

1-1-2011

The Prevalence and Predictive Nature of Victimization, Substance Abuse and Mental Health on Recidivism: A Comparative Longitudinal Examination of Male and Female Oregon Department of Corrections Inmates

Anastacia Konstantinos Papadopulos
Portland State University

Let us know how access to this document benefits you.

Follow this and additional works at: https://pdxscholar.library.pdx.edu/open_access_etds

Recommended Citation

Papadopulos, Anastacia Konstantinos, "The Prevalence and Predictive Nature of Victimization, Substance Abuse and Mental Health on Recidivism: A Comparative Longitudinal Examination of Male and Female Oregon Department of Corrections Inmates" (2011). *Dissertations and Theses*. Paper 204.

10.15760/etd.204

This Thesis is brought to you for free and open access. It has been accepted for inclusion in Dissertations and Theses by an authorized administrator of PDXScholar. For more information, please contact pdxscholar@pdx.edu.

The Prevalence and Predictive Nature of Victimization, Substance Abuse & Mental
Health on Recidivism: A Comparative Longitudinal Examination of Male and Female
Oregon Department of Corrections Inmates

by

Anastacia Konstantinos Papadopulos

A thesis submitted in partial fulfillment of the
requirements for the degree of

Master of Science
in
Criminology and Criminal Justice

Thesis Committee:
Emily Salisbury, Chair
Kris Henning
Laura Hickman

Portland State University
©2011

Abstract

As a consequence of increased awareness and the current scholarly debate regarding women's differential predictors of recidivism, criminal justice agencies are working with researchers in the field to expand their knowledge in this area. In 2007, Portland State University researchers in collaboration with the Oregon Department of Corrections conducted an investigation of factors emerging in the pathways and gender responsive literature as predictive of women's recidivism in a randomly selected sample of female (n=150) and male (n=150) inmates. This study uses information gathered from that investigation for two purposes: (1) to assess the prevalence rates of victimization experiences (childhood, adolescent and adulthood), substance abuse and mental health diagnosis across male and female ODOC inmates, and (2) to assess the predictive nature of victimization experiences, substance abuse and mental health diagnoses on recidivism across gender after a three year period. Findings of this investigation suggest that ODOC female inmates suffered from higher rates of victimization experiences and diagnosis of mood and anxiety disorders when compared to their male counterparts. Similar patterns emerged when assessing substance abuse and diagnosis of co-occurring disorders across gender. When assessing the predictive impact of victimization, substance abuse and mental health diagnosis on recidivism this study found support for both gender neutral and gender responsive perspectives.

Dedication

This thesis is dedicated to my children Maggie and Kostaki. They are the two reasons I believe everything is possible.

Acknowledgements

There are a number of individuals that have contributed to the completion of this thesis. First, I would like to thank Jeff Lesowski, for in the process of prosecuting crime he saved my life. Mr. Lesowski believed in my ability to do what was right for me and my children at the time I needed it the most. Without the support and understanding of Mr. Lesowski and his staff, this thesis would have never come to fruition.

I would like to acknowledge Professor Annette Jolin for the opportunity to work on research projects throughout my assistantship with the Criminology and Criminal Justice Department. Professor Jolin supervised the research and development of this project and was available at any point to provide guidance. Although Professor Jolin retired prior to the completion of this thesis she remained a major support and mentor throughout. Additionally, I am grateful for the support of the Oregon Department of Corrections Research and Evaluation Unit for selecting the sample, defining variables and building a foundation by which this research was possible. Mr. Bellatty, research manager for the Department of Corrections was available to teach me the importance of patience during the process of research. I am truly appreciative of the time, effort and patience he has put in this project.

Professor Emily Salisbury has guided me through the writing process and data analysis of this project. I am especially thankful to her for giving me the confidence and guidance during the times I thought this project would never come to an end. I thank my

committee members, Kris Henning and Laura Hickman for accepting to take on additional work during the summer to get this thesis completed. I appreciate the time and energy they spent providing feedback so that this thesis would be stronger.

Last but not least I would like to acknowledge my family for standing by me through this long process. My parents, Margaret and Kostas Papadopoulos have given me opportunities I never thought possible as a single mother of two children. They have given up their retirement and sanity for the purposes of assisting me in raising my children. Their commitment to my success is truly appreciated.

Table of Contents

Abstract.....	i
Dedication.....	ii
Acknowledgements.....	iii
Chapter One: Introduction.....	1
Chapter Two: Review of Literature.....	4
Pathways Perspective.....	4
Principles of Effective Intervention.....	9
Victimization.....	11
Substance Abuse.....	13
Mental Health Diagnosis.....	15
Current Study.....	17
Chapter Three: Methods.....	18
Sample.....	18
Procedure.....	19
Independent Variables.....	21
Victimization.....	21
Substance Abuse.....	22
Mental Health Diagnosis.....	23
Dependent Measure.....	23
Recidivism.....	23

Chapter Four:	
Results.....	25
Prevalence Rates	
Victimization.....	25
Substance Abuse.....	25
Mental Health Diagnosis.....	26
Assessment of Predictive Validity.....	27
Prison/Jail Admissions.....	27
New Felony Conviction.....	30
Chapter Five:	
Discussion.....	32
References.....	39
Appendix	
Archival Data Collection Tool.....	53

List of Figures

Graph 1: Percent Lifetime Victimization by Gender.....	41
--	----

List of Tables

Table 1: Percent Sample Characteristics by Gender.....	42
Table 2: Percent County of Offense by Gender.....	43
Table 3: Percent Mental Health Disorders by Gender.....	44
Table 4: Percent & Type Substance Abuse by Gender.....	45
Table: 5: Bivariate Correlations by Gender.....	46

Chapter 1

Introduction

Males have dominated the world of criminological theory, research, and policy. With males comprising an overwhelming majority of criminal offenders, it is not surprising that women have long suffered from underrepresentation in all areas of criminological research (Bloom, Owen & Covington, 2003; Lowenkamp, Holsinger, & Latessa, 2001). However, recent estimates indicate that the number of female (2.6%) offenders has been rising at higher rates than that of their male (1.6%) counterparts (Bloom, Owen, & Covington, 2003; Braithwaite, Treachwell & Arriola, 2005; Harrison & Beck, 2006). The United States is not the only country that has observed such a phenomenon in regards to their female offender population; similar patterns have been emerging in other countries such as Canada, Australia and England (Monnah-Moffat, 2009). The National Center for Addiction and Substance Abuse (1998) indicates that over the course of 15 years (1980-1995) the population of female prison inmates has risen 439 percent. As a result of this significant increase in female offending, researchers have found a new focus; investigating factors that contribute to the continuation of female offending.

Research assessing women's continuation of crime is growing at an accelerated rate. Through the use of quantitative methodologies, researchers are shedding light on important issues related to women's criminal involvement. Pathways and gender responsive scholars have been at the forefront of such investigations focusing on issues

such as poverty, victimization, mental health, substance abuse, and women's sole responsibility for their children (McKean & Ransford, 2004; Wright, Salisbury, & Van Voorhis, 2007). Emerging from this literature is evidence that female offenders have distinct pathways to criminal offending. In comparison to male offenders, females suffer higher rates of trauma throughout their life course, have higher levels of mental health impairments and tend to experience substance abuse differently than their male counterparts (Bloom et al, 2003; Greenfield & Snell, 1999; McCampbell, 2005).

Currently a debate has emerged in the field of Criminology. Criminologists are debating over whether predictors of crime are gender specific (gender responsive) or the same across gender (gender neutral). Pathways and gender responsive scholars question the ability of current risk instruments which have been researched and developed using largely male samples to accurately depict women's risk of future criminality and needs in correctional settings. They assert that variables such as victimization, substance abuse and mental health diagnosis are inter-connected when female offenders are concerned (Bloom et, al., 2003; Covington, 1998). Furthermore, these scholars argue that female offenders' risks are not being adequately assessed and needs are not being met when risk assessments implemented in correctional settings take no consideration of women's unique paths.

On the other hand there has been research showing that variables predictive of recidivism are the same for all offenders regardless of gender (Dowden & Andrews, 1999). Gender neutral scholars who have been responsible for the research and

development of risk assessments suggest that such assessments perform equally well in the prediction of risk in female offending populations (Andrews & Bonta, 2006).

Currently, gender neutral scholars, through the support of meta-analytic research showing gender neutrality in the predictors of recidivism, are steadfast about the validity of current risk assessments when addressing risk in both genders (Andrews & Bonta, 2006; Dowden & Andrews, 1999). They view women's unique experiences as important when considering responsivity to interventions and treatments but not as important contributors to recidivism (Andrews & Bonta, 2006). Consequently, they argue that variables such as victimization and mental illness should not be included in the assessment of risk.

As a consequence of the increased awareness female offenders' unique experiences and the current scholarly debate, criminal justice agencies are working with researchers in the field to expand their knowledge in this area. In 2007, Portland State University researchers in collaboration with the Oregon Department of Corrections conducted an investigation of factors emerging in the pathways and gender responsive literature as possible predictors of women's recidivism in a randomly selected sample of female (n=150) and male (n=150) inmates. Through an archival file review process, researchers extracted information regarding victimization, substance abuse and mental health impairments. The purpose of this investigation was twofold. First, researchers were interested in assessing the prevalence of the aforementioned variables across gender to determine if ODOC inmates followed similar patterns as those observed nationally. Secondly, there was an interest in investigating the predictive impact of victimization

experiences, substance abuse and mental health impairments on two measures of recidivism across gender for the purposes of providing further insight into the current criminological debate.

