	.009	.052	-.005	-.037	--				
18. Education	-.022	-.037	-.005	-.004	-.001	.148	-.001	-.028	-.027	.003	-.028	-.007	-.047	-.107	-.079	.032	.004	--			
19. Prior prison	.015	.004	-.011	.074	.053	-.026	-.065	.003	.023	-.002	-.004	.006	-.002	-.007	-.042	.006	-.049	.029	--		
20. Race	.029	.022	.062	.098	.072	.094	.036	-.001	.010	.008	.006	.027	.059	.046	.104	-.130	.031	.025	.126	--	
21. Age	-.195	-.095	-.047	-.022	-.073	-.017	.145	-.141	-.100	-.064	-.132	-.186	.092	-.030	.096	.204	-.072	.065	-.090	-.019	--