Chapter 2

Review of Literature

Pathways Perspective

Feminist author Chesney-Lind and Pasco (2004) describe the field of criminology as being almost “quintessentially male” (p.2). This statement is supported by the fact that most criminological theory has been developed and researched using male-only samples (Daly & Chesney-Lind, 1988). Traditional theoretical approaches although very revealing as to the causes of male offending, have spent little time delineating the possible causes of female criminality (Belknap, 2007). Specifically, most criminological theorists mention female offenders in passing and in most instances their depiction of female criminality is limited to their divergence from gender role expectations such as femininity and passivity (Belknap, 2007).

The emergence of feminist perspectives into the masculine world of criminology began approximately 30 years ago and has resulted in a greater understanding of the impact of gender on criminal behavior (Chesney-Lind, 1989). It has also provided an opportunity for the theoretical advancements and study of female criminality. The pathways perspective, which emerged as a consequence of the feminist desire to understand and explain female criminal involvement, demonstrates the importance of gender in the continuation of criminal activity (Blanchette & Taylor, 2009).

The pathways perspective views women’s criminality as a product of their life experiences. Researchers were interested in determining the life circumstances that lead

individuals to offending. Specifically, researchers asked the question: “how did you end up being an offender/delinquent?” (Belknap, 2007, p. 71). Most research studies examining the life histories of offenders have used qualitative retrospective designs (Belknap, 2007), in which individuals were able to openly speak of their past experiences. Although most pathways research presently focuses on incarcerated women, the study of offenders’ life histories began with prostitutes (Belknap, 2007).

Specifically, the work of James and Meyerding (1977) emerged as the first pathways research (Belknap, 2007). James and Meyerding (1977) used a combination of self- report questionnaires, interviews and field observations found in two studies on female prostitutes and compared their early experiences of victimization with those found in a “normal” population of women. They found that prostitutes reported more negative sexual experiences than their comparison group (James & Meyerding, 1977). Their histories were plagued by childhood sexual victimization, which often were incestuous and lacked meaningful relationships with males in their lives (James & Meyerding, 1977). They concluded that pathways to prostitution were associated with early exposure to sexual experience and sexual victimization (James & Meyerding, 1977).

Studies that followed investigating early sexual victimizations experienced by prostitutes found similar patterns of abuse histories. For example, Silbert and Pines (1983) found that 60 percent of their sample (n=200) had been sexually abused before the age of 16. A horrifying discovery was that on average each victim had been sexually abused by at least two perpetrators (Silbert & Pines, 1983). Unfortunately, for many of

these women escaping victimization meant running away from home, which in turn put them at further risk of violence. Farley and Barkan (1998) in their investigation into the histories of violence and prevalence of Post-Traumatic Stress Disorder in 130 prostitutes found that a large number of their sample had experienced rape (68%), physical victimization (82%), and threats of harm by use of weapons (83%) and homelessness (84%) since becoming a prostitute. Additionally, over half (68%) of their sample met diagnostic criteria for Post-Traumatic Stress Disorder, a diagnosis clearly linked to their traumatic victimization experiences (Farley & Barkan, 1998).

Chesney-Lind and Rodriguez (1983) conducted a qualitative study interviewing sixteen incarcerated women. Incarcerated women's histories of victimization were similar to those found in adult prostitutes. Specifically, ninety percent had experiences prostituting as a means to survive after running away from home (Chesney-Lind & Rodriguez, 1983). Furthermore, over half (62%) of incarcerated women in their sample had experienced severe non-sexual child abuse (Chesney-Lind & Rodriguez, 1983). In this study drug dependency was seen as a further precursor to re-offending (Chesney-Lind & Rodriguez, 1983).

The work of Cathy Widom (1989) depicted in "Childhood Victimization and the Derailment of Girls and Women to the Criminal Justice System" was one of the strongest research designs seen in the pathways literature up to that point (Belknap, 2007). Up to the release of this study, most research designs in this area were retrospective in nature (Belknap, 2007; Widom, 1989). This study however, had a prospective longitudinal

design that investigated the role of childhood victimization in the development of female criminality (Widom, 1989). Large samples of physically and sexually abused children (both boy and girls) were followed from childhood into adulthood. Criminal histories were collected first at the age of 26 and then once the average age of the sample was 33 years old. Widom (1989) found that girls were more likely to run away from their abuse environments, which in turn led to their continued victimization and initiation of risky activities such as prostitution, alcohol and smoking. This study introduced another possible variable contributing to women's pathways to criminality, namely substance abuse. Specifically, women in Widom's (1989) study were more likely to abuse substances when dealing with stressful situations.

As evidence and knowledge in the area increased, researchers began examining the link between victimization experiences and offending. Chesney-Lind (1989) had already set the tone for the investigation into the "criminalization" of women's survival, in her work "Girls' Crime and Women's Place: Toward a Feminist Model of Female Delinquency". Gilfus (1992) through the use of in-depth life history interviews of 20 incarcerated women constructed a conceptual framework in order to explain women's progression from victim, to survivor, to offender. Gilfus (1992) presents disheartening encounters of violence both sexual and physical in nature. The overwhelming majority (75%) of women had experienced childhood in homes beset by divorce, death and desertion (Gilfus, 1992). Even with such devastating circumstances most of them characterized themselves as caregivers of others, taking responsibility of siblings and

drug addicted parents (Gilfus, 1992). These early themes of neglect, abuse and responsibility Gilfus (1992) suggested “gave way to questions of survival and escape” (p. 75). Survival for them meant entering the streets, which in-turn led them to prostitution and substance abuse. As adults many (80%) experienced abuse by the hands of their intimate partner and substance abusing behaviors, which included high rates (80%) of intravenous drug abuse (Gilfus, 1992). Additionally, 15 out of the 20 women had custody of their children prior to their incarceration (Gilfus, 1992).

Recently, the work of Salisbury and Van Voorhis (2009) has been increasingly recognized for its rigorous methodology in their examination of females’ pathways to recidivism (Blanchette & Taylor, 2009). Researchers conducted a quantitative investigation into the pathways to incarceration of 313 female probationers (Salisbury & Van Voorhis, 2009). Using path analysis they found support for three gendered pathways to incarceration (Salisbury & Van Voorhis, 2009). Childhood victimization, although indirect in its predictive power was correlated with levels of depression and anxiety and substance abusing behaviors which led to incarceration (Salisbury & Van Voorhis, 2009). Secondly, findings demonstrated that women’s dysfunctional relationships were indirectly linked to their incarceration, but still very relevant to their criminal careers. That is, adult women who experienced dysfunctional intimate relationships were more likely to have higher levels of victimization due to low self-efficacy, which led to depression and anxiety followed by substance abusing behaviors, resulting in their incarceration (Salisbury & Van Voorhis, 2009). Lastly, employment and financial needs

were found to be directly correlated with incarceration (Salisbury & Van Voorhis, 2009). Authors noted that such findings correlating employment and financial to recidivism are “exacerbated by gendered constructs including a lack of support in their romantic and familial relationships as well as their diminished self-efficacy” (Salisbury & Van Voorhis, 2009, p. 560).

The pathways literature clearly points towards female gender specific pathways to criminality. Through the pathways perspective we are able to envision the life circumstances and past experiences of the female offender.

Principles of Effective Intervention

Considerable research has been dedicated towards the development of actuarial risk assessments devised to predict risk and needs in the offender population. Specifically, over the course of thirty years criminal justice practitioners have moved from making instinctual decisions regarding designation of offender risk, to the use of actuarial risk assessments grounded in theory that assess offender risk, need and responsivity (Bonta & Andrews, 2007). Although these assessments have been researched, developed and theoretically driven with male offenders in mind there is evidence suggesting that such assessments can also be successful in the prediction of risk in female populations (Bonta & Andrews, 2007). Principles of risk, need and responsivity comprise a model of effective intervention whose effectiveness has been researched and

supported by a databank of meta-analytic work (e.g. Andrews, Zinger, Hoge, Bonta, Gendreau, and Cullen (1990).

According to Andrews and Bonta (1998) the risk principle functions under the assumption that criminal behavior is predictable. Under this principle, high risk offenders receive intensive correctional services while low risk offenders necessitate little or no intervention (Andrews & Bonta, 1998). Requiring participation of low risk offenders in services provided to higher risk offenders can potentially lead to colluding, in which low risk offenders learn behaviors that increase their likelihood of recidivism instead of decreasing them (Bonta, Wallace-Capretta & Rooney, 2000). Gender responsive scholars have argued that the assessment of risk as currently being prescribed may lead to the over-classification of female offenders, which leads to inappropriate classification and intervention (Hardyman & Van Voorhis, 2004).

The need principle assesses criminogenic (dynamic) factors that contribute to an offender's recidivism and targets those needs in treatment (Andrews & Bonta, 1998). Andrews and Bonta (1998) make a distinction between criminogenic and noncriminogenic variables, in that attention to criminogenic factors contributes to the reduction of recidivism while focus on noncriminogenic although important do not lead to such reduction. Andrews and Bonta (1998) have identified the "Central Eight" as criminogenic factors: antisocial associates, antisocial cognitions, antisocial personality pattern, history of antisocial behavior, substance abuse, and problems in family, marital, school, work, leisure and recreation.

Finally, specific responsivity refers to “delivering treatment programs in a style and mode that is consistent with the ability and learning style of the offender” (Andrews & Bonta, 1998, p. 245). According to this principle interventions that are based on cognitive learning approaches are the most influential when teaching new behaviors (Andrews & Bonta, 2006). Under the specific responsivity principle noncriminogenic factors such as victimization experiences and diagnosis of major mental health disorders are seen as potentially important barriers to success if they impede an individual’s ability to gainfully participate in and complete programming (Andrews & Bonta, 2006).

The Current Debate: Gender Responsive or Gender Neutral?

Victimization

The investigation into the physical and sexual victimization histories of female offenders reveals disheartening figures. Studies have found that females unlike their male counterparts report significantly more victimization (Bloom et., al, 2003; Harrison & Beck, 2006; McClellan et, al, 1997; Silbert & Pines, 1983). These victimizations are more often violent, sexual, perpetrated by multiple offenders and occur over their life course (Blanchette & Taylor, 2009; Hollin & Palmer, 2006; Silbert & Pines, 1983).

In 1995, Bonta and colleagues found that 61.4% of the women in their sample (n=83) had been physically abused before the age of 12, while over half (54.2%) of them had been sexually abused at least once in their lives (Bonta, Pang & Wallace-Capretta, 1995). Silberman (2010) in an examination of the impact of childhood sexual abuse in a

sample of 321 female offenders found that early experiences of sexual abuse, specifically experiences prior to 18 years of age significantly increased the likelihood of a mental health diagnosis. Furthermore, history of victimization has been linked to self-medicating behaviors, in which individuals' abuse substances in order to escape the emotional pain of victimization (Evans, Forsyth & Gauthier, 2002).

While there is no question as to the devastating long term consequences of victimization, the literature is divided as to its predictive nature when considering recidivism. Specifically, gender responsive and pathways researchers view victimization as an important contributor to women's initiation and continuation of criminal activity (Bloom, Owen & Covington, 2003). On the other hand, victimization has been viewed as a noncriminogenic variable by the gender-neutral risk-need researchers (Lowenkamp, Holsinger & Latessa, 2001, Rettinger & Andrews, 2011). That is, researchers in that area of study do not believe that victimization plays an integral role in recidivism, which consequently does not necessitate attention when implementing risk assessments. Research in this area of the debate has demonstrated that victimization is not predictive of recidivism (Lowenkamp et al, 2001).

However, there have been numerous studies highlighting the impact of early experiences of victimization on criminality in the female offender population (Browne, Miller, Maguin, 1999, Chesney-Lind & Rodriguez, 1983; Farley & Barkan, 1998; Silbert & Pines, 1983; Widom, 1989). A recent longitudinal study conducted by Topizes, Mersky and Reynolds (2011) found that experiences of child maltreatment, which were

substantiated by local governmental agencies (i.e. child services and Juvenile Court referrals) significantly predicted adult arrest conviction for both males and females. The adjusted likelihood for adult arrest conviction for males in the sample was 58.3 percent and 148.9 percent for females (Topitzes et al, 2011).

Substance Abuse

According to the National Institute of Justice and the U.S. Department of Human Services, rates of substance abuse or dependence in the offender population are more than four times that of the general population (NIDA, 2007). A 2003 survey conducted by the Bureau of Justice Statistics investigating substance dependence and abuse in jail inmates found that over two-thirds of the jail inmate population were either dependent or had abused alcohol or drugs (Karberg & James, 2005). In addition, research has shown that approximately 53 percent of state and 45 percent of federal prisoners met criteria for diagnosis of substance abuse dependence in accordance to DSM-IV-TR criteria (NIDA, 2006).

The fact that substance abusing behaviors have been found to be predictive of recidivism and are considered a major criminogenic variable in the risk/need literature does not necessarily mean that such variables are not considered variables “of interest” in the current criminological debate. The debate surrounding substance abuse has to do specifically with the differential role substance abuse plays in the female offender population. That is, although substance abusing behaviors have been found to be

predictive of recidivism for both genders (Dowden & Brown, 2002) female offenders' prevalence and experiences with substance abuse are different than those found in males (Bloom et al, 2003).

Research on the prevalence of substance abuse among the offender population has found that female (52%) offenders exhibit higher rates of substance dependence than their male (44%) counterparts (Karberg & James, 2005; Peters, Stronzier, Murrin & Kearns, 1997). A special report conducted by the Bureau of Justice Statistics (Snell, 1991) found that more than half of women in prison reported that they had committed their offenses under the influence of drugs or alcohol, while nearly two thirds had reported using drugs on a daily basis. Furthermore, 1 in 3 female offenders reported having committed their present offense in order to support their addiction (Greenfield & Snell, 1999).

While examining the experiences female offenders have with substance abuse, Snell (1991) found that females used more, both in frequency and quantity than their male counterparts. In addition, female offenders tend to begin their substance abusing behaviors at an older age and their initiation in such behaviors has been depicted as sudden and heavy rather than gradual (Bloom et al, 2003). Furthermore, gender responsive scholars argue that substance abusing behaviors in female offenders directly related to their mental health impairments and their exposure to traumatic experiences (Bloom et al., 2003; Covington, 1998).

Mental Health

According to the Bureau of Justice Statistics (James & Glaze, 2006), female offenders have higher rates of mental health problems than their male counterparts. Approximately 73 percent of female state prisoners had a mental health problem, compared to 55 percent of males (James & Glaze, 2006). In 2005, just under a quarter of female (23%) offenders in state custody were under medical supervision and taking medications for the treatment of their mental health disorder (James & Glaze, 2006). Similar patterns have been observed at the federal level (James & Glaze, 2006).

When considering the impact of mental illness on recidivism, research has resulted in mixed findings. The meta-analytic work of Bonta, Law and Hanson (1998) resulted in the finding that major recidivism contributors of mentally disordered and non-disordered offenders are similar. Specifically, the study found major psychiatric disorders such as schizophrenia and psychosis were inversely associated with both general and violent recidivism, while mood disorders such as depression were not related to either measure of recidivism (Bonta et al., 1998). They concluded that although attention to mental health diagnosis is warranted, when considering the assessment of risk, “clinical factors are overshadowed by the more general factors identified in the criminological research” (Bonta, Law & Hanson, 1998, p. 139).

Recently, Bailargeon and colleagues conducted an examination for the purposes of assessing the impact of major psychiatric disorders such as depressive disorder, bipolar disorder, schizophrenia and nonschizophrenic psychotic disorders on repeat

incarcerations (Baillargeon, Binswager, Penn, Williams & Murray, 2009). Results of that study indicate that inmates with a diagnosis of a major mental illness were more likely to have repeat incarcerations (Baillargeon et al, 2009). Individuals with a diagnosis of bipolar disorder had the highest risk of return to prison than inmates with no mental health diagnosis (Baillargeon et al, 2009).

The diagnosis of co-occurring disorders has become increasingly noted in studies examining the mental health impairments of offenders. According to the Center for Substance Abuse Treatment (2005) co-occurring disorders “is the presence of one or more disorders related to drug and/or alcohol use in conjunction with one or more mental disorder” (as cited in Sacks, 2004, p. 449). Specifically, research is showing that in comparison to the general population, the offender population suffers from higher levels of mental health disorders and substance abuse (Baillargeon, Penn, Knight, Harzke, Baillargeon & Becker, 2009; Sacks, 2004). A diagnosis of a co-occurring mental health diagnosis and a substance abuse dependence disorder tends to create substantial barriers to overall success (Baillargeon et al, 2009). Baillargeon and colleagues investigated whether the presence of a substance abuse disorder in a sample of seriously mentally disturbed prison inmates increased the likelihood of recidivism (Baillargeon et al, 2009). They found that female offenders in the sample suffered from higher rates of mental health disorders and higher rates of co-occurring disorders (Baillargeon et al, 2009). Results of their study indicated that a diagnosis of a substance abuse disorder in addition

to a mental health diagnosis significantly increase the likelihood of recidivism (Baillargeon et al, 2009).

Current Study

As the debate between researchers continues, correctional agencies responsible for the assessment of risk and needs of offenders under their supervision are becoming increasingly interested in investigating whether or not differences exist between male and female offenders in factors predicting their recidivism. In 2007, Portland State University researchers in collaboration with the Oregon Department of Corrections, measured several factors emerging in the literature as risk factors in female offending in a randomly selected sample of female (n=150) and male (n=150) Oregon Department of Corrections inmates. The purpose of this study was to supplement ACRS (Automated Criminal Risk Score), the current risk instrument used by the Department of Corrections with factors found in the literature to contribute to female recidivism. This current examination utilizes an archival data collection strategy through a 2007 file review in order to examine:

- 1) The prevalence rates of victimization experiences, substance abuse and diagnosis of mental health disorders across gender.
- 2) Assess the predictive nature of victimization, substance abuse, and mental health diagnosis on recidivism across gender in an effort to inform the gender-neutral/gender-responsive scholarly debate

Chapter 3

Methods

Sample

The ODOC Research and Evaluation Department analysts selected a random sample of female (n=150) and male (n=150) inmates released from prison between January 1, 2000 and December 31, 2002. Upon review of sample characteristics, it became clear that the sample of female offenders followed similar demographic patterns as those found in national studies when it comes to race, age and children (Blood et al., 2003; Wright et al., 2007). That is, female offenders although predominantly white (78.1%) are overrepresented in the African American (17.2%) racial category; they also tend to be older than their male counterparts (31-40 [43.7%]) and the overwhelming majority of them are mothers (75.7%) (Table 1). Males in the sample although predominantly white (82.6%) were over-represented in Black (8.1%) and Hispanic (8.1%) racial groups and tended to be younger than their female counterparts (21-30 [34.9%]). The majority of male offenders identified themselves as never having been married (32.2%) and under half of them (44.3%) had children.

Prior criminal history was not available through ODOC records, thus researchers had to rely on finding such information through the file review process. The criminal histories of 163 inmates became available through this process. Of those inmates, 53.8 percent of male and 52.9 percent of females had prior adult misdemeanor convictions. Furthermore, information was gathered regarding the counties in which inmates were

returned to upon completion of their sentences. In the State of Oregon, offenders are returned to the county in which the crime they committed occurred. According to ODOC data, the overwhelming majority of male (28.4% vs. 12.2%) and female (35.8% vs. 11.5%) inmates in the sample were returned for Post-Prison Supervision to Multnomah County and Marion County, respectively (Table 2).

Procedure

Upon completion of an extensive review of the literature on factors that contribute to recidivism for both genders, researchers moved their attention towards standardized risk assessment used with offenders across the United States for guidance in the development of an archival data collection tool. It was considered important to identify assessments currently being used to evaluate offender risk and likelihood of recidivism. This was done for the purposes of developing a more sound and evidence based approach to data collection. The literature pointed towards one instrument in particular with high level of predictive validity for risk of recidivism, the Level of Service Inventory-Revised (Andrews & Bonta, 1995). This instrument was used as a guide for the development of the archival data collection tool used in this investigation (see attachment 1).

As a consequence of this study involving a review of inmate files without the inclusion of an interview component it was considered impossible to gather information on LSI-R subcomponents such as accommodation and leisure and recreation, thus, eliminating them from the file review process was considered to be the most appropriate

avenue. Once all information was compiled, the archival data collection tool included two measures assessing noncriminogenic variables (victimization and mental health diagnosis) and seven measures assessing criminogenic variables of interest (criminal history, history of victimization, employment financial, education, substance abuse, mental health diagnosis, criminal associates /antisocial attitudes, marital status/children and current offense characteristics).

Throughout the file review period, two file reviewers were assigned the task to review and document findings. Upon ODOC clearance, file reviewers provided the list of inmates selected for review to the person in charge so that files could be pulled for review. ODOC inmates have two types of files assigned throughout their confinement-- an institutional file and a medical file. Institutional files included within them an array of information available to ODOC staff such as criminal background, police reports, presentence investigation reports, institutional misconduct reports, institutional kites (messages from inmate to staff and staff to inmate) and drug and alcohol assessments. Medical files consisted of an updated copy of the drug and alcohol assessment, any mental health evaluations and diagnosis, copies of medical kites and other medical related documents.

Prior to the initiation of the file review process, file reviewers met to establish inter-rater reliability. Five institutional files and their corresponding medical files were selected to determine whether or not reviewers answered questions consistently. Once each file was complete it was passed to the next reviewer who filled out the archival data

code sheet and compared it to that of the first reviewer. Upon completion of this process the main reviewer made adjustments and clarifications to questions. This process was repeated twice to ensure that reviewers understood the adjustments and were consistent in their answers. Upon completion of this initial review, each file reviewer would select a file reserved for review, match the inmate's State Identification number with their corresponding study identification number, document the study identification number on the archival data code sheet, and begin the file review process.

It is important to note that information was not consistent across files.

Specifically, the amount of information available seemed to be dependent on the format in which the file was received. Files were separated into three formats; paper copies, computer generated copies (PDF files) and microfiche. Paper copies had the greatest amount of information with information decreasing substantially when moving from computer generated (PDF files) to microfiche. More often than not files provided on microfiche had no more than a substance abuse questionnaire available on them.

Independent Variables

Victimization

File reviewers were asked to extract various types of information regarding victimization. Information included the age at which the inmate had been abused, the location in the file where this information was found, and the type of victimization experienced. The first three questions were related to the timeframe in which the inmate

stated the abuse occurred. Reviewers were asked whether or not (Yes=1, No=0) the file indicated that the inmate experienced victimization in (1) childhood (birth-10), (2) adolescence (11-19), or (3) adulthood (20 and above). File reviewers were also asked to identify and document the location within the file where the inmate had indicated they had been abused (presentence investigation report, medical record, etc.). Upon examination, reviewers found that history of victimization for both males (6.7%) and females (25.5%) was most often found in medical files rather than presentence investigation reports or other unidentifiable reports. Lastly, reviewers were asked to identify the type of victimization sustained (physical, sexual, and emotional). Emotional abuse was eventually eliminated as a category because of its subjective nature.

Substance Abuse

Upon intake into the Department of Corrections, inmates are given an array of questionnaires used for the purposes of assessing their needs. During this process inmates are given a self-report questionnaire regarding their history of substance abuse prior to their most recent incarceration. This questionnaire references an array of substances ranging from the use of inhalants such as glue, spray cans and gasoline to injectable drug use of any kind. Inmates were asked to reported if they had ever used a particular drug (Yes=1, No=0), the age at first use, if used, whether or not it was used at least daily for 20 out of 30 days, the age of last use and whether or not the substance had been used during the last two months prior to incarceration. Inmates are asked whether or not

(Yes=1, No=0) their drug use caused problems such as hospitalization, serious problems with family, friends, work and problems with police and arrests. Additionally, this questionnaire asked that inmates document the number of times they had been in treatment and how important it was to them that they seek treatment while incarcerated.

Mental Health

There were two measures of mental health included in this study. First, researchers incorporated the measure of mental health as determined by the Department of Corrections. This variable was included in the original database sent by ODOC researchers to the principal investigator at PSU at the beginning of the study. This information was gathered upon each inmate's intake into the Department of Corrections. There were five data designations provided for this variable, (1) No need for further mental health evaluation; (2) Need for further mental health evaluation; (3) DSM diagnosis; (4) psychotic; (5) unknown.

Secondly, file reviewers were asked to answer whether or not (Yes=1, No=0) there was a recorded diagnosis of a (1) major mental illness, (2) personality disorder and (3) Post-Traumatic Stress Disorder. Due to the fact that file reviewers lacked the educational background in psychology to appropriately categorize mental health disorders into the above classifications, it was considered most appropriate to list all diagnoses found in the medical history for each inmate. Subsequent to the file review process, and prior to the analysis of data, researchers grouped mental health disorders

found during the file review process in accordance to the Diagnostic Statistical Manual of Mental Disorders, fourth edition, text revision (DSM-IV-TR thereafter) categorizations. This resulted in eight mental health categorizations that are described in Table 3 below. In addition, an additional variable was created which combined offenders who had a DSM-IV-TR diagnosis of a mental health disorder in addition to a diagnosis of a substance abuse dependence disorder to show the prevalence of co-occurring disorders. Literature on risk strongly points to correlations between co-occurring disorders and an increased risk of offender recidivism (Baillargeon, et al., 2010).

Dependent Variable

Recidivism

Recidivism data were provided in the master file compiled by the Oregon Department of Corrections Research and Development Department. In this study, there were two measures available that researchers could draw upon for the prediction of recidivism. The first measure was defined as any admission into a prison or county jail after release from ODOC custody. This measure includes supervision violations or arrests for a new crime, within three years after release from the Department of Corrections. The second measure available was defined as the conviction of a new felony within three years of release.

Chapter 4:

Results

Assessment of Prevalence Rates

Victimization Experiences

Upon examination of victimization experiences across gender results indicate that female offenders suffered from higher rates of victimization than their male counterparts. Female (36.3%) offenders had higher rates of overall victimization experiences when compared to males (11.0%). Furthermore, female offenders suffered from higher rates of victimization than males when examining experiences suffered in childhood (26.5% vs. 8.6%), adolescence (23.5% vs. 5.5%) and adulthood (7.4% vs. 0%). Interestingly, files reviewed of male inmates did not include documentation of adult victimization. Similar patterns emerged when examining the types of victimization experiences. Female ODOC inmates had higher rates of physical (6.6% vs. 4.9%) and sexual (4.9% vs. .4%) victimization than their male counterparts.

Substance Abuse

Male and female inmates reported experiencing similar rates of both drug and alcohol use. Both genders were more likely to use drugs than alcohol. Specifically, 85.8 percent of males and 86.5 percent of females had used drugs, while 77 percent of males and 70 percent of females had used alcohol. As seen in Table 3, female offenders in the sample reported similar rates of methamphetamine (38.9% vs. 38.1%), and cocaine/crack

(43.3% vs. 42.9%) use as male inmates in the sample. Their use of street methadone (4.4%) and injectible drugs (30.6%) was much higher than that observed in the male (1.8% and 22.5% respectively) sample (Table 3). On the other hand, males seemed to use marijuana/hashish (78.8% vs. 67.8%), hallucinogens (32.7% vs. 18.9%), heroin (20.4% vs. 15.6%), and other opiates (15.0% vs. 12.2%), tranquilizers (12.4% vs. 10.0%) and alcohol (77.0% vs. 70%) at higher rates than female ODOC inmates in the sample.

Interestingly, the number of times female inmates had participated in substance abuse treatment was higher than that seen in the male sample. Specifically, both males and females in the sample had similar rates of treatment participation once (23.3% vs. 22.4% respectively), while females had consistently higher rates of being in treatment twice (10% vs. 22.4%), three times (6.7% vs. 13.4%) and four or more times (8.9% vs. 10.4%). Considering the fact that the overwhelming majority of female inmates in the sample were mothers, one possible explanation for their higher rates of substance abuse treatment could be through their involvement with mandatory services through the Department of Human Services-Child welfare. In Oregon, one of the primary reasons for child welfare involvement is substance abuse (Green, Rockhill & Furrer, 2007).

Mental Health Diagnosis

Female ODOC inmates had higher rates of mood disorders (not specified), dysthymia, bipolar disorder, and obsessive compulsive disorder when compared to their

male counterparts (see Table 3). Both genders suffered from similar rates of depression, anxiety disorder, and co-occurring disorders (see Table 3).

According to ODOC records, female inmates had higher percentages of referrals for further mental health evaluations (62.9% vs. 50.8%) and were more often categorized as being psychotic (11.2% vs. 10.2%) than their male counterparts. On the other hand, men were more likely to enter the department of corrections with a DSM IV diagnosis (28.8% vs. 22.4%).

Assessment of Predictive Validity

Pearson correlations were used to determine the predictive validity of victimization, substance abuse and mental health with two measures of recidivism (i.e. admission to prison/jail and new felony conviction; see Table 5).

Prison/Jail Admissions

Forty two females (28.4%) and fifty nine males (39.3%) were admitted to prison/jail three years post release from the Department of Corrections. On average, the time between release from ODOC and their admission to a prison/jail ranged from 1.43 to 1.55 years for males and females, respectively.

In this investigation overall experiences of victimization (i.e., encompassing either-childhood, adolescent or adulthood) were significantly correlated with prison/jail admissions for both females ($r=.234$, $p<.001$) and males ($r=.206$, $p<.001$). Furthermore,

childhood ($r=.226, p<.001$) and adolescent ($r=.221, p<.001$) victimization was found to be significantly correlated with admission to prison/jail for females. In comparison, males who experienced childhood victimization were significantly more likely to be recidivists ($r=.235, p<.001$), a finding shared by their female counterparts. However, history of victimization in adolescence for males was associated at a lower level, but nonetheless significant ($r=.106, p<.05$). According to ODOC files there were no adult victimization experiences documented for males in the sample, thus rendering it impossible to conduct any analysis. Although files of female offenders indicated adult experiences of victimization, their experiences did not predict admission to prison/jail (see Table 4).

Interestingly females' histories of physical and sexual victimization experiences were not predictive of their admission to prison/jail, while findings suggested them to be a significant predictor for males ($r=.185, p<.01$ and $.111, p<.05$ respectively). In addition, results indicate that sexual victimization was negatively correlated with admission to prison/jail for females ($r=-.250, p<.001$). These findings are contrary to what has been found in the literature concerning female offenders' physical and sexual victimization experiences. Thus further investigation was deemed necessary (Benda, 2005). This led to the finding that low numbers of women recidivists experienced physical ($n=6$) and sexual victimization ($n=3$), therefore, caution is necessary when interpreting this finding.

It was expected from prior literature that substance abuse specifically a disaggregated measure as having been used in this study, measuring both illicit drug use

and alcohol use would result in findings suggesting both genders' recidivism was impacted by their drug use. Interestingly, drug use documented by males ($r=.194$, $p<.01$) was predictive of their admission to prison/jail, a finding not observed for the female sample. The finding that alcohol use did not predict recidivism under this outcome measure for either gender was not surprising. Prior literature has shown alcohol to be less important in the prediction of recidivism (Dowden & Brown, 2002). Alcohol use was not predictive for either gender when assessing this outcome measure.

A diagnosis of a personality disorder was the most predictive mental health disorder associated with admission to prison/jail for female offenders ($r=.202$, $p<.001$). The presence of a dysthymia ($r=.119$, $p<.01$), and mood disorder (*type not specified*) ($r=.110$, $p<.01$), followed in their predictive power when examining females in the sample. Females suffering from co-occurring disorders, specifically a combination of mood disorder and substance abuse dependence disorder were more likely to be admitted to prison/jail ($r=.135$, $p<.01$) than those who did not suffer from co-occurring disorders. On the other hand, males with the same co-occurring disorder combination (mood disorder plus substance abuse disorder) were no more likely to be admitted to prison/jail than males who did not have co-occurring needs. In comparison, the mental health need variables compiled by ODOC used for the purposes of assessing mental health needs of each inmate upon intake provided little predictive power when assessing admission to prison/jail for either gender (see Table 4).

New Felony Conviction

Forty six males (30.7%) and forty one females (27.3%) in the sample were reconvicted of a new felony within three years of their release. The dates of re-conviction were not available, which consequently did not allow for the calculation of the time between inmates release and re-conviction.

Unlike the first outcome measure, overall victimization and adolescent victimization was not predictive of new felony conviction for either gender. Additionally, adult victimization experiences were not predictive for females, but no analysis was possible for males due to the lack of victimization experiences documented in the files. There was no predictive value between childhood victimization and recidivism for either gender in the sample. Contrary to expectations, history of sexual victimization was associated with reconviction of a new felony for males ($r=.140$, $p<.01$) but not for females in the sample.

When examining the impact of drug and alcohol use findings suggest that drug use was predictive of a new felony conviction for female ($r=.213$, $p<.001$) offenders only. Alcohol use was not a predictor for either gender.

The diagnosis of Posttraumatic Stress Disorder ($r=.207$, $p<.001$), mood disorder (*type not specified*) ($r= .210$, $p<.001$) were predictive of a new felony conviction for females. Conversely, a diagnosis of dysthymia ($r=.175$, $p<.01$) was predictive for males. Co-occurring mental health needs, specifically a combination of mood disorder and

substance abuse dependence was predictive for women's reconviction of a new felony ($r=.149$, $p<.01$), a finding not true for male offenders (see Table 4). The mental health need variable gathered by the Department of Corrections provided no predictive power for either gender (see Table 4).

Chapter 5

Discussion

The purpose of this investigation has been to determine the prevalence and predictive nature of victimization experiences, substance abuse and mental illness on two measures of recidivism across genders in a sample of ODOC inmates. One of the primary missions of ODOC and other correctional facilities across the United States is to provide services for the purposes of reducing recidivism. The continuation of investigations into predictors of recidivism comes at an important time when budgetary constraints exist nationwide and funding is being cut to important programs used to reduce recidivism.

When assessing the prevalence rates of victimization results indicated that ODOC female offenders suffered from higher rates than their male counterparts. This finding, although expected because of the growing number of national studies showing this effect, has potential implications for the Department of Corrections (Greenfield & Snell, 1999; James & Glaze, 2006; Karberg & James, 2005). Specifically, gender responsive scholars have argued that female offenders because of their differential experiences with victimization correctional agencies should provide treatment programming that takes into account the impact of such trauma (Bloom et al., 2003).

This study's findings concerning the impact of victimization on recidivism provides support as to the importance of childhood and adolescent victimization for both genders, but also lends further support as to the complexity of such variable. Specifically, depending on the outcome measure used the impact of victimization moves from significantly impacting the outcome to having no real significant predictive value. This is

a finding observed for both genders in this study. One possible explanation for these results is in line with one of the study's major limitations, which is its total reliance on archival data. It could be hypothesized that an interview component would allow researchers to capture the full extent of inmates' victimization histories, resulting in a greater understanding of the extent and impact of victimization on recidivism. Furthermore, an interview component would allow researchers to address the non-existent histories of adult victimization observed in the male offender sample.

The limitation of using only archival data became increasingly evident when interpreting the impact of the types of victimization experiences on recidivism. It was expected from prior findings that both physical and sexual victimization would prove to be of strong predictive power, especially for female inmates in the sample (Benda, 2005). Contrary to expectations physical victimization was found to be more predictive of admission to prison/jail for males rather than females. Similarly, males' sexual victimization held higher predictive value than that observed in females. Both findings conflict with available literature, which show that female recidivism is associated with experiences of childhood and adult physical victimization and adult sexual experiences (Benda, 2005).

An interesting finding emerged when examining the second outcome variable (new felony conviction) and victimization in female offenders. Results did not indicate any great predictive value when assessing these variables, but upon examination of the mental health variables, a diagnosis of Posttraumatic Stress Disorder was found to be

highly predictive of recidivism. According to the DSM-IV-TR, exposure to an extreme traumatic stressor is necessary for such diagnoses (American Psychiatric Association [DSM-IV-TR], 2000). Furthermore, an examination of the archival data available show a strong predictive relationship between overall victimization ($r=.278, <.001$), childhood victimization ($r=.358, p<.001$), adolescent victimization ($r=.245, p<.001$) and the diagnosis of Posttraumatic Stress Disorder. Similar analysis was conducted using males in the sample and no such connections were applicable to their gender. This is not surprising considering research findings showing that females and males cope with their victimization experiences in different ways. Females are likely to internalize the impact of their experiences resulting in higher rates of mental health diagnosis and substance abusing behaviors, while males are likely to externalize and react in violence (Bloom, Owen & Covington, 2003).

Pathways literature, specifically the pathways investigation conducted by Salisbury and Van Voorhis (2009), could possibly provide some assistance in interpreting this finding. Their findings indicate that although childhood victimization was not directly linked to recidivism, re-offending is continued through what they call “psychological” and “behavioral” effects (Salisbury & Van Voorhis, 2009). Those included diagnoses of mental health disorders and substance abusing behaviors (Salisbury & Van Voorhis, 2009). Consequently, it is possible that the victimization variables work through the mental health variables in the prediction of new felony convictions.

Gender differences in the prevalence and diagnosis of certain mental health disorders has been increasingly researched and debated in the field of psychology (Hartung & Widiger, 1998). Differential rates of diagnosis between males and females have been explained as a consequence of biogenetic and/or environmental factors (Hartung & Widiger, 1998). This study's findings clearly illustrated the differential impact of certain mental health disorders on female and male rates of recidivism. Recidivism measured as the admission to prison/jail was associated in the female sample with a diagnosis of dysthymia, mood disorder (not specified), personality disorder and adjustment disorder. A strength of this study was the fact that each mental health diagnosis was documented for each inmate, making it possible to look at an array of diagnosis and their impact on recidivism. Prior studies assessing the impact of mental health on recidivism have done so with particular emphasis on specific major psychiatric disorders (Baillargeon et al., 2009). Furthermore, prior studies have found that disaggregating mental health diagnosis can provide a more accurate depiction of the particular mental health disorders that are predictive of recidivism (Salisbury et al., 2006). This will give correctional agencies the ability to identify particular mental health disorders that produce higher risk levels for female and male offenders.

In 2007, the Department of Corrections utilized mental health categorizations as a method for determining each inmate's mental health needs. The results of this study indicate that broad categorizations may not be as effective in addressing risk for recidivism in this population of inmates. With the results of this study in mind it might

benefit the Department of Corrections to ask inmates to identify upon intake their mental health diagnosis. Subsequently, ODOC can flag inmates with mental health diagnosis found to be predictive of recidivism as potentially high risk until further evaluation and/or confirmation of diagnosis from medical records. Priority for treatment services should be given to those with mental health disorders found to be predictive of recidivism. In this study mental health diagnosis functions as a criminogenic variable contributing to an offender's recidivism rather than a responsivity factor, an argument made by gender-neutral scholars. In this case programming focusing on mental health diagnosis would be warranted for both genders.

Over the past decade, the increase in the number of offenders suffering from co-occurring disorders has been met with great concern by correctional agencies, which are responsible for their supervision and treatment (Sacks, 2004). According to gender responsive literature female offenders' needs are different from, greater than and more complex than those observed in the male population (Bloom, Owen & Covington, 2003; McCampbell, 2005; Sacks, 2004). This is especially clear when it comes to their mental health and substance abuse needs. Research has shown that female offenders suffer from higher rates of co-occurring diagnosis, specifically combinations of mood and substance abuse dependence disorders (Sacks, 2004). The results of this study indicate that both genders suffer from similar rates of co-occurring disorders. Furthermore, co-occurring disorders were predictive of recidivism for both genders when examined across

recidivism measures. Literature further indicates the higher risk of homelessness and unemployment which adds to their risks of recidivism (Sacks, 2004).

Currently, ODOC does not provide services specifically for inmates identified as having co-occurring disorders. Approximately two years ago lack of resources led to the dissolution of programs geared towards treating these offenders. Literature in the area of co-occurring disorders although limited in comparison to research on mental health diagnosis or substance abuse has provided some clear association between co-occurring disorders and higher risk of recidivism. It is important that services are provided to inmates with co-occurring disorders considering the available literature which points to an increased risk of homelessness and unemployment, which only adds to their risk of recidivism (Sacks, 2004).

There are two major strengths of this current examination. The first is directly associated to the use of a randomized sample of inmates, and the second is associated with the use of a male comparison group. After an examination of the literature on the impact of gender on recidivism it became increasingly evident that the focus of “gender” really means the study of males or females independent from each other. A gendered comparison is most often achieved by using research findings from previous studies that have focused on males and comparing them to separate studies using female only samples. This has been a criticism of the study of criminology in general, made by feminist authors (Chesney-Lind & Pasco, 2004). Unfortunately, even the feminist literature falls short. When speaking of the differential impact of certain variables on

gender, it is critical to study the impact of those variables for both genders. It is also important to do this in the same examination and not use comparisons based solely on past literature. Comparing the impact of these variables across genders, while using the same methodological approach and operationalizations provides more reliability to the statements made about the differences and similarities between genders.

This project supports findings suggested by scholars on both sides of the current criminological debate. Gender responsive scholars are appropriately concerned about the prevalence of victimization experiences, substance abuse and mental health in the female offender population. Furthermore, they are warranted in speaking up about the impact of victimization and mental health as contributors to female offender recidivism. After all this study found that victimization, substance abuse (drug use) and mental health diagnosis were predictive of recidivism. On the other hand, gender neutral scholars are also correct in their assessment that predictors of recidivism are similar across gender. In this case, findings suggest that both genders' recidivism were impacted by their experiences of victimization, substance abuse (drug use) and mental health diagnosis.

In conclusion, future research should be conducted evaluating these factors for both genders while using rigorous methodologies that are able to capture the complex nature of the impact of victimization, substance abuse and mental health. Using both genders shouldn't be only for comparison purposes but should be guided by the desire to understand the impact of these influences on both females and males equally.

Graph 1: Percent Lifetime Victimization by Gender

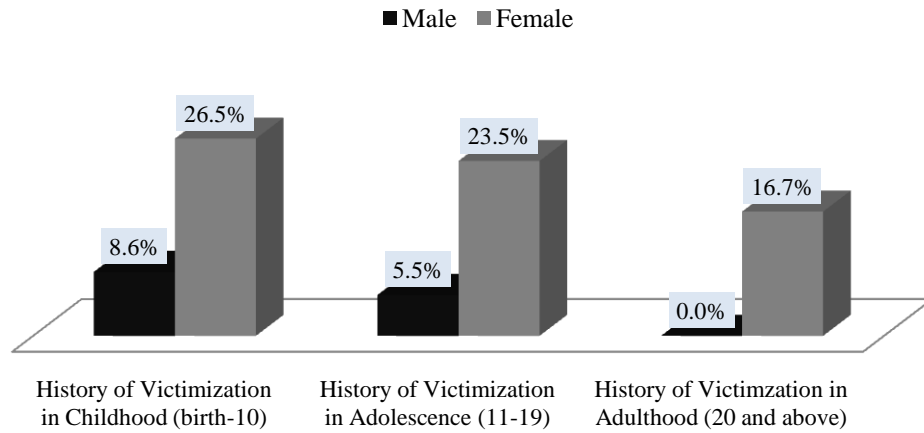


Table 1: Percent Sample Characteristics by Gender

Characteristics	Gender	
	Male	Female
Race		
White	82.6%	78.1%
Black	8.1%	17.2%
Hispanic	8.1%	1.3%
Indian	1.3%	2.6%
Asian	0.0%	0.7%
Age at Intake		
16-20	12.1%	7.3%
21-30	34.9%	32.5%
31-40	26.8%	43.7%
41-50	21.5%	13.9%
51 and above	4.7%	2.6%
Marital Status		
Never been Married	32.2%	29.8%
Single	11.9%	7.7%
Married	22.9%	19.2%
Have a partner	1.1%	2.9%
Separated	10.2%	13.5%
Divorced	21.2%	26.0%
Widowed	0.0%	1.0%
Children		
Yes	44.3%	75.7%
Prior Misdemeanor Convictions		
Yes	55.8%	52.9%

Table 2: Percent Sample Demographics (County) by Gender

County	Gender	
	Male	Female
BAKR	0.0%	0.7%
BENT	1.4%	0.0%
CLAC	3.4%	2.7%
CLAT	0.0%	0.7%
COLU	1.4%	0.0%
COOS	1.4%	3.4%
CROO	1.4%	0.0%
CURR	0.7%	0.0%
DESC	4.7%	0.7%
DOUG	5.4%	4.1%
HARN	0.0%	0.7%
JACK	4.7%	2.7%
JOSE	4.1%	4.1%
KLAM	4.1%	2.0%
LANE	7.4%	8.1%
LINC	0.7%	2.0%
LINN	4.7%	3.4%
MALH	1.4%	2.0%
MARI	12.2%	11.5%
MULT	28.4%	35.8%
POLK	1.4%	0.7%
TILL	3.4%	0.7%
UMAT	1.4%	2.0%
WASH	5.4%	10.1%
YAMH	1.4%	2.0%

Table 3: Percent Mental Health Disorders by Gender

Mental Health Disorder	Gender	
	Male	Female
Mood Disorders		
<i>Bipolar Disorder</i>	6.7%	15.0%
<i>Dysthymia</i>	6.7%	11.0%
<i>Depression</i>	12.4%	13.1%
<i>Mood Disorder (NS)</i>	1.9%	6.0%
Anxiety Disorders		
<i>Anxiety Disorder (NS)</i>	4.8%	5.0%
<i>Post-Traumatic Stress Disorder</i>	3.8%	4.0%
<i>Obsessive Compulsive Disorder</i>	0.9%	3.0%
Co-Occurring Disorders	17.9%	18.6%

Note: (NS) Not Specified.

Table 4: Percent & Type of Substance Abuse by Gender

Substance Used	Gender	
	Male	Female
Marijuana/Hashish	78.8%	67.8%
Hallucinogens (LSD, peyote, PCP, etc.)	32.7%	18.9%
Methamphetamines	38.1%	38.9%
Barbiturates/Downers	13.3%	11.1%
Heroin	20.4%	15.6%
Street Methadone	1.8%	4.4%
Other Opiates (morphine, codeine, etc.)	15.0%	12.2%
Cocaine/Crack	42.9%	43.3%
Tranquilizers (valium, Librium, etc.)	12.4%	10.0%
Alcohol	77.0%	70.0%
Injectable Drugs	22.5%	36.0%

Table 5: Bivariate Correlations by Gender

Variables	<u>Recidivism Measure</u>			
	Admission to Prison/Jail		New Felony Conviction	
	<u>Gender</u>			
	Females	Males	Females	Males
Victimization				
Overall Victimization	0.234***(N=102)	0.206***(N=127)	0.022 (N=102)	0.078 (N=127)
Childhood Victimization	0.226***(N=102)	0.235***(N=128)	-0.033(N=102)	0.074(N=128)
Adolescent Victimization	0.221***(N=102)	0.106*(N=128)	0.060(N=102)	0.094(N=128)
Adult Victimization	-0.071(N=102)	-	-0.049(N=102)	-
Types of Victimization				
Physical Victimization	.085 (N=110)	0.185**(N=134)	-0.086 (N=110)	.040 (N=134)
Sexual Victimization	-.025(N=110)	0.111* (N=134)	.040(N=110)	.140**(N=134)
Substance Abuse				
Drug Use	-.036 (N=89)	.194**(N=113)	.213***(N=89)	-.035(N=113)
Alcohol Use	.096 (N=90)	.097 (N=113)	-.155(N=90)	-.041(N=113)
Mental Health Diagnosis				
Dysthymia	0.119* (N=100)	.035 (N=104)	-0.013 (N=100)	.175*(N=104)
Anxiety Disorder	0.05 (N=100)	0.018 (N=105)	0.056(N=100)	0.062(N=105)
Depression	.013 (N=99)	.018 (N=105)	0.013(N=99)	-0.038(N=105)

Posttraumatic Stress Disorder	.089 (N=100)	-0.046(N=105)	.207***(N=100)	-0.012(N=105)
Bipolar Disorder	.092 (N=100)	-0.042(N=105)	.040(N=100)	0.006(N=105)
Obsessive Compulsive Disorder	-0.115*(N=100)	-0.073 (N=106)	0.017(N=100)	-0.061(N=106)
Mood Disorder (Not Specified)	0.11* (N=100)	.042 (N=105)	0.21***(N=100)	-0.089(N=105)
Dual Diagnosis	.067 (N=102)	.153** (N=106)	.133***(N=102)	.099(N=106)

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

References

- American Psychiatric Association. (2000). Diagnostic and statistical manual of mental disorders (Revised 4th, Ed.). Washington, DC: Author.
- Andrews, D. A., & Bonta, J. (1994). The psychology of criminal conduct. Cincinnati, OH: Anderson.
- Andrews, D. A., & Bonta, J. (1995). The Level of Service Inventory-Revised. Toronto, Canada: Multi-Health Systems.
- Andrews, D.A., Zinger, I., Hoge, R., Bonta, J., Gendreau, P., & Cullen, F. (1990). Does correctional treatment work? A clinically relevant and psychologically informed meta-analysis". *Criminology* 28:369-404.
- Baillargeon, J., Binswanger, M., Penn, J., Williams, B., & Murray, O. (2009). Psychiatric disorders and repeat incarcerations: The revolving prison door. *American Journal of Psychiatry*, 166, p. 103-109.
- Baillargeon, J., Penn, J., Knight, K., Harzke AJ., Baillargeon, G., Becker, E. (2010). Risk of Re-incarceration Among Prisoners with Co-occurring Severe Mental Illness and Substance Use Disorders. *Administration & Policy in Mental Health and Mental Health Services Research*, 37(4), 367-374.
- Belknap, J. (2007). *The Invisible Woman: Gender, Crime, and Justice*. Belmont, CA: Wadsworth.
- Benda, B. B. (2005). Gender differences in life-course theory of recidivism: A survival analysis. *International Journal of Offender Therapy and Comparative Criminology*, 49, 325-342.
- Blanchette, K., & Taylor, K. (2009). Reintegration of Female Offenders: Perspectives on "What Works". *Corrections Today* 71(6).
- Bloom, B., Owen, B., Covington, S. (2003). *Gender Responsive Strategies: Research, Practice, and Guiding Principles of Women Offenders*. Washington, DC: USDOJ, National Institute of Corrections.

- Bonta J., Andrews, D.A. (1998). *The Psychology of Criminal Conduct*. Cincinnati, OH: Anderson Publishing Co.
- Bonta, J., Pang, B., & Wallace-Capretta, S. (1995). Predictors of Recidivism Among Incarcerated Female Offenders. *The Prison Journal*, 75: 277.
- Browne, A., Miller, B., & Maguin, E. (1999). Prevalence and severity of lifetime physical and sexual victimization among incarcerated women. *International Journal of Law and Psychiatry*, 22(3-4), 301-322.
- Center for Substance Abuse Treatment (CSAT). (2005). Substance abuse treatment for persons with co-occurring disorders . Treatment Improvement Protocol (TIP) Series. S. Sacks (Chair) & R. Reis (Co-Chair), Consensus Panel. DHHS Pub. (SMA). Rockville, MD: Substance Abuse and Mental Health Services Administration.
- Chesney-Lind, M. (1989). Girls' Crime and Women's Place: Toward a Feminist Model of Female Delinquency. *Crime & Delinquency* 35(1), 5-29.
- Chesney-Lind, M., Pasco, L. (2004). *The Female Offender: Girls, Women, and Crime*. Thousand Oaks, CA: Sage Publications, Inc.
- Covington, S. (1998). The relational theory of women's psychological development: Implications for the criminal justice system. In R. T. Zeplin (Ed.), *Female offenders critical perspectives and effective interventions* (pp.113-128). Gaithersburg, MD: Aspen Publishers.
- Daly, K., & Chesney-Lind, M. (1988). Feminism and Criminology. *Justice Quarterly*, 5(4), p. 497-538.
- Dowden, C., & Andrews, D.A. (1999). What works for female offenders: A meta-analytic review. *Crime & Delinquency*, 45:438.
- Dowden, C., & Brown, S., L. (2002). The Role of Substance Abuse Factors in Predicting Recidivism: A Meta-Analysis. *Psychology, Crime & Law*, 8, 243-264.
- Erickson, P., Butters, J., McGillicuddy, P., & Hallgren, A. (2000). Crack and prostitution: Gender, myths and experiences. *Journal of Drug Issues*, 30(4), p. 767-788.

- Evans, E. R., Forsyth, C. J., & Gauthier, D.K. (2002). Gendered Pathways into and Experiences within Crack Cultures Outside of the Inner City. *Deviant Behavior*, 23, 483-510.
- Farley, M., Barkan, H. (1998). Prostitutions, Violence Against Women, and Posttraumatic Stress Disorder. *Women & Health*, 27(3).
- Green, B., Rockhill, A., & Furrer, C. (2007). Does Substance Abuse Treatment make a Difference for Child Welfare Case Outcomes? A Statewide Longitudinal Analysis. *Children & Youth Services Review*, 29(4), p. 460-473.
- Gendreau, P., Little, T., & Goggin, C. (1996). A Meta-Analysis of the Predictor of Adult Offender Recidivism: What Works. *Criminology* 34(2), 575-596.
- Gilfus, M. E. (1992). From Victims to Survivors to Offenders: Women's Routes to Entry and Immersion in Street Crime. *Women & Criminal Justice*, 4(1).
- Greenfield, L., & Snell, T. (1999). Women Offenders. Bureau of Justice Statistics.
- Hardyman, P., & Van Voorhis, P. (2004). Developing Gender-Specific Classification Systems for Women Offenders. Washington, D.C.: U.S. Department of Justice, National Institute of Corrections.
- Hartung, C., & Widiger, Thomas (1998). Gender Differences in the Diagnosis of Mental Disorders: Conclusions and controversies of the DSM-IV. *Psychological Bulletin*, 123(3), p. 260-278.
- Harrison, P., & Beck, A. (2004). Prisoners in 2005. Bureau of Justice Statistics.
- Hollin, C. & Palmer, E. (2006). Criminogenic Need and Women Offenders: A Critique of the Literature. *Legal & Criminological Psychology* 11, 179-195.
- James, J., & Meyerding, J. (1977). Early Sexual Experiences and Prostitution. *American Journal of Psychiatry* 134(12): 1381-1385.
- Karberg, J., & James, D. (2005). Substance Dependence, Abuse, and Treatment of Jail Inmates, 2002. Bureau of Justice Statistics.
- Lambert, L. R., & Madden, P. G. (1976). The adult female offender: The road from institution to community life. *Canadian Journal of Criminology and Corrections*, 18, 319-331.

- Lamberti, S. (2007). Understanding and preventing criminal recidivism among adults with psychotic disorders. *Psychiatric Services*, 58(6).
- Lowenkamp, C., Holsinger, A., & Latessa, E. (2001). Risk/Need assessment, offender classification, and the role of childhood abuse. *Criminal Justice & Behavior*, 28(5).
- Lowenkamp, C., Latessa, E., & Holsinger, A. (2006). The Risk Principle in Action: What have we Learned from 13,676 Offenders in 97 Correctional Programs. *Crime & Delinquency*, 52(1), 77-93.
- McCampbell, S. (2005). *Gender Responsive Strategies for Women Offenders: The Gender-Responsive Strategies Project: Jail Applications*. Washington, D.C.: U.S. Department of Justice, National Institute of Corrections.
- McClellan, D., Farabee, D., & Crouch, B. (1997). Early victimization, drug use, and criminality: A comparison of male and female prisoners. *Criminal Justice & Behavior*, 24: 455.
- McKean, L., & Ransford, C. (2004). *Current Strategies for Reducing Recidivism*. Chicago Community Organizing Capacity Building Initiative. Center of Impact Research.
- Palmer, C., & Hollin, E. (2006). Criminogenic Need and Women Offenders: A Critique of the Literature. *Legal & Criminological Psychology*, 11, 179-195.
- Peters, R., Strozier, A., Murrin, M., & Kearns, W. (1997). Treatment of substance-abusing jail inmates: Examination of gender differences. *Journal of Substance Abuse Treatment*, 14(4), p. 339-349.
- Pines, M., Silbert, E., Ayala, M. (1983). Early Sexual Exploitations as an Influence in Prostitution. *Social Work*, July-August.
- Reisig, M., Holtfreter, K., & Morash, M. (2002). Social Capital Among Women Offenders: Examining the Distribution of Social Networks and Resources. *Journal of Contemporary Criminal Justice* 18(2), 167-187.
- Rettinger, L., & Andrews, D. (2010). General Risk and Need, Gender Specificity, and the Recidivism of Female Offenders. *Criminal Justice & Behavior* 37:29.

- Rhonda, E., Forsyth, C. & Gauthier, K. (2002). Gendered Pathways into and Experiences within the Crack Cultures Outside of the Inner City. *Deviant Behavior*, 23, 483-510.
- Sacks, J. (2004). Women with co-occurring substance abuse and mental disorders (COD) in the criminal justice system: A research review. *Behavioral Sciences and the Law*, 22: 449-466.
- Salisbury, E. (2007). *Gendered Pathways: An Empirical Investigation of Women Offenders' Unique Paths to Crime*. [Dissertation].
- Salisbury, E., Van Voorhis, P. (2009). Gendered Pathways: A Quantitative Investigation of Women Probationer' Path to Incarceration. *Criminal Justice & Behavior*, 36, 541.
- Salisbury, E., Van Voorhis, P., & Wright, E. (2006). Construction and validation of a gender responsive risk/needs instrument for women offenders in Missouri and Maui. Presented at the Annual Meeting of the American Society of Criminology, Los Angeles, CA.
- Silberman, M. (2010). Sexual Abuse in Childhood and the Mentally Disordered Female Offender. *International Journal of Offender Therapy and Comparative Criminology*. 54(5), 783-802.
- Snell, T. (1991). *Survey of State Prison Inmates: Women in Prison*. Bureau of Justice Statistics.
- Steffensmeier, D., & Allan, E. (1996). Gender and Crime: Toward a Gendered Theory of Female Offending. *Annual Review of Sociology*, 22, 459-487.
- Topitzes, J., Mersky, J., & Reynolds, A. (2011). Child Maltreatment and Offending Behavior: Gender-Specific Effects and Pathways. *Criminal Justice & Behavior*, 38(5), 492-510.
- Hardyman, P.L., & Van Voorhis, P. (2004). *Developing gender-specific classification systems for women offenders*. Washington, DC: USDOJ, National Institute of Corrections.
- Van Voorhis, P., Salisbury, E., Wright, E., Bauman, A. (2008). Washington, D.C.: U.S. Department of Justice, National Institute of Corrections.

- Widom, C. (2000). Childhood victimization and the derailment of girls and women to the criminal justice system. In J. Samuels (Ed.), *Research on women and girls in the justice system: Plenary papers of the 1999 conference on criminal justice research and evaluation-Enhancing policy and practice through research* (Vol. 3, pp. 27-36). Washington, DC: U.S. Department of Justice.
- Wright, E., Salisbury, E. & Van Voorhis, P. (2007). Predicting the Prison Misconducts of Women Offenders: The Importance of Gender Responsive Needs. *Journal of Contemporary Criminal Justice*, 23 (4), 310-340.

Archival Data Collection Tool

Researcher Name: _____
Date Survey Completed: _____
Time Started: _____
Time Ended: _____
Location of file review: _____

Identification Number _____

Inmate Gender Female (1) Male (0)

Static/Historical Variables:

CRIMINAL HISTORY

CH 1 No^o Yes¹ Unk⁵⁵ Any prior adult convictions **out of state**? Specify #

CH 2 No^o Yes¹ Unk⁵⁵ Any prior adult **felony** convictions? Specify #

CH 3 No^o Yes¹ Unk⁵⁵ Any prior adult **misdemeanor** convictions? Specify #

CH 4 No^o Yes¹ Unk⁵⁵ Any prior **youth** convictions? Specify #

CH 5 In the space below, indicate the types of prior convictions:

Types of Prior out of State convictions:

Types of Prior Federal Convictions:

Types of Prior Misdemeanor Convictions:

Types of Prior Youth Convictions:

CH 6 No^o Yes¹ Unk⁵⁵ Arrested under that age of 16?

CH 7 No^o Yes¹ Unk⁵⁵ 40 years and older at first known offense

CH 8 No^o Yes¹ Unk⁵⁵ Between 20 and 39 years at first known offense

CH 9 No^o Yes¹ Unk⁵⁵ Under 20 years at first known offense

HISTORY OF VICTIMIZATION

Timeframe of victimization

No^o Yes¹ Unk⁵⁵ File indicates victimization experienced in childhood (birth-10)

Notes:

No° Yes¹ Unk55 File indicates victimization experienced during adolescence (11-19)
Notes:

No° Yes¹ Unk55 File indicates victimization experienced during adulthood (20 and above)
Notes:

Type of victimization

No° Yes¹ Unk55 File contains evidence of sexual victimization
Explain how the file indicates sexual victimization (PSI, evaluations, court reports, etc.):

No° Yes¹ Unk55 File contains evidence of physical victimization without evidence of sexual
Explain how the file indicates physical victimization without sexual victimization:

No° Yes¹ Unk55 File contains evidence of other victimization
Explain how the file indicates other victimization:

The perpetrator was the victim's (circle one): Parent^o Other Blood Relative¹ Intimate Partner²
Acquaintance³ Stranger⁴ All Other⁵

EMPLOYMENT/FINANCIAL

No° Yes¹ Unk55 File indicates inmate had employment prior to incarceration

Half³³ Full²² Unk55 Employed¹ in prison
If employed in prison and it is unknown whether half or full document below:

No° Yes¹ Unk55 Reliance upon social assistance*

No° Yes¹ Unk55 Frequently unemployed² (when in labor market)

No° Yes¹ Unk55 Never employed for a full year (when in labor market)

No° Yes¹ Unk55 Never employed (when in labor market)

EDUCATION

No°	Yes ¹	Unk55	Less than a regular ¹ 10 th grade education
No°	Yes ¹	Unk55	Less than a regular ¹ 12 th grade education
No°		Unk55	GED completion prior to incarceration¹__ during incarceration²__ Unk
When³			
No°		Unk55	Any post-secondary education prior to incarceration¹__ during incarceration²__
			Unk When³
No°	Yes ¹	Unk55	Suspended or expelled at least once

SUBSTANCE ABUSE

See ODOC Drug & Alcohol History spread sheet

MENTAL HEATH DIAGNOSIS

No°	Yes ¹	Unk55	Major mental illness ¹
Notes:			
No°	Yes ¹	Unk55	Personality Disorder ² (DSM Criteria)
Notes:			
No°	Yes ¹	Unk55	Post Traumatic Stress Disorder ³ (DSM Criteria)
Notes:			

Dynamic/Changeable Variables

CRIMINAL ASSOCIATES/ANTISOCIAL ATTITUDES

No°	Yes ¹	Unk55	A social isolate ¹
No°	Yes ¹	Unk55	Some ² criminal acquaintances
No°	Yes ¹	Unk55	Some criminal friends* (if answered yes to this question, then above question is yes)
No°	Yes ¹	Unk55	Few ³ anti-criminal acquaintances (if yes then question below is also yes)
No°	Yes ¹	Unk55	Few anti-criminal friends ^o
No°	Yes ¹	Unk55	Supportive of crime ¹
No°	Yes ¹	Unk55	Unfavorable toward convention ²

No°	Yes ¹	Unk55	Poor, toward sentence ³
No°	Yes ¹	Unk55	Poor, toward supervision© (see attached manual)
No°	Yes ¹	Unk55	Indifferent concerning sentence and/or supervision* (see attached manual)

MARITAL STATUS/CHILDREN

No°	Yes ¹	Unk55	File indicates inmate reported never being married
No°	Yes ¹	Unk55	File indicates inmate reported being single
No°	Yes ¹	Unk55	File indicates inmate reported being married
No°	Yes ¹	Unk55	File indicates inmate reported having a partner
No°	Yes ¹	Unk55	File indicates inmate reported being separated
No°	Yes ¹	Unk55	File indicates inmate reported being divorced
No°	Yes ¹	Unk55	File indicates inmate reported being widowed
No°	Yes ¹	Unk55	File indicates inmate reported no knowing whether or not s/he is married
No°	Yes ¹	Unk55	Dissatisfaction with marital or equivalent relationship ^{**} Indicate any other information reported by inmate concerning marital status:

No° Yes¹ Unk55 File indicates inmate has children Specify #_____

Age of Child _____ OR Average age of children _____

No° Yes¹ Unk55 File indicates inmate had financial responsibility of children prior to incarceration

Notes:

No° Yes¹ Unk55 File indicates inmate had physical custody of children prior to incarceration

Notes:

CURRENT OFFENSE CHARACTERISTICS

Describe the relationship between the offender and the victim:

Describe the severity of the current offense: