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Risk Markers for Sexual Predation and Victimization in Prison

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Abstract

Our research was exploratory and sought for the first time to apply empirically validated static and dynamic risk makers for violence in the community to sexual predation and victimization in prisons. We conducted this exploration using five outcome measures including experiences of coerced sexuality while imprisoned as a perpetrator or victim, involvement in sexual exchanges that were based on bartering of goods or protection as either a perpetrator or victim, and consensual acts that occurred with other inmates or members of the correctional staff. We sought to identify the most relevant risk markers through a review of clinical violence risk research, criminological research concerning sexual violence in the community and in prison, and risk classification schemes for incarcerated men and women. This review directed us to the potential relevance of an array of risk factors that included early adverse life experiences; prior adolescent and domestic violence; criminality and prison violence; hyper-sexuality and impersonal sexuality; affective and cognitive states including anger, impulsivity and thoughts of harm; personality traits and disorders including psychopathy; extant risk instruments for violence including the COVR, HCR:20 and VRAG; and the social environment as reflected in the attitudes and behaviors of the correctional staff in each institution. Each of these domains of risk markers was examined in terms of its bivariate association with the various outcome measures and later entered into a multivariate classification analysis using Chi Square Automated Interaction Detector (CHAID). This analytic process resulted in the construction of nine valid conceptual models for predatory, victimized, bartered, and consensual sex in prison, each of which was different for the male and female inmates.

The models were developed using a sample of 471 inmates (288 males/ 183 females) from two states. The models were characterized by good to excellent (.70 to .99) accuracy with high levels of sensitivity and relatively low levels of specificity. In developing our models, we found that male inmates engaged in more predatory, bartered, and consensual sex with visitors or staff while the female inmates engaged in more bartered and consensual sex with other inmates. However, these different types of sex were highly related suggesting that inmates who engage in one type of sex are far more likely to be involved in the other types of sex and that these inmates are different in many ways from inmates who adopt a largely asexual stance while incarcerated. Similarly, many of the risk makers for sex in prison have been previously identified as predicting violent behavior in the community. Inmates who experienced conduct problems as juveniles, had problems establishing relationship with others during adolescence, had a past history of early violence, and suffered from one or more of the Cluster B personality diagnoses tended to be more sexually active in prison. The HCR: 20 used to predict violence risk in the community was found to correlate with the different types of sexual behavior in prison for both the male and female inmates. Affective states such as anger, impulsivity and violent thoughts often associated with reactive forms of physical violence, also clustered in our sample among those whose reported involvement in predatory, victimized, bartered, or consensual sex while incarcerated. This affinity between sexual and aggressive behavior in prison suggest that it is not merely a "sex scene" that defines the behaviors of particular inmates, but rather engagement in a turbulent set of interpersonal relationships that are sexual, aggressive, and occasionally violent.

We discuss these findings as they apply to programming and highlight the importance of developing gender specific programs that address a broad spectrum of behaviors associated with sexual violence. We reflect on issue of consent as attributed to prison inmates and discuss the importance of boundary training for the correctional staff at risk for sexual involvement with inmates. Most importantly, we underscore the significance of an informed and consistent approach to sexual behavior in prison which recognizes the interplay between victimization and predation and the relationship of different types of sex and aggression to the full continuum of sex that is occurring.

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Table of Contents

Abstract	2
Acknowledgements	3
List of Tables	11
List of Figures	15
Executive Summary	16
The Adaption of Clinical Risk Assessment.....	16
Integrating the Full Continuum of Sexual Behavior in Prison	17
Our Decision to Examine Gender Differences.....	19
Method	20
The Sexual Behavior of Incarcerated Men and Women	20
Coerced Sexual Behavior in Prison.....	21
Sexual predation.....	21
Sexual victimization	22
Bartered Sexual Behavior in Prison.....	24
Consensual Sexual Behavior in Prison.....	25
Co-Occurring Forms of Sexual Activity among Inmates.....	26
Data Analyses and Model Building.....	27
Conclusions and Recommendations	28
Chapter One: An Introduction to the Prison Rape Elimination Act and the Study	42
Prison Rape Elimination Act of 2003: Why Now?	42
Prison Rape Elimination Act of 2003: What did it do?	43
Three Unique Areas of Inquiry	43
The Adaptation of Clinical Risk Assessment.....	43
Integrating the Full Continuum of Sexual Behavior in Prison	44
Our Decision to Examine Gender Differences.....	47
The Goals of our Study.....	49

Addressing the Fundamental Problem of Studying a Forbidden Behavior in a Coercive Environment	50
Conclusions.....	50
Chapter Two: Methodology	52
Prison Selection and Sampling	52
Inmate Sample	52
State and demographic comparisons	53
Correctional Officer Sample	56
Response rates and generalizability	56
Sample demographics.....	56
State comparisons on key demographic variables.	58
Warden Sample.....	58
Instrumentation	58
Inmate Instruments.	58
Clinical and risk assessment using structured interviews and actuarial instrument	59
Standardized and study-specific instrumentation	62
Onsite inmate file review.....	66
Statewide prison database	67
Correctional Officer Instruments.....	67
Warden Instrument	67
Interviewers and Data Collectors.....	67
Procedures	68
Inmates.....	68
Correctional Officers.....	69
Wardens.....	69
Integrating Information from Multiple Sources.....	69
Data Analysis.....	70
Conclusions	70
Chapter Three: The Sexual Behavior of Incarcerated Men and Women.....	72
Coerced Sexual Behavior in Prison.....	72

Sexual predation	72
Study results - sexual predation	75
Sexual victimization in prison	79
Study results - sexual victimization.....	81
Bartered Sexual Behavior in Prison.....	84
Study results – bartered sex	85
Consensual Sexual Behavior in Prison.....	87
Study results – consensual sexual activity in prison.	88
Co-Occurring Forms of Sexual Activity among Inmates	92
Inmate’s Estimations of Consensual and Bartered Sexual Activity	93
Conclusions	95
Chapter Four: Early Life Risk Markers for Sexual Predation and Victimization	99
Outcomes Associated with Early Adverse Life Experiences.....	99
Study Analyses	101
Outcomes Associated with Adolescent Violence and Victimization	108
Serious violent offenders.....	108
Adolescent-limited and life course persistent antisocial offending	109
The Manual of for the Structured Assessment of Violence Risk in Youth (SAVRY).	109
Study Analyses.	110
Conclusions	113
Chapter Five: Violence and Criminality as Risk Markers for Sexual Predation and Victimization ...	116
Outcomes Associated with Community Violence and Victimization	116
Physical fights and violent crime.	116
Domestic and partnered violence.....	117
Study Analyses	117
Outcomes Associated with Instant Offense and Prison Sentence	121
Correctional research and risk classification schemes	121
Study Analyses	122
Outcomes Associated with Institutional Nonsexual Victimization, Violence, and Gang	
Affiliation	127
Male and female nonsexual victimization in prison	127

Male and female sexual victimization in prison	128
Gang affiliation and prison violence	129
Study Analyses	129
Conclusions	134
Chapter Six: Sex Risk Markers for Sexual Predation and Victimization	137
Outcomes Associated with Indices of Impersonal Sex and Sexual Drive	137
The relationship of precocious and impersonal sex to rape.....	137
Mating effort and parental investment	138
Hyper-sexuality desire	139
Study Analyses	140
Conclusions	149
Chapter Seven: Affective and Perceptual States as Risk Marker for Sexual Predation and Victimization	151
Outcomes Associated with Anger, Impulsivity and Fear.....	151
Anger and sexual violence	151
Study Analyses	153
Impulsivity and sexual violence	156
Association between impulsivity and violence.....	157
Impulsivity in rape behavior	157
Study Analyses	158
Fear of victimization	161
Fear of victimization in prison	161
Study Analyses	162
Perceptual Risk Markers for Sexual Predation and Violence	170
Thoughts of Harm and Sexual Violence	170
Threat Control Override Symptoms.....	170
Study Analyses	171
Conclusions	175
Chapter Eight: Personality Risk Markers for Sexual Predation and Victimization	177
The Role of Antisociality in the Prediction of Sexual Aggression and Violence in Prison	177
Defining antisociality	177
Sexual coercion in community samples.....	177

Criminal Behavior of Male Rapists	178
Female Rapists	178
Study analyses	179
The Role of Psychopathy in the Prediction of Sexual Aggression and Violence in Prison.....	183
Psychopathy and criminal offending in men	184
Psychopathy and sexual offending by men	184
Psychopathy and criminal offending in women	185
Study Analyses	185
The Role of Personality Disorders in the Prediction of Sexual Aggression and Violence in Prison	192
Personality disorders and criminality	192
Study analyses	193
Conclusions	Error! Bookmark not defined.
Chapter Nine: Structured and Actuarial Instruments for Assessing Violence Risk	201
MacArthur Violence Risk Study (COVR)	201
Assessing the Risk for Violence, Version Two (HCR:20)	212
Study Analyses	213
Violence Risk Appraisal Instrument (VRAG).....	234
Study Analyses	234
Conclusions	243
Chapter Ten: Social Environment Risk Markers for Sexual Predation and Victimization.....	245
The contribution of correctional officers to the social environment	245
The contribution of wardens to the social environment.....	246
The contribution of prison policies on social environment	246
The contribution of institutional characteristics on social environment.....	247
Study Analyses	248
Conclusions	250
Chapter Eleven: CHAID Classification for Sexual Behavior in Prison.....	251
Model Predicting Any Sex in Prison for Male Inmates.....	251
Model Predicting Sexual Predation for Male Inmates	254
Model Predicting Sexual Victimization for Male Inmates	256

Model Predicting Sexual Bartering for Male Inmates	258
Model Predicting Consensual Sex for Male Inmates.....	260
Model Predicting Any Sex in Prison for Female Inmates	262
Model Predicting Sexual Predation for Female Inmates.....	264
Model Predicting Sexual Victimization for Female Inmates	266
Model Predicting Sexual Bartering for Female Inmates	268
Model Predicting Consensual Sex for Female Inmates.....	270
Conclusions	272
Chapter Twelve: Conclusions and Recommendations	276
References	290
Appendix A: Assessing Generalizability	313
Appendix B: Training of Interviewers and Reliability of Interview Measures	316
Structured Interview for Disorders of Personality (SIDP-IV)	316
Psychopathy Checklist - Revised 2 (PCL-R-2).....	318
Historical Clinical Risk– 20 (HCR:20).....	318
Training of Interviewers and Reliability of Interview Measures - Texas Coding Team	319
Structured Interview for Disorders of Personality (SIDP-IV).....	319
Psychopathy Checklist - Revised 2 (PCL-R-2).	319
Historical Clinical Risk – 20 (HCR:20) and Violence Risk Appraisal Guide (VRAG). .	319
Appendix C: Consent Form.....	320
Appendix D: Significant Risk Factors.....	323
Appendix E: Footnotes.....	336
Appendix F: Bivariate Variables for CHAID Analyses.....	339

List of Tables

Table 1. Frequency of Sexual Predation among Men and Women while in Prison	21
Table 2. Frequency of Sexual Victimization among Men and Women while in Prison	23
Table 3. Frequency of the Bartering of Sexual Acts by Men and Women while in Prison	24
Table 4. Frequency of Consensual Sexual Activity of Men and Women while in Prison.....	25
Table 5. Correlations Between Consensual, Bartered, and Coercive Sexual Activity of Men and Women while in Prison	27
Table 6. Response Rate of Incarcerated Men and Women within Selected Prisons in Ohio	53
Table 7. Demographic Characteristics of Incarcerated Men and Women by State.....	54
Table 8. Demographic Characteristics of Incarcerated Men and Women in Sample.....	55
Table 9. Demographic Characteristics of Male and Female Correctional Officers in Ohio and Texas ..	57
Table 10. Frequency of Sexual Predation among Men and Women while in Prison.....	75
Table 11. Frequency of Predatory Acts Self-Reported by Men and Women while in Prison	76
Table 12. Frequency of Methods and Motives for Coerced Sex in Prison Reported by Predatory Males and Predatory Females.....	78
Table 13. Frequency of Sexual Victimization among Men and Women while in Prison	82
Table 14. Frequency of the Location and Response to Sexual Victimization among Men and Women while in Prison	83
Table 15. Frequency of Bartered Sexual Acts by Men and Women while in Prison.....	85
Table 16. Frequency of Type of Commodity Sought through Bartered Sexual Acts by Men and Women and Concerns About HIV While in Prison	86
Table 17. Frequency of Consensual Sexual Acts by Men and Women while in Prison	89
Table 18. Frequency of Location, Motive and Timing of Consensual Sex Reported by Males and Females while in Prison	90
Table 19. Correlations Between Consensual, Bartered, and Coercive Sexual Activity of Men and Women while in Prison.....	92
Table 20. Perceptions of the Frequency of Sexual Activity within the Prison Environment by Incarcerated Men and Women	94
Table 21. Frequencies of Adverse Childhood Events Reported by Incarcerated Men and Women ...	101

Table 22. Relationship Between Adverse Childhood Events Reported by Incarcerated Men and Type of Sexual Experiences in Prison	104
Table 23. Relationship Between Adverse Childhood Events Reported by Incarcerated Women and Type of Sexual Experiences in Prison.....	106
Table 24. Frequency of Juvenile Risk Factors Reported by Incarcerated Men and Women	110
Table 25. Relationship Between Juvenile Risk Factors Reported by Incarcerated Men and Sexual Experiences in Prison.....	111
Table 26. Relationship Between Juvenile Risk Factors Reported by Incarcerated Women and Sexual Experiences in Prison.....	112
Table 27. Frequency of Prior Violence and Victimization Reported by Incarcerated Men and Women	118
Table 28. Relationship Between Prior Violence and Victimization Reported by Incarcerated Men and Sexual Experiences in Prison	119
Table 29. Relationship Between Prior Violence and Victimization Reported by Incarcerated Women and Sexual Experiences in Prison	120
Table 30. Frequency of Prison Status and Prior Criminal Involvement by Incarcerated Men and Women.....	122
Table 31. Relationship Between Prison Status and Prior Criminal Involvement by Incarcerated Men and Sexual Experiences in Prison	124
Table 32. Relationship Between Prison Status and Prior Criminal Involvement by Incarcerated Women and Sexual Experiences in Prison	125
Table 33. Frequency of Institutional Misconduct Reported by Men and Women	129
Table 34. Relationship Between Institutional Misconduct Reported by Incarcerated Men and Sexual Experiences in Prison.....	131
Table 35. Relationship Between Institutional Misconduct Reported by Incarcerated Women and Sexual Experiences in Prison	132
Table 36. Frequency of Precocious Sexuality, Hyper-sexuality, and Mating Strategy of Incarcerated Men (N=288) and Women	140
Table 37. Relationship between Precocious Sexuality, Hyper-sexuality and Mating Strategy of Incarcerated Men by Sexual Experiences in Prison	144
Table 38. Relationship between Precocious Sexuality, Hyper-sexuality and Mating Strategy of Incarcerated Women by Sexual Experiences in Prison.....	146
Table 39. Descriptive Statistics for Anger Measures for Incarcerated Men and Women	153

Table 40. Relationship between Measures of Anger for Incarcerated Men and Sexual Experiences in Prison.....	154
Table 41. Relationship between Measures of Anger for Incarcerated Women and Sexual Experiences in Prison.....	155
Table 42. Descriptive Statistics for Impulsivity Measures for Incarcerated Men and Women	168
Table 43. Relationship Between Impulsivity Measures for Incarcerated Men and Sexual Experiences in Prison.....	159
Table 44. Relationship Between Impulsivity Measures for Incarcerated Women and Sexual Experiences in Prison.....	160
Table 45. Descriptive Statistics for Fear of Assault in Prison for Incarcerated Men and Women.....	162
Table 46. Relationship between Fear of Victimization in Incarcerated Men and Sexual Experiences in Prison.....	165
Table 47. Relationship between Fear of Victimization in Incarcerated Women and Sexual Experiences in Prison.....	178
Table 48. Descriptive Statistics for SIV and TCO Endorsement for Incarcerated Men and Women ..	171
Table 49. Relationship Between SIV and TCO Measures for Men by Sexual Experiences in Prison....	173
Table 50. Relationship Between SIV and TCO Measures for Women by Sexual Experiences in Prison	174
Table 51. Frequency of Antisocial PD Symptoms by Antisocial PD (APD), Stratified by and Across Gender for Incarcerated Men and Women.....	180
Table 52. Relationship Between Antisocial PD Symptoms for Incarcerated Men and Sexual Experiences in Prison.....	181
Table 53. Relationship Between Antisocial PD Symptoms for Incarcerated Women and Sexual Experiences in Prison.....	182
Table 54. Frequency of Psychopathy Checklist Items and Factor Scores for Incarcerated Men and Women	185
Table 55. Relationship Between Psychopathy Checklist Total and Factor Scores for Incarcerated Men and Sexual Experiences in Prison	190
Table 56. Relationship Between Psychopathy Checklist Total and Factor Scores for Incarcerated Women and Sexual Experiences in Prison.....	191
Table 57. Frequency of Personality disorders among Incarcerated Men and Women.....	193
Table 58. Frequency Count of all Personality Disorder Diagnoses among Incarcerated Men and Women	194

Table 59. Relationship Between Personality Disorders among Incarcerated Men and Sexual Experiences in Prison.....	196
Table 60. Relationship Between Personality Disorders among Incarcerated Women and Sexual Experiences in Prison.....	197
Table 61. Frequency of MacArthur risk factors among Incarcerated Men and Women.....	202
Table 62. Relationship Between MacArthur Risk Factors among Incarcerated Men and Sexual Experiences in Prison.....	206
Table 63. Relationship Between MacArthur Risk Factors among Incarcerated Women and Sexual Experiences in Prison.....	209
Table 64. Frequency of HCR: 20 Items by Gender among Incarcerated Men and Women	214
Table 65. Relationship Between HCR:20 Items by Gender among Incarcerated Men and Sexual Experiences in Prison.....	220
Table 66. Relationship Between HCR:20 Items by Gender among Incarcerated Women and Sexual Experiences in Prison.....	227
Table 67. Frequency of VRAG Item Scores for Incarcerated Men and Women	235
Table 68. Relationship Between VRAG Item Scores for Incarcerated Men and Sexual Experiences in Prison.....	237
Table 69. Relationship Between VRAG Item Scores for Incarcerated Women and Sexual Experiences in Prison.....	240
Table 70. Relationship Between Institutional Variables by Ohio Institutions and Sexual Experiences in Prison.....	248
Table A1. Comparison of Participants and Randomly Selected Group of Non-Participants by Gender in Ohio	313
Table B1. Reliability Estimates SIDP-IV University of Virginia Coders: Intraclass Correlation Coefficient	317
Table B2. Percent Agreement for Diagnostic Category SIDP-IV	317
Table B3. Reliability Estimates SIDP-IV Texas Coders: Intraclass Correlation Coefficients.....	320
Table D1. Significant Risk Factors for Sexual Experiences for Incarcerated Males	323
Table D2. Significant Risk Factors for Sexual Experiences for Incarcerated Females.....	329
Table F1. Bivariate Risk Factors Used in CHAID Analyses for Male Inmates	339
Table F2. Bivariate Risk Factors Used in CHAID Analyses for Female Inmates.....	346

List of Figures

Figure 1. CHAID Analyses for Any Sexual Behavior for Male Inmates.....	253
Figure 2. CHAID Analyses for Sexual Predation for Male Inmates.	255
Figure 3. CHAID Analyses for Sexual Victimization for Male Inmates	257
Figure 4. CHAID Analyses for Sexual Bartering for Male Inmates	259
Figure 5. CHAID Analyses for Consensual Sex for Male Inmates.....	261
Figure 6. CHAID Analyses for Any Sexual Behavior for Female Inmates	263
Figure 7. CHAID Analyses for Sexual Predation for Female Inmates.....	265
Figure 8. CHAID Analyses for Sexual Victimization for Female Inmates.....	267
Figure 9. CHAID Analyses for Sexual Bartering for Female Inmates.....	269
Figure 10. CHAID Analyses for Consensual Sex for Female Inmates	271

Executive Summary

With the passage of the Prison Rape Elimination Act (PREA) of 2003, state correctional institutions were required to engage seriously in activities designed to eliminate prison rape. PREA charged the Bureau of Justice Statistics (BJS) with conducting epidemiological studies in the incidence and prevalence of prison rape in America's prisons. The National Institute of Justice was charged with funding research that would assist correctional facilities in achieving the goals related to prediction, prevention programming, and policy development. Our study was one of several that addressed various aspects of this endeavor.

In designing our study, we sought to extend the literature on prison rape in three important and distinct ways. First, we chose to adapt violence risk assessment measures to study sexual violence in prison as there are no existing sexual violence risk assessment measures. Second, we chose to examine the continuum of sexual behavior among incarcerated individuals, thus allowing us to place sexual coercion in the broader context of sexual behavior in prison. Finally, we chose a study design that would allow us to directly examine gender differences in sexual behavior among male and female inmates. Each of these design aspects is further described below.

The Adaption of Clinical Risk Assessment

The impetus for our particular study was mandated in the context of this larger policy initiative with its distinct focus being on the identification of promising risk markers for inmates at risk for sexual victimization and predation, as they entered the prison system and prior to an actual incident of sexual assault. This represented an ambitious and broad based study goal but one that we believed was timely given advances in the clinical assessment of violence risk over the past decade and the availability of structured clinical assessment paradigms that had proven increasingly accurate and useful for predicting and managing violence in the community (Monahan et al., 2001; Webster, Douglas, Eaves & Hart, 1997; Borum, Bartel & Forth, 2002). We also believed that the field of clinical risk assessment could inform the correctional risk literature which up until this time had focused almost exclusively on the use of demographic, criminal history, and institutional variables to classify offenders and predict physical violence in prison and jails among primarily male inmates (Wooldredge, 1994; Gaes, Wallace, Gilman, Klein-Saffran & Suppa, 2002; Hueber, 2003; Irwin, 2005). Equally compelling was the emerging focus on eradicating violence in prison through changing rather than controlling prisoners, a cyclical consideration that had begun to re-appear based upon research

that demonstrated that programming and treatment were the most effective prison violence reduction strategies available (Byrne & Hummer, 2007).

Clinical violence risk assessment is designed to identify relevant static and dynamic risk factors with interventions being designed to lower the impact of the dynamic factors, contain the static factors, and through these efforts lower the overall level of risk of the individual. We believed that the identification of these dynamic and static risk factors could not only improve classification but also identify the possible interventions that might be used by prisons to lower the level of risk among groups of offenders who were believed early in their prison career to pose a higher than average risk for either sexual predation or sexual victimization. Our endeavor thus sought to identify the most empirically sound violence risk markers within the clinical violence risk literature, with a particular emphasis on sexual violence, and to explore the combining of these factors into risk models that might inform correctional interventions and policies.

Integrating the Full Continuum of Sexual Behavior in Prison

Our study derived from the PREA mandate to study coerced sexuality in prison. This focus of study initially seemed clear enough given certain assumptions about the asexual life that characterized most domains of prison living and the extraordinary violence that would be associated with same sex rape by violent inmates in a tightly controlled and yet dangerous environment. This clear cut demarcation immediately oriented us to various research literatures associated with sexual violence and physical violence in the community and in different types of institutionalized settings. Moreover, it provided us a clear definition of the illegal act that we were studying, a pre-existing understanding of the destructive aftermath that could be anticipated from it, and the egregious susceptibility and vulnerability of the victims that fall prey to this type of humiliating experience.

This rather traditional perspective on sexual assault and victimization, however, began to erode as we left the confines of our university offices and began to visit the many prisons that were to be the site of our data collection. Quickly the wardens and the inmates that were part of our pilot testing began to tell us of a sexual world inside each prison that was far more complex and multifaceted than our initial approach was prepared to handle. We found that there were significant rates of consensual sex occurring in both the male and female prisons, that bartered sex was occurring to obtain various kinds of commodities and psychological benefits, and that there was a small but aggressive number of rapes that occurred, largely as an expression of dominance and control, and which generally were not reported to the authorities. These were accompanied by a common understanding that

retaliation would follow any type of reporting and that there would be significant and longstanding effects associated with being labeled a “snitch” in the institution.

At the same time we were formulating our thoughts, four publications appeared almost simultaneously that supported and illuminated the behaviors that were becoming a part of our study focus. Smith (2006) published a law review article which explored the motivations that inmates had for being sexual in prison. In the same journal, Ristroph (2006) published a second law review article arguing that only officially sanctioned deprivations of rights and liberties are properly called punishment and that “any-sex, including sexual assaults that may occur in prison is ‘not a part of the penalty’” (pg. 139). Ristroph suggests that many inmates consent to sexual encounters not because of a fear of immediate or threatened violence but rather for money, drugs, food, comfort, physical gratification, and love. A third publication emerged that was generated using the early stages of PREA funding. Based upon hundreds of unstructured interviews in state prisons across the country, Fleisher and Krienert (2006) concluded that the “idea” of prison rape exerted a powerful influence on inmates’ lives. However, disputing the premise of an epidemic of sexual violence in prison, they asserted that these impressions and beliefs arose as much from the influence of the family and neighborhood social life, the county jail, and the media, as they did from direct observation or experience in prison¹. Fleisher and Krienert (2006) reported a controversial finding at that time, that prison rape “did not frequently occur” (p. 12) and based upon this observation, developed a rather intricate explanation and description of the same-sex relationships that developed in this context. Finally, at the time we were developing the design of the study, the Bureau of Justice published its first in a series of four studies of prison sexual assault. It reviewed actual allegations of sexual violence made to prison and jail officials throughout the country in male and female prisons throughout 2004 and 2005. They found that half of the reported incidents involved the use of force and in the remaining incidents inmates were talked into it, bribed or blackmailed, or offered protection from other inmates. A similar rate of substantiation was found for the staff-on-inmates incidents; however, in two-thirds of the incidents were described by both participants as being romantic in nature.

Based upon the convergence of these early commentaries combined with our own experience, we felt compelled to expand our study focus to include the three different kinds of sexual behavior we had reason to believe occurred in prison: consensual sex, bartered sex, and coerced sex². This decision derived from three primary considerations. We believed that any attempt to understand coerced sex in prison, without comparing it to the other forms of sexual experience that were occurring simultaneously would rob us of the contextual meaning and a comparative platform for

these incidents. Moreover, the common association observed in criminological literature between patterns of victimization and perpetration suggested to us that there was a likely interplay between these sexual behaviors and the specific inmates that participated in them. Finally, our beginning suspicions that the rate of authenticated rape would be very low motivated us to develop a continuum of coercion which we believed would better capture the concerns regarding forced and manipulated sexuality that lay at the heart of the PREA legislation. Together, these considerations compelled us to develop a research strategy that included a full continuum of sexual behaviors as they applied to consensual, bartered and coerced sexuality and to use these as the analytic focus of our study. This approach ensured that we would obtain a broader view of sexual life within the institutions and the particular relevance of sexual coercion within this pivotal interpersonal context.

Our Decision to Examine Gender Differences

As we developed our study design we decided to include an equal number of male and female inmates in our sample, despite this contradicting the significant disparities that exist in the number of males and females currently held in our state and federal prisons. We decided that this was important both to address rather implicit differences in gendered research on prison rape and to allow us to undertake an empirical analyses of the similarities and differences in the risk markers for the various types of sex that were occurring in the male and female prisons that were included in our two state study.

Our review of the research regarding prison rape led us to the same conclusion as other researchers. Research on male sexual activity in prisons has primarily focused on sexual coercion whereas the research on female sexual activity in prisons has primarily focused on consensual sex. Hensley, Struckman-Johnson and Eigenberg (2000) noted that only four studies had been conducted on consensual sex in male prisons up until that time when they conducted their review. In contrast, from the earliest research (Otis, 1913) there has been a focus on consensual sexual activity among female inmates (Koscheski, Hensley, Wright, & Tewksbury, 2002), with studies of sexual coercion among females appearing for the first time in the mid to late 1990s (see Struckman-Johnson, Struckman-Johnson, Rucker, Bumby & Donaldson, 1996; Struckman-Johnson & Struckman-Johnson, 2002). As noted by Hensley et al. (2000), it is difficult to determine whether these differences in research orientation reflect reality or whether they reflect researchers' personal attitudes toward sex in prison. Whether males and females experience sex in prisons differently remains an empirical question that to our mind had not been answered.

Method

Data were collected in seven Ohio and five Texas male and female state prisons of varying security levels. The sample consisted of 288 males and 183 females. Post-hoc analyses indicated the samples were representative of inmates in Ohio and Texas. Our data was collected from four different sources. Lengthy clinical interviews were conducted by trained clinical faculty and psychology graduate students. The structured interview, termed the Prison Violence Risk Interview Schedule (PVRI), required three-and-one-half hours to complete based upon a face-to-face interview with each inmate. The interview and its coding schedule contained 22 sections pertaining to current institutional adjustment, family background, early childhood, adolescence, friendships, interpersonal relationships, marital/romantic relationships, relationships with children, work experience, finances, mental health, alcohol/substance abuse/impulsive behavior, aggression and anger control, emotions and feelings, self-perceptions, criminal behavior, current offenses, manipulation/deceitfulness, career goals, general questions, post-interview observational criteria, and narratives of interest concerning sexual experiences in prison. The information that was supplied by each inmate during each interview had multiple uses. It was used to quantify certain historical and institutional variables that became independent variables included in the dataset and later analyses. The information was also used to code three structured clinical instruments and one actuarial risk assessment instrument, i.e., the Structured Interview for DSM-IV Personality Disorders, (SIDP-IV) , the Psychopathy Checklist Revised-2 (PCL-R-2), the Historical, Clinical, and Risk Management violence risk assessment tool (HCR:20) and the Violence Risk Assessment Guide (VRAG). These clinically derived data were combined with data generated from a number of self report questionnaires completed by each inmate during their face-to-face interview, file review information was collected by research staff at different locations within each prison while the clinical interviews were being completed, and database information submitted to us by the state correctional agencies as part of our random sampling procedures.

The Sexual Behavior of Incarcerated Men and Women

We used five outcome measures in our study. These included the experience of coerced sexuality while imprisoned as either a perpetrator or victim, involvement in sexual exchanges that were based on the bartering of goods or protection as either a perpetrator or victim, and involvement in consensual acts that occurred with other inmates. We included the incidents in which the inmates reported consensual involvement with correctional officers or members of the prison staff under the rubric of consensual sexuality. Currently, statutory law defines this type of encounter as a felony offense in each state. However, we sought to structure our data analyses to take into account the consensual nature of the encounters as described by the inmates in our study. This structure is

supported by the research published by the BJS which identifies two-thirds of the staff on inmate incidents as being romantic in nature (Beck, Harrison, & Adams, 2007).

Coerced Sexual Behavior in Prison

Sexual predation. Significant gender differences were found in the rates of self-report predation in our male and female samples (see Table 1). Thirty-three male inmates (11.5%) reported having perpetrated non-contact sexual acts against other inmates or staff and twelve males (4.2%) reported contact predatory acts against other inmates or staff. The female inmates reported lower levels of non-contact sexual predation (2.7%) and none reported contact sexual predation against another inmate or member of the correctional staff. Extrapolated to a national population, the results would suggest that our prison system currently houses 61,225 male inmates who are willing to self-report contact sexual predation.

Among the cadre of male inmates reporting contact predatory sexual behavior, the majority described themselves as being sexually predatory toward staff and others and relatively few described themselves as being sexually predatory toward other inmates. It is not clear if these data reflect an accurate portrayal of the inmates' predatory targets or the wish to retain a heterosexual identity when describing these incidents combined with a possible interest in demonstrating their ability to dominate institutional staff. However, if taken at face value, these data suggest that sexual coercion of prison staff by male inmates is as much a concern as the more widely publicized incidents of inmate coercion by correctional staff.

Table 1

Frequency of Sexual Predation among Men (N=288) and Women (N=183) while in Prison

	Men		Women		χ^2	Φ
	N	(%)	N	(%)		
Against Inmates						
Any Non-Contact Sex Acts	13	4.5	5	2.7	0.97	-0.05
Any Contact Sex Acts	1	0.3	0	0.0	0.64	-0.04
	M	SD	M	SD	T	
Count of Non-Contact Sex Acts	0.13	0.77	0.04	0.29	1.68	
Count of Contact Sex Acts	0.01	0.12	0.00	0.00	0.80	
Against Visitors/Others	N	(%)	N	(%)	χ^2	Φ
Any Non-Contact Sex Acts	28	9.7	2	1.1	13.97***	-0.17***

Any Contact Sex Acts	12	4.2	0	0.0	7.82 ^{**}	-0.13 ^{**}
	M	SD	M	SD	T	
Count of Non-Contact Sex Acts	0.36	1.67	0.01	0.10	3.44 ^{***}	
Count of Contact Sex Acts	0.10	0.68	0.00	0.00	2.44 ^{***}	
Against Staff	N	(%)	N	(%)	χ^2	Φ
Any Non-Contact Sex Acts	25	8.7	2	1.1	11.92 ^{***}	-0.16 ^{***}
Any Contact Sex Acts	8	2.8	0	0.0	5.17 [*]	-0.11 [*]
	M	SD	M	SD	T	
Count of Non-Contact Sex Acts	0.22	0.89	0.01	0.10	3.21 ^{***}	
Count of Contact Sex Acts	0.03	0.19	0.00	0.00	2.74 ^{**}	
CUMULATIVE TOTAL	N	(%)	N	(%)	χ^2	Φ
Any Non-Contact Sex Acts	33	11.5	5	2.7	11.48 ^{**}	-0.16 ^{**}
Any Contact Sex Acts	12	4.2	0	0.0	7.82 ^{**}	-0.13 ^{**}
	M	SD	M	SD	T	
Count of Non-Contact Sex Acts	0.70	2.68	0.07	0.41	3.96 ^{***}	
Count of Contact Sex Acts	0.10	0.74	0.00	0.00	2.38 [*]	

Note. ^{*} $p < .05$, ^{**} $p < .01$, ^{***} $p < .001$.

Sexual victimization. Our data concerning sexual contact that was perceived by the recipient as coercive was higher than that found in a national survey conducted by the BJS. As summarized in Table 2, 5.9% of the male inmates reported contact sexual victimization by other inmates and 2.4% by prison staff. The female inmates reported comparable levels with 6.6% self-reporting contact sexual victimization by other inmates and 2.7% by correctional staff. Further added to this were significantly higher levels of perceived non-contact sexual victimization (12.5% by inmates and 6.6% by staff for males and 22.4% by inmates and 11.5% by staff for females). These data suggest that females experience and report significantly more victimization by other inmates through comments, looks and innuendoes than men.

However, the self-reported rates of contact sexual victimization by both genders were not significantly different, hovering around 8 to 9% including both inmates and staff perpetrators. In contrast to the BJS findings, our data suggest that the inmates experience themselves as more

vulnerable to victimization by other inmates as contrasted to correctional staff although, as with the BJS study, many of these staff on inmate incidents were described as consensual and romantic in nature.

Table 2

Frequency of Sexual Victimization among Men (N=288) and Women (N=183) while in Prison

By Inmates	Men		Women		χ^2	Φ
	N	(%)	N	(%)		
Any Non-Contact Sex Acts	36	12.5	41	22.4	8.03**	- 0.13**
Any Contact Sex Acts	17	5.9	12	6.6	0.08	0.01
	M	(SD)	M	(SD)	T	
Count of Non-Contact Sex Acts	0.57	1.93	0.91	2.07	-1.75	
Count of Contact Sex Acts	0.18	0.89	0.11	0.48	1.02	
By Visitors/Others	N	(%)	N	(%)	χ^2	Φ
Any Non-Contact Sex Acts	4	1.4	5	2.7	1.08	0.05
Any Contact Sex Acts	3	1.0	0	0.0	1.92	-0.06
	M	(SD)	M	(SD)	T	
Count of Non-Contact Sex Acts	0.07	0.68	0.03	0.17	0.75	
Count of Contact Sex Acts	0.06	0.67	0.00	0.00	1.50	
By Staff	N	(%)	N	(%)	χ^2	Φ
Any Non-Contact Sex Acts	19	6.6	21	11.5	3.42	0.09
Any Contact Sex Acts	7	2.4	5	2.7	0.04	0.01
	M	(SD)	M	(SD)	T	
Count of Non-Contact Sex Acts	0.20	0.95	0.35	1.09	-1.48	
Count of Contact Sex Acts	0.04	0.34	0.05	0.35	0.23	
CUMULATIVE TOTAL	N	(%)	N	(%)	χ^2	Φ
Any Non-Contact Sex Acts	38	13.2	42	23.0	7.55**	0.13**
Any Contact Sex Acts	19	6.6	12	6.6	<0.01	<0.01
	M	(SD)	M	(SD)	T	
Count of Non-Contact Sex Acts	0.64	2.07	0.94	2.14	-1.49	
Count of Contact Sex Acts	0.23	1.11	0.11	0.48	1.66	

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

Bartered Sexual Behavior in Prison

Table 3 summarizes data concerning bartered sex as described by the inmates in our sample. Male inmates tended to report efforts to barter with visitors (6.6% non-contact and 3.5% contact sex) and correctional staff (9.7% non-contact and 8.0% contact sex) while the female inmates reported more relative efforts to barter with other inmates (6.0% non-contact and 3.8% contact sex).

Table 3

Frequency of the Bartering of Sexual Acts by Men (N=288) and Women (N=183) while in Prison

	Men		Women		χ^2	Φ
	N	(%)	N	(%)		
With Inmates						
Any Non-Contact Sex Acts	7	2.4	11	6.0	3.90*	0.09*
Any Contact Sex Acts	7	2.4	7	3.8	0.76	0.04
	M	(SD)	M	(SD)	T	
Count of Non-Contact Sex Acts	0.14	0.94	0.16	0.78	-0.35	
Count of Contact Sex Acts	0.10	0.78	0.07	0.45	0.59	
With Visitors/Others						
Any Non-Contact Sex Acts	19	6.6	3	1.6	6.18*	-0.12*
Any Contact Sex Acts	10	3.5	1	0.5	4.19*	-0.09*
	M	(SD)	M	(SD)	T	
Count of Non-Contact Sex Acts	0.24	1.17	0.03	0.31	2.85**	
Count of Contact Sex Acts	0.15	0.90	0.01	0.07	2.69**	
With Staff						
Any Non-Contact Sex Acts	28	9.7	7	3.8	5.66*	-0.11*
Any Contact Sex Acts	23	8.0	2	1.1	10.58**	-0.15**
	M	(SD)	M	(SD)	T	
Count of Non-Contact Sex Acts	0.34	1.26	0.09	0.56	2.91**	
Count of Contact Sex Acts	0.26	1.12	0.01	0.10	3.82**	
CUMULATIVE TOTAL						
Any Non-Contact Sex Acts	36	12.5	15	8.2	2.15	-0.07
Any Contact Sex Acts	29	10.1	9	4.9	4.00*	-0.09*
	M	(SD)	M	(SD)	T	
Count of Non-Contact Sex Acts	0.71	2.61	0.29	1.30	2.35*	
Count of Contact Sex Acts	0.52	2.10	0.09	0.47	3.35**	

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

When asked about the commodity that they sought through the offering of sexual favors, the male inmates most frequently mentioned seeking favors from staff. The data concerning the female inmates was limited but suggested that they reported most often wanting money, goods and canteen items in exchange for sexual contact.

Consensual Sexual Behavior in Prison

As presented in Table 4, significant gender differences were found when we examined non-contact and contact consensual sexual interactions that occurred between inmates only. In our male sample, 14.2% of the male inmates reported non-contact sexual encounters and 5.9% actual sexual contact with another inmate, possibly involving oral and anal sex. In contrast, 39.3% of the female inmates reported non-contact sexual encounter with other inmates and 26.2% some type of sexual contact with another inmate, possibly including cunnilingus and penetration with an inanimate object. The female inmates also reported a greater variety of non-contact activities when compared to the male inmates ($M = 1.86$ females, $M = 0.42$ males out of eight) as well as a greater variety of sexual contact activities ($M = 1.22$ females, $M = 0.23$ males out of eight).

Further gender differences emerged when we examined the relationships that the inmates stated that they were having consensually with members of the prison staff. In this context, 24 percent of the male inmates reported non-contact consensual encounters with staff members and 17 percent contact sexual encounters with staff members. Fourteen percent of the women reported non-contact consensual encounters with staff members and 3 percent contact sexual encounters with staff members. These gender differences are similar to those reported by the Bureau of Justice Statistics and underscore the particular vulnerability of female correctional officers to becoming sexually involved with male inmates.

We also queried the inmates about the location of their consensual sexual encounters, their motivation of participating in this type of sexual encounter, the time it took after imprisonment for them to enter into these sexual encounters, and their concerns while involved with others about HIV exposure and infection.

Table 4

Frequency of Consensual Sexual Activity of Men (N=288) and Women (N=183) while in Prison

	Men	Women
--	-----	-------

With Inmates	N	(%)	N	(%)	χ^2	Φ
Any Non-Contact Sex Acts	41	14.2	72	39.3	38.68**	0.29**
Any Contact Sex Acts	17	5.9	48	26.2	38.87**	0.29**
	M	SD	M	SD	T	
Count of Non-Contact Sex Acts	0.42	1.43	1.86	3.04	-5.96***	
Count of Contact Sex Acts	0.23	1.10	1.22	2.43	-5.23***	
With Visitors/Other	N	(%)	N	(%)	χ^2	Φ
Any Non-Contact Sex Acts	96	33.3	28	15.3	18.76***	-0.20***
Any Contact Sex Acts	56	19.4	7	3.8	23.56***	-0.22***
	M	SD	M	SD	T	
Count of Non-Contact Sex Acts	1.28	2.34	0.37	1.10	5.73***	
Count of Contact Sex Acts	0.59	1.60	0.12	0.86	4.14***	
With Staff	N	(%)	N	(%)	χ^2	Φ
Any Non-Contact Sex Acts	70	24.3	25	13.7	7.87**	-0.13**
Any Contact Sex Acts	50	17.4	5	2.7	23.22**	-0.22**
	M	SD	M	SD	T	
Count of Non-Contact Sex Acts	0.95	1.96	0.32	1.00	4.60***	
Count of Contact Sex Acts	0.56	1.58	0.07	0.48	4.90***	
CUMULATIVE TOTAL	N	(%)	N	(%)	χ^2	Φ
Any Non-Contact Sex Acts	125	43.4	84	45.9	0.28	0.03
Any Contact Sex Acts	88	30.6	54	29.5	0.06	-0.01
	M	SD	M	SD	T	
Count of Non-Contact Sex Acts	2.66	4.16	2.54	3.87	0.30	
Count of Contact Sex Acts	1.38	2.98	1.42	2.71	-0.15	

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

Co-Occurring Forms of Sexual Activity among Inmates

Our finding that approximately one half of our sample reported no sexual contact while imprisoned prompted us to explore further the co-occurring nature of the different types of sexual contact. We were interested in the dynamics that might turn victims into predators and the affect that consensual sex might have on the occurrence of more coerced forms of sexual contact. The correlations between the different categories of sexual behavior are summarized below (see Table 5) with the data for the female inmates being displayed in the upper diagonal and for the male inmates in the lower diagonal.

These data reflect significant gender differences in the pairing of different types of sexual contact. For the female inmates, the inmates that reported sexual victimization were not simultaneously involved in consensual and bartered encounters. The female inmates who reported predatory sexual behavior toward other inmates, however, did self-report involvement in other consensual and bartered sexual relationships. The associations for the male inmates were more all-encompassing.

Table 5

Correlations Between Consensual, Bartered, and Coercive Sexual Activity of Men (N=288) and Women (N=183) while in Prison

Males	Females			
	Victimization	Predation	Bartered	Consensual
Victimization	---	0.14	0.12	0.14
Predation	0.30 ***	---	0.27***	0.19***
Bartered	0.21 ***	0.39 ***	---	0.40***
Consensual	0.25 ***	0.38 ***	0.49 ***	---

*Note. Spearman's rho used due to non-normality of variables; Women's coefficients in upper diagonal, Men's coefficients in lower diagonal; * $p < .05$, ** $p < .01$, *** $p < .001$.*

Male inmates who reported being sexually victimized also reported being involved in bartered and consensual sexual relationships with others. Similarly, male inmates who self reported sexually predatory behavior also reported being sexually victimized by others. For both genders, the highest correlations (.49 and .40) were between consensual and bartered sex suggesting that conceptually bartered sex may be closer to consensual sex at least in this type of setting.

Data Analyses and Model Building

The empirical scaffolding of our study lay in the identification of the eight domains of risk factors for violent behavior including sexual predation in the community and in prison. We sought these risk markers through a thorough review of the clinical violence risk research, criminological research concerning sexual violence in the community and in prison, and the development of risk classifications schemes for incarcerated men and women. This review directed us to the potential relevance of a wide array of historical, criminological, clinical, and contextual risk factors that included: early adverse life experiences; prior adolescent and domestic violence; criminality and prison violence; hyper-sexuality and impersonal sexuality; affective and cognitive states including anger, impulsivity and thoughts of harm; personality traits and disorders including psychopathy;

extant risk instruments for violence including the COVR, HCR:20 and VRAG, and the social environment as reflected in the attitudes and behaviors of the correctional staff in each institution.

Each of the variables identified in the eight risk domains that was found to be statistically associated with our various outcome measures was integrated into our later model building using multivariate analyses. For this purpose, we used Chi Square Automated Interaction Detector (CHAID), an analysis technique that is used to create decision trees. This method of analysis selects the best predictor variables using a statistic test (Chi square for categorical and F for continuous, $p < .05$ with Bonferroni adjustment) to act as the first node in the tree and repeats this process until a full tree is grown. We used a cross-validation method (which divides the sample into 10 folds and verifies the original risk model) which allows us to compute a risk estimate as well as a cross validated risk estimate that represents the average of all risk estimates across the 10 subsamples. In this study, 288 males and 183 females were included in the analyses. Analyses were conducted separately for males and females.

Conclusions and Recommendations

Our research was exploratory and sought for the first time to apply empirically validated static and dynamic risk makers for violence in the community to sexual predation and victimization in prisons. This translational process proved to be fitting to the goals that we had articulated at the beginning of our project and culminated in the construction of conceptual models for predatory, victimized, bartered, and consensual sex in prison. The models were characterized by good to excellent (.70 to .99) accuracy with high levels of sensitivity and relatively low levels of specificity. These statistics suggest that our casting of a wide net for predictive risk markers was successful in orienting us to the various risk domains that might be most useful in predicting various types of sexual behavior in prison. The differential ability of the models to identify sexually active individuals more adeptly than sexually inactive individuals further underscores the value of these models for informing broad based educational and violence reduction strategies. However, the low levels of specificity alert us to the need for replication and refinement before any of the risk markers or conceptual models are integrated into investigative strategies or prosecutorial endeavors.

In reflecting on the overall significance of our study, there are two intertwined observations that are crucial to an informed understanding of the various outcomes of the project. These two observations reflect different perspectives on the same phenomenon and provide two important lenses through which sexual behavior in prison is best understood experientially and programmatically. The first of these emerged from our decision to include different types of sexual activity in our definition of the

outcome measures and to explore all of these behaviors through our multivariate statistical analyses. At the beginning of the study, we decided to step out of the mandated focus on predatory sex and sexual victimization, choosing instead to include in our instrumentation and interviews the full continuum of sexual behaviors that we had come to believe took place in prison. This decision was motivated by trends that we began to discern in the research literature as well our experiences we went out into the field to begin our pilot testing. Our initial conversations with wardens and inmates began to suggest to us that a singular focus on predation and victimization might turn into the proverbial search for the needle in the haystack with considerable expense and professional effort embedded in it while missing the complex set of sexual interchanges that were routinely occurring in the prisons that we were scheduled to study.

Auspiciously, this more inclusive approach proved rich in meaning and came to constitute the foundation for all the most important findings of our study. Firstly, it documented with substantive detail the fact that there is a significant amount of sexual behavior occurring in our prisons across the country. This sex is occurring despite firm institutional regulations prohibiting it and in the context of increasingly criminal sanctions regarding it. This sex is varied in form and intent and can be based upon different types of relationships between the inmates and with members of the prison staff. Some of the sex is coerced, other is not. Some involves relationships between same gendered inmates, others illicit relationships with members of the prison staff. The intent of the sex is also found to vary at times reflecting a predatory imposition of a degrading experience upon another, at other times a bartered exchange of goods and interpersonal commodities, and at other times, the consensual exchange of sexual gratification often designed to obtain immediate pleasure and future control of another individual. These different domains of sexual behavior are not substantially different than those found in the community but they are made unique in the prison environment by the fact that they are prohibited, commonly involve single-gendered pairings by heterosexual individuals, and entail two adults, one of whom might be deemed capable of giving consent while the other is not.

Secondly, our data analyses further deepened our understanding of these sexual exchanges by demonstrating that the different kinds of sexual behaviors were significantly correlated and that our sex-specific distinctions, when applied to descriptions of an individual, were misleading if not illusory. In developing our risk models, we found that the male inmates engaged in more predatory, bartered, and consensual sex with visitors or staff while the female inmates engaged in more bartered and consensual sex with other inmates. However, these different types of sex were found to correlate in many significant ways suggesting that inmates who engage in one type of sex are far more likely to be

involved in the other types of sex and that these inmates are different in many substantial ways from the inmates who adopt a largely asexual stance while living in prison. These correlations were less apparent initially among the female inmates when examining their vulnerability to victimization, yet even among the female inmates, predatory, bartered and consensual sex correlated consistently across their self reported behavior. Fleisher and Krienert.(2006) came upon a similar set of observations as part of ethnographic study of prison sex and referred to this panorama of sexual behaviors as the “sex scene” in prison.

Our findings, while affirming empirically the importance of this integrated aspect of prison life, offered a different interpretation of the meaning and origins of these behaviors for the individual and for the institution. Specifically, the sexual behavior that we encountered across the different prisons and different prison systems states was consistently associated with higher levels of threatened, physical, and relational violence within both the male and female institutions. Similarly, many of the risk makers for sex in prison were the same as those that have been identified as predicting violent behavior in the community. Inmates who experienced conduct problems as juveniles, who had problems in establishing relationship with others during adolescence, who had past history of early violence, and who suffered from one of the Cluster B personality diagnoses tended to be more sexually active in prison. The HCR:20 used to predict violence risk in the community was found to correlate with the different types of sexual behavior in prison for both the male and female inmates. Further, various affective states such as anger, impulsivity and violent thoughts to self and others, often associated with reactive forms of physical violence, clustered in our sample among those whose reported involvement in predatory, victimized, bartered, or consensual sex while incarcerated. This affinity between sexual and aggressive behavior in prison suggest that it is not only a “sex scene” that defines the behaviors of some inmates, but rather engagement in a turbulent set of interpersonal relationships that are sexual, aggressive, and occasionally violent. This turbulence seems to have been reflected in chaotic early lives, domestically violent relationships prior to coming too prison, and an adjustment to prison that is tinged with hostility in its many forms. The impetus for this kind of behavior seems to lie in the past expressed through the personality into the present where it recreates the same interpersonally distressed mêlée as was apparent in the sexual and intimate lives of these individuals before they came to prison.

It is with these over arching observations in mind that we will now turn our attention to our initial research questions and use these to organize our findings as they might best inform programming and policy. We present these findings in the hope that they will contribute to the effort of the PREA

legislation to make prisons more humane and dignified while also developing interventions that will minimize unintended hardship for the inmates and correctional staff who live and work within them.

Is it possible to combine individual-specific dynamic and static risk factors to create a model to predict which inmates are most likely to be at high risk for perpetrating sexually aggressive behavior in prison prior to a first sexually violent event?

Through our analytic process, we were able to build a *Male Sexual Predation Model* that predicted sexual predation among the male inmates using variables that did not rely on past incidents of sexual violence. The *Male Sexual Predation Model* correctly classified roughly 89 percent of all cases and had a sensitivity rate of 98 percent and a specificity rate of 26 percent (see page 255, Figure 2 for the CHAID diagram).

Of the overall sample, 35 men (12.2%) admitted to sexual perpetration in prison. Among this group of male inmates, sexual victimization was the most powerfully risk maker associated with sexually predatory behavior in prison. Thirty four percent of the males who admitted to sexual victimization also admitted to being sexually predatory toward others. This was compared to eight percent of those who did not report any prior sexual victimization. As mentioned, this intermingling of victimization and predation argues against more traditional depictions of these terms as reflecting different inmates and suggests instead that the two experiences are in some ways like two sides of the same coin and combined in the sexual experience of a single individual, at least when they are living in prison.

Following from this initial decision point, two other groups appeared within the *Male Sexual Predation Model*. Among the inmates who did not report sexual victimization, those who reported perpetrating threatening violence against others and who were incarcerated in Texas were many times more likely to report sexually predatory behavior. Among those who did report threatened violence, inmates with continuous scores of six or more on the diagnostic criteria for Antisocial Personality Disorder were more likely to report sexually predatory behavior. A history of head injury with loss of consciousness further increased the likelihood of sexual predation by a factor of three among this group of inmates.

When these numbers are extrapolated to the male prison population across the country, they suggest that approximately one in ten male inmates endorse involvement in some type of contact (4.2 %) or noncontact sexually predatory act (11.5%) toward either another inmate or members of the prison staff. The risk factors that predict this behavior are found to be both individual and systemic and to reflect behavior in the present and impairments from the past. The reflective nature of these

behaviors combined with the presence of Antisocial Personality Disorders and at least one head injury with loss of consciousness point towards a particular sub-group of inmates who are impulsive and somewhat reckless and who are involved in reciprocal violence with other inmates. The presence of state differences, however, also suggests that there are prison specific differences that mediate these behaviors either through administrative edict or the racial mix of the inmates that populate the various prisons. These systemic differences converge with the BJS research which documented some of the highest rates of sexual assault within the Texas prison system.

We were unable to create a valid model for sexual predation among the female inmates as the rates of self reported sexual predation were too low. Of the overall sample, only 5 women (2.7%) admitted to sexual perpetration in prison.

However, to inform future research we did conduct a CHAID analysis on these data and surprisingly created a model that correctly classified roughly 99 percent of all cases and had a sensitivity rate of 99 percent and a specificity rate of 80 percent. The CHAID diagram of this model is displayed in Chapter 10 on page 265, Figure 7.

In these analyses, HCR:20 scores were the best predictor of sexual perpetration in women. Women who scored over 29 on the Total Score of the HCR:20 and who reported having had an orgasm with a partner in prison were more likely to report sexual predation (80% versus 0% respectively).

Although preliminary in nature, these findings do point to the programmatic usefulness of the HCR:20 in identifying sexually violent women in prison. Theoretically, they suggest that sexually violent, incarcerated women are characterized by many of the same historical, clinical, risk factors that predict community and institutional violence among both male and females. The significance of orgasmic activity with a partner may reflect a homosexual or bisexual sexual orientation or conversely the impact of a more intense sexual drive, two variables that were found to be associated with predatory sex by female inmates in the initial bivariate series of analyses.

Is it possible to combine individual-specific dynamic and static risk factors to create a model to predict which inmates are most likely to be at risk for being sexually victimized in prison prior to a first experience of victimization?

Our CHAID analyses were successful in building a significant *Male Sexual Victimization Model* and a *Female Sexual Victimization Model*. Past victimization was not included in either of these models. The CHAID diagrams of these two models are displayed on page 257, Figure 3 and page 267, Figure 8.

Of the overall sample, 44 men (15.3%) admitted to sexual victimization in prison. As with the previous model, sexual predation was the most powerful predictor of victimization. Men who admitted to sexual perpetration were almost four times more likely to admit victimization than those who denied sexual perpetration. Within this group, physical size mattered with men weighing less than 164 pounds being four times more likely to be sexually victimized than those who weighed over 164 pounds. A second group of male victims reported no prior sexual predation. Among this group, a more vulnerable psychological state seemed most influential in their victimization. This experience was characterized by more worries and fears of being sexually assaulted by other inmates, having experienced suicidal ideation at some time in the past, and being essentially non-violent prior to and during their incarceration.

The rate of sexual victimization was higher among the female inmates (26.6%). The most powerful predictor of sexual victimization among the female victims involved simultaneously being the recipient of threatened violence by other inmates. This first tier effect suggests that sexual victimization is paired for most women with other types of victimization and that they appear to experience themselves as being vulnerable in a number of different ways. However, similar in some ways with the *Male Victimization Model*, a proportion of these female inmates reported having perpetrated some type of relational violence against the other inmates. This group was twice as likely to report sexual victimization when compared to those who had not participated in this type of behavior. A second group of female victims reported higher levels of concerns about being sexually assaulted by correctional staff and demonstrated more consistent symptoms of Histrionic Personality Disorder. These findings suggest that the first group of female victims is entangled with other inmates in a reciprocal dynamic of aggressive and intrusive interactions while the second is more concerned about unwanted sexual interactions with staff which may to some extent be elicited by their own attention seeking behavior.

In reflecting on the *Male Victimization Model*, we were reminded of two forms of adaptation that we observed or heard reported to us by male inmates. Many of the inmates in higher security units were physically fit and robust with well defined musculatures, an effort that required rigorous exercise regimes often maintained over long periods of time, alone, in their single cells. Other inmates described to us the importance of fighting when they first entered the prison, often as young ages, to ensure that this would build an institutional image that would protect them over the course of their incarceration. Both of these adaptations reflect an intuitive response to the factors that, in fact, are

shown empirically to place them at higher risk for sexual victimization, size and history of violence, regardless of security level or placement in a particular state institution.

The multi-tiered nature of the *Male Victimization Model* and the *Female Victimization Model* further alerts us programmatically to the multiplicity of victim types and the importance of designing programs that are responsive to the behaviors that are associated with each of them. The retaliatory nature of some victimization requires that the cyclical nature of these behaviors be addressed with the inmates and that the less egregious behaviors addressed as incubators for the more problematic types of sexual victimization. For the more vulnerable victims of both genders, the affective instability of the men and the provocative behavior of the women can be attended to through programs designed to create resiliency to the different types of victimization that they might experience. Each approach underscores the behaviors that increase risk and which use behavior of the victim to strengthen their position in the institution and inoculate them against multiple forms of victimization. Systemically, these combined behaviors also suggest that individual victimization is not only a problem for the individual but also one tendril of the network of behaviors that contribute to some of the most explosive behavior that must be handled by both the male and female prisons across the nation. Routinely, the wardens told us of the violence and bloodshed that they have encountered often traced back to the jealousy and distress that is paired with the romantic and sexual lives of the inmates. Akin to the links proposed between nuisance behavior and violence in the broken window theory of violence prevention, the behavioral risk markers for sexual violence represent viable and productive entry points for interventions that might change the inner dynamics of this sexual world and provide alternatives to unidimensional efforts to create higher and more consistent levels of social control.

Fleisher and Krienert (2006) concluded based upon their interviews that the inmates' definition of victimization is quite different than that associated with it in community settings. They suggest that coercion is not defined in prison by the sexual act but rather the circumstances that proceed and follow it. For example, they observe that an inmate who voluntarily submits to threats ("Do it or I'll take you") is considered to have participated in a consensual sexual act with another. If the act is justifiable, for example retribution for a debt, it is also seems as justifiable and the victim is often blamed because they allow themselves to be perceived as weak. If an inmate does not fight back, it is also interpreted as consensual and assumed that the inmate "really wanted it." These different interpretations have not been examined empirically but they do highlight the complexity of the behavior being studied and the importance of integrating the inmates' interpretation of these

behaviors into the programming that is designed to interrupt or alter its expression in particular prison environments.

Are these risk markers and model building efforts gender specific, and if so, what are the primary differences for males and female inmates?

Each of the five risk models for sexual behavior in prison (any-sex, predatory, victimized, bartered, and consensual) differed one from the other and also differed across genders. These differences reflected different vulnerabilities and reciprocal forms of behavior that were distinct and unique in their significance to the individual models. As such, they demonstrate the importance of understanding prison sex differentially for men and women and developing programs that are responsive and receptive to these gender specific needs. When considered in the context of the extant literature, these differences support the premise of predictive diversity argued by Cunningham and Sorensen (2006) and argue against the comparability position of Harer and Langan (2001) who assert that the contributory factors for prison violence are the same, albeit at different levels, for male and female inmates.

Many other interesting and thought provoking gender differences emerged throughout the analyses of our data. Both genders reported remarkably similar rates of non-contact and contact consensual sex in prison (44.4% versus 46.5%) although the male inmates described these encounters occurring with visitors or staff and the female inmates with other female inmates. We also learned that consensual sex was initiated within a month of arrival at the institution, whereas the male inmates reported taking a year to initiate a consensual relationship with a correctional staff or inmate.

Consensual sex was reported by 127 male inmates (44.4%) and 85 female inmates (46.5%). Among the male inmates, sexual perpetration was the best predictor of consensual sex, with 91.4 percent of those reporting sexual perpetration also reporting consensual sex, as compared to 37.9 percent of those denying sexual perpetration. This group of male inmates was also characterized by at least one of the TCO override symptoms (most often believing that others intended to do harm) and having had trouble with establishing and maintaining relationships in adolescence. For those who denied sexual predation, consensual sex was associated with threatened violence, relational violence, and paternal drug addiction.

Among the female inmates, sexual orientation was the best predictor of consensual sex. Women who self-identified as homosexual or bisexual were two and one half times more likely to report consensual sex than women who self-identified as heterosexual. Among this group, having more

symptoms of Schizotypal Personality Disorder and reporting having reached orgasm with a partner in prison were also associated with consensual sexual contact. For the women who described themselves as heterosexual, consensual sex was associated with physical victimization in prison, being under the age of 39 years, and having had thoughts of harming others in the past two months as measured by the Schedule of Imagined Violence (SIV).

These differences empirically and based upon our interviews with the inmates consistently reinforced our impression of the profound gender differences that characterize the experience of sex in prison for male and female inmates. The female inmates were open about their sexual involvement with other women, referring to it rather lightly as “gay for the stay,” and at times sharing it with their heterosexual partners during visitation as part of their shared sexual conversation and interaction. The males were far more covert in their behavior and descriptions. While they would at times describe their move toward same sex encounters or their observations of aggressive and brutal rapes within their institution, it was clear that these experiences would remain hidden within the wall of the prison and never be a part of the formal narrative of the time they spent in prison and/or the friendships that they developed within this milieu.

We also found that male inmates reported more bartered contact sex (12.9%) than the female inmates (9.8%) although the rates of noncontact, bartered sexual activity was comparable across genders (12.5% versus 8.2%). The male inmates bartered more using both contact and noncontact sexual activity with correctional staff and visitors while the female inmates reported more noncontact sexual bartering with other inmates. When they were asked the commodities that were being sought, the male inmates identified wanting to obtain privileges from staff; followed by obtaining money, goods, or canteen items; and ending with the wish to obtain drugs or alcohol. Women attributed their sexual bartering to the wish to increase status and to obtain money, goods and canteen items. These findings motivated many discussions among the research team as to whether bartered sex was conceptually more like consensual sex or more like coerced sex. Our findings suggest that both the male and female inmates use bartered sex to obtain concrete and psychological benefits and that they self-describe themselves as obtaining a well defined benefit from the exchange. We further found that bartering correlated with psychopathy, a construct that reflects a callous and manipulative stance toward others. This finding was congruent with the CHAID analyses which found that sexual predation was the best predictor of sexual bartering for both the male and female inmates.

The CHAID analyses further revealed three distinct groups of individuals who engaged in bartered sex in prison, and these were very different for the male and female inmates. For males, sexual predation

was the first predictor variable followed by low Novaco Anger Scale anger score and a belief that wardens would take sexual assault seriously. A second group of male inmates were characterized by threatening behavior in prison and anger as reflected in the diagnosis of Borderline Personality Disorder. The females who reported bartering sex were also more predatory and tended to more often be involved in perpetrating relational aggression against other inmates. However one subgroup of women did not report any of these violent tendencies but did report experiencing neglect as children, suggesting that they had learned to survive on their own and that bartering might be another survival technique in a harsh environment where resources are scarce.

More generally, as observed by Kinsey (1948) many years ago, we found that the inmates in both our male and female samples reported sexual interests that far exceed those of the general population. Almost 40 percent of the male inmates and 17 percent of the female inmates reported a level of sexual desire that is currently diagnosed as hyper-sexuality in the research and clinical literature. These individuals tended to experience over eight orgasms a week while living in the community and a small proportion of these individuals, primarily the males, continued this rate of orgasmic activity during incarceration. The presence of this high level of sexual interest was not associated with sexual predation among either the male or female inmates. As such, this finding argues against the deprivation theory of prison rape and suggests that sexual desire is not the primary factor that motivates aggressive sexual assault in a prison environment. However, these elevated levels of sexual desire were associated with higher rates of consensual sex during incarceration among the female inmates. Similarly, while impersonal and promiscuous sexuality as coded on the PCL-R2 was not associated with any of the indices of prison sexual behavior for the male inmates, it was associated with any-sex, predatory sex, and consensual sex for the female inmates.

The sexual orientation of the inmates also differed within and across the male and female samples. Homosexual males were under-represented among the male sample and they were more likely to be sexually victimized. They were also less likely to self report involvement in any type of bartered sex during their incarceration. In contrast, homosexual women were over-represented in the female sample and reported more predatory, bartered, and consensual sex during incarceration. This factor seemed to overshadow any of the physical characteristics of the women with height and weight being unrelated to these indices of sexual behavior. For the men, a slighter build associated with less weight and more height was associated with higher level of sexual victimization.

These findings concerning sexual orientation may help to explain the observation that more women become involved in same sex encounters while incarcerated, and as a gender, are more comfortable

with bisexuality and the prison adaptation referred to as “gay for the stay.” Only six male inmates (2 percent) described themselves as being bisexual in sexual orientation (despite 5.9 reporting sexual contact with other inmates) whereas 34 (19 percent) of the female inmates self-identified in this way (with 26.2 percent reporting sexual contact with other inmates). It is not clear if this difference reflects a self-identity that existed prior to incarceration or evolved, at least for the women, as a result of their experiences while incarcerated. It may be that women tend more often to identify themselves as bisexual after a sexual encounter with a woman whereas men maintain a self identification of being heterosexual even amidst same sex physical contact. Alternatively more men did report consensual sexual encounters with female correctional staff suggesting that they may, in fact, creatively develop these boundary crossing relationships either to maintain their sexual identity as heterosexual men or because of a more innate disinterest in the sexual appeal of other men.

Hensley, Tewksbury and Wright (2001) provide some interesting data on the topic of changing sexual identity among inmates. Inmates were asked to identify their sexual orientation prior to coming to prison and then were asked their sexual identity after incarceration. Before prison, 79% of respondents considered themselves heterosexual, 6% homosexual and 15% bisexual. After incarceration, these same individuals self-identified as 69% heterosexual, 7% homosexual, and 23% bisexual. Throughout our study, we were struck by this observed fluidity in the sexual orientation of these individuals and the powerful nature of the intimacy seeking behavior of some inmates. While not suggesting that object choice and sexual orientation are purely social constructs determined by social expectation, these observations did underscore for us the malleability of the human being and the powerful nature of the drive for attachment and interpersonal connectedness.

What is the interplay of sexual coercion in the larger pattern of sexual behavior occurring in prison either between inmates or with correctional officers and staff?

Our decision to study not only the different types of sexual behavior but also the different dimensions of violent behavior in prison provided a rich context for understanding the relationship between these various types of institutional behaviors. As discussed above, male inmates who acted in a sexually predatory way toward others were also at elevated risk for being sexually victimized. These same individuals were more likely than other inmates to be involved in bartered sex and consensual sex with other individuals, as often with members of the prison staff as with other inmates. Moreover, these same inmates demonstrated a higher propensity for being involved in different types of physical and relational violent with other inmates. The female inmates were far less predatory in their sexual behavior but when they were, they were similarly involved in the full array of sexual behaviors often paired with relational aggression and threatened violence toward others.

More often, the women reported being involved in consensual sexual relationships with other inmates and on occasion being sexually victimized by others.

It was this pronounced co-mingling of aggressive and sexual behavior in prison that led us to reinterpret its meaning and intent. While we began the study assuming that consensual sex reflected a mutual bond of affection and personal affinity, we ended the study understanding that it was often tinged with aggression either through the choice of partner, the interpretation of the sexual act itself, or the introduction of violence as the relationship progresses from the start to its tumultuous end. The commonality of shared risk factors for sex and aggression further convinced us of the importance of articulating a more differentiated understanding of sex in prison. Rather than being a sexual experience altered in some instances by the single gendered nature of the participants, it seems to further represent an experience that is embedded in a more aggressive set of interactions manifest by a more aggressive subset of inmates. While this observation is not meant to dispute the possibility of a mutual, shared, and intimate sexual experience between inmates in prison, it does argue for a more nuanced assessment of the meaning and impact of the sexual behavior that is described by the inmates and the role that impulsivity and violence may bring to it. The significance of these distinctions is heightened by our data that clearly demonstrated that paired sexual behavior is not an inevitable outcome of incarceration. Approximately one half of the inmates in our sample adopted a relatively asexual lifestyle and remained unattached and uninvolved in the sexual forays that were unfolding around them. These individuals tended to be older, less antisocial, less violent, and more inclined to avoid all types of aggressive interactions with other inmates. They also tended to demonstrate less trauma and exposure to violence in their childhood, less involvement in the criminal justice system as adolescents, and less violent crime prior to their current incarceration. Less sexual experience prior to coming to prison, in particular less lifetime sexual partners and being over the age of eighteen at the time of first sexual experience, also lessened the likelihood that either the male or female inmates would be involved in sexual interactions during incarceration.

What is the role of contextual factors in ameliorating or aggravating the impact of these individual based violence risk markers and what is their relevance to programming and policy?

Within this larger social context, our study confirmed the significant rates of single gendered sex that is occurring across the nation in both our male and female prisons. This aspect of prison life is familiar to the inmates and staff working in these confines but represents an aspect of incarceration that often goes unrecognized by the larger community. Individually, these relationships often stand in stark contrast to the established sexual identity of the individuals who are involved in them. Institutionally, they create a chronic undercurrent of hidden intimacy and relatedness that cannot be

eradicated and which is interpreted differently by wardens working with different genders at different levels of security. On the level of the wider community, same sex encounters and same sex romantic relationships contradict the social mores of most constituencies and call into question many of our implicit assumptions about gender identity and the nature of human sexual arousal. The hidden feature of this aspect of prison life also has long term effects on the inmates themselves and those with whom they reconnect when they return to live in society. Because all sex is technically forbidden in prison, no protections are offered to inmates and the rates of disease transmittal remain unknown to the inmates and to the institutions. It is also our impression that the forbidden nature of these encounters can create turmoil in the adjustment of inmates as they return to live in the community after exposure to high rates of voyeuristic sex and burdened by a sexual secret that cannot be shared with others.

Furthermore, this large divide between policy and experience leaves all employees unprotected and unprepared for this important aspect of their working lives. With little training, they encounter a closed environment with young offenders who are by nature hypersexual, violent, and lacking in the ability to maintain strong, respectful interpersonal relationships, often motivated by racial tensions, and wanting in many ways to express interpersonal dominance. The nature of the laws and the implicit assumptions concerning the vulnerability of the imprisoned inmates further camouflages the seductive charms of the psychopathic male and the allure of the manipulative mercenary female. Laws which frame these encounters or relationships simply as an offense perpetrated by the prison employee fail to take into account this interactive aspect of the victimization that is occurring and the contribution that both individuals bring to it. The difficulty that prisons have in finding qualified and educated prison staff further diminishes the cultural divide between inmates and correctional officers and highlights the importance of training and supervision to help prison staff avoid these inappropriate and disruptive liaisons. The particular vulnerability of female correctional officers was illustrated in our study and paralleled the BJS's research which found that two thirds of the correctional officers involved in sexual relationships with inmates were female with the majority of these relationships being described as romantic in nature.

Over the course of our study, these observations inevitably prompted our interest in the issue of consent in prison and the idea of coercion that is implicit to the status of being a prison inmate. Unlike other contexts in which consent is assumed to be lacking, the majority of these inmates have no mental illness, no impaired cognitive abilities, and no necessary assumption of vulnerability. In fact, many of these individuals are considered dangerous and powerful on the outside but weak and vulnerable once they begin living in the controlled environment of prison. It is obvious that there are

strict hierarchical relationships within the prison environment but these operate in many community settings and do not result in felony convictions for those who overstep common sense and good judgment. Ristroph (2006) offers an interesting perspective commenting that sex in the community is assumed to be consensual unless someone complains. This assumption is currently disputed in all prison settings although it is our impression that its application to the prison setting would do much to inform the investigation that are required and minimize some of the intrigue and manipulation that distorts many aspects of our understanding and programming. It is also our impression that the sanctions used with prison staff who become sexually or romantically involved with prison inmates are tinged with gender biases that seem unfair and unwarranted. Our experience suggests that, women who become sexually involved with male inmates are simply terminated from their position at the institution. In contrast, male correctional officers who become sexually involved with female inmates are often subject to rigorous arrest and prosecution.

In closing, we would like to underscore the exploratory nature of our research and the preliminary nature of our findings. Our findings will surely require replication across states and types of institutions. We would recommend that this replication begin with the many significant bivariate risk makers that were identified across the eight domains of potential risk markers. These risk makers might well prove of predictive value in multivariate analyses that involve larger samples and we hope that the relevance of them will not be lost in a premature rush toward model testing given the complex nature of the behavior being studied. We also believe that the inclusion of personality data will be central to our understanding of the process by which early trauma is translated into turbulent sexual and aggressive behavior in prison. This type of data is very time consuming and expensive to collect and is mired in a discouraging attitude of therapeutic nihilism. Nonetheless, it is central to understanding not only the symptom level behaviors that need to be addressed and managed but also the individual propensities that unwittingly make some inmates particularly vulnerable to victimization or consistently prone to violence. Finally, we are convinced that time spent reviewing and reflecting upon the issues of consent, the applicability and viability of providing protections against sexually transmitted diseases to inmates who are likely to become sexually active, and the importance and content of boundary training for the correctional staff would benefit the integrity of all prison systems and contribute to an informed and wise approach to managing the sexual behavior of some inmates. This type of preventative approach might well tame some of the passions that disturb many of the daily functions of prison life and provide a less humiliating set of experiences for inmates to hide as they begin their process of reintegration in their families and life in the community.

Chapter One

An Introduction to the Prison Rape Elimination Act and the Study

With the passage of the Prison Rape Elimination Act (PREA) of 2003 (*P.L. 108-79*), state correctional institutions were required to engage seriously in activities designed to eliminate prison rape. PREA charged the BJS with conducting epidemiological studies in the incidence and prevalence of prison rape in America's prisons. The National Institute of Justice was charged with funding research that would assist correctional facilities in achieving the goals related to prediction, prevention programming, and policy development. Our study was one of several that addressed various aspects of this endeavor.

Prison Rape Elimination Act of 2003: Why Now?

Historically, the public has viewed prison rape as an acceptable or perhaps an inevitable by-product of criminal punishment. Why then, did Congress pass the PREA in 2003? It is our impression that four societal factors came together at that time and merged into a political force strong enough to overcome political divisions and ideological distinctions. First, the women's movement in the 1970s brought attention to the issue of rape in general, and specifically the rape of women. One effect of this movement was to begin to change the public's attitudes toward rape. It also led to the emergence of a robust body of research examining the motivation and characteristics of both perpetrators and victims in a variety of social settings. Simultaneously, inmates began to identify coercive sex as one of the significant hardships that they experienced in prison and using the expertise of a cadre of "jail house lawyers" began to petition for the eradication of certain policies and practices that they believed contributed to these incidents. When one of these cases was successfully certified to the Supreme Court, it created a highly publicized precedent for future lawsuits. Human rights groups began to mirror these concerns, adopted this issue, and began to advocate strongly for the rights of incarcerated individuals, viewing these individuals as victims of inhumane and, at times, racially motivated violence. This movement was fueled by some articulate and accomplished inmates who had been incarcerated as part of major political scandals and who brought their abilities and skills to the problems they encountered while personally living on the "inside." Finally, a bi-partisan coalition was formed based upon different ideological commitments but the same behavioral goals – to stop homosexual, coercive sex in prison -- leading to the swift and largely uncontested passage of the PREA over a short 18 month period in 2002 and 2003.

Prison Rape Elimination Act of 2003: What did it do?

Upon first review the intent and goals of PREA were straightforward. Philosophically, it sought to further define the position of the United States Supreme Court in *Farmer v. Brennan* (511, US, 825 (1994)). In this case, the Court ruled that deliberate indifference to the substantial risk of sexual assault of incarcerated individuals violated the prisoners' rights under the Cruel and Unusual Punishment Clause of the Eighth Amendment of the Constitution. PREA also required additional research on prison rape. According to the Act, there was at the time of its passage insufficient research on prison rape and thus the extent of the problem was unknown. Citing what came to be recognized as inflated rates of 13% of inmates being raped, the PREA legislation extrapolated these numbers to suggest that 200,000 inmates were victimized over the course of their incarceration. The act required the federal government to collect data on the incidence and prevalence of prison rape and created a zero tolerance standard for the incidence of prison rape. It also sought to make prison rape prevention a top priority in each prison system while striving to create national standards for the detection, prevention, reduction, and punishment of prison sexual assault. These goals were strengthened by a possible reduction in federal subsidies of 5% per year if the standards eventually promulgated by the National Prison Rape Reduction Commission were not met and certified by the chief executive of each state. Taken as a whole, the Act suggested a clear-cut commitment to rape reduction and provided financial incentives for research and programming that were robust and convincing in their intent.

Three Unique Areas of Inquiry

In designing our study, we sought to extend the literature on prison rape in three important and distinct ways. First, as there were no existing sexual violence risk assessment measures, we chose to adapt violence risk assessment measures to study sexual violence in prison. This would also enable us to examine differences between violence and sexual violence risk markers among inmates. Second, we chose to examine the continuum of sexual behavior among incarcerated individuals, thus allowing us to place sexual coercion in the broader context of sexual behavior in prison. Finally, we chose a study design that would allow us to directly examine gender differences in sexual behavior among male and female inmates. Each of these design aspects is further described below.

The Adaptation of Clinical Risk Assessment

The impetus for our particular study was mandated in the context of this larger policy initiative, with our distinct focus being on the identification of promising risk markers for inmates at risk for sexual victimization and predation as they entered the prison system but prior to an actual incident of sexual assault. This represented an ambitious and broad based study goal but one that we believed was

timely given advances in the clinical assessment of violence risk over the past decade and the availability of structured clinical assessment paradigms that had proven increasingly accurate and useful for predicting and managing violence in the community (Monahan et al., 2001; Webster, Douglas et al., 1997; Borum et al., 2002). We also believed that the field of clinical risk assessment could inform the correctional risk literature which up until this time had focused almost exclusively on the use of demographic, criminal history, and institutional variables to classify offenders and predict physical violence in prison and jails among primarily male inmates (Wooldredge, 1994; Gaes et al., 2002; Hueber, 2003; Irwin, 2005). Equally compelling was the emerging focus on eradicating violence in prison through changing rather than controlling prisoners, a cyclical consideration that had begun to re-appear based upon research that demonstrated that programming and treatment were the most effective prison violence reduction strategies available (Byrne & Hummer, 2007).

Clinical violence risk assessment is designed to identify relevant static and dynamic risk factors with interventions being designed to lower the impact of the dynamic factors, contain the static factors, and through these efforts lower the overall level of risk of the individual. We believed that the identification of these dynamic and static risk factors could not only improve classification but also identify the possible interventions that might be used by prisons to lower the level of risk among groups of offenders who were believed early in their prison career to pose a higher than average risk for either sexual predation or sexual victimization. Our endeavor thus sought to identify the most empirically sound violence risk markers within the clinical violence risk literature, with a particular emphasis on sexual violence, and to explore the combining of these factors into risk models that might inform correctional interventions and policies.

Integrating the Full Continuum of Sexual Behavior in Prison

Our study derived from the PREA mandate to study coerced sexuality in prison. This focus of study initially seemed clear enough given certain assumptions about the asexual life that characterized most domains of prison living and the extraordinary violence that would be associated with same sex rape by violent inmates in a tightly controlled and yet dangerous environment. This clear cut demarcation immediately oriented us to various research literatures associated with sexual violence and physical violence in the community and in different types of institutionalized settings. Moreover, it provided us a clear definition of the illegal act that we were studying, a pre-existent understanding of the destructive aftermath that could be anticipated from it, and the egregious susceptibility and vulnerability of the victims that fall prey to this type of humiliating experience.

This rather traditional perspective on sexual assault and victimization, however, began to erode as we left the confines of our university offices and began to visit the many prisons that were to be the site of our data collection. Quickly the wardens and the inmates that were part of our pilot testing began to tell us of a sexual world inside each prison that was far more complex and multifaceted than our initial approach was prepared to handle. We found that there were significant rates of consensual sex occurring in both the male and female prisons, that bartered sex was occurring to obtain various kinds of commodities and psychological benefits, and that there was a small but aggressive number of rapes that occurred, largely as an expression of dominance and control, and which generally were not reported to the authorities. These were accompanied by a common understanding that retaliation would follow any type of reporting and that there would be significant and longstanding effects associated with being labeled a “snitch” in the institution.

At the same time we were formulating our thoughts, four publications appeared almost simultaneously that supported and illuminated the behaviors that were becoming a part of our study focus. Smith (2006) published a law review article which explored the motivations that inmates had for being sexual in prison. She observed, “[n]otwithstanding the desire to think otherwise, individuals continue to have an affirmative interest in sexual expression even during institutionalization” (pg. 204). Based upon this principle, she identified seven motivational themes that she felt contributed to this continuation of sexual desire and intent including sex for pleasure, for trade, for freedom, for transgression, for procreation, for safety, and for love. Based upon this review, she concluded that sex was a basic drive that did not dissipate upon incarceration but rather reflected an integral but publically unacknowledged part of correctional life commonly recognized by inmates and prison staff alike.

In the same journal, Ristroph (2006) published a second law review article arguing that only officially sanctioned deprivations of rights and liberties are properly called punishment and that “any-sex, including sexual assaults that may occur in prison is ‘not a part of the penalty’” (pg. 139). Commenting on the prison subculture, she observed that each inmate is by the nature of the institution robbed of any sense of sexual privacy and is contained in an environment in which their body is monitored, restrained, and regulated. It is also an environment replete with hierarchical inequalities with some inmates having more than others, a context that can motivate some of the “have-nots” to use sex to negotiate issues of procurement and safety. Ristroph suggests that many inmates consent to sexual encounters not because of a fear of immediate or threatened violence but rather for money, drugs, food, comfort, physical gratification, and love. In commenting on these various dynamics, she references some of the central issues surrounding the topic of consent.

Acknowledging that some scholars and prison officials insist that no prison sex is fully consensual, she argues that this view is too simplistic and fails to capture the multifaceted nature of the diverse sexual acts that occur in prison. Poignantly, she observes that outside the confines of prison, sex is assumed to be consensual unless some one complains³. To encompass these ambiguities, she suggests that a third kind of sex occurs in prisons: sex that is “produced by the overwhelmingly coercive environment of prison, sex sought or agreed to under ambiguous circumstances, sex that may constitute prostitution or ‘sexual extortion’, or just a conflicted quest for a measure of safety in an inherently dangerous environment” (p. 157)⁴.

A third publication emerged that was generated using the early stages of PREA funding. In 2003, as part of their research agenda, the National Institute of Justice funded Mark Fleisher, an ethnographer, to explore the culture and language of prison rape. This was viewed as a first step to a more thorough empirical research agenda. Based upon hundreds of unstructured interviews in male and female state prisons across the country, Fleisher concluded that the “idea” of prison rape exerted a powerful influence on inmates’ lives. However, disputing the premise of an epidemic of sexual violence in prison, he asserted that these impressions and beliefs arose as much from the influence of the family and neighborhood social life, the county jail, and the media, as they did from direct observation or experience in prison⁵. Fleisher and Krienert (2006) reported a controversial finding at that time, that prison rape “did not frequently occur” (p. 12) and based upon this observation, they developed a rather intricate explanation and description of the same-sex relationships that developed in this context. In particular, they attempted to determine if there was any sense of coercion embedded in these encounters⁶. When rape did occur, he was told by inmates that it was most often perpetrated against “easy targets” and was most often associated with getting another inmate’s commissary or as retaliation for unpaid debts. The premise of prison rape being to some extent a cultural myth embedded in a menagerie of consensual and retributory sexual violence was at odds with the exaggerated estimates that had spawned the initial PREA legislation (personal communication, November 12, 2005).

Finally, at the time we were developing the design of the study, the BJS published its first in a series of four studies of prison sexual assault. It reviewed actual allegations of sexual violence made to prison and jail officials throughout the country in male and female prisons in 2004 and 2005. These data involved 6,241 allegations in 2005 which reflected a rate that was up from 5,286 in 2004. The inmate-on-inmate incidents were substantiated in only 15% of the allegations made to officials, and these involved primarily younger white male victims, in jail, being assaulted by an older male of a different racial group. Half of these incidents involved the use of force and in the remaining incidents

inmates were talked into it, bribed or blackmailed, or offered protection from other inmates. A similar rate of substantiation was found for the staff-on-inmates incidents; however, in two thirds of these incidents the encounters were described by both participants as being romantic in nature. Most substantiated incidents of staff sexual misconduct involved correctional officers but 16% also involved other prison staff including janitors, cooks and drivers, and 10% health care staff including counselors, doctors, dentists and nurses. Two thirds (prison) to three quarters (jails) of the perpetrators were female prison staff with male inmates being the presumed “victim.”⁷ In presenting these initial data, Beck and Harrison (2006) cautioned about the over-interpretation of them, observing that “due to a fear of reprisal from perpetrators, a code of silence among inmates, personal embarrassment, and lack of trust in staff, victims are often reluctant to report incidents to correctional authorities” (p. 2).

Based upon the convergence of these early commentaries combined with our own experience, we felt compelled to expand our study focus to include the three different kinds of sexual behavior we had reason to believe occurred in prison either with other inmates, with correctional staff or with visitors: consensual sex, bartered sex, and coerced sex⁸. This decision derived from three primary considerations. We believed that any attempt to understand coerced sex in prison, without comparing it to the other forms of sexual experience that were occurring simultaneously would rob us of the contextual meaning and a comparative platform for these incidents. Moreover, the common association observed in criminological literature between patterns of victimization and perpetration suggested to us that there was a likely interplay between these sexual behaviors and the specific inmates that participated in them. Finally, our beginning suspicions that the rate of authenticated rape would be very low motivated us to develop a continuum of coercion which we believed would better capture the concerns regarding forced and manipulated sexuality that lay at the heart of the PREA legislation. Together, these considerations compelled us to develop a research strategy that included a full continuum of sexual behaviors as they applied to consensual, bartered and coerced sexuality and to use these as the analytic focus of our study. This approach ensured that we would obtain a broader view of sexual life within the institutions and the particular relevance of sexual coercion within this pivotal interpersonal context.

Our Decision to Examine Gender Differences

As we developed our study design we decided to include an equal number of male and female inmates in our sample, despite this contradicting the significant disparities that exist in the number of males and females currently held in our state and federal prisons. We decided that this was important both to address rather implicit differences in gendered research on prison rape and to

allow us to undertake an empirical analysis of the similarities and differences in the risk markers for the various types of sex that were occurring in the male and female prisons that were included in our two-state study.

Our review of the research regarding prison rape led us to the same conclusion as other researchers. Research on male sexual activity in prisons has primarily focused on sexual coercion whereas the research on female sexual activity in prisons has primarily focused on consensual sex. Hensley et al. (2000) noted that as of 2000, only four studies had been conducted on consensual sex in male prisons. In contrast, from the earliest research (Otis, 1913), there has been a focus on consensual sexual activity among female inmates (Koscheski et al., 2002) with studies of sexual coercion among females appearing for the first time in the mid to late 1990s (see Struckman-Johnson et al., 1996; Struckman-Johnson & Struckman-Johnson, 2002). As noted by Hensley et al. (2000), it is difficult to determine whether these differences in research orientation reflect reality or whether they reflect researchers' personal attitudes toward sex in prison. Whether males and females experience sex in prisons differently remained an empirical question that to our mind had not been answered.

We were also interested in accessing data relevant to the core focus of our study, the nature and power of certain violence and sexual violence risk markers and the gender differences, if any, between these for male and female inmates. A large study of institutional violence within the federal prison system failed to confirm the existence of gender differences in risk markers for such violence. Harer and Langan (2001) found radical differences in the types of violence perpetrated by the two genders but when they applied the various risk markers to the different types of violent behavior, they found no differences in the types of risk factors that were most predictive cumulatively of institutional violence by both male and female inmates. The pertinent risk markers included type of detainment measures used by local authorities; whether current offenses involved violence and injury to a victim; history of escapes to flee custody or avoid prosecution; history of violence; pre-commitment status measures; age; criminal history including quantity and recency of offenses; and educational attainment at the time of incarceration. The authors observed that these similarities emerged only using very large sample sizes and emphasized that the seriousness of violence at each classification level would need to be calibrated differently for male and female inmate populations.

To ensure that we had adequate data to explore consensual, coerced and bartered sex among both male and female inmates and to provide an analytic platform for assessing gender differences in risk markers we decided to recruit an equal number of male and female inmates into our sample.

The Goals of our Study

In designing this study, we identified a number of theoretical and applied questions that served to orient our study and inform the sampling design and analytic structure of our design. These included:

- Is it possible to combine individual-specific dynamic and static risk factors to create a model to predict which inmates are most likely to be at high risk for perpetrating sexually aggressive behavior in prison prior to a first sexually violent event?
- Is it possible to combine individual-specific dynamic and static risk factors to create a model to predict which inmates are most likely to be at risk for being sexually victimized in prison prior to a first experience of victimization?
- Are these risk markers and model building efforts gender specific, and if so, what are the primary differences for males and female inmates?
- What is the interplay of sexual coercion in the larger pattern of sexual behavior occurring in prison either between inmates or with correctional staff?
- What is the role of contextual factors in ameliorating or aggravating the impact of these individual based violence risk markers and what is their relevance to programming and policy?

By their very nature, these questions, both theoretical and applied, required an endeavor that was more exploratory than confirmatory in nature. We chose to adhere to this type of approach for a number of interrelated reasons. First, the nature of the prediction field pertaining to physical and sexual violence in a prison setting was as yet too undefined to warrant efforts at verification and model testing. Second, the research that did exist suggested significant gender differences in risk factors for predicting violence among men and women making it unclear as to the specificity or generality of our prediction efforts. Thirdly, the emergent research being generated by the BJS suggested that an exclusive focus on prison rape per se would miss the broader context of this behavior as another aspect of physical violence expressed along a continuum of consensual and coerced sexuality. Taken together, these observations convinced us to embark on a multi-tiered endeavor that encompassed different arenas of clinical risk prediction research, different types of sexual behavior, and different gendered behavior among incarcerated men and women. These observations further convinced us that model generation rather than model testing was the

appropriate starting place for this type of undertaking and the starting point for programmatic and policy relevant risk prediction research.

Addressing the Fundamental Problem of Studying a Forbidden Behavior in a Coercive Environment

These questions were developed in the context of having to also consider the complexities that derived from the sensitive nature of the information that we were seeking to solicit from the inmates as it was experienced and expressed in a highly coercive environment. Although sexual behavior is considered a private issue when encountered or experienced in the community, sexual activity in prison is considered an organizational and safety issue that must be regulated and contained. Moreover, the assumption as coined by Ristroph that sex is assumed to be consensual unless someone complains is less applicable in this type of hierarchical structure given the many regulations and prohibitions that seek to encapsulate it. Every prison in the country prohibits all forms of sexual activity (masturbation, consensual, bartered, coerced) among incarcerated individuals and there is a growing movement towards rigorous prosecution of those who ignore issues of consent and the power differentials that are asserted to define all relationships between inmates and staff (Hensley, 2002; Hensley & Tewksbury, 2005a). These unique characteristics of the prison environment heightened the already sensitive and personal nature of the inquiries that we were planning to make and were further animated by the various taboos that are associated with same sex encounters among predominately heterosexual adults. The tensions between inmates and correctional staff also provide the study with a platform that could be used manipulatively by inmates to punish each other and to undermine the authority of prison administrative staff.

Conclusions

Our study thus developed as an exploratory undertaking that sought to identify relevant static and dynamic risk markers for sexual predation and victimization among male and female offenders in the context of the wider continuum of sexual behavior. We used a multi-method approach to data collection that included self-report questionnaires, structured clinical and diagnostic interviewing, file review, and database verification. The data were collected in Ohio and Texas and resulted in a random sample of 471 inmates, 288 male and 183 female participants drawn from all four levels of security. We combined the structure of the battery with clinical and diagnostic interviewing to facilitate the reporting of personal and sensitive information by each inmate and to minimize the perceived intrusiveness of our inquiry and the stigmatizing nuance of the information being solicited. We collected data on the risk markers associated with sexual violence, physical violence, and relational violence in the community; risk markers for violence in institutional settings: and structured

clinical and actuarial risk items identified in the COVR, HCR:20 and VRAG. The results of these efforts are summarized in the next chapters as they inform the various domains of risk markers for violence and victimization as identified in the individual and in their immediately living environment. These are then analyzed using a tree classification form of multivariate analysis for the various types of sex that constituted the focus on our study: any-sex, predatory sex, victimized sex, bartered sex and consensual sex. We end with a review of our initial hypothesis-generating questions and seek preliminarily to apply our findings to relevant areas of policy relating to sexual life and sexual violence in prison.

Chapter Two

Methodology

The current chapter includes an overview of our sampling and the data collection process, the demographic characteristics of each of our four samples (male inmates, female inmates, correctional officers, and wardens), and a description of each of our four different types of data collection (interview, self-report questionnaire, file review measures, and database measures). We also outline in Appendix A the analyses that we conducted to explore the random nature of our sample and the generalizability of our findings to other prison populations. Appendix B presents the training procedures and reliability indices associated with the interview measures.

Prison Selection and Sampling

It was our intention to collect data in three states. We began the process of identifying states by contacting the Commissioners of Criminal Justice Departments in six states. We received interest from two states: Ohio and Texas. A formal proposal was submitted to each state and approved.

Inmate Sample

Within each Department of Criminal Justice, we consulted with members of the justice department staff to identify and gain access to male and female institutions at high, medium and low security levels. Based upon these efforts we were able to gain access to 164 males and 149 females in Ohio and 124 males and 34 females in Texas across the three security levels. Our overall response rate for inmates in Ohio was 37% and varied across sites from a high of 56% to a low of 28% (see Table 6). This rate of response is comparable to other studies of prison sex that have been conducted by academic researchers (Hensley, Tewksbury, & Castle, 2003; Struckman-Johnson & Struckman-Johnson, 2000; Struckman-Johnson & Struckman-Johnson, 2002; Wolff, Blitz, Shi, Bachman & Siegel, 2006). It is significantly lower than the response rate obtained by the BJS (39% to 84%) in their study of sexual victimization conducted in 2007. The BJS study was defined by the PREA legislation and carried with it a congressional mandate requiring that all state and federal correctional facilities participate in the study if they were identified through its random sampling procedures.

Although we were able to initially create a list of randomly selected inmates at each Texas institution, we were unable to track refusals due to logistical limitations. For example, using the list of randomly selected inmates, correctional officers, rather than researchers, were first to approach inmates in their quarters and invite them to hear an invitation to participate in the research. However, some of

these inmates could not be located, and others declined. Officers did not consistently report these details and were sometimes unavailable to answer questions that might clarify this. Therefore we were unable to calculate a response rate for our Texas sample.

Table 6

Response Rate of Incarcerated Men (N = 164) and Women (N = 149) within Selected Prisons in Ohio

Gender of Prison	Institution	Number of Eligible Inmates	Number Randomly Selected	Number Agreed to Participate	Response Rate
Men's Prisons	A	2783	100	28	28%
	B	980	100	33	33%
	C	955	50	28	56%
	D	116	116	35	30%
	E	1199	100	40	40%
Women's Prisons	F	309	200 ⁹	74	37%
	G	583	200 ¹⁰	75	37%
Total		6925	866	313	37%

To ensure that the random nature of our sampling was successful in identifying an unbiased pool of participants, we conducted a variety of comparisons between the inmates who participated in the study and those who did not. The comparisons included age, race, minimum aggregate sentence, security level, and security threat affiliation. These analyses, described in detail in Appendix A, indicate one significant difference between the two groups, with inmates who were serving longer sentences being more inclined to participate in the research study.

State and demographic comparisons. The demographic characteristics of our sample are summarized in Table 7 and presented separately for Texas and Ohio. Table 8 presents the same information for the entire sample.

Table 7

Demographic Characteristics of Incarcerated Men (N = 288) and Women (N = 183) by State

	Ohio		Texas		χ^2	Φ
	N = 313		N = 158			
	N	%	N	%		
Sex						
Male	164	52.4	124	78.5	30.07**	-0.25**
Race						
White	153	48.9	65	41.7	39.27**	0.29**
Black	133	42	43	27.6		
Hispanic/Other	27	8.6	48	30.8		
Education						
< High School	64	20.4	26	16.6	1.12	0.05
GED/HS Diploma	127	40.6	69	43.9		
>HS Diploma	122	39.0	62	39.5		
Marital Status						
Never Married	153	48.9	60	39.0	4.22	0.10
Separated, Divorced, Widowed	92	29.4	52	33.8		
Married, Common-law	68	21.7	42	27.3		
Employed before Prison?						
If yes, Full time?	221	70.6	115	73.2	0.36	0.03
	167	81.5	94	85.5	0.80	-0.05
Longest Period Employed						
< 6 Months	37	12.5	17	11.3	1.54	0.06
6 -12 Months	41	13.9	27	18.0		
12-24 Months	71	24.0	32	21.3		
> 24 Months	147	49.7	74	49.3		
Received State Support before Prison	165	53.4	49	31.4	20.17**	-0.21**

Notes. * $p < .05$, ** $p < .01$ In later analyses, race is dichotomized into minority and non-minority. Marital status is collapsed into three categories: (1) married/common-law; (2) never married; and (3) divorced/separated/widowed.

Table 8

Demographic Characteristics of Incarcerated Men (N = 288) and Women (N = 183) in Sample

	Male		Female		χ^2	Φ
	N = 288		N = 183			
	N	%	N	%		
Race					4.43	0.10
White	123	43.0	218	46.5		
Black	111	38.8	65	35.5		
Hispanic/Other	52	18.2	23	12.6		
Education					13.61**	0.17**
< High School	57	19.9	33	18.0		
GED/HS Diploma	136	47.4	60	32.8		
>HS Diploma	94	32.8	90	49.2		
Marital Status					7.51*	0.13*
Never Married	144	50.3	69	38.1		
Separated, Divorced, Widowed	77	26.9	67	37.0		
Married, Common-law	65	22.7	45	24.9		
Employed before Prison?	298	82.2	128	70.3	0.20	-0.02
If yes, Full time?	161	83.4	100	82.0	0.11	0.02
Longest Period Employed					3.87	0.09
< 6 Months	37	14.0	17	9.3		
6 -12 Months	44	16.7	24	13.2		
12-24 Months	57	21.6	46	25.3		
> 24 Months	126	47.7	95	52.2		
Received State Support before Prison	94	33.2	119	66.1	47.93**	0.32**

Notes. * $p < .05$, ** $p < .01$. In later analyses, race is dichotomized into minority and non-minority. Marital status is collapsed into three categories: (1) married/common-law; (2) never married; and (3) divorced/separated/widowed.

Overall, the majority of the inmates had no more than a high school education, with over 60% of both samples not progressing beyond a high school diploma. However, four-fifths of the inmates did endorse being employed full-time at the time of their arrest and incarceration. Slightly less than half described themselves as having held a job for more than two years at any time prior to their current incarceration. Reflective of further social instability was the finding that approximately one fifth of

the inmates were married at the time of their incarceration, with almost half of the sample never having been married and the rest being either divorced or separated at the time of their incarceration.

These data indicate that the two state samples were the same on all except three variables. The Texas sample contained more male inmates, had more Hispanic and fewer black inmates, and contained fewer inmates who had received some type of state support prior to being incarcerated.

Certain gender differences were found in the sample. Women tended to have higher levels of education, were more likely to be married at the time of their incarceration, and more often reported receiving some form of state support prior to incarceration. No differences were observed on race and employment history of the inmates.

Correctional Officer Sample

Response rates and generalizability. The correctional officers' (CO) survey was completed by a total of 358 COs in Ohio and Texas. Although the response rate was low, it is not unlike other peer-reviewed research in this field (see Gordon, 2006 (20% response rate); Tewksbury & Collins, 2006 (22.7% response rate)). To determine whether our sample was comparable to all COs in the Ohio Department of Rehabilitation and Correction (ODRC), comparisons were made on key demographic variables between our participants and the entire population of COs in the ODRC. We found our sample of COs were remarkably similar to all ODRC demographics and thus representative of COs in Ohio. We were unable to obtain comparable data from the Texas Department of Criminal Justice and therefore generalizability was not assessed in Texas.

Sample demographics. Sample demographics for Ohio and Texas COs are presented in Table 9, separately by gender. The majority (70%) of COs were White, male (67%), with an average age of 40 years. Over half (56%) the sample had some college, although almost a third (32%) had a high school diploma. Two thirds (66%) had been a CO for 5 years or longer. Nearly three fourths (74%) of the COs had contact with general population inmates. Almost all (92%) COs had contact with inmates on a daily basis, having an average number of contact with 119 inmates per day.

Five gender differences emerged from the CO demographic data. More females were of minority status ($\chi^2 (1) = 7.45, p < .01$). Males ($M = 41$ years) were significantly older than females ($M = 38$ years) ($F (1) = 5.17, p < .05$). More females had worked for less than one year at the current facility and fewer females had worked at the current facility more than 10 years ($\chi^2 (3) = 8.61, p < .05$).

Fewer females had contact with segregation/administrative detention inmates ($\chi^2 (1) = 4.09, p < .05$) and inmates in protective custody ($\chi^2 (1) = 3.81, p < .05$).

Table 9

Demographic Characteristics of Male (N =239) and Female (N =119) Correctional Officers in Ohio and Texas

Variable	Male N = 239		Female N = 119		χ^2	Φ
	N	%	N	%		
Race					7.45**	-0.15**
White	178	75	71	61		
Minority	61	25	46	39		
Average Age (years)	41	19-67	38	19-64	5.17*	
Education					0.22	0.03
High School Degree	77	32	35	30		
Some college or more	161	68	82	70		
Employment at Facility					3.52*	-0.10
Less than 1 year to 5 years	73	31	48	41		
5 to more than 10 years	165	69	70	59		
Contact with Inmates						
General population	178	75	88	74	0.01	0.01
Medical/psychiatric	28	12	9	8	1.48	0.06
Segregation	70	29	23	19	4.09*	-0.11*
Holdover/transit	2	1	4	3	3.07	-0.09
Pretrial detention	3	1	1	1	0.12	0.02
Protective custody	30	13	7	6	3.81*	-0.10*
Drug therapy	10	4	6	5	0.14	-0.02
Other	14	6	11	9	1.40	-0.06
Contact with Inmates Past 6 Months					1.09	0.06
Never	9	4	3	3		
Once a month	4	1	1	1		
Once a week	9	4	3	3		
Everyday	217	91	110	94		
Average Daily Inmate Contacts	115		128		0.34	

Note. * $p < .05$, ** $p < .01$

State comparisons on key demographic variables. Our circumstances in Texas varied from that of Ohio and therefore the same data collection procedures were not employed although the same instrument was administered. We found significant differences in the Ohio and Texas correctional samples on all but one (education) demographic variable: more female COs in Texas completed the survey ($\chi^2 (1) = 36.63, p < .001$), COs were older in Ohio ($t = 3.42, p < .001$; Ohio $M = 41.07$ yrs, Texas $M = 36.39$ yrs), more COs in Texas were of minority status ($\chi^2 (2) = 10.06, p < .01$), and more COs in Texas worked at their current facility for less than 10 years ($\chi^2 (1) = 74.99, p < .001$). Correctional officers in Ohio were more likely to interact with the general population ($\chi^2 (1) = 4.88, p < .05$), whereas correctional officers in Texas were more likely to interact with Holdover inmates ($\chi^2 (1) = 11.32, p < .01$) and drug therapy ($\chi^2 (1) = 8.89, p < .01$). Ohio and Texas COs did not differ in the mean number of inmates with which they have daily contact.

Warden Sample

The participants included nine wardens (one female warden), one from each institution from which data were collected in Ohio and Texas. Wardens had been in their current position between 1 and 10 years, with an average of 2.25 years ($M = 4.68$ years as ever a warden). For four wardens, this was their first time being a warden. All but one became a warden by working up to their current position. Seven of the nine wardens had at least a college degree in one of the following disciplines: criminal justice, sociology, management, or general studies.

Instrumentation

Inmate Instruments. When we began designing the study, we were aware of the methodological issues associated with collecting data of a very serious nature such as rape. We read, for example, a thorough methodological review completed by Gaes and Goldberg (2004) under the auspices of the National Institute of Justice and provided to the various grantees. In it, the authors reviewed not only prior research on sexual behavior and other risky health behaviors but also studies that sought to query respondents concerning their preferences when being asked about sensitive personal matters (National Academy of Sciences, 1979; Aquilino, 1994; Catania, 1999; Tourangeau & Smith, 1998). In this context, they explored the various factors that have been found to influence the self-report of sensitive behaviors including question sensitivity, social undesirability of the response, the intrusiveness of the inquiry, and the perception of disclosure to third parties (Tourangeau, Rips & Rasinski, 2000). They also summarized the research that had been conducted up until that time on computer assisted interviews (video CASI and Audio-CASI) and concluded these methods appeared to enhance the quality of the data that was obtained in studies of drug use, needle sharing, HIV status,

interpersonal violence, and number of sexual partners reported by women (Williams et al., 2000; Newman et al., 2002; Miller, Gribble, Mazade & Turner, 1998; Turner et al., 1998).

As we reviewed this summary, we considered the use of CASI technology and consulted with various vendors concerning it. However, we quickly learned that use of this type of computer technology would rob us of all clinical and diagnostic information and eradicate the possibility of coding the various violence risk assessment instruments that lay at the heart of our study. Therefore, we abandoned this approach, concluding that it was relevant to epidemiological studies but not necessarily to clinically based inquiries, and turned our attention to the other factors that had been identified as being relevant to the solicitation of sensitive behaviors. Questions regarding sexual matters were included in both the interview protocol and in the questionnaires at multiple places in the battery, with different types of questions and probing the same domains of inquiry. The questions that were used to describe sexual behavior were behaviorally and context specific and did not use any legal or colloquial terminology (Lynch, 1996; Bachman, 2000; Fisher, Cullen & Turner, 2000; Williams, Siegel & Pomeroy, 2000). We arranged to ask the most personal questions about sexual activity in prison after rapport had been established through the first half of the interview and before we embarked on asking each inmate about their criminal history and the offense that led to the current incarceration. We also placed the inquiries about personal behavior after each inmate had been provided with an opportunity to tell us about what he or she believed the other inmates were doing sexually in their prison, in this way hopefully providing some degree of self-justification to any self-reports that were about to follow. Perhaps most importantly, we carefully trained each of our clinical interviewers and ensured that they were not only reliable in their coding of clinical behavior but also actively engaged and non-reactive no matter how provocative and unexpected the information that was provided to them by the various inmates.

Information on inmates was obtained from clinical interviews, standardized and unstandardized measures, file reviews, and state databases. This instrumentation is presented below.

Clinical and risk assessment using structured interviews and actuarial instruments.

Lengthy clinical interviews were conducted by trained clinical faculty and psychology graduate students. The structured interview, termed the Prison Violence Risk Interview Schedule (PVRI), required three-and-one-half hours to complete based upon a face-to-face interview with each inmate. The interview and its coding schedule contained 22 sections pertaining to current institutional adjustment, family background, early childhood, adolescence, friendships, interpersonal relationships, marital/romantic relationships, relationships with children, work experience, finances, mental health, alcohol/ substance abuse, impulsive behavior, aggression and anger control, emotions

and feelings, self-perceptions, criminal behavior, current offenses, manipulation/deceitfulness, career goals, general questions, post-interview observational criteria, and narratives of interest concerning sexual experiences in prison.

The information that was supplied by each inmate during each interview had multiple uses. It was used to quantify certain historical and institutional variables that became independent variables included in the dataset and later analyses. The information was also used to code three structured clinical instruments and one actuarial risk assessment instrument described below.

- ***Structured Interview for Personality Disorders (SIDP-IV; Pfohl, Blum & Zimmerman, 1995).*** The SIDP-IV is a semi-structured interview designed to assess depressive and passive-aggressive personality disorder in addition to the 10 DSM-IV personality disorders. It is comprised of 101 questions divided into 10 interrelated sections (e.g., Interests & Activities, Work Style, Close Relationships, etc.). The last section of the interview allows interviewers to score criteria based on clinical observation. In contrast to other semi-structured personality disorder (PD) interviews, the SIDP-IV questions are organized by clinical topic rather than by disorder, which allows a dialogue to develop between the interviewer and client. In addition, the SIDP-IV questions are posed in a positive way (in contrast to DSM-IV criteria) so that the interview seems less threatening to the client. Individuals being interviewed are asked to respond according to what they are like when they are their “usual self,” and they are also instructed that they should think about the last five years when answering the questions.

- ***Psychopathy Checklist-Revised 2 (PCL-R-2; Hare, 2003).*** The PCL-R-2 (Hare, 2003) is a 20-item checklist designed to assess the interpersonal, affective, and behavioral traits of psychopathy. It is completed using information gleaned from both a face-to-face clinical interview and a comprehensive file review. The 20 PCL-R-2 items are scored on a three-point Likert scale ranging from 0 to 2 according to the degree to which the examinee matches the trait or behavior described: No (0), Maybe/in some respects (1), or Yes (2). Historically, on the basis of factor analytic research (Harpur, Hare & Hakstain, 1989), the 20 PCL-R-2 items have been combined to yield a Total score, an Interpersonal/Affective (Factor 1) score, and a Behavioral (Factor 2) score. Based on subsequent research, Cooke and Michie (2001) proposed an alternative, three factor model for the PCL-R-2, which resulted in an Arrogant and Deceitful Interpersonal Style (Factor 1) score, a Deficient Affective Experience (Factor 2) score, and an Impulsive and Irresponsible Behavioral Style (Factor 3) score. Most recently, Hare (2003) developed two Facet scales for the

traditional Factor 1 and 2 scales. Accordingly, Factor 1 is comprised of the Interpersonal and Affective Facet scales and Factor 2 is comprised of the Lifestyle and Behavioral Facet scales.

- ***HCR:20 (Historical, Clinical, and Risk Management) risk assessment tool (Webster et al., 1997).*** The HCR:20 is a structured risk assessment instrument designed to predict violence in civil psychiatric, forensic, and criminal justice populations and is administered and scored by trained clinical raters. The instrument consists of 20 items scored on a Likert scale ranging from 0 (absence of item) to 2 (definite evidence for item), including one item that rates a Total PCL-R-2 score. The items on the HCR:20 were selected based on empirical support for logically or analytically-derived factors related to risk. They include clinical (e.g., Lack of Insight, Negative Attitudes, Unresponsive to Treatment) and risk management (e.g., Plans Lack Feasibility, Exposures to Destabilizers) items that are dynamic risk factors and, thus, are amenable to change. The instrument can be completed on the basis of file review and interview, however, completion solely on the basis of file review has been supported in some populations (Douglas & Weir, 2003).

The authors of the HCR:20 have proposed eleven additional variables possibly related to violence risk for inclusion in future revisions of the HCR:20. These eleven additional, experimental items were added to the protocol used in the present study in order to advance empirical examination of these variables. The experimental items include eight additional historical items (Previous Nonviolent Criminal Conduct, Previous Violent Criminality, Substance Use Problems Associated with Criminality, Early Maladjustment: Victim of Child Abuse, Early Maladjustment: Conduct Problems, Relationship Problems in Adolescence, and Educational Problems in Adolescence), as well as two additional clinical items (Homicidal Ideation and Suicidal Ideation).

- ***Violence Risk Assessment Guide (VRAG; Harris, Rice & Quinsey, 1993).*** The VRAG is an actuarial instrument developed for the prediction of violent recidivism among offenders. The VRAG consists of 12 items. Each item has multiple response options, and each response is assigned a numerical value. For example, the first item inquires whether the individual lived with both biological parents to until age 16. A response of “Yes” is assigned -2 points, and a response of “No” is assigned 3 points. Scores on the VRAG can range from -26 to +38, with higher scores indicating a greater risk that the individual will reoffend violently.

Standardized and study-specific instrumentation. At three points throughout the interview, the interviewer paused to code certain clinical and risk variables while the inmate completed a number of copyrighted and study generated questionnaires. The questionnaires included:

- ***Prison Background Information Schedule (PBIS; Warren, Loper & Jackson, 2006).*** The PBIS is a 40 item self-report questionnaire that captures demographic characteristics, family background, work history, drug history, prior criminal involvement, and an assortment of violence risk factors identified in the research literature but not measured by any particular standardized instrument (for example, separation from parents before the age of fifteen years, head injury, parental antisociality, etc). We also used this instrument to collect information on the inmates' sexual behavior prior to prison and their self-identified sexual orientation in prison and in the community.

- ***Adverse Childhood Experiences Study Questionnaire (ACE SQ; Felitti et al., 1998).*** The ACE Modified is a 38-item paper-and-pencil measure designed to assess a history of negative events experienced in childhood. The original Adverse Childhood Experiences Study Questionnaire (Felitti et al., 1998) was developed for research in the health field and queries the subject about a number of adverse events as a child such as psychological, physical, and sexual abuse; the presence of a household member with substance abuse problems or mental illness; violence toward the individual's mother or step-mother; and criminal behavior in the household.

The ACE SQ was modified (ACE SQ-M) for use in the present study. The number of test items was increased from 17 to 38, although two of the original ACE SQ items ("Did a household member attempt suicide?" and "Did a household member go to prison?") were not included as this data was collected elsewhere. Items were also added to the ACE SQ to expand the range of behaviors and events inmates could endorse for each category of adverse childhood events. For example, the ACE SQ sexual abuse items all reflect "hands-on" behaviors such as fondling and penetration. In contrast, the ACE SQ-M sexual abuse items also reflect non-contact behaviors including exposure to pornography and observing others having sex. In addition, items were added to assess witnessing physical violence directed toward one's father or step-father, and the experience of childhood neglect. The scoring of the ACE SQ was also modified so that all ACE SQ-M items are scored exclusively as dichotomous variables.

- ***Prison Violence Inventory (PVI; Warren, Loper, & Hurt, 2002).*** The Prison Violence Inventory was designed to measure the amount of self-reported violence experienced and perpetrated by an

- inmate since arriving at a correctional institution. This measure was modified from a measure assessing community violence (Monahan et al., 2001). The PVI is coded using a dichotomous response to 34 questions as summed across three dimensions (physical violence, threats, and sexual assault) into an overall perpetration score and an overall victimization score.
- ***Inmate Fear of Victimization-Revised (McCorkle, 1993a; Warren & Jackson, 2006).*** The IFV was initially developed by McCorkle (1993a, 1993b) to investigate inmate's fear of violence in prison and their sense of being protected by the prison staff. In the current study, we expanded the instrument to include nine questions concerning social contact and patterns of affiliation while in prison (such as belonging to a religious group, a gang, having visitors, and having a close relationship with prison staff) and expanded the various Likert scales to include fear of a sexual attack and the sense that a report of this type of assault would be taken seriously by prisons officials including both correctional staff and the warden.
 - ***Paraphilic Interests (PI; Warren, 2006).*** The PI, designed for use in the current study, contained fifteen questions that related to the various paraphilic disorders identified by the Diagnostic and Statistical Manual for Mental Disorders–IV-TR (2000). The inmates were asked to indicate if they had “no interest in this activity,” “fantasized about it but never done it,” “done it once,” and “done it multiple times.” Due to the limited endorsement of these items, responses were coded as dichotomous variables indicating any endorsed interest or not.
 - ***Schedule of Imagined Violence (SIV; Grisso, Davis, Vesselinov, Appelbaum & Monahan, 2000).*** The SIV was developed for use in the MacArthur Violence Risk Assessment Study (Monahan et al., 2001; Steadman et al., 1994, 1998) to determine whether imagined violence is correlated with later violent behavior. The SIV consists of eight structured questions with coded response categories including daydreams or thoughts about physically hurting or injuring another person, the recency and frequency of these thoughts, the chronicity of the violent thoughts, the diversity in the type of imagined harm, the specificity of the assumed target, increases in the level of harm imagined, and the respondent's proximity to the target individual.
 - ***Relationship Violence in Prison (RVP; Jackson & Warren, 2006).*** The RVP was developed for use in the current study based upon the disruptive impact that triangulated love affairs and broken relationships were perceived to have on the prison environment by the warden and other administrative staff. It contains questions about the inmate's experience of intimate relationships while in prison and the behaviors they manifest when this relationship came to an

- end (for example, self-injury, violence toward partner, violence toward new lover, rule violations to prompt a move to another area of the prison).
- ***Novaco Anger Scale (NAS; Novaco, 2003)***. The NAS is a self-report questionnaire designed to assess anger as a problem of psychological functioning and physical health. It was initially developed in conjunction with the MacArthur Foundation Network on Mental Health and Law (Novaco, 1994). The NAS contains 60 items that focus on how an individual experiences anger. The instrument yields five scale scores: Cognitive, Arousal, Behavioral, and Anger Regulation subscale scores, and a NAS Total score.
 - ***Beck Depression Inventory (BDI-II; Beck, Steer & Brown, 1996)***. BDI-II is a 21-item self-report instrument designed to measure the severity of depression in persons aged 13 years or older. It includes questions concerning Sadness, Pessimism, Past Failure, Crying and Irritability. Each item is organized according to severity (lowest to highest) on a four-point scale ranging from 0-3 although possible responses vary between items. Respondents are asked to endorse the single statement in each item that they feel to be most characteristic “within the past two weeks, including today.” The BDI-II is scored by summing the ratings of the 21 items with a maximum score of 63 points.
 - ***Revised Conflict Tactics Scale (CTS-2; Straus, Hamby, Boney-McCoy & Sugarman, 1996)***. CTS-2 is a self-report paper-and-pencil measure designed to assess the extent to which partners in a dating, cohabiting, or marital relationship engage in psychological and physical attacks and their use of reasoning or negotiation to deal with these conflicts. It is comprised of 39 pairs of items. One set of items asks about the experiences of the individual completing the CTS-2, and the other set asks about their partner. The 78 CTS-2 items are scored on a 6-point Likert scale, which reflects the frequency of occurrence of the behavior described in each test item ranging from 0 (“This has never happened”) to 6 (“More than 20 times in the past year”). The CTS-2 yields scores for five scales: Negotiation, Psychological Aggression, Physical Assault, Sexual Coercion, and Injury. Each of the six parent scales is comprised of two subscales. The Negotiation scale can be divided into Cognitive and Emotional subscales, and the remaining CTS-2 scales are comprised of Minor and Severe subscales.
 - ***Self-report Criminal History Questionnaire (SRCHQ; Warren, 2006)***. The SRCHQ was designed for use in the current study to assess each inmate’s willingness to report accurately their criminal behavior regardless of whether or not they had been arrested, charged, or convicted of the

crime. The instrument queried the inmate about 14 categories of crime, separately as a juvenile and as an adult, and asked if the inmate had participated in that type of illegal behavior, how many times, and if they were arrested for the behavior. The responses were coded as total number of crimes as a juvenile and as an adult.

These self-report questionnaires were completed in three batches and color coded to ensure that the most central were completed by all inmates in what often was a very time intensive data collection session.

One single instrument was designed for use as our criterion measures in the study. A thorough review of the research literature indicated that no instrument had been used previously to obtain detailed and graded information concerning different types of sexual experience in a prison environment.

- ***Sexual Aggression in Prison (SAP; Warren, Jackson & Loper, 2006).*** The SAP was designed specifically for the study from which to derive our criterion variables. The SAP included sections that queried the inmates about consensual sex (“Please mark those sexual experienced that you have had in prison that you and your partner WANTED and ENJOYED and with whom you had them.”), bartered sex (“Please mark those sexual experiences you have had in prison as part of TRADING SEX for something you want e.g., canteen goods, money, protection.”), coerced sex as a victim (“Please indicate whether you have been sexually HARRASSED, ASSAULTED, or RAPED in prison.”), and coerced sex as a perpetrator (“Please mark the sexual behaviors that YOU have done to others WITHOUT THEIR PERMISSION.”) while incarcerated for their current offense. Sections were presented to inmates in the order described above. The self-report questions used a 16-point continuum to capture information ranging from relatively benign “cat calls” and comments about one’s body to anal and vaginal penetration with body parts or objects and listed below. The statements were worded slightly differently for each type of sex under investigation. The instrument allowed the respondent to indicate with whom these incidents occurred (other inmates, groups of inmates, visitors, and/or correctional staff), where the sexual incident occurred, and asked the respondent if the sexual behavior caused them any concerns about contracting HIV. They were also asked if they used any type of protection during the reported sexual encounter. For the bartered sex section, we also identified various reasons for participating in bartered sex, including the wish to obtain money or commissary goods, to gain protection, to obtain drugs or alcohol, to get privileges from correctional staff, to repay a debt, to belong to a group or gang, to increase power and standing, and/or to obtain assistance with household activities such as laundry and cleaning. The SAP was scored by indicating the presence

or absence of any of the noncontact items (n = 8) or any of the contact items (n = 8) separately for each type of sex (consensual, bartered, victimization, coerced).

The eight types of non-contact sex included

- Cat-calls, whistling
- Sexual comments
- Looking while naked or partially dressed
- Patting, rubbing, stroking non-sexual body parts
- Asking about sexual experiences
- Telling about sex life
- Sexual letters

The eight types of contact sex included:

- Sexual kissing
- Removing clothes for sexual reasons
- Exposing sexual body parts
- Patting, rubbing sexual body parts
- Watching masturbation
- Oral sex
- Vaginal penetration and inanimate object penetration
- Anal penetration and inanimate object penetration

These behaviors were calculated to indicate the presence or absence of non-contact or contact sexual behavior and the number of categories of these behaviors endorsed by each inmate.

Onsite inmate file review. In addition to the clinical interview and the self report instrumentation, undergraduate research assistants examined each inmate's prison files while the clinical interview was being conducted in another area of the prison. This review was conducted using a specially designed Access database on laptop computers and was designed to collect objective information on the inmate's past criminal history, institutional adjustment, and behavioral observations relevant to the various structured risk instruments (such as the PCL-R-2, HCR:20, and VRAG). It also provided us with information about each inmate's height, weight, and age, three physical characteristics that have been associated with patterns of victimization and predation, particularly in male prisons. As part of the file review, we coded each institutional infraction as violent, non-violent, rule, or sexual and used these in compiling our composite measures of prison

violence and prison sexual activity. Inmate files which included a presentence report were rich auxiliary information whereas those lacking this type of summary report were sparse and left us unsure whether we were encountering missing data or the real absence of some behavioral index. We tried to combat this problem by creating composite variables for our most central criterion variables and used multiple sources for coding the presence or absence of some variables. For example, an inmate was coded as having experienced a violent past offense if this was indicated in his prison file, in the prison database, if it was reported during the clinical interview, or if it was included in the self-report criminal history instrument created for use in the study.

Statewide prison database. Our data collection was further enriched using data derived directly from the databases maintained statewide by the Ohio Department of Rehabilitation and Correction and the Texas Department of Criminal Justice. These statewide databases were initially used to construct the random sample used in both states, and later became the source of the most accurate information about each inmate's most serious current charge, prior incarcerations, maximum and minimum length of sentence, status as a convicted sex offender, security status, and designation as a gang member.

Correctional Officer Instruments. The Prison Safety and Security Survey was developed to capture the perceptions, thoughts, beliefs, and experiences of individuals who work daily within the prison environment. The instrument was adapted from the Federal Bureau of Prisons Social Climate Survey. Sixty-six questions (6 one-sided pages) were selected from the instrument that captured information of interest to this research. The survey instrument is divided into 6 sections: Demographic information, inmate-on-inmate safety, inmate-on-staff safety, staff-on-staff safety, staff-on-inmate safety, facility ideology regarding safety, and facility design and safety. All responses were forced choice. The survey took approximately 10 minutes to complete.

Warden Instrument. A semi-structured interview was designed to capture the warden's philosophy regarding their work as a warden, attitudes towards prison sexual behavior, thoughts regarding important issues surrounding prison sex, estimates of prison sex, what consumes the most resources, prevention efforts, risk factors associated with victimization and perpetration, and the most significant aspect of prison sex. Interviews lasted between 30 and 105 minutes, with a mean of 65 minutes.

Interviewers and Data Collectors

Interviewers were two clinical professors and nine graduate students in clinical psychology. The two professors trained the students in administering the PVRI and other instrumentation. The process of

establishing reliability and intercoder reliability is presented in Appendix B. Undergraduate students in psychology were hired to conduct file reviews and were trained by one of the PIs. One of the PIs administered the correctional officer surveys and conducted the warden interviews.

Procedures

Inmates. A pilot test was conducted at one Ohio prison prior to data collection. This experience led to revisions of our protocol, namely shortening the interview and interspersing the self-report instruments throughout the clinical interview.

Each state sent the PIs a list of all inmates currently housed at the institution. From this list, a randomly selected group of inmates was identified based on prior agreements with each institution regarding the maximum number of inmates that could be recruited. This list was then returned to the institution. The research staff created a notice that was then presented to the inmates by prison staff two weeks prior to our arrival at the institution. On the day of interviewing, those expressing a willingness to participate were escorted (generally one at a time) to where the interviewers were stationed. Interviewing took place in a variety of locations throughout the prison, but attempts were made to find private places for the interviews. Inmates were told briefly about the study and asked if they would like to proceed. If they declined, a correctional officer would escort the inmate back to their cell. If they agreed, four consent forms approved by the University of Virginia's institutional review board (IRB) and each state's IRB (see Appendix C) were read to the inmates and signed. Once the consent forms were signed, the interviewer would call the file reviewers in the records room and notify them of the inmate's willingness to participate and the file review (described above) would begin. At the same time, the interview would begin. Interviews lasted approximately 3.5 hours. The interview began with benign questions that gradually became more personal. Peppered throughout the interview were breaks for completing various paper and pencil instruments.

When conducting our interviews in these settings, we were tied to the prison schedule as tightly as were the inmates and correctional staff. We had to arrive to begin interviews in the early hours of the morning, meet with correctional officers as they changed shift, and adhere to the rigorous nature of cell count every four hours the institution undertook ensuring that each inmate could be seen and accounted for in the prison. Each member of the research team had to be escorted if they moved from one area of the prison to another. The length of our protocol also required that we complete a 3.5 hour interview in a 3.5 hour time slot, while establishing rapport, maintaining the proper boundaries, and eliciting very personal information, at times through plexi-glass shields or amidst

wire mesh barriers. At the completion of the interview, inmates were thanked for their participation. The correctional officer was notified and the inmate was escorted back to his or her cell.

After conducting two 3.5 hour interviews each day, the interviewers would return to their hotel rooms where the file reviewers would print out and deliver the file reviews for the inmates seen that day, allowing each member of the interview team to complete and recalibrate the answers that had been entered earlier based only on the self report of each inmate.

Correctional Officers. Participants were anonymous and therefore packets were created with an informed consent notice on the front of the CO survey. The entire packet was placed in a manila envelope that could be sealed to ensure confidentiality. COs at each institution in Ohio were invited to participate. To recruit COs, a PI attended each roll call (e.g., 6 am, 2 pm, 10 pm) over a two day period at each institution and invited all COs on duty to complete the survey. Prison officials assured the research team that this approach would capture the largest majority of correctional officers (e.g., some might be out sick, attending training, etc.). Inmates were handed the survey packet as they left the room. COs were permitted to complete the surveys while on duty in all but one institution. The PI picked up the completed packets throughout the day at the designated depository or at subsequent roll calls.

Only one group of COs in Texas was recruited. Recruitment and administration occurred during one meeting. COs completed the survey during the meeting and packets were returned within 15 minutes.

Wardens. While the research team was onsite collecting data from inmates and correctional officers, an interview was scheduled with the warden. At the designated time, the Warden's Assistant would escort one of the PIs to meet privately with the warden in his/her office. After the consent form was signed, the interview began. Responses to questions were written on the interview form and later transcribed after returning to the university.

Integrating Information from Multiple Sources

As we have described, data was collected on and from inmates, correctional officers, and wardens. The nature of the data that we collected through this procedure was derived from a number of sources and combined eventually into a singular database that contained over 1,000 variables. However, we used these variables in various ways. For example, data collected from the wardens was certainly used to describe their philosophy, but we also used their responses as a measure of the

prison environment. Similarly, for correctional officers the survey provided important information about their perceptions, but also was used as a measure of the prison environment.

Data Analysis

Our data analyses are summarized in the following chapters. In each we follow a similar format. We briefly review the research literature pertaining to each of seven primary domains of risk factors including child and adolescent violence and victimization, adult violence, victimization and criminal behavior, sexual behavior and offending, affective and perceptual states, personality, extant risk instruments, and the social environment. We examine the bivariate empirical relationship between each of the individual variables subsumed in these domains as they are statistically associated with our various outcome measures of sexual violence and victimization. At the end, we integrate the various significant risk markers into classification decision trees pertaining to sexual predation and victimization as reported by male and female inmates in the correctional institutions throughout Ohio and Texas. In constructing the classification trees, we use Chi Square Automated Interaction Detector (CHAID), an analysis technique that is used to create decision trees. CHAID can be conducted on either continuous or categorical data, though it groups continuous data into homogeneous categories. This method of analysis selects the best predictor variables using a statistic test (Chi square for categorical and F for continuous, $p < .05$ with Bonferroni adjustment) to act as the first node in the tree and repeats this process until a full tree is grown. We used a cross-validation method (which divides the sample into 10 folds and verifies the original risk model) which allows us to compute a risk estimate as well as a cross validated risk estimate that represents the average of all risk estimates across the 10 subsamples.

Conclusions

Our randomized procedures were successful in producing a sample that was consistent on most demographic variables across the prison-wide population and the randomly selected group of inmates who decided not to participate in our study. For those who did participate in our study, they demonstrated an impressive degree of willingness to complete our battery, telling us of crimes and sexual encounters that had never been reported, and at times calling out the last answers to their interview questions as they were being lead away in handcuffs and shackles for count. The use of the triangulated data collection strategy created a rich source of data that is described in detail in the ensuing chapters.

Our sample, itself, held few surprises. It was made up of disadvantaged offenders with limited educational success and unstable family and marital lives. There were greater numbers of black

inmates in Ohio and Hispanic inmates in Texas with these minority inmates being overrepresented in each of the two systems. In both systems, there were racial differences between the correctional officers and the inmates, with the former having a higher representation of non-minority individuals. There were a number of gender differences also identified over the two states with the female inmates having higher levels of education, more likely being married at the time of their incarceration, and more often having received state support prior to incarceration. The correctional officers tended to be of non-minority status, to have completed some college education, and to be on average around 40 years of age. Most of the correctional officers worked with general population inmates and reported an average of contact with 119 inmates each day. The wardens were college educated to varying degrees, had generally worked their way up through the ranks to their position of wardens, and had often served for less than five years in their current positions.

Our data collection and analyses reflects our effort to apply all of the known clinical risk markers as identified in the research literature to sexual predation and victimization as experienced by male and female inmates. We identify through this review a large array of risk markers that are organized according to seven primary risk domains including early adverse life experiences, prior violence in the community, past arrests and behavior in the institution, sexual risk markers including impersonal sex and hyper-sexuality, affective and perceptual states associated with violence, the presence of personality disorders including psychopathy, extant violence risk instruments, and correctional and warden attitudes and perceptions across the two state systems. We were able to use this process to develop ten CHAID classification models that predicted for each gender five types of sexual behaviors: any-sex, predatory sex, victimized sex, bartered sex, and consensual sex. These models successfully classified inmates with a degree of accuracy that was unexpected given the exploratory nature of our research endeavor.

Chapter Three

The Sexual Behavior of Incarcerated Men and Women

We used five outcome measures in our study derived from the Sexual Aggression in Prison (SAP) instrument. Outcomes included (1) the experience of perpetrating coerced sexuality while imprisoned, (2) the experience of being victimized sexually while imprisoned, (3) the experience of engaging in sexual exchanges that were based on the bartering of goods or protection while imprisoned, (4) involvement in consensual sexual acts that occurred with another that occurred while imprisoned, and (5) any sex, which was defined as any of the above. We included the incidents in which the inmates reported consensual involvement with correctional staff under the rubric of consensual sex. It was our intent to allow inmates to determine the nature of their relationship with correctional staff, fully acknowledging that such acts are illegal. This structure is supported by the research published by the BJS which identifies two thirds of the staff on inmate incidents as being romantic in nature (Beck et al., 2007).

Coerced Sexual Behavior in Prison

Sexual predation. The existing research on rape in prisons tends to ignore the larger body of research pertaining to rape in the community and through this omission implies that rape in prison is fundamentally different from the rape individuals experience in the community. Eigenberg (2000) has argued for a deconstruction of these distinctions and for a more rigorous use of the community rape research to inform prison rape research. In this regard, she notes that it can be difficult to determine whether the behavior is coercive or consensual and identifies three methods used by perpetrators to assault their victims in correctional settings: entrapment, intimidation, and physical force (Eigenberg, 2000; Fishman, 1951; Groth, Burgess & Holmstrom, 1977; Scacco, 1975; Struckman-Johnson & Struckman-Johnson, 2000b; Weiss, & Friar, 1974). Eigenberg notes that despite the significance of these different forms of coercion in many correctional settings, only incidents involving physical force tend to be investigated and catalogued as real incidents of sexual assault or rape.

In attempting to explain the intent of sexual assaults in prison, Groth et al. (1977) reported that sexual gratification is but one reason for a sexual assault. Other motivations include: a need to acquire status and affiliation, to protect oneself from victimization, to take revenge and retaliation, repayment, to dominate (i.e., conquest and control of others), to release pent up emotions, sadism and denigration, and conflict and counteraction (Chonco, 1989; Groth et al., 1977). More recently,

Knowles (1999) has offered a review of the prison rape literature and concludes that sexual violence is used primarily as means to establish or maintain power within the institution (Knowles, 1999).

In 2005, the BJS¹¹ released their first study of sexual violence identified through a national survey of administrative records in adult and juvenile correctional facilities. They defined four different measures of sexual violence as informed by the definition of rape included in the PREA. These included nonconsensual sexual acts, abusive sexual contacts, staff sexual misconduct, and staff sexual harassment. Using officially reported allegations of sexual misconduct identified in 2004¹², Beck and Hughes determined that there were 8,210 allegations of sexual violence reported nationwide during that year and that 2,100 of these allegations were substantiated, a rate that reflected 30% of the completed investigations. Of the reported allegations, 42% involved staff misconduct, 37% inmate on inmate nonconsensual sexual acts, 11% staff sexual harassment, and 10% inmate on inmate abusive sexual contact. They found that in state prisons 69% of the victims of staff sexual misconduct were male while 67% of the perpetrators were female. In jails, 70% of the victims were female and 65% of the perpetrators were male.

In 2006, Beck and Harrison reported on a second wave of national survey data. The second study expanded the data collection to include specific information pertaining to each of the substantiated incidents. This data included characteristics of the victims and perpetrators, the types of pressure or physical force used in each incident, the extent of the victim's injuries, the sanctions imposed, and the type of assistance offered to the victim by the institution. Based upon their analyses, BJS found that the rate of sexual violence allegations had increased by nearly 16% over the past year. Thirty-eight percent of the allegations involved staff sexual misconduct, 35% inmate on inmate nonconsensual sexual acts, 17% staff sexual harassment, and 10% inmate on inmate abusive sexual contact. Only 37% of the allegations of staff sexual misconduct in local jails and 15% in state prisons were substantiated. Physical force or the threat of physical force was used in about half of the incidents of inmate on inmate sexual violence and in about one third of the incidents of non-consensual sexual acts. In one sixth of the incidents, the victim was physically injured. The majority of inmate on inmate incidents occurred in the victim's cell (59%) or in their dormitory (12%) with the most serious incidents occurring in the evening between 6 pm and midnight and the least serious between 6 am and noon. Half of the victims of non-consensual sexual acts were placed in protective custody or administrative segregation and most inmate perpetrators received legal sanctions or solitary confinement. Two thirds of the incidents of staff misconduct were reported to be romantic in nature with only 15% of these incidents involving physical force, the abuse of power, or pressure by

the staff member. Ninety percent of the perpetrators of staff misconduct were arrested, referred for prosecution, or discharged from their position at the prison.

In 2007, Beck et al., collected and reported further data from the administrative records maintained at each institution. Again, they found an increase in the estimated number of allegations nationwide with a 21% increase since the passing of the PREA legislation in 2003. They confirmed that most allegations were unsubstantiated (55%) or unfounded (29%). Of those incidents that were substantiated, multiple victims were reported in 4 to 8 percent of the incidents and multiple perpetrators in 7 to 10 percent of the incidents. Both the perpetrators (85%) and victims (92%) of inmate on inmate sexual violence were most frequently male. The victims tended to be younger and under the age of 24 years. The majority of perpetrators were older and over the age of 25 years. Correctional authorities reported that physical force or threat of force was used in more than half of the substantiated incidents of inmate on inmate sexual violence. In 30% of the substantiated incidents, victims were talked into the encounter. In 7% of the incidents, the victim was offered protection, bribed, or blackmailed into compliance.

Beck et al. (2007) reported that the inmate “appeared to be willing” in 62% of the substantiated incidents of staff sexual misconduct and harassment in prisons. These incidents occurred primarily outside the inmate’s cell in a program or program area and occurred most often between noon and 6 PM in prisons. Staff was also found to be involved with more than one inmate in 18% of the incidents and more than one staff involved with a single inmate in 2% of the incidents. In 2006, three quarters of the staff perpetrators lost their jobs and 56% were arrested or referred for prosecution. Half of the inmates involved in staff sexual misconduct were transferred or placed in segregation.

Some incidents were highly coercive and involved injuries to the victim. An estimated 0.8% of inmates studied nationwide reported being physically injured as a result of their sexual victimization. This involved 0.5% being injured by another inmates and 0.3% by a member of the correctional staff. When asked about the nature of their injury, the inmates reported anal or vaginal tearing, knife or stab wounds, broken bones, chipped or knocked out teeth, internal injuries, black eyes, sprains, cuts, scratches, swelling and welts. Rates of injury were found to vary by institution with a some of the insitutions with the highest rates of victimization reporting injury rates of up to 3.7 by other inmates and 3.9% by correctional staff.

Study results - sexual predation. Table 10 summarizes the rates of sexual predation self-reported by the male and female inmates for each victim category. Significant gender differences were found in the rates of self-report predation in our male and female samples, with males reporting higher rates of predatory behavior compared to females. Thirty-three male inmates (11.5%) reported having perpetrated non-contact sexual acts against other inmates and twelve males (4.2%) reported contact predatory acts against other inmates. The female inmates reported lower levels of non-contact sexual predation (2.7%) and none reported contact sexual predation against another inmate. These rates are five times higher than that reported by the Bureau of Justice. Extrapolated to a national population, the results would suggest that our prison system currently houses 61,225 male inmates who are willing to self-report contact sexual predation.

Table 10

Frequency of Sexual Predation among Men (N=288) and Women (N=183) while in Prison

	Men		Women		χ^2	Φ
	N	(%)	N	(%)		
Against Inmates						
Any Non-Contact Sex Acts	13	4.5	5	2.7	0.97	-0.05
Any Contact Sex Acts	1	0.3	0	0.0	0.64	-0.04
	M	SD	M	SD	T	
Count of Non-Contact Sex Acts	0.13	0.77	0.04	0.29	1.68	
Count of Contact Sex Acts	0.01	0.12	0.00	0.00	0.80	
Against Visitors/Others						
Any Non-Contact Sex Acts	28	9.7	2	1.1	13.97 ^{***}	-0.17 ^{***}
Any Contact Sex Acts	12	4.2	0	0.0	7.82 ^{**}	-0.13 ^{**}
	M	SD	M	SD	T	
Count of Non-Contact Sex Acts	0.35	1.67	0.01	0.10	3.44 ^{***}	
Count of Contact Sex Acts	0.10	0.68	0.00	0.00	2.44 ^{***}	
Against Staff						
Any Non-Contact Sex Acts	25	8.7	2	1.1	11.92 ^{***}	-0.16 ^{***}
Any Contact Sex Acts	8	2.8	0	0.0	5.17 [*]	-0.11 [*]
	M	SD	M	SD	T	
Count of Non-Contact Sex Acts	0.22	0.89	0.01	0.10	3.21 ^{***}	

Count of Contact Sex Acts	0.03	0.19	0.00	0.00	2.74**	
CUMULATIVE TOTAL	N	(%)	N	(%)	χ^2	Φ
Any Non-Contact Sex Acts	33	11.5	5	2.7	11.48**	-0.16**
Any Contact Sex Acts	12	4.2	0	0.0	7.82**	-0.13**
Any-Sex Acts	35	12.2	5	2.7	12.78**	-0.17**
	M	SD	M	SD	T	
Count of Non-Contact Sex Acts	0.48	1.92	0.06	0.41	3.66***	
Count of Contact Sex Acts	0.10	0.74	0.00	0.00	2.38*	
Count of Any-Sex Acts	0.58	2.37	0.06	0.34	2.96**	

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

Among the cadre of male inmates reporting contact predatory sexual behavior, the majority described themselves as being sexually predatory toward staff and others and few described themselves as being sexually predatory toward other inmates. It is not clear if these data reflect an accurate portrayal of the inmates' predatory targets or the wish to retain a heterosexual identity when describing these incidents combined with a possible interest in demonstrating their ability to dominate institutional staff. However, if taken at face value, these data suggest that sexual coercion of prison staff by male inmates is as much a concern as the more widely publicized incidents of inmate coercion by correctional staff. These data suggest that at least some male prison inmates view themselves not only able to consent to sexual encounters with correctional staff but to perpetrate it in a way that implies they are predatory in their efforts and effect.

Table 11 summarizes the actual predatory behaviors reported by this small cohort of male and female inmates.

Table 11

Frequency of Predatory Acts Self-Reported by Men (N=288) and Women (N=183) while in Prison

	Men		Women		χ^2	Φ
	N	(%)	N	(%)		
Non-Contact Sexual Predatory Acts						
Cat-Calls/Whistling	28	9.7	3	1.6	11.89**	-0.16**
Sexual Comments/Body	21	7.3	2	1.1	9.26**	-0.14**
Sexual Orientation Comments	19	6.6	2	1.1	7.96**	-0.13**

Physical Proximity/Unwanted	6	2.1	0	0.0	3.86*	-0.09*
Looking at Partially Clothed/Naked	6	2.1	1	0.5	1.81	-0.06
Patting/Rubbing/Stroking	7	2.4	0	0.0	4.52*	-0.10*
Asking Sexual Experiences/Unwanted	8	2.8	0	0.0	5.17*	-0.11*
Telling Sexual Experiences/Unwanted	6	2.1	0	0.0	3.86*	-0.09
Receiving Sexual Letters/Unwanted	5	1.7	0	0.0	3.21	-0.08
Contact Sexual Predatory Acts						
Sexual Kissing/Unwanted	4	1.4	0	0.0	2.56	-0.07
Exposing Body Part/Unwanted	11	3.8	0	0.0	7.16**	-0.12**
Remove Clothes/Forced	3	1.0	0	0.0	1.92	-0.06
Sexual Patting/Rubbing/Unwanted	3	0.0	0	0.0	1.92	-0.06
Watching Masturbation/Unwanted	3	0.0	0	0.0	1.92	-0.06
Oral Sex/Unwanted	2	0.7	0	0.0	1.28	-0.05
Vaginal Penetration/Unwanted	2	0.7	0	0.0	1.28	-0.05
Anal Penetration/Unwanted	2	0.7	0	0.0	1.28	-0.05

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

These data indicate, not unexpectedly, that non-contact predatory sexual behaviors are more common than contact predatory sexual behavior, particularly among the male inmates. For the male inmates, they tend to use cat-calls, sexual comments, and various kinds of looking and patting to create a certain types of intrusive form of sexual contact with others. Exposure is also reported as another way of forcing a sexual experience upon another, an experience that is ultimately humiliating and demeaning to both individuals who are involved in it. The two male inmates who report the most aggressive types of sexual behavior describe combinations of oral sex and both forced vaginal intercourse with women and forced anal intercourse with men, behavior that they recount as having occurred on numerous occasions with multiple victims. The women reported only non-contact sexual predation which included cat calls and sexual comments made both to other inmates and members of the prison staff.

Inmates who reported sexual predation were asked a number of questions about their predatory behavior. These questions focused on what techniques they used to force sex upon another person. Possible answers included using bribes or blackmail, getting a person drunk or stoned, threatening harm to the victim, using size to scare the victim, physically holding the victim down, and/or using a weapon to threaten or harm the victim. The inmates were asked about their motivation for forcing sex in prison; their method for choosing a victim in terms of their race, age, and size; and what

repercussions they experienced in response to their behavior. Finally, the inmates were asked if they were concerned about becoming infected with the HIV virus and if they used any type of protection against infection. While these numbers are small we found them of interest and therefore summarize them in Table 12.

Table 12

Frequency of Methods and Motives for Coerced Sex in Prison Reported by Predatory Males (N = 35) and Predatory Females (N = 5)

	Men		Women		χ^2	Φ
	N	(%)	N	(%)		
Techniques Used to Force Sex						
Bribe	3	8.6	0	0.0	0.46	-0.11
Blackmail	0	0.0	0	0.0	--	--
Love Withdrawal	0	0.0	0	0.0	--	--
Drunk/Stoned	0	0.0	0	0.0	--	--
Threatened Harm	0	0.0	0	0.0	--	--
Used Size to Threaten	0	0.0	0	0.0	--	--
Physical Held Down	0	0.0	0	0.0	--	--
Physically Harmed Person	0	0.0	0	0.0	--	--
Used a Weapon	0	0.0	0	0.0	--	--
Motivations for Forcing Sex in Prison						
Sexual Release	2	5.7	0	0.0	0.30	-0.09
Increase Status in Group	1	2.9	0	0.0	0.15	-0.06
Force Inmates to Leave Alone	0	0.0	0	0.0	--	--
Punishment	0	0.0	0	0.0	--	--
Anger and Rage	0	0.0	0	0.0	--	--
Humiliate Another	0	0.0	1	20.0	7.12	0.42
Get Something	1	2.9	0	0.0	0.15	-0.06
Gang Activity	0	0.0	0	0.0	--	--
Jealously	0	0.0	0	0.0	--	--
Victim Choice Strategies						
Considered Race	4	11.4	0	0.0	0.64	-0.13
Considered Age	3	8.6	0	0.0	0.46	-0.11
Considered Size	2	5.7	0	0.0	0.30	-0.09

Outcome of Coercion						
No Bad Outcome	3	8.6	0	0.0	0.46	-0.11
Prison Infraction	0	0.0	0	0.0	--	--
Prison Segregation	0	0.0	0	0.0	--	--
Sexual Payback from Inmate	0	0.0	0	0.0	--	--
Physical Payback from Inmate	0	0.0	0	0.0	--	--
Correctional Payback	0	0.0	0	0.0	--	--
Concerned about HIV	5	14.3	1	20.0	1.10	-0.30
Used Protection	3	8.6	1	20.0	1.14	-0.38

The data concerning these activities are limited. However, it can be seen that the male inmates primarily described bribing other inmates for sexual contact and doing it for what they experienced as sexual release and as an opportunity to gain status and get something that they wanted. They indicated that they considered the race, age, and size of the person that they chose to victimize and experienced no negative outcome to their predatory actions. Of twelve male inmates who reported contact predatory behavior, five or slightly less than one half reported concerns about HIV infection and three of these individuals reported using some type of protection. None of the five female inmates who reported predatory sexual behavior completed these sections of the SAP, although one did express concerns about HIV infection and indicated that she used protection during her sexual contact.

Sexual victimization in prison. Starting in the late 1960's, researchers attempted to estimate the number of inmates who experienced some form of sexual assault in prison. These estimates were found to vary widely over the next forty years, a fact that may be attributed to evolving prison philosophies and changing inmate and staff characteristics.

This type of undertaking has also been complicated by the forbidden, embarrassing, and illegal nature of the behavior being studied. Six years ago when the PREA legislation was first passed, Dumond (2003) calculated that there were approximately 20 published epidemiological studies on prison rape reported in the past 35 years, with fewer than four of them including data on women.

The earliest study on the incidence of sexual coercion in prison was conducted by Davis (1968) in the late 1960s. Davis reported that 3% of inmates in the Philadelphia jail system had been sexually assaulted by another inmate in a two-year period. Later, Lockwood (1980) concluded from his research in the New York state prison system that 28% of inmates had been sexually victimized by

another inmate, with about 1.3% of inmates experiencing a rape. He reported that the targets of sexual violence tended to be new to the facility, to have a weak public image, and to be considered attractive by others. Three years later, Nacci and Kane (1983) reported that 2% of the inmates in their sample experienced unwanted sexual contact (forced or attempted force), with 0.3% reporting a completed rape.

Struckman-Johnson and colleagues (1996) were the first to estimate the number of sexual assaults experienced by female inmates and reported in 1999 that between 0% and 27% of women in three Midwestern prisons had been sexually coerced. Rape reportedly ranged from 0% to 3% among women in these three institutions, due in part to differences in institutional characteristics¹³. Surprisingly, these estimates are consistent with the estimates for male inmates reported in the previous research.

In 2003, PREA stated that 13% of inmates had been sexually victimized. This estimate was the impetus for the National Institute of Justice to conduct an exhaustive review of the incidence and prevalence research concerning sexual violence in prisons. It was the conclusion of Gaes and Goldberg (2004) that approximately 2% of inmates experienced rape while incarcerated. When sexual pressure was included in the definition, the lifetime prevalence rate of sexual assault among inmates rose to 21%.

Following this review, Wolff et al. (2006) completed a quality of life survey of 6000 inmates in a single state in the US. As part of the survey, they asked inmates what they thought made another inmate vulnerable to sexual victimization. The majority of the inmates reported that the inmate being homosexual, weak, small, a pretty boy, or having a prior offense that involved a child or intimate partner placed them at a higher risk for sexual victimization.

The following year, Wolff et al. (2007) reported on a single state, audio-computer-administered survey of 7,785 inmates using questions from the National Violence Against Women and Men Survey to query inmates about their experience of sexual assault over the previous six months. Using this methodology, they found that 2% of inmates were reporting sexual victimization over a six to nine month period. This rate was found to increase significantly if incidents involving staff members and abusive sexual contact were included in the measurement of sexual victimization. Wolff et al. (2007) contrasted these rates to those in the general population where it is estimated that 0.2 to 0.9 percent experience sexual assault over a twelve month period. In the Wolff et al. (2007) study, abusive sexual contact between female inmates was reported by over 20% of the sample. The risk for this type of abuse was found to be higher among female inmates who had experienced sexual abuse prior to the

age of eighteen years and who reported believing that gang activity was high in their particular institution. Sexual contact with staff among female inmates was predicted by younger age and higher education. Only a fraction of the female inmates reported non-consensual (5.9%) sexual contact with staff over the previous six to nine months.

In 2007 and 2008, BJS released their study of self-reported sexual victimization in prisons and jails nationwide (Beck & Harrison, 2007; Beck & Harrison, 2008). Both surveys used Audio Computer-Assisted Self Interview (ACASI) technology. The first inmate survey included 23,398 prisoners housed in 46 state and federal prisons. Among the prison sample, Beck and Harrison found that 1,109 inmates reported one or more incidents of sexual victimization. When estimated totals were calculated, Beck and Harrison conclude that 2.1% of inmates reported incidents of sexual victimization involving other inmates and 2.9% reported an incident involving staff. For inmates reporting sexual victimization by another inmate, 1.3% of the inmates reported nonconsensual sex involving giving or receiving oral, anal or vaginal sex, and 0.8% reported abusive sexual contact involving unwanted touching of specific body parts in a sexual way. For inmates reporting sexual misconduct by staff, equal proportions (1.7% of inmates) reported unwilling and willing contact with prison staff. Most inmates sexually involved with prison staff reported sexual contacts that were more intimate than simple sexual touching. Again, 58% of the staff involved in staff on inmate sexual misconduct were female and 65% of the inmates involved in staff on inmate sexual misconduct were male. Rates of sexual victimization varied across the various institutions with three prisons in three different states reporting staff sexual misconduct that exceeded 10%.

Study results - sexual victimization. While our data are not intended to be epidemiological in nature, we found it interesting to examine the prevalence of sexual victimization that was reported by our male and female samples. Our data concerning sexual contact that was perceived by the recipient as coercive in nature was higher than that found in the national survey conducted by the BJS.

As summarized in Table 13, 5.9% of the male inmates reported contact sexual victimization by other inmates and 2.4% by prison staff. The female inmates reported comparable levels with 6.6% self-reporting contact sexual victimization by other inmates and 2.7% by prison staff. However, females reported significantly higher levels of perceived non-contact sexual victimization than males (12.5% by inmates and 6.6% by staff for males and 22.4 %by inmates and 11.5% by staff for females). These data suggest that females experience and report significantly more victimization through comments, looks and innuendoes than men by other inmates. However, the self-reported rates of contact sexual

victimization by both genders were not significantly different, hovering around 8 to 9 percent including both inmates and correctional staff perpetrators. In contrast to the BJS findings, our data suggest that the inmates experience themselves as more vulnerable to victimization by other inmates as contrasted to correctional staff although, as with the BJS study, many of these staff on inmate incidents were described as consensual and romantic in nature.

Table 13

Frequency of Sexual Victimization among Men (N=288) and Women (N=183) while in Prison

	Men		Women		χ^2	Φ
	N	(%)	N	(%)		
By Inmates						
Any Non-Contact Sex Acts	36	12.5	41	22.4	8.03**	- 0.13**
Any Contact Sex Acts	17	5.9	12	6.6	0.08	0.01
	M	(SD)	M	(SD)	T	
Count of Non-Contact Sex Acts	0.57	1.93	0.91	2.07	-1.75	
Count of Contact Sex Acts	0.18	0.89	0.11	0.48	1.02	
By Visitors/Others	N	(%)	N	(%)	χ^2	Φ
Any Non-Contact Sex Acts	4	1.4	5	2.7	1.08	0.05
Any Contact Sex Acts	3	1.0	0	0.0	1.92	-0.06
	M	(SD)	M	(SD)	T	
Count of Non-Contact Sex Acts	0.07	0.68	0.03	0.17	0.75	
Count of Contact Sex Acts	0.06	0.67	0.00	0.00	1.50	
By Staff	N	(%)	N	(%)	χ^2	Φ
Any Non-Contact Sex Acts	19	6.6	21	11.5	3.43	0.09
Any Contact Sex Acts	7	2.4	5	2.7	0.04	0.01
	M	(SD)	M	(SD)	T	
Count of Non-Contact Sex Acts	0.20	0.95	0.35	1.09	-1.48	
Count of Contact Sex Acts	0.04	0.34	0.05	0.35	0.23	
CUMULATIVE TOTAL	N	(%)	N	(%)	χ^2	Φ
Any Non-Contact Sex Acts	38	13.2	42	23.0	7.55**	0.13**
Any Contact Sex Acts	19	6.6	12	6.6	<0.01	<0.01
Any-Sex Acts	44	15.3	49	26.8	9.34*	0.14*
	M	(SD)	M	(SD)	T	
Count of Non-Contact Sex Acts	0.64	2.07	0.94	2.14	-1.49	
Count of Contact Sex Acts	0.23	1.11	0.11	0.48	1.66	

Fight Back Physically	12	27.3	1	2.0	12.27**	-0.36**
Start Rumors about Perpetrator	1	2.3	0	0.0	1.13	-0.11
Arrange Other Payback	2	4.5	0	0.0	2.28	-0.16
Join a Gang	1	2.3	0	0.0	1.13	-0.11
Join a Religious Group	3	6.8	2	4.1	0.34	-0.06

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

Approximately one quarter of the male inmates and one quarter of the female inmates reported prior sexual victimization in prison, a proportion that is indicative of less rather than more chronic patterns of repeated sexual victimization in prison. Clearly, the most common location for the victimization was in the cell or dormitory where the inmate resided. Showers were the next most common location. These two locations highlight the problems with external regulation if the inmate chooses not to report the incidents to the prison officials. The cell area is by definition often unsupervised and unmonitored whereas the shower areas can be monitored only by eradicating any sense of privacy for both the male and female inmates involved in these self care activities.

Moreover, our data suggest that most incidents of perceived victimization did go unreported. Only one quarter of the male inmates and one fifth of the female inmates reported their perceived victimization to correctional staff. For both sexes the inmates seemed most motivated to try and avoid further victimization through their own efforts. For the male inmates, this involved trying to avoid the perpetrator or fighting back physically. For the female inmates, this overwhelmingly involved trying to avoid the perpetrator although a small number sought assistance from another inmate or joined a religious group in an effort to contain their vulnerability.

Bartered Sexual Behavior in Prison

We found in conducting our study that bartered sex was frequently mentioned and openly discussed in the various prisons. In both male and female prisons, those inmates who were referred to as “commissary bunnies” were described as selling sex for money and other commodities that they wanted and could not obtain through other means. Research on this type of exchange is limited. The 2006 BJS study reported that in 30% of the substantiated inmate on inmate incidents, victims were talked into the encounter, and in 7% of the incidents the victim was offered protection, bribed, or blackmailed into compliance.

In her writing, Smith (2006) has identified trade as one of seven motivations that prompt sexual behavior in prison. She observes that scarce items become extremely valuable (types of potato chips,

cigarettes, phone calls) and fuel an underground economy for those with limited resources. Ristroph (2006) similarly argues that many prison inmates consent to sex not because of fear but rather due to a wish for money, drugs, food and comfort. Kunselman, Tewksbury, Dumond and Dumond (2002), however, underscore the most coercive interpretation of this type of exchange, observing that they are “anything but consensual” and that the majority of these inmates would never consent to such interactions outside the coercive conditions of incarceration.

Study results – bartered sex. Table 15 summarizes data concerning bartered sex as described by the inmates in our sample.

Table 15

Frequency of Bartered Sexual Acts by Men (N=288) and Women (N=183) while in Prison.

	Men		Women		χ^2	Φ
	N	(%)	N	(%)		
With Inmates						
Any Non-Contact Sex Acts	7	2.4	11	6.0	3.90*	0.09*
Any Contact Sex Acts	7	2.4	7	3.8	0.76	0.04
	M	(SD)	M	(SD)	T	
Count of Non-Contact Sex Acts	0.14	0.94	0.16	0.78	-0.35	
Count of Contact Sex Acts	0.10	0.78	0.07	0.45	0.59	
With Visitors/Others						
Any Non-Contact Sex Acts	19	6.6	3	1.6	6.18*	-0.12*
Any Contact Sex Acts	10	3.5	1	0.5	4.19*	-0.09*
	M	(SD)	M	(SD)	T	
Count of Non-Contact Sex Acts	0.24	1.17	0.03	0.31	2.85**	
Count of Contact Sex Acts	0.15	0.90	0.01	0.07	2.69**	
With Staff						
Any Non-Contact Sex Acts	28	9.7	7	3.8	5.66*	-0.11*
Any Contact Sex Acts	23	8.0	2	1.1	10.58**	-0.15**
	M	(SD)	M	(SD)	T	
Count of Non-Contact Sex Acts	0.34	1.26	0.09	0.56	2.91**	
Count of Contact Sex Acts	0.26	1.12	0.01	0.10	3.82**	
CUMULATIVE TOTAL						
Any Non-Contact Sex Acts	36	12.5	15	8.2	2.15	-0.07
Any Contact Sex Acts	29	10.1	9	4.9	4.00*	-0.09*

Any-Sex Acts	37	12.8	18	9.8	0.98	-0.05
	M	(SD)	M	(SD)	T	
Count of Non-Contact Sex Acts	0.71	2.61	0.29	1.30	2.32*	
Count of Contact Sex Acts	0.52	2.10	0.09	0.47	3.35**	
Count of Any-Sex Acts	1.24	4.61	0.38	1.69	2.85**	

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

Male inmates tended to report efforts to barter with visitors (6.6% non contact and 3.5% contact sex) and correctional staff (9.7% non-contact and 8.0% contact sex) while the female inmates reported more relative efforts to barter with other inmates (6.0% non-contact and 3.8% contact sex). This was not an uncommon behavior with 12.8% of the male inmates and 9.8% of the female inmates reporting bartered activity that involved some type of sexual exchange while imprisoned. In Table 16, we summarize data concerning the goals or purpose of the bartered sexual behavior.

Table 16

Frequency of Type of Commodity Sought through Bartered Sexual Acts by Men (N=37) and Women (N=18) and Concerns About HIV While in Prison

	Men		Women		χ^2	Φ
	N	(%)	N	(%)		
Money/Goods/Canteen	12	40.0	2	4.3	2.91	-0.26
Protection	2	7.1	1	7.1	<0.01	<0.01
Drugs/Alcohol	7	25.0	1	7.1	1.93	-0.21
Privileges from Staff	14	50.0	1	7.1	7.47**	-0.42**
Repay Debt	3	11.1	0	0.0	1.56	-0.20
Belong to Group/Gang	2	8.0	1	7.1	0.01	-0.02
Increase Power/Status	7	26.9	2	14.3	0.83	-0.14
Assistance in Tasks/Cleaning/ Laundry	3	12.0	1	7.1	0.23	-0.08
Other	16	5.6	9	4.9	0.10	-0.01
Concerned about HIV	13	52.0	4	33.3	1.14	0.18
Used Protection	8	47.4	2	20.0	2.08	0.27

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

When asked about the commodity that they sought through the offering of sexual favors, the male inmates most frequently mentioned seeking privileges from staff, money and canteen goods from

inmates, an increase in power and status, and drugs or alcohol. The data concerning the female inmates was limited but suggested that they most often wanted to enhance their power and status within the social milieu and to a lesser extent were interested in obtaining protection, drugs and alcohol, privileges, group affiliation, and assistance with their cleaning and tasks of daily living. Among these two groups, there were more concerns expressed about HIV infection with half of the male inmates and one third of the female inmates reporting concerns about infection. The majority of these individuals reported that they did use some type of protection during the sexual contact that occurred.

Consensual Sexual Behavior in Prison

There has been relatively little research concerning consensual sex in prison, particularly as it pertains to male inmates. Currently prison regulations define sex between inmates as a higher-tier infraction that is punishable by a variety of sanctions including segregation and movement to another unit or institution. Sex between an inmate and member of the correctional staff has become a felony offense in each of the 50 states. This stance of zero tolerance reflects a sustained commitment to maintaining safety and order within this type of institutions and the belief that sexual activity, if sanctioned, would contribute to instability, unrest, and a compromised ability of the staff to maintain control over the inmates. Feminist scholars point to the coercive, non-egalitarian, and hierarchical nature of the prison environment, and argue that these elements of its structure erode the ability of any individual situated within it to give consent to a sexual interchange or encounter (Ristoph, 2006).

Koscheski, Hensley, Wright and Tewksbury (2002) note that prior to 2002 only six studies had addressed consensual sex among male prison inmates despite the awareness of this type of encounter being quite common (Hensley, Tewksbury & Wright, 2001; Hensley, 2001; Nacci & Kane, 1983; Saum, Surratt, Inciardi, & Bennett, 1995; Tewksbury, 1989; Wooden & Parker, 1982). For example, Tewksbury (1989) studied 150 inmates in a male Ohio prison and found that between 25% and 40% of male inmates engaged in consensual sexual activity while incarcerated. Of these inmates, 20% had engaged in homosexual behavior during the previous year, with 8.5% of these inmates engaging in sexual activity with another once a week or more. More recently, Hensley (2001) conducted interviews with 174 male inmates in Oklahoma. These inmates reported engaging in a number of behaviors such as kissing another inmate (8%), rubbing their body part against an inmate (23%), allowing an inmate to touch their penis in a sexual way (24%), and engaging in anal intercourse with another inmate (20%).

Because staff on inmate sex is forbidden, there are no studies directly examining consensual sexual activity between staff and inmates. However, as referenced earlier, Beck and Harrison (2006) found that two thirds of the incidents of staff misconduct were reported to be romantic in nature. Only 15% of the incidents that involved an inmate and a staff person involved any type of physical force, abuse of power, or pressure by the staff member. Similarly in 2007, Beck, Harrison & Adams found that the inmate “appeared to be willing” in 62% of the substantiated incidents of staff sexual misconduct and harassment in prisons. They found that one fifth of the identified correctional staff had been involved with other inmates and 56% of these were arrested or referred for prosecution. The BJS study of prison inmates confirmed these administrative findings with 1.7% of inmates studied reporting willing contact with prison staff.

The assumption of early research on incarcerated female sexual behavior was that the sexual behavior was consensual (Hensley et al., 2000). In a sample of females in a juvenile institution, Halleck and Hersko (1962) found that 69% of their sample engaged in “girl stuff,” behavior ranging from kissing to genital contact. Only 9% of these girls reported “girl stuff” prior to incarceration. Similarly, Giallombardo (1966) found that 86% of the women had engaged in homosexual activity while incarcerated, although only 5% had practiced homosexuality prior to incarceration. Giallombardo noted that 21% of the females described their homosexual relationships as voluntary, explaining that the relationship provided them with love, affection, and companionship.

The most recent research on women (Greer, 2000) suggests that this scenario might be changing. Greer found that only five of the 35 women interviewed were engaging in a sexual relationship, with the majority of women considering themselves to be loners. Hensley, Tewksbury and Koscheski (2002) sought to explore the predictors of the same sex encounters by females and found that age (under the age of 34) and length of time incarcerated (women who had been incarcerated for longer periods of time) were the primary factors that distinguished the two groups. They also noted that non-Protestant religious affiliation was associated with performing oral sex on another inmate.

Study results – consensual sexual activity in prison. As presented in Table 17, our data indicate that just less than half of the inmates report some type of contact or non-contact consensual sexual encounter with another individual while in prison. These rates are surprisingly similar across genders (46.4% males, 44.4% females). These self reported endorsements of consensual sexual activity in prison suggest that it is more common than expected given the many rules and laws designed to eradicate it. Conversely, it also indicates that sexual contact can be avoided given the fact

that the majority of inmates report no contact or non-contact sexual exchange with others during their current incarceration.

Table 17

Frequency of Consensual Sexual Acts by Men (N=288) and Women (N=183) while in Prison

	Men		Women		χ^2	Φ
	N	(%)	N	(%)		
With Inmates						
Any Non-Contact Sex Acts	41	14.2	72	39.3	38.68**	0.29**
Any Contact Sex Acts	17	5.9	48	26.2	38.87**	0.29**
	M	SD	M	SD	T	
Count of Non-Contact Sex Acts	0.42	1.43	1.86	3.04	-5.96***	
Count of Contact Sex Acts	0.23	1.10	1.22	2.43	-5.23***	
With Visitors/Other						
Any Non-Contact Sex Acts	96	33.3	28	15.3	18.76***	-0.20***
Any Contact Sex Acts	56	19.4	7	3.8	23.56***	-0.22***
	M	SD	M	SD	T	
Count of Non-Contact Sex Acts	1.28	2.34	0.37	1.10	5.73***	
Count of Contact Sex Acts	0.59	1.60	0.12	0.86	4.14***	
With Staff						
Any Non-Contact Sex Acts	70	24.3	25	13.7	7.87**	-0.13**
Any Contact Sex Acts	50	17.4	5	2.7	23.22**	-0.22**
	M	SD	M	SD	T	
Count of Non-Contact Sex Acts	0.95	1.96	0.32	1.00	4.60***	
Count of Contact Sex Acts	0.56	1.58	0.07	0.48	4.90***	
CUMULATIVE TOTAL						
Any Non-Contact Sex Acts	125	43.4	84	45.9	0.28	0.03
Any Contact Sex Acts	88	30.6	54	29.5	0.06	-0.01
Any-Sex Acts	128	44.4	85	46.4	0.18	0.02
	M	SD	M	SD	T	
Count of Non-Contact Sex Acts	2.66	4.16	2.54	3.87	0.30	
Count of Contact Sex Acts	1.38	2.98	1.42	2.71	-0.15	
Count of Any-Sex Acts	4.04	6.87	3.96	6.27	0.12	

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

In our male sample, 14.2% of the male inmates reported non-contact sexual encounters and 5.9% actual sexual contact with another inmate, possibly involving oral and anal sex. In contrast, 39.3% of the female inmates reported non-contact sexual encounter with other inmates and 26.2% some type of sexual contact with another inmate, possibly including cunnilingus and penetration with an inanimate object. The female inmates also reported more different types of non-contact activities when compared to the male inmates ($M = 1.86$ females, $M = 0.42$ males out of eight) as well as more different types of sexual activities ($M = 1.22$ females, $M = 0.23$ males out of eight).

Further gender differences emerged when we examined the relationships that the inmates stated that they were having consensually with members of the prison staff. In this context, 24% of the male inmates reported non-contact consensual encounters with staff members and 17% contact sexual encounters with members. Fourteen percent of the women reported non-contact consensual encounters with staff members and 3% contact sexual encounters with staff members. These gender differences are similar to those reported by the BJS and underscore the particular vulnerability of female correctional officers to becoming sexually involved with male inmates.

We also queried the inmates about the location of their consensual sexual encounters, their motivation of participating in this type of sexual encounter, the time it took after imprisonment for them to enter into these sexual encounters, and their concerns while involved with others about HIV exposure and infection. The results are presented in Table 18. In completing the location section, the inmates were able to indicate more than one location where the sexual activity had occurred.

Table 18

Frequency of Location, Motive and Timing of Consensual Sex Reported by Males (N =128) and Females (N =85) while in Prison

	Men		Women		χ^2	Φ
	N	(%)	N	(%)		
Location of Sexual Contact						
Cell or Dormitory	94	73.4	72	84.7	3.78	0.13
Chapel	15	11.7	2	2.4	6.10*	-0.17*
Educational Area	6	4.7	2	2.4	0.77	-0.06
Counseling/Administrative Offices	4	3.1	1	1.2	0.85	-0.06
Dining Hall	12	9.4	4	4.7	1.60	-0.09
Recreational Area	16	12.5	13	15.3	0.34	0.04
Showers	49	38.3	71	83.5	42.51**	0.45**

Workplace	27	21.1	8	9.4	5.08*	-0.15*
Motivation for Sexual Encounters						
Warm and Comfortable	17	13.3	23	27.1	6.36*	0.17*
Sexy and Pleasurable	23	18.0	24	28.2	3.13	0.12
Love and Affection	12	9.4	34	40.0	28.29**	0.36**
Friendship and Belonging	10	7.8	12	14.1	2.19	0.10
Status in Group	3	2.3	3	3.5	0.26	0.04
Please My Partner	13	10.2	22	25.9	9.20**	0.21**
Time until Sexual Encounter with Another Inmate					22.64**	0.42**
No Sex (with Inmates)	68	81.9	29	34.1		
Less than One Month	0	0.0	0	0.0		
One to Six Months	2	2.4	9	13.8		
Seven Months to a Year	0	0.0	5	7.7		
More than One Year	13	15.7	22	33.8		
Concerned about HIV	29	42.0	30	45.5	0.16	-0.04
Used Protection	14	35.0	20	40.0	0.24	-0.05
Led to Jealousy	10	23.8	33	65.3	14.72**	-0.40**

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

As with other types of sexual encounters, both the male and female inmates reported that the cells and showers were the most likely location in which consensual sexual activities would take place. In contrast to the coerced encounters, they also reported that inmates would initiate consensual sexual contact with other inmates or staff in the recreational areas, chapel, and dining hall. The only gender differences included the male inmates more often reporting sexual activity in the chapel areas and the females in the showers.

There were a number of gender differences in the motivations that were reported for the consensual sexual activity that occurred. The male inmates prioritized the experience of feeling sexy and seeking pleasure, experiencing the contact as warm and comfortable, and wanting to please their partner. Less often they mentioned seeking love and affection, wanting friendships and a sense of belonging, and attempting to enhance their status in a particular social group. In contrast, the female inmates prioritized feelings of love and affection and less often experiencing the sexual contact as sexy and pleasurable, wanting to please their partner, and feeling that the contact was warm and comfortable.

Despite these differences, Table 18 illustrates that there were relative discrepancies with some male inmates and some female inmates endorsing all of the six motivations that were offered to them.

The timing of the consensual sexual encounters also varied for the male and female inmates. The female inmates began to engage in consensual sexual behaviors in prison after a month with the numbers increasing substantially after a year of incarceration. The male inmates tended not to become involved in consensual sexual encounters until they had been incarcerated for at least one year. Almost half of the male and female inmates reported initiating these encounters despite concerns about HIV infection and many of these inmates reported using some type of protection during the encounters that occurred. About one quarter of the male inmates and almost three quarters of the female inmates reported that these consensual sexual relationships led to feelings of jealousy on the part of others, possibly past partners with whom they had been engaged.

Co-Occurring Forms of Sexual Activity among Inmates

Our finding that the rates of sexual activity varied so significantly across the different types of sexual behavior prompted us to explore further the co-occurring nature of the different types of sexual contact. We were interested in the dynamics that might turn victims into predators and the affect that consensual sex might have on the occurrence of more coerced forms of sexual contact. The correlations between the different categories of sexual behavior are summarized below (see Table 19) with the data for the female inmates being displayed in the upper diagonal and for the male inmates in the lower diagonal.

Table 19

Correlations Between Consensual, Bartered, and Coercive Sexual Activity of Men (N=288) and Women (N=183) while in Prison

	Females			
Males	Victimization	Predation	Bartered	Consensual
Victimization	---	0.14	0.12	0.14
Predation	0.30^{***}	---	0.27 ^{***}	0.19 ^{***}
Bartered	0.21^{***}	0.39^{***}	---	0.40 ^{***}
Consensual	0.25^{***}	0.38^{***}	0.49^{***}	---

*Note. Spearman's rho used due to non-normality of variables; Women's coefficients in upper diagonal, Men's coefficients in lower diagonal; * $p < .05$, ** $p < .01$, *** $p < .001$.*

These data reflect significant gender differences in the pairing of different types of sexual contact. For the female inmates, the inmates that reported sexual victimization were not simultaneously involved in consensual, coerced and bartered encounters. The female inmates who reported predatory sexual behavior toward other inmates, however, did self-report involvement in other consensual and bartered sexual relationships. The associations for the male inmates were more all-encompassing. Male inmates who reported being sexually victimized also reported being involved in coerced, bartered and consensual sexual relationships with others. For both genders, the highest correlations (.49 and .40) were between consensual and bartered sex suggesting that conceptually bartered sex may be closer to consensual sex at least in this type of institutional setting.

These gender differences in paired sexual contact highlighted for us the importance of identifying gender specific risk markers for male and female inmates and for exploring sex in prison as both a homogenous and distinct continuum of sexual behaviors. To conceptually embed these observations in our predictive analyses, we decided to implement an approach to the bivariate analyses that we used as a second step in our data analyses. Rather than focusing immediately on the different types of sexual contact in prison, we decided to first identify risk markers that differentiated the sexually active inmates from the sexually reclusive inmates and then to proceed in trying to determine which of these differentiated between the different categories of sexual behavior (predatory, victimized, bartered, and consensual). We adopted this analytic approach to ensure that we did not prematurely impose a static interpretation of these roles upon the inmates. We also concluded that the broader category of any-paired sexual contact in prison might be relevant to the programming and policy implications that we assumed would develop out of our risk prediction research and that of others.

Inmate's Estimations of Consensual and Bartered Sexual Activity

During the interview with inmates, they were asked to estimate what percentage of inmates in their prison they believed were involved in consensual or bartered sexual relationships with other inmates or with staff (see Table 20). This estimation was obtained to both provide a broader context for the amount of sexual activity that was perceived by inmates as occurring in the prisons while also serving as a proxy measure of a particular inmate's involvement in these types of sexual relationships. We hypothesized that while some inmates might be hesitant about acknowledging same-sex encounters while in prison, they would tend, if they were sexually active, to ascribe this behavior to others at a rate that was higher than the mean for the general sample assessed by gender.

These data are obviously subjective and involve significant problems with missing data. Nonetheless, they do reflect gender differences which have been given credence by other research. As suggested

by these attributions, the inmates believe that more women are involved in consensual sexual relationship than men while in prison and that more women barter for sex than do men. However, the inmates reported to the interviewers that more men barter sex for protection than do female inmates. These attributional responses reflect similar patterns as seen in the self-report data concerning sex in prison and suggest that the cultural environment concerning sexual life is different across these gender-determined environments.

Table 20

Perceptions of the Frequency of Sexual Activity within the Prison Environment by Incarcerated Men and Women

	Men		Women		H
	N	%	N	%	
Consensual Sex					0.32**
<20 Percent	108	46.6	20	15.6	
21-40 Percent	42	18.1	14	10.9	
41-60 Percent	30	12.9	36	28.1	
61-80 Percent	25	10.8	36	28.1	
> 80 Percent	27	11.6	22	17.2	
Bartered Sex					0.26**
<20 Percent	126	64.6	32	39.0	
21-40 Percent	32	16.4	15	18.3	
41-60 Percent	16	8.2	12	14.6	
61-80 Percent	6	3.1	8	9.8	
> 80 Percent	15	7.7	15	8.3	
Bartered Sex for Protection					0.11*
<20 Percent	119	70.8	80	89.6	
21-40 Percent	23	13.7	1	1.5	
41-60 Percent	13	7.7	1	1.5	
61-80 Percent	6	3.6	2	3.0	
> 80 Percent	7	4.2	3	4.5	

Note. Consensual sexual activity was missing 111 responses, bartered sex was missing 194 responses, and bartered sex for protection was missing 235 responses.

Conclusions

Our data suggest that inmates in general adopt one of two sexual strategies when they find themselves imprisoned for either a short or longer period of time. About one half of the inmates carve out a day to day life that does not involve sexual exchanges or encounters with other individuals. The other half of the individuals does become involved in non-contact or contact sexual activity with other inmates, visitors, or members of the prison staff. The rate of this contact is surprisingly similar across genders with about 30% of the male and female inmates reporting some type of contact sexual experience with another. This process occurs more quickly for the female inmates as compared to the male inmates, with the latter waiting up to a year before embarking on these interpersonal forms of sexual experience.

The nature of the sexual behavior that ensues differs depending upon whether the inmate is male or female. With the female inmates, a high rate of consensual sex is reported with other inmates (39.3 % non-contact and 26.2% sexual contact) in contrast to a lower rate of consensual sex with correctional staff (13.7% non-contact and 2.7%sexual contact). When we turn our attention to the coerced interactions reported by these women, we see that a significant proportion of the female inmates also report being victimized by other inmates (22.4% non- contact and 6.6% sexual contact) and by correctional staff (11.5% non-contact and 2.7% sexual contact). When examining the experiences of the female inmates, we found that there was no significant correlation between victimization and the other forms of sexual behavior (coerced, bartered, consensual), suggesting that they reflect the experience of two distinct groups of female inmates, one which seeks out sexual contact with others and the other which feels it is forced upon them.

This distinction, however, begins to blur when we look at the female inmates who report predatory behavior toward others. This number is very small with only 2.7% of the women reporting predatory non contact sexual contact with inmates and 1.1% with correctional staff. None of the women reported contact sexual predation against either inmates or members of the prison staff. Although this group is small, they are different than the other female inmates and report, more like the male inmates, a confluence of involvement in all types of sexual activity including consensual, bartered and coerced sex, although unlike the male inmates, do not experience sexual victimization while imprisoned.

The description of the sexual behavior reported by the male inmates differed in many respects from that of the female inmates. Unlike the women, the male inmates reported a lower rate of consensual sex with other inmates (14.2% non-contact and 5.9% contact) but a higher rate of consensual sex

with correctional staff (24.3% non- contact and 17.4% contact). They also reported a lower rate of non contact victimization by other inmates (12.5% non-contact) and by members of the prison staff (6.6% non- contact) and lower rates of contact sexual victimization by both inmates (5.9% contact) and staff (2.4% contact). More male inmates also self described predatory sexual behavior toward other inmates (4.5% non-contact and 4.2% contact) and members of the prison staff (8.7% non-contact and 2.8% contact) compared to female inmates.

Perhaps of greatest theoretical importance was the finding that the different types of sexual behavior co-occurred far more frequently among the male inmates than they did among the female inmates. As illustrated in Table 19, all four distinct types of sexual behavior (consensual, bartered, victimization, and predation) correlated in a highly significant manner with each other among the male sample, suggesting that one kind of sexual behavior serves as a risk marker for other types of sexual contact for the male inmates. Moreover, It suggests that a full understanding of sexual behavior in prison as manifest and experienced by male inmates can only be developed fully through the combined exploration of the interplay between consent and coercion that ultimately characterizes these activities.

Our rates of self-reported contact victimization were comparable across genders both for encounters involving other inmates (6.6% for female inmates 5.9% for male inmates) and members of the prison staff (2.7% for female inmates and 2.4% for male inmates). However, these reflected rates of victimization that were three times higher than the inmate victimization rates reported by Beck and Harrison (2007) and Wolff et al. (2007), and two times higher for staff victimization when the consensual relationships with staff are factored out of these numbers. These differences may be the result of our smaller and less representative sample, our use of a 16 point scale to collect different gradations of sexually coercive behaviors, or our use of face to face clinical interviews to collect data on the sexual life of prisoners. Interestingly, this last possibility contradicts the assumption that greater anonymity promotes higher rates of disclosure and suggests that intensive interviews conducted by trained clinicians may in fact enhance inmates' willingness to describe their sexual lives in prison. Regardless the explanation, our data serve to heighten concerns about sexual victimization in prison and the contagion effect that active sexuality can impose on the male and female inmates as they seek to adjust to the constraints and dangers of prison life.

From a more phenomenological perspective, we found that both the male and female inmates endorsed the full spectrum of reasons for initiating same sex relationships while in prison. These included the experience of the contact being warm and comfortable or pleasurable and sexy, while

also being an avenue for expressing love and affection, for conveying friendship and belonging, for increasing one status in a social group, and for pleasing one's partner. The emphasis placed upon these motivations, however, differed between the two genders. The males more often endorsed the encounters feeling pleasurable and comfortable and being a way to please their partner. The female inmates more often endorsed initiating sex because of feelings of love and affection and to a lesser extent because of its pleasurable and comfortable impact on their lives while incarcerated. These gender differences seem similar to those that might be found in a community sample of males and females of similar ages, although in many instances they reflect same sex encounters that are often in contrast to the individuals self reported sexual identity while living in the community.

Both the male and female sexually active inmates conveyed in their responses an ability to differentiate between consensual and coerced sexuality and seemed to experience themselves as giving consent to some and not to other sexual encounters. This was found to be true both when the sexual activity was occurring with other inmates and when it was occurring with members of the prison staff. This finding appears to be relevant to the debate that is occurring concerning the ability of prison inmates to provide consent to sexual encounters with correctional staff. Our data seems to support the consent imbuing interpretation of this behavior and argues for the transportation of Ristroph's (2006) pithy observation that sex in the community is assumed to be consensual unless someone complains.

Finally, as suggested by earlier research, a significant proportion of the men and women in our sample reported developing consensual sexual relationships with either other inmates of the same sex or with prison staff in situations that are considered illegal and contrary to the disciplinary code of every institution. In choosing a partner for these encounters, we find a significant difference in the self report of the male and female inmates, with the female inmates reporting primary involvement with other inmates and male inmates with members of the prison staff. Taken at face value, these differences suggest that women are more comfortable with initiating or at least reporting same sex encounters with other women. They also suggest that the male inmates self describe themselves as being seductive toward members of the prison staff and underscore the importance of training female prison staff to withstand the enticing behavior of some male inmates.

These findings also point to the significant medical risks that occur when thousands of inmates participate repeatedly in unprotected sex with others who are at risk for different types of infection and exposure to high risk sexual behavior in the community. As indicated, only 41% of our inmates reported any concerns about HIV transmission and of these only about a third reported using any

type of precaution when they were participating in a sexual encounter. This problem is exacerbated by the fact that in the US protection such as condoms is considered contraband and forbidden by all local, state and federal correctional agencies. These same sex encounters also carry the potential of putting community partners at risk when the inmate returns to the community and it is assumed that the incarceration has carried for them no sexual contact and no heightened risk for others.

Chapter Four

Early Life Risk Markers for Sexual Predation and Victimization

Violence risk research has confirmed the substantial association between adverse experiences in early life and aggressive and violent behavior in adulthood. This association has been recognized in clinical practice for many years and now is reflected in most of the major risk assessment schemes or systems. In the current study, we explore the impact of diverse adverse early life experiences, separation from family of origin prior to the age of fifteen years, and involvement in different types of juvenile delinquency as it predicts the various types of sexual behavior of men and women while incarcerated.

Outcomes Associated with Early Adverse Life Experiences

Research and clinical practice support the proposition that early trauma and exposure to violent behavior predisposes a child to act in a violent manner towards others. This developmental perspective is explained by a wide range of theories, perhaps most centrally the classical object relation descriptions of the development of the human mind (Bowlby, 1969; Klein, 1935, 1940; Waddell, 1998). This theoretical paradigm underscores the importance of parent-child interactions early in life and the impact of these relationships on creating the platform for cognitive and social development throughout later stages of life. Although these theoretical-clinical paradigms are seldom applied to criminal behavior, they constitute the developmental pre-suppositions that has stimulated research into the effects of childhood abuse and violence on adult behavior.

Cross-sectional and longitudinal research has identified a relationship between childhood sexual and physical abuse and a number of detrimental outcomes. Coid et al. (2001) found that women who experienced less severe forms of sexual abuse in childhood were at greater risk for rape, sexual assault, and other forms of trauma although not domestic violence in adulthood. In contrast, women who experienced more extreme forms of sexual abuse in childhood, including sexual intercourse and severe beatings, were at higher risk for both sexual and physical abuse as adults. Further research has found that sexually abused girls are more likely to engage in sexually precocious behavior, to be seductive towards adults, and to exhibit higher levels of sexual activity in adulthood (El-Bassel et al., 1996; Foti, 1995).

Research in primary care health settings has examined the relationship between multiple adverse experiences in childhood and high risk health behaviors associated with elevated levels of mortality among adults. Felitti et al. (1998) developed the Adverse Childhood Events (ACE) index to tabulate

various types of disruptive early life experience including sexual abuse, physical abuse, psychological abuse, exposure to substance abuse, exposure to mental illness, observation of violent treatment of a maternal caregiver, and criminal behavior of either parents leading to imprisonment. Using an initial sample of 9508 health seeking individuals, they found a relationship between these early adverse experiences and ten adult outcomes including alcoholism, drug abuse, depression, suicide attempts, smoking, sexually transmitted disease, physical inactivity, and severe obesity. Later research indicated relationships with unintended first pregnancy among women (Dietz et al., 1999), smoking in adolescence (Anda et al., 1999), male involvement in teen pregnancy (Anda et al., 2001); sexual risk behavior in women including risk for AIDS (Hillis, Anda, Felitti & Marchbanks, 2001); attempted suicide throughout the life-span (Dube, Anda, Felitti, Chapman, Williamson & Giles, 2001); impaired mental health (Edwards, Holden Felitti & Anda, 2003); and adolescent pregnancy and fetal death (Hillis et al., 2004).

Early adverse life experiences have also been associated with violent behavior in adolescence and adulthood. Violence risk research has documented the effects of a disruptive and abusive family environment on physical violence in later life (Bandura, 1973; Widom, 1989; Earels & Barnes, 1997; Monahan et al., 2001). Parental loss through death or divorce and disruptions due to the hospitalization of parents due to psychiatric illness or imprisonment have been found to be related to adolescent and adult violence (Quinsey, Warneford, Pruesse & Link, 1975; Klassen & O'Connor, 1988; Convit, Jaeger, Lin, Meisner, & Volavka, 1988). Bensley, Speiker, van Eenwyck and Schoder (1999a, 1999b) found higher levels of antisocial behavior, substance abuse, and suicidal behavior among a cohort of high school students who reported being abused in childhood. Widom (1999) reported more aggression, violence, depression, suicide, anxiety, substance abuse and post-traumatic stress disorder among individuals who had experienced abuse as children when compared to a comparable group of controls. The MacArthur risk assessment study found that prior physical abuse as a child, deviant behavior of fathers and mothers including drug and alcohol abuse, and the arrest of fathers were related to violence in adulthood after a period of inpatient psychiatric hospitalization. These associations, however, were found to reflect gender and ethnic differences. For example, paternal drug use affected violence for white patients only; the effects of maternal drug use on violence perpetrated was found only for the male patients, and the protective impact of living with either parent until the age of 15 years was found only for the white patients (Monahan et al., 2001).

Moreover, early adverse life experiences have been associated with sexual violence in adulthood. Malamuth, Sockloskie, Koss and Tanaka (1991) explored the effects of early abuse on the sexually coercive attitudes and behavior of community-living males. They examined the sexual experiences

reported by 2,652 college men and found that sexual abuse in childhood, when combined with physical abuse, made a small but significant contribution to the prediction of sexual coercion in adulthood. Langevin, Wright and Handy (1989) examined a large database of Canadian offenders and found that the men who reported being sexually victimized in youth, particularly by male relatives, were more often involved in rape and other sexually anomalous acts in adulthood. Seghorn, Prentky and Boucher (1987) studied the background of incarcerated rapists and incarcerated child molesters and found that the child molesters were two times more likely to report childhood sexual abuse when compared to the rapists. However, when the rapists did report early sexual abuse, they were three times more likely to report having been abused by their fathers in highly chaotic home environments that involved sexual aggression against female members. Fagan and Wexler (1988) studied violent juvenile offenders and found that the youth charged with sex offenses were more likely to have been the victims of sexual and physical abuse by their parents when compared to other violent young offenders.

Study Analyses. We used the Adverse Childhood Experiences Study Questionnaire – Modified (ACE SQ- M) and questions from the Personal Background Information Survey (PBIS) to examine the extent of early abuse and neglect reported by the male and female inmates in our sample. We then examined the effect of these early life experiences on the various types of sexual behavior in prison.

These data are summarized below in Table 21 for the male and female inmates.

Table 21

Frequencies of Adverse Childhood Events Reported by Incarcerated Men (N = 288) and Women (N = 183)

Risk Factor	Men		Women		Effect Size	
	N	%	N	%	χ^2	Φ
Adverse Childhood Event						
Any Psychological Abuse	165	57.9	109	60.2	0.25	.02
Any Physical Abuse	141	49.5	89	49.2	<.01	<-.01
Any Sexual Abuse	185	65.1	109	60.6	1.00	-.05
Any Violence towards Mother	124	44.9	87	48.9	0.68	.04
Any Violence towards Father	97	35.5	53	29.8	1.61	-.06
Any Neglect	152	53.3	76	42.2	5.45*	-.11*

Away from Family < 18	105	36.8	60	33.3	0.73	-0.04
Head Injury with LOC	133	46.5	66	36.1	4.98*	-.10*
Maternal Depression	83	30.0	57	32.4	0.30	.03
Maternal Arrest	72	26.3	37	21.0	1.61	-.06
Maternal Incarceration	55	19.6	29	16.5	0.72	-.04
Maternal Alcohol Addiction	69	24.5	55	30.9	2.29	.07
Maternal Drug Addiction	40	14.2	39	21.9	4.58*	.10*
Paternal Depression	49	19.5	23	14.4	1.79	-.07
Paternal Arrest	144	55.0	70	42.9	5.81*	-.12*
Paternal Incarceration	116	43.9	57	34.8	3.54	-.09
Paternal Alcohol Addiction	122	45.9	81	48.2	0.23	.02
Paternal Drug Addiction	70	26.5	36	21.7	1.28	-.06

Note. * $p < .05$, ** $p < .01$. LOC= Loss of consciousness.

These data reflect the pervasive nature of the adverse life experiences that characterize the early lives of the male and female inmates in our sample. Across both genders, we found that half or more than half of the inmates had experienced psychological abuse (57.8%, 60.2%), physical abuse (49.5%, 49.2%), and sexual abuse (65.1%, 60.6%). The rates of sexual abuse were comparable across genders, a finding that contradicts common stereotypes of female inmates being at heightened risk for prior sexual abuse and current vulnerability. This category of abuse included a wide range of sexual experiences including being exposed to pornography, being made aware that sex was occurring, being touched or fondled in a sexual manner, touching another in a sexual manner, having another attempt oral, anal, or vaginal intercourse, and/or having experienced oral, anal or vaginal intercourse. These data reflect exposure to sexual experiences at an early age for the majority of the inmates at rates far higher than found in community samples (Finkelhor, Turner, Ormrod & Hamby, 2009).

A significant proportion of the inmates had been exposed to violence in their homes as children with the abuse being perpetrated against both their mother (44.9%, 48.9%) and their fathers (35.5%, 29.8%). Maternal pathology consisted of depression (30.0%, 32.4%), alcohol addiction (14.2%, 30.9%), drug addiction (14.2%, 21.9%), arrest (26.3%, 21.0%), and incarceration (19.6%, 16.5%). Paternal pathology was even more pronounced with lower rates of depression (19.5%, 14.4%), but higher rates of alcohol addiction (45.9%, 48.2%), drug addiction (26.5%, 21.7%), arrest (55.0%, 42.9%) and incarceration (43.9%, 34.8%).

Rates of head injury with a resultant loss of consciousness were found to be high for both the male and female inmates (46.5%, 36.1%). There are few estimates of the prevalence of head injury with loss of consciousness in the general population, but estimates in the literature range from 5 to 24 percent (McGuire, Burrell, Williams & Donovan, 1998). The rates in this study were two to ten times higher, a finding that is consistent with previous research which has found that the rate of head injury with loss of consciousness is substantially higher among incarcerated populations (25-87%; Barnfield & Leathem, 1998; Morrell, Merbitz, Jain & Jain, 1998; Slaughter, Fann & Ehde, 2003; Schofield et al., 2006).

These analyses indicate that the decision to be sexually active in prison or to be unwillingly victimized is associated among male inmates with a number of the early adverse life experiences summarized above in Table 22. These include being the victim of psychological abuse in childhood, being the victim of physical abuse in childhood, being the victim of sexual abuse in childhood, living away from family of origin prior to age 15 years, experiencing a head injury with loss of consciousness on at least one prior occasion, and experiencing maternal incarceration and paternal drug addiction. These various early risk markers combine to reflect chaotic and unstable early lives characterized by abuse, abandonment, addiction, and significant neurological insults with a loss of consciousness.

These various risk markers combine differently when we examine their association with the different types of sexual activity experienced by these men during incarceration. Predatory sex is associated with only four of the early life risk factors: psychological abuse, physical abuse, sexual abuse, and head injury with a loss of consciousness. Being sexually victimized is associated with only two of the early life risk markers: sexual abuse in childhood and living away from home prior to the age of 15 years. Bartered sex was associated with physical abuse, sexual abuse, and parental arrest. Finally, consensual sex was associated with psychological abuse, physical abuse, sexual abuse, and living away from home prior to the age of 15 years.

Table 22

Relationship Between Adverse Childhood Events Reported by Incarcerated Men (N = 288) and Type of Sexual Experiences in Prison

	Any-sex		Predatory		Victim		Bartered		Consensual	
	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
	N=143 (%)	N=145 (%)	N=253 (%)	N=35 (%)	N=244 (%)	N=44 (%)	N=251(%)	N=37 (%)	N=160 (%)	N=128 (%)
Adverse Childhood Event										
Any Psychological Abuse	68 (48.2)	97 (67.4)**	140 (55.8)	25(73.5)*	135 (55.8)	30 (69.8)	137 (55.2)	28 (75.7)*	79 (50.0)	86 (67.7)**
Any Physical Abuse	58 (41.1)	83 (57.6)**	117 (46.6)	24 (70.6)**	115 (47.5)	26 (60.5)	115 (46.4)	26 (70.3)**	67 (42.4)	74 (58.3)**
Any Sexual Abuse	78 (55.3)	107 (74.8)**	156 (62.4)	29 (83.5)**	152 (62.8)	33 (78.6)*	154 (62.3)	31 (83.8)*	88 (56.1)	97 (76.4)**
Any Violence towards Mother	55 (41.0)	69 (48.6)	104 (43.0)	20 (58.8)	102 (43.6)	22 (52.4)	102 (42.5)	22 (61.1)	61 (40.4)	63 (50.4)
Any Violence towards Father	37 (28.2)	60 (42.3)	81 (33.9)	16 (47.1)	79 (34.2)	18 (42.9)	79 (33.3)	18 (50.0)	43 (29.1)	54 (43.2)
Any Neglect	75 (53.2)	77 (53.5)**	130 (51.8)	22 (64.7)	124 (51.2)	28 (65.1)	129 (52.0)	23 (62.2)	85 (53.8)	67 (52.8)
Lived Away from Family <18	43 (30.7)	62 (42.8)*	87 (34.8)	18 (51.4)	83 (34.4)	22 (50.0)*	86 (34.7)	19 (51.4)	45 (28.7)	60 (46.9)**
Head Injury with LOC	65 (46.1)	68 (46.9)*	111 (44.2)	22 (62.9)*	109 (45.0)	24 (54.5)	114 (45.8)	19 (51.4)	75 (47.5)	58 (45.3)
Maternal Depression	39 (28.1)	44 (31.9)	70 (28.8)	13 (38.2)	69 (29.2)	14 (34.1)	74 (30.5)	9 (26.5)	44 (28.8)	39 (31.5)

Maternal Arrest	35 (25.5)	37 (27.0)	65 (27.0)	7 (21.2)	62 (26.3)	10 (26.3)	62 (25.9)	10 (28.6)	38 (25.0)	34 (27.9)
Maternal Incarceration	27 (19.3)	28 (20.0)*	51 (20.7)	4 (11.8)	46 (19.2)	9 (22.0)	47 (19.3)	8 (22.2)	29 (18.6)	26 (21.0)
Maternal Alcohol Addiction	29 (20.9)	40 (28.0)	60 (24.3)	9 (25.7)	56 (23.4)	13 (30.2)	58 (23.7)	11 (29.7)	33 (21.2)	36 (28.6)
Maternal Drug Addiction	15 (10.8)	25 (17.5)	35 (14.2)	5 (14.3)	32 (13.4)	8 (18.6)	34 (13.9)	6 (16.2)	17 (10.9)	23 (18.3)
Paternal Depression	24 (18.6)	25 (20.5)	44 (19.8)	5 (17.2)	43 (19.9)	6 (17.1)	41 (18.5)	8 (27.6)	27 (18.9)	22 (20.4)
Paternal Arrest	68 (51.9)	76 (58.0)4	124 (54.1)	20 (60.6)	128 (57.1)	16 (42.1)	118 (52.0)	26 (74.3)*	71 (48.6)	73 (62.9)*
Paternal Incarceration	54 (40.9)	62 (47.0)	100 (43.5)	16 (47.1)	100 (44.2)	16 (42.1)	92 (40.2)	24 (68.6)**	57 (38.8)	59 (50.4)
Paternal Alcohol Addiction	53 (40.2)	69 (51.5)	104 (44.6)	18 (54.5)	99 (44.0)	23 (56.1)	102 (44.2)	20 (57.1)	62 (41.9)	60 (50.8)
Paternal Drug Addiction	27 (20.5)	43 (32.6)*	60 (26.0)	10 (30.3)	62 (27.6)	8 (20.5)	58 (25.3)	12 (34.3)	28 (18.9)	42 (36.2)**
Maternal Pathology (PBIS)	65 (45.5)	72 (49.7)	120 (47.4)	17 (48.6)	115 (47.1)	22 (50.0)	119 (47.4)	18 (48.6)	74 (46.2)	63 (49.2)
Paternal Pathology (PBIS)	83 (58.0)	98 (67.5)	156 (61.7)	25 (71.4)	149 (61.1)	32 (72.7)	152 (60.6)	29 (78.4)*	95 (59.4)	86 (67.2)

Note. * $p < .05$, ** $p < .01$. LOC = Loss of consciousness

Table 23

Relationship Between Adverse Childhood Events Reported by Incarcerated Women (N = 183) and Type of Sexual Experiences in Prison

	Any-sex		Predatory		Victim		Bartered		Consensual	
	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
	N=77 (%)	N=106 (%)	N=178 (%)	N=5 (%)	N=134 (%)	N=49 (%)	N=165 (%)	N=18 (%)	N=98 (%)	N=85 (%)
Adverse Childhood Event										
Any Psychological Abuse	38 (49.4)	71 (68.3)**	104 (59.1)	5 (100.0)	73 (55.3)	36 (73.5)*	96 (58.5)	13 (76.5)	53 (54.1)	56 (67.5)
Any Physical Abuse	31 (40.3)	58 (55.8)*	85 (48.2)	4 (80.0)	60 (45.5)	29 (59.2)	79 (48.2)	10 (58.8)	43 (43.9)	46 (55.4)
Any-sexual Abuse	37 (48.1)	72 (69.9)**	104 (59.4)	5 (100.0)	75 (57.3)	34 (69.4)	95 (58.3)	14 (82.4)	50 (51.0)	59 (72.0)**
Any Violence towards Mother	30 (39.5)	57 (55.9)*	84 (48.6)	3 (60.0)	62 (47.3)	25 (53.2)	77 (47.8)	10 (58.8)	40 (41.2)	47 (58.0)*
Any Violence towards Father	18 (23.7)	35 (34.3)	49 (28.3)	4 (80.0)*	34 (26.0)	19 (40.4)	45 (28.0)	8 (47.1)	23 (23.7)	30 (37.0)
Any Neglect	24 (31.2)	52 (50.5)**	73 (41.7)	3 (60.0)	46 (35.1)	30 (61.2)**	64 (39.3)	12 (70.6)*	36 (36.7)	40 (48.8)
Lived Away from Family <18	22 (28.6)	38 (36.2)	58 (32.8)	2 (40.0)	43 (32.1)	18 (35.4)	55 (33.5)	5 (27.8)	28 (28.6)	32 (38.1)
Head Injury with LOC	28 (36.4)	38 (35.8)	65 (36.5)	1 (20.0)	49 (36.6)	17 (34.7)	59 (35.8)	7 (38.9)	34 (34.7)	32 (37.6)
Maternal Depression	16 (21.3)	41 (40.6)**	56 (32.6)	1 (25.0)	36 (27.3)	21 (47.7)*	54 (34.2)	3 (16.7)	27 (28.1)	30 (37.5)

Maternal Arrest	10 (13.3)	27 (26.7)*	34 (19.9)	3 (60.0)*	27 (20.6)	10 (22.2)	32 (20.3)	5 (27.8)	12 (12.5)	25 (31.2)**
Maternal Incarceration	8 (10.5)	21 (21.0)	29 (16.9)	0 (0.0)	20 (15.2)	9 (20.5)	2 (11.1)	2 (11.1)	10 (10.3)	19 (24.1)*
Maternal Alcohol Addiction	23 (29.9)	32 (31.7)	52 (30.1)	3 (60.0)	41 (30.8)	14 (31.1)	15 (31.9)	4 (22.2)	26 (25.6)	29 (36.2)
Maternal Drug Addiction	12 (15.6)	27 (26.7)	36 (20.8)	3 (60.0)*	27 (20.3)	12 (26.7)	34 (21.2)	5 (27.8)	13 (13.3)	26 (32.5)**
Paternal Depression	10 (14.5)	13 (14.3)	21 (13.4)	2 (66.7)**	17 (14.3)	6 (14.6)	19 (13.2)	4 (25.0)	12 (13.5)	11 (15.5)
Paternal Arrest	26 (36.1)	44 (48.4)	69 (43.1)	1 (33.3)	51 (41.8)	19 (46.3)	63 (42.6)	7 (46.7)	34 (37.0)	36 (50.7)
Paternal Incarceration	23 (31.9)	34 (37.0)	56 (34.8)	1 (33.3)	42 (34.1)	15 (36.6)	52 (34.9)	5 (33.3)	30 (32.6)	27 (37.5)
Paternal Alcohol Addiction	33 (44.6)	48 (51.1)	80 (48.5)	1 (33.3)	61 (48.4)	20 (47.6)	75 (49.3)	6 (37.5)	43 (45.3)	38 (32.1)
Paternal Drug Addiction	9 (12.3)	27 (29.0)	36 (22.1)	0 (0.0)	27 (21.6)	9 (22.0)	32 (21.3)	4 (25.0)	12 (12.9)	24 (32.9)**
Maternal Pathology (PBIS)	36 (46.8)	64 (60.4)	95 (53.5)	5 (100.0)*	71 (53.0)	29 (59.2)	89 (53.9)	11 (61.1)	48 (49.0)	52 (61.2)
Paternal Pathology (PBIS)	43 (55.8)	66 (62.3)	107 (60.1)	2 (40.0)	83 (61.9)	26 (53.1)	99 (60.0)	10 (55.6)	56 (57.1)	53 (62.4)

Note. * $p < .05$, ** $p < .01$. LOC = Loss of consciousness

The risk factors for sexual contact in prison differed for the female inmates and are summarized in Table 23. Any-sexual contact was associated with seven of the early life risk markers: psychological abuse, physical abuse, sexual abuse, violence being perpetrated against the mother, neglect, maternal depression, and maternal arrest. Moreover, the risk markers for the different subcategories of sexual behavior were also found to differ across the four subcategories of sexual experiences as found with the male inmates. Predatory sex was associated with the largest number of risk markers: violence being perpetrated against the father, maternal arrest, maternal drug addiction, paternal depression, and maternal pathology. Being victimized sexually for the women was associated with three different risk markers: psychological abuse, neglect, and maternal depression. Bartered sex reported by the women was associated with only one risk marker: neglect. Consensual sex was associated with largest number of subcategory risk makers: sexual abuse in childhood, observing violence toward the mother, maternal arrest, maternal incarceration, maternal drug addiction, and paternal drug addiction.

Outcomes Associated with Adolescent Violence and Victimization

Developmental research has identified different patterns of offending among juveniles and the effects that these different patterns have on criminal behavior in adulthood. Two of the dominant paradigms include the identification of a progressively violent subcategory of youth referred to as serious violent juveniles (SVJ) and the classification of delinquent behavior into adolescent-limited (ADL) and life course persistent antisocial offending (LCP). A manual for violence risk assessment particularly for juveniles, *The Manual for the Structured Assessment of Violence Risk in Youth (SAVRY, 2002)*, has also been developed to identify and guide inquiry into violence risk in adolescents.

Serious violent offenders. Loeber and Farrington (1998) conducted an extensive review of the research literature concerning juvenile offenders and found within this group, a particularly violent and chronically delinquent sub-group, which they termed serious violent juvenile offenders (SVJ). They found this group to be characterized by a persistent path of delinquency that culminated in serious and violent forms of delinquency as these youth progressed through adolescence. This group was found to share certain common attributes that included an early age of onset, the presence of childhood behavior patterns, and relatively high levels of aggression. As this group reached adolescence they were also found to be involved in extensive drug use (Thornberry, Huizinga & Loeber, 1995), high levels of externalizing and aggressive behavior (Stouthamer-Loeber, Loeber & Thomas, 1992), truancy and school suspensions (Maguin & Loeber, 1996), involvement with delinquent peers, (Farrington, 1989), and familial disruptions that lead to separation from family and what the authors referred to as “early home leaving” (Maguin, 1995). Viewed nationally, these

serious violent offenders were estimated to be responsible for more than half of the serious crimes committed by juveniles and to be common participants on a long term trajectory that culminated in chronic criminal careers as adults.

Adolescent-limited and life course persistent antisocial offending. Moffitt, Caspi, Rutter and Silva (2001) studied sex difference in antisocial behavior using data from a longitudinal cohort in Dunedin, New Zealand. They found that both the male and female children demonstrated one of two patterns of delinquency as they transition through adolescence into adulthood. The adolescent-limited (ADL) group was made up of youth who had not shown antisocial behavior in childhood but who took up delinquent behaviors in mid-adolescence, later returning to law abiding behavior as they entered early adulthood. In contrast, the life course persistent group (LCP) tended to manifest earlier problems associated with subtle cognitive deficits, a difficult temperament, and hyperactivity. As adolescents, they were involved in more chronic criminal behavior which they maintained even as they transitioned into adulthood. Moffitt and her colleagues hypothesized that both the male and female life-course-persistent individuals were born with the same risk factors, albeit at higher rates among the boys, and when exposed to a high risk social environment, entered adulthood with a disordered personality characterized by physical aggression and antisocial behavior. Moffitt et al. (2001) found that when followed into adulthood, the life-course-persistent males demonstrated more psychopathic traits, more mental health problems, a higher rate of substance dependence, a larger number of children, more severe financial and work problems, and violent crimes against women and children. The life course persistent females were fewer in number and demonstrated many of the same problems but at a sub-threshold level.

The Manual of for the Structured Assessment of Violence Risk in Youth (SAVRY). The SAVRY grew out of the evolving tradition of developing structured clinical assessments for the assessment of violence risk among adults (HCR:20, Webster, Douglas, Hart & Kropp, 1997). The instrument includes a three tiered assessment (0.1.2) of ten historical risk factors (history of violence, history of non-violent offending, early initiation into violence, past supervisory failures, history of self harm, exposure to violence in the home, childhood mistreatment, parental criminality, early caregiver disruption and poor school achievement), six social/contextual risk factors (peer delinquency, peer rejection, stress and poor coping, poor parental management, lack of social support, and community disorganization), eight individual factors (negative attitudes, risk taking, substance use, anger problems, psychopathic traits, attention deficit hyperactivity, poor compliance, and low commitment to school) and six protective factors (prosocial involvement, strong social supports, strong attachments, positive attitudes to interactions, strong commitment to school, and a resilient personality). The various risk items are not cumulated numerically but rather used to structure a

clinical inquiry that incorporates the research literature on the assessment of violence risk in adolescence. The various risk and protective factors also serve as the conceptual basis for formulating an intervention and risk management plan for a particular youth who may be considered to be at high risk for violent behavior.

Study Analyses. We used information about juvenile behavior that was collected from the Personal Background Information Survey (PBIS), the Self Report Criminal History Questionnaire (SRCHQ), and the HCR:20 risk instrument to assess potential risk markers demonstrated in adolescence. Our goal was to assess the presence of these adolescent violence risk markers in our male and female samples and to explore the relationship between these adolescent behaviors and the various types of sexual behavior experienced in prison.

Table 24

Frequency of Juvenile Risk Factors Reported by Incarcerated Men (N = 288) and Women (N = 183)

Risk Factor	Men		Women		Effect Size	
	N	%	N	%	χ^2	Φ
Educational Problems	184	65.0	88	48.6	12.24**	-0.16**
Early Maladjustment – Conduct Problems	182	64.1	86	47.3	12.86**	-0.17**
Adolescent Failure to Establish Relationships	87	30.6	74	40.7	4.93*	0.10*
First Violent Act Prior to Age 18 (HCR_I)	196	69.0	70	38.7	41.57**	-0.30**
Self Report Juvenile Criminal History (JSRCH)	171	59.4	87	47.5	6.33*	-0.12*
Juvenile Arrest History (JSRCH)	124	43.1	44	24.0	17.63**	-0.19**

Note. * $p < .05$, ** $p < .01$.

The results in Table 24 illustrate the chronic problems that both the male and female inmates experienced while transitioning through adolescence into adulthood. Almost two thirds of the of the male inmates had experienced educational problems, early conduct problems, early violent behavior, and criminal offending prior to reaching the age of 18 years. Forty-three percent had also been arrested as a juvenile. The female inmates reported similar problems but at a reduced level. They also reported more troubled relationships in adolescence and less early violent behavior. The female

Table 25

Relationship Between Juvenile Risk Factors Reported by Incarcerated Men (N = 288) and Sexual Experiences in Prison

Risk Factor	Any-sex		Predatory		Victim		Bartered		Consensual	
	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
	N=143 (%)	N=145 (%)	N=253 (%)	N=35 (%)	N=244 (%)	N=44 (%)	N=251 (%)	N=37 (%)	N=160 (%)	N=128 (%)
Educational Problems	86 (61.9)	98 (68.1)	160 (64.5)	24 (68.6)	160 (66.9)	24 (54.5)	156 (63.4)	28 (75.7)	93 (59.6)	91 (71.7)*
Early Maladjustment – Conduct Problems	80 (57.1)*	102 (70.8)*	158 (63.5)	24 (68.6)	154 (64.2)	28 (63.6)	154 (62.3)	28 (75.7)	88 (56.1)**	94 (74.0)**
Adolescent Failure to Establish Relationships	38 (27.1)	49 (34.0)	79 (31.7)	8 (22.9)	71 (29.6)	16 (36.4)	72 (29.1)	15 (40.5)	41 (26.1)	46 (36.2)
First Violent Act Prior to Age 18 (HCR_I)	90 (64.3)	106 (73.6)	166 (66.7)	30 (85.7)*	168 (70.0)	28 (63.6)	165 (66.8)	31 (83.8)*	97 (61.8)**	99 (78.0)**
Self Report Juvenile Criminal History (JSRCH)	88 (61.5)	83 (57.2)	154 (60.9)	17 (48.6)	150 (61.5)	21 (47.7)	154 (61.4)	17 (45.9)	99 (61.9)	72 (56.2)
Juvenile Arrest History (JSRCH)	61 (42.7)	63 (43.4)	109 (43.1)	15 (42.9)	111 (45.5)	13 (29.5)*	109 (43.4)	15 (45.0)	67 (41.9)	57 (44.5)

Note. * $p < .05$, ** $p < .01$.

Table 26

Relationship Between Juvenile Risk Factors Reported by Incarcerated Women (N = 183) and Sexual Experiences in Prison

Risk Factor	Any-sex		Predatory		Victim		Bartered		Consensual	
	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
	N=77(%)	N=106 (%)	N=178 (%)	N=5(%)	N=134 (%)	N=49 (%)	N=165 (%)	N=18(%)	N=98 (%)	N=85 (%)
Educational Problems	39 (52.0)	49 (46.2)	85 (48.3)	3 (60.0)	70 (53.0)	18 (36.7)	80 (49.1)	8 (44.4)	47 (49.0)	41 (48.2)
Early Maladjustment – Conduct Problems	33 (43.4)	53 (50.0)	82 (46.3)	4 (80.0)	64 (48.1)	22 (44.9)	80 (49.1)	6 (33.3)	40 (41.2)	46 (54.1)
Adolescent Failure to Establish Relationships	29 (38.2)	45 (42.5)	70 (39.5)	4 (80.0)	55 (41.4)	19 (38.8)	66 (40.2)	8 (44.4)	37 (38.1)	37 (43.5)
First Violent Act Prior to Age 18 (HCR_I)	22 (28.6)	48 (46.2)*	68 (38.6)	2 (40.0)	48 (36.1)	22 (45.8)	64 (38.7)	7 (38.9)	33 (33.7)	37 (44.6)
Self Report Juvenile Criminal History (JSRCH)	31 (40.3)	56 (52.8)	84 (47.2)	3 (60.0)	64 (47.8)	23 (46.9)	76 (46.1)	11 (61.1)	37 (37.8)	50 (58.8)**
Juvenile Arrest History (JSRCH)	13 (16.9)	31 (29.2)	43 (24.2)	1 (20.0)	29 (21.6)	15 (30.6)	38 (23.0)	6 (33.3)	16 (16.3)	28 (32.9)**

Note. * $p < .05$, ** $p < .01$.

inmates reported a fairly high level of criminal offending but a much lower rate of arrest when compared to the male inmates.

The association between the various adolescent risk markers and sexual behavior in prison were more modest with only one risk maker differentiating most of the various sub-categories of sexual behavior in prison (see Table 25). These varied across the various sex categories including any-sex category (early maladjustment with conduct problems), predatory sex in prison (early first violence), victimized sex in prison (fewer self reported juvenile arrests), bartered sex (early first violence) and consensual sex (educational problems, early maladjustment, and first violent act before age 18 years).

Table 26 demonstrates that the association of adolescent risk marker with sexual behavior among female inmates was also quite limited. A single risk marker was associated with the any-sex category: early first violence. There were no significant correlations with the predatory, victimized and bartered sexual sub-categories. Consensual sex was associated with higher rates of self report criminal offending in adolescence and higher rates of self report criminal arrest history.

Conclusions

Our findings reaffirm the high rate of early abuse and victimization often referenced in descriptions of incarcerated women. Our comparisons across genders, however, suggest that the degree of early trauma and adverse life experience experienced by the male inmates is as extensive and chronic as the abuse experienced by the majority of the female inmates. We found this to be true even with self reported sexual abuse with 65% of the male inmates and 61% of the female inmates reporting exposure to sexually stimulating experiences and/or involvement in sexually intrusive acts in childhood. This early experience of sexual abuse was found to be significantly associated with the various sub-categories of sexual behavior reported by the male inmates during their incarceration including predatory sex, sexual victimization, bartered sex, and consensual sex in prison. The impact of this early risk marker was less substantial for the female inmates with early sexual abuse being associated only with consensual sex in prison.

The predatory male inmate in our sample was characterized by psychological abuse, physical abuse, and sexual abuse in childhood combined with at least one head injury with a loss of consciousness and an early initiation into violent behavior. This confluence of risk markers that combines a violent and chaotic home environment with neurological injury and early first violence is congruent with the descriptions contained in the *Serious Juvenile Offender (SJO)* and *Life Course Persistent (LCP)*

descriptions of evolving criminality and antisociality. The predatory female in our sample had often observed violence being perpetrated against the father along with paternal depression and various forms of maternal pathology including maternal arrest and maternal drug addiction. These risk markers combine to convey an early experience characterized by an unstable family situation with aggressive and disruptive behavior of the mother and her involvement in the criminal justice system. The differences embedded in these constellations of risk makers further underscore the gender differences in the types of early experienced that lead to sexually predatory behavior by males and females in the two prison environments.

The male victim of sexual abuse in prison was characterized by sexual abuse in childhood and living away from home prior to the age of 15 years combined with a lower rate of arrest in adolescence. The female victim of sexual abuse in prison was characterized by psychological abuse, neglect, and maternal depression. These risk factors again support gender differences in the emergence of a victimized stance while incarcerated. However, unlike with the predatory behavior, the risk markers for victimization across genders suggest a combination of early abuse and a lack of parental support either because of the individual living away from home prior to the age of 15 years or because of intermittent care associated with maternal depression.

Consensual sex for the male inmates was associated with psychological abuse, physical abuse, sexual abuse, early home leaving, educational problems in adolescence, early conduct problems, and early first violence. Consensual sex for the female inmates was associated with sexual abuse in childhood, being exposed to violence perpetrated against the mother, maternal arrest, maternal incarceration, maternal drug addiction, paternal drug addiction, higher rates of self report offending in adolescence, and higher rates of self report juvenile arrests. Taken together, these early life risk markers confirm the association between early sexual abuse and consensual sexual engagement in prison and further confirm the research concerning early life adverse events which links these early events to high risk sexual behavior in adulthood (Foti, 1995, Hillis et al., 2001).

The high rates of head injury reported by both the male and female inmates again emphasize not only the chaotic nature of these individuals' early life history but also the chronicity of the neurological deficits that they carry with them into adulthood and the adult prison system. While it is commonly acknowledged that male prison populations are characterized by higher than normal rates of neurological impairments, we found in our samples that over one third of the female inmates also reported at least one head injury that had resulted in the loss of consciousness. This compromising

type of injury was associated with sexually predatory behavior among the male inmates but with none of the sub-categories of sexual behavior among the female inmates.

Finally, we found for both the male and female inmates that the effects of adverse life events in childhood were more powerfully associated with the different types of prison sexual behavior than were the behavioral disruptions commonly associated with adolescence. This may reflect normal differences between the early, formative experiences of childhood and the more transitory experiences of adolescence. However, in our sample, it clearly demonstrated the significance of these early life traumas and their impact not only on adult life in the community but also to adjustment in prison. In terms of prior victimization, for both genders sexual victimization in childhood placed both the male and female inmates at higher risk for sexual victimization in prison. Concerning the intergenerational transmission of some of these behaviors, it is clear that maternal arrest and maternal incarceration constitutes a significant risk maker for both the predatory and consensual sex of female inmates while they are incarcerated. This finding draws attention not only to the maternal transmission of antisocial tendencies commonly referenced in genetic studies of personality but also suggests the transmission of a particular form of sexual adaptation that involves same sex encounters either associated with coercion or consent during a period of incarceration.

Chapter Five

Violence and Criminality as Risk Markers for Sexual Predation and Victimization

All efforts to predict violent behavior in the community have included a focus on past violent behavior and criminality. These efforts have emerged in varied theoretical frameworks including criminology, behavioral sciences, forensic psychiatry and psychology, public health, and most recently decision theory and neuroscience (Blumstein, Cohen, Roth & Visher, 1986; Moffitt et al., 2001; Monahan et al., 2001; Warren et al., 1998; Slovic, Finucane, Peters, & MacGregor, 2002). Embedded in each of these perspectives is the recognition that violence in many instances is a patterned behavior which can be predicted if the proper information is collected and assessed in the context of past violence. This basic assumption is expressed in an often cited quote by Monahan, who in 1981 concluded based upon a review of the extant literature, “past violence is the best predictor of future violence” (Monahan, 1981).

In this chapter, we examine three indices of past violence and criminality. These include community violence prior to incarceration, instant offense and sentence length, and institutional violence and victimization during the current incarceration. We then explore the relationship of each of these risk markers to the five sub-categories of sexual behavior in prison.

Outcomes Associated with Community Violence and Victimization

Physical fights and violent crime. All major violence risk instruments include past violence or victim injury as a primary risk factor for future violent behavior (see the COVR, HCR: 20 and VRAG in Chapter 8). The MacArthur Violence Risk Study found that both violent arrests and arrest for non-violent crimes were associated with violent behavior after release from a psychiatric institution. The HCR:20 includes past violence as its first historical risk factors and is currently pilot testing additional risk factors that include previous violent and non-violent criminality. The VRAG assesses the degree of victim injury as one of eleven risk factors that predicts violence among forensic patients following release into the community.

From a different perspective, aggregate crime statistics indicate a parallel co-occurrence of violent crime and various types of sexual aggression in the community. Young men under the age of 24 are responsible for committing both the largest number of reported rapes each year as well as the largest

percentage of homicide, assault, and non-violent property offenses (Ellis & Walsh, 2000). Rates of violent crime are also found to co-mingle with rates of rape over different time periods and cultural contexts. America experienced a significant decline in the rate of rape nationwide during the 1990's which mirrored the same decline in rates of homicide, assault, sexual abuse of children, domestic violence, and robbery (UCR,BJS, <http://www.ojp.usdoj.gov/bjs>).

Domestic and partnered violence. For many women, much of the violence they experience, both as perpetrator and victim, occurs in the context of their intimate relationships with others. Kessler, Molnar, Feurer and Appelbaum (2001) analyzed data from the National Co-morbidity Survey and found that 6.5% of women and 5.5% of men reported having experienced severe domestic violence at some point in their adult lives. The perpetration of severe domestic violence by women has been associated with prior victimization in intimate relationships and patterns of exposure to various high risk behaviors including the use of drugs and having more than ten male sexual partners (Cohen et al., 2000). Research concerning women who are considered generally violent has also found their battering behavior to be more physically assaultive, to involve more instrumental violence, and to entail more emotionally abusive tactics. Battering among this particularly violent group of women was also found to be associated with a mean of 7.7 physical fights with a non-partner since the age of 18 years.

Domestic violence by males has been associated with dysthymia, adult antisocial behavior, and non-affective psychosis. Recent research has also begun to identify the relationship between psychopathic traits and battering specifically as it is associated with deficient affective experiences, heightened impulsivity, and irresponsibility as measured by two of the four facets of the PCL-2 (Swogger, Walsh & Kosson, 2007). Statistical data maintained by the BJS and the Federal Bureau of Investigation (FBI) indicate that 78% of the male inmates incarcerated in jail for domestic violence have a prior conviction history and four out of ten males have a criminal status at the time of the incident (Chaiken, 1998; <http://www.ojp.usdoj.gov/bjs>).

Study Analyses. We used two primary indices of community violence in our study: self reported number of physical fights since the age of eighteen years and scoring on the five subscales of the CTS-2. These subscales include conflict in Negotiation, Psychological Aggression, Physical Assault, Sexual Coercion, and Injury as experienced by both the perpetrator and/or victim. These data were then examined as they related to the different sub-categories of sexual behavior in prison.

Table 27

Frequency of Prior Violence and Victimization Reported by Incarcerated Men (N = 180) and Women (N = 148)

	Men		Women		Effect Size	
	N	%	N	%	χ^2	Φ
Any Fights Since Age 18	263	91.2	125	68.3	40.82**	-0.29**
CTS – By Self ¹						
Negotiation	177	98.3	147	99.3	0.66	0.05
Psychological	152	84.9	131	88.5	0.90	0.05
Physical	133	74.3	90	60.8	6.79**	-0.14**
Injury	49	27.9	64	43.2	9.02**	0.17**
CTS – By Partner ¹						
Negotiation	176	98.3	147	99.3	0.67	0.05
Psychological	157	87.7	128	87.2	0.02	-0.01
Physical	140	78.2	93	62.8	9.35**	-0.17**
Injury	49	27.9	51	34.7	2.03	0.08

Note. * $p < .05$, ** $p < .01$. ¹N = 180 for men and 148 for women due to missing data on CTS.

Table 27 illustrates the high levels of community violence that characterized the adult lives of both the male and female inmates prior to incarceration. Over 90% of the male inmates reported involvement in at least one physical fight since the age of 18 years and over two thirds of the female inmates reported at least one physical fight since reaching adulthood.

Rates of domestic violence were also high for both the male and female inmates (see Tables 28 and 29). Seventy-four percent of the male inmates and 61% of the female inmates reported engagement in physical battering in the context of at least one significant intimate relationship one year prior to incarceration. This battering lead to significant injury to their partner in one quarter of the incidents perpetrated by the male inmates and almost half of incidents perpetrated by the female inmates. Similar patterns were observed regarding victimization within prior partnered relationships. The majority of both the male and female inmates reported being the victim of domestic battering with a quarter of these incidents resulting in injury for the male inmates and slightly over one third resulting in injury to the female inmates.

Table 28

Relationship Between Prior Violence and Victimization Reported by Incarcerated Men (N = 180)¹ and Sexual Experiences in Prison

	Any-sex		Predatory		Victim		Bartered		Consensual	
	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
	N=143 (%)	N=145 (%)	N=253 (%)	N=35 (%)	N=244 (%)	N=44 (%)	N=251 (%)	N=37 (%)	N=160 (%)	N=128 (%)
Any Fights Since Age 18	125 (87.4)	138 (95.2)*	230 (90.9)	33 (94.3)	223 (91.4)	40 (90.9)	227 (90.4)	36 (97.3)	140(87.5)	123 (96.1)*
CTS – By Self ¹	N=94	N=86	N=161	N=19	N=152	N=28	N=162	N=18	N=107	N=72
	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)
Negotiation	4.0 (1.6)	4.4 (1.6)	4.2 (1.6)	4.3 (1.8)	4.2 (1.6)	4.0 (1.6)	4.1 (1.6)	4.7 (1.8)	4.0 (1.6)	4.4 (1.6)
Psychological	1.5 (1.4)	1.8 (1.7)	1.6 (1.5)	2.2 (2.0)	1.6 (1.5)	1.6 (1.6)	1.6 (1.5)	1.9 (1.7)	1.5 (1.4)	1.8 (1.7)
Physical	0.8 (1.0)	0.8 (1.0)	0.8 (1.0)	1.1 (1.2)	0.9 (1.1)	0.6 (0.6)	0.8 (1.0)	1.4 (1.4)*	0.8 (1.0)	0.8 (1.0)
Injury	0.2 (0.6)	0.2 (0.4)	0.2 (0.5)	0.3 (0.5)	0.2 (0.5)	0.2 (0.4)	0.2 (0.5)	0.4 (0.6)	0.3 (0.6)	0.2 (0.4)
CTS – By Partner ¹										
Negotiation	4.0 (1.6)	4.5 (1.6)*	4.2 (1.6)	4.2 (2.0)	4.2 (1.6)	4.1 (1.6)	4.1 (1.6)	4.9 (1.6)*	4.0 (1.6)	4.5 (1.6)*
Psychological	1.5 (1.3)	1.9 (1.7)	1.6 (1.5)	2.1 (1.8)	1.7 (1.5)	1.6 (1.5)	1.7 (1.5)	1.9 (1.8)	1.5 (1.4)	1.9 (1.8)
Physical	0.9 (1.1)	0.9 (1.0)	0.9 (1.1)	1.0 (1.0)	0.9 (1.1)	0.7 (0.8)	0.8 (1.0)	1.3 (1.1)	0.9 (1.1)	0.9 (1.0)
Injury	0.3 (0.6)	0.3 (0.7)	0.3 (0.7)	0.5 (0.8)	0.3 (0.7)	0.2 (0.5)	0.3 (0.6)	0.7 (1.1)**	0.3 (0.6)	0.3 (0.7)

Note. $p < .05$, ** $p < .01$. ¹N = 180 due to missing CTS data. CTS scaled as 0 = never, 7 = more than 20 times.

Table 29

Relationship Between Prior Violence and Victimization Reported by Incarcerated Women (N = 148)¹ and Sexual Experiences in Prison

	Any-sex		Predatory		Victim		Bartered		Consensual	
	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
	N=77(%)	N=106 (%)	N=178 (%)	N=5(%)	N=134 (%)	N=49 (%)	N=165 (%)	N=18 (%)	N=98 (%)	N=85 (%)
Any Fights Since Age 18	138 (95.2)*	78 (73.6)	33 (94.3)	4 (80.0))	40 (90.9)	38 (77.6)	36 (97.3)	13 (72.2)	123 (96.1)*	63 (74.1)
CTS – By Self ¹	N=63 M(SD)	N=85 M(SD)	N=144 M(SD)	N=4 M(SD)	N=110 M(SD)	N=38 M(SD)	N=134 M(SD)	N=14 M(SD)	N=78 M(SD)	N=70 M(SD)
Negotiation	4.50 (1.8)	4.65 (1.5)	4.57 (1.6)	5.08 (1.1)	4.65 (1.6)	4.39 (1.4)	4.59 (1.6)	4.55 (1.1)	4.34 (1.7)*	4.86 (1.4)
Psychological	1.96 (1.4)	2.48 (1.8)	2.23 (1.7)	3.29 (2.5)	2.23 (1.7)	2.33 (1.7)	2.28 (1.7)	2.08 (2.0)	2.04 (1.5)	2.51 (1.8)
Physical	.51 (.9)**	1.04 (1.3)	.79 (1.1)	1.81 (1.5)	.75 (1.1)	1.02 (1.3)	.81 (1.2)	.85 (.7)	.62 (1.1)*	1.03 (1.2)
Injury	.58 (1.1)	.98 (1.4)	.80 (1.3)	1.04 (1.3)	.73 (1.2)	1.02 (1.5)	.86 (1.3)*	.27 (.7)	.70 (1.2)	.93 (1.4)
CTS – By Partner ¹	N=63 M(SD)	N=85 M(SD)	N=144 M(SD)	N=4 M(SD)	N=110 M(SD)	N=38 M(SD)	N=134 M(SD)	N=14 M(SD)	N=78 M(SD)	N=70 M(SD)
Negotiation	4.37 (1.8)	4.21 (1.5)	4.27 (1.6)	4.50 (1.4)	4.34 (1.7)	4.08 (1.4)	4.28 (1.7)	4.17 (1.0)	4.21 (1.8)	4.36 (1.4)
Psychological	2.00 (1.6)*	2.67 (2.1)	2.36 (1.9)	3.32 (2.4)	2.27 (1.8)	2.71 (2.1)	2.43 (1.9)	1.92 (2.0)	2.22 (1.8)	2.58 (2.0)
Physical	.97 (1.6)*	1.70 (1.9)	1.38 (1.8)	1.85 (1.3)	1.27 (1.7)	1.73 (2.0)	1.43 (1.8)	.95 (.9)	1.17 (1.8)	1.63 (1.7)
Injury	.35 (.7)	.58 (1.1)	.47 (.9)	.83 (1.3)	.44 (.9)	.60 (1.2)	.51 (1.0)	.22 (.4)	.45 (1.0)	.51 (.9)

Note. * $p < .05$, ** $p < .01$. ¹ N = 148 due to missing CTS data.

Among the male inmates, prior community violence (i.e., fights) was associated with sexual activity in prison, specifically consensual sex with either other inmates or members of the prison staff. Aggression in the negotiations that took place in these relationships was also associated with these same two variables, any-sex and consensual sex in prison. Bartered sex in prison was further associated with perpetrating physical abuse against a partner, being the victim of negotiated abuse with a partner, and experiencing physical injury in the context of domestic battering.

The opposite patterns were observed among the female inmates. For the female inmates, involvement in fight prior to the age of 18 years prior was negatively associated with the any-sex and the consensual sex categories, and showed no association with sexual predation or sexual victimization. Conversely, involvement in domestic violence as a perpetrator of physical violence and as a victim of more psychological conflict and higher levels of injury were positively associated with the any-sex category in the female sample. Specifically, perpetrating less injury against a domestic partner was associated with involvement in bartered sex. Involvement in higher degrees of negotiation conflict and more physical violence toward a domestic partner were further associated with consensual sex among the female inmates.

Outcomes Associated with Instant Offense and Prison Sentence

Correctional research and risk classification schemes. Prisons risk classification schemes consistently reference prior offending and past violence as part of their security and placement assessment of individuals both while they are incarcerated and during placement in the community (Gaes et al., 2002; Gendreau, Goggin & Law, 1997; Gover, Perez & Jennings, 2008; Harer & Langan, 2001; Harer & Steffensmeier, 1996; Greenfield & Snell, 1999; Kury & Smartt, 2002; Skeem & Loudon, 2006). In the context of these assessments, some research indicates that these contributory factors to prison violence are the same for males and females (albeit at different levels) (Harer & Langan, 2001) while other research suggests that the predictive factors are significantly and in some instances inversely predictive of different kinds of institutional behavior across genders (Cunningham & Sorensen, 2006; Gover et al., 2008). These inquiries have often emerged as elements of the scientific debate over importation theory and deprivation theory and the relative significance of pre-existent as contrasted to situational factors in predicting various aspects of prison adjustment (Faily & Roundtree, 1979; Craddock, 1996; Thompson & Loper, 2005).

The Risk Assessment Scale for Prison (RASP) is an actuarial scale for predicting prison violence that was initially developed in Missouri. Recent efforts to replicate the scale in Florida have highlighted

the importance of younger age, shorter sentence, prison gang affiliation, prior prison violence, and prior prison term in predicting violent behavior while incarcerated. The actuarial models used in predicting violence were found to be modestly successful in predicting both violent infractions and all types of behavioral infractions in prison. In contrast to earlier research, Cunningham and Sorenson (2006) also found the rates of institutional violence consistent across male and female institutions and concluded that the predictive factors for prison misconduct were similar for male and female inmates.

Study Analyses. In the current study, we used five measures of criminality and offending. These included self-report criminal history, number of prior incarcerations, number of prior violations on parole or probation, current offense, and current sentence (see Table 30). Information concerning the inmates' past criminal history was collected from a number of different data sources and cross referenced when determining whether it had occurred. These data were then assessed as they were associated with the five sub-categories of sexual behavior in prison.

Table 30

Frequency of Prison Status and Prior Criminal Involvement by Incarcerated Men (N = 288) and Women (N = 183)

	Men		Women		Effect Size	
	N	%	N	%	χ^2	Φ
Self Reported Criminal Activity¹						
Violent	158	76.0	85	52.5	2.96**	-0.24**
Non-Violent	185	90.7	139	87.4	0.99	-0.05
Sexual	37	19.0	15	9.9	5.45*	-0.13*
Number of Prior Incarcerations²					5.89	0.13
None	68	27.0	42	33.6		
One	27	10.7	12	9.6		
Two	30	11.9	6	4.8		
Three to Eight	75	29.8	37	29.6		
Nine or More	52	20.6	28	22.4		
Previous Parole or Probation Violation						
One or More	202	70.1	100	54.6	11.68**	-0.16**
Current Most Serious Offense					69.28**	0.39**
Violent	91	32.3	48	26.2		
Potentially Violent	63	22.3	35	19.1		

Other Crimes Against Person	10	3.5	14	7.7		
Sex	56	19.9	1	0.5		
Property	22	7.8	44	24.0		
Drug	27	9.6	36	19.7		
Other	13	4.6	5	2.7		
Current Sentence Length					78.40**	0.41**
<1 Year	5	1.8	23	12.8		
1 to 5 Years	51	18.2	77	42.8		
6-10 Years	47	16.8	34	18.9		
11-20 Years	66	23.6	19	10.6		
>20, but not life	65	23.6	18	10.0		
Life Sentences	46	16.4	9	5.0		

Note. * $p < .01$; ** $p < .001$ ¹

On the self report criminal history instrument, both the male and female inmates report a combination of non-violent, violent and sexual crimes. The rates of violent crime and sexual crime are higher for the male inmates although over one half of the female inmates report involvement in a prior violent crime and 10% involvement in a prior sexual offense. The male inmates were found to be more chronic offenders with over half of them having served at least three or more and some nine or more prior periods of incarceration. Almost three quarters of the male inmates and over one half of the female inmates had experienced a prior supervision failure on either probation or parole. The male inmates were primarily incarcerated for crimes that were classified as violent, potentially violent, or sexual. The female inmates were primarily incarcerated for crimes classified as violent, property, potentially violent, and drug related. Half of the male inmates were serving sentences of eleven years to life as contrasted to the majority of the female inmates who were serving sentences of less than six years.

Most of the criminal history variables commonly used in prison classification schemes were unrelated to sexual behavior in prison among the male inmates (see Table 31). Having been involved in a prior violent crime made it more likely that the male inmates would be involved in a consensual sexual relationship while they were imprisoned and less likely that they would be sexually victimized. Sexual behavior was not associated with the inmates' instant offense, past supervision failures, and/or length of sentence.

Table 31

Relationship Between Prison Status and Prior Criminal Involvement by Incarcerated Men (N = 288) and Sexual Experiences in Prison

	Any-sex		Predatory		Victim		Bartered		Consensual	
	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
	N=143 (%)	N=145(%)	N=253 (%)	N=35 (%)	N=244 (%)	N=44 (%)	N=251 (%)	N=37 (%)	N=160 (%)	N=128 (%)
Self Reported Criminal Activity¹										
Violent	77 (71.8)	81 (81.0)	138 (74.2)	20 (90.9)	143 (79.4)	15** (53.6)	139 (74.7)	19 (86.4)	83 (68.0)	75** (87.2)
Non-Violent	97 (91.5)	88 (89.8)	165 (90.2)	20 (95.2)	160 (90.79)	25 (89.3)	166 (90.7)	19 (90.5)	109 (90.8)	76 (90.5)
Sexual	17 (17.2)	20 (20.8)	34 (19.5)	3 (14.3)	29 (17.4)	8 (28.6)	33 (19.0)	4 (19.0)	21 (18.6)	16 (19.5)
Number of Prior Incarcerations²										
None	27 (21.6)	41 (32.3)	59 (26.8)	9 (28.1)	57 (26.5)	11 (29.7)	57 (25.8)	11 (35.5)	31 (22.0)	37 (33.3)
One	15 (12.0)	12 (9.4)	24 (10.9)	3 (9.4)	22 (10.2)	5 (13.5)	25 (11.3)	2 (6.5)	17 (12.1)	10 (9.0)
Two	14 (11.2)	16 (12.6)	27 (12.3)	3 (9.4)	25 (11.6)	5 (13.5)	23 (10.4)	7 (22.6)	15 (10.6)	15 (13.5)
Three to Eight	40 (32.0)	35 (27.6)	63 (28.6)	12 (37.5)	67 (31.2)	8 (21.6)	68 (30.8)	7 (22.6)	46 (32.6)	29 (26.1)
Nine or More	29 (23.2)	23 (18.1)	47 (21.4)	5 (15.6)	44 (20.5)	8 (21.6)	48 (21.7)	4 (12.9)	32 (22.7)	20 (18.0)
Previous Parole or Probation Violation										
One or More	97 (67.8)	105 (72.4)	175(69.2)	27 (77.1)	166 (68.0)	36 (81.8)	174 (69.3)	28 (75.7)	108 (67.5)	94 (73.4)
Current Most Serious Offense										
Violent	39 (27.9)	52 (36.6)	78 (31.6)	13 (37.1)	81 (33.9)	10 (23.3)	76 (31.0)	15 (40.5)	40 (25.6)	51 (40.5)
Potentially Violent	30 (21.4)	33 (23.2)	55 (22.3)	8 (22.9)	57 (23.8)	6 (14.0)	51 (20.8)	12 (32.4)	35 (22.4)	28 (22.2)
Other Crimes	6 (4.3)	4 (2.8)	9 (3.6)	1 (2.9)	9 (3.8)	1 (2.3)	8 (3.3)	2 (5.4)	6 (3.8)	4 (3.2)
Against Person										
Sex	30 (21.4)	26 (18.3)	52 (21.1)	4 (11.4)	44 (18.4)	12 (27.9)	53 (21.6)	3 (8.1)	37 (23.7)	19 (15.1)

Property	10 (7.1)	12 (8.5)	17 (6.9)	5 (14.3)	14 (5.9)	8 (18.6)	20 (8.2)	2 (5.4)	12 (7.7)	10 (7.9)
Drug	17 (12.1)	10 (7.0)	24 (9.7)	3 (8.6)	23 (9.6)	4 (9.3)	24 (9.8)	3 (8.1)	17 (10.9)	10 (7.9)
Other	8 (5.7)	5 (3.5)	12 (4.9)	1 (2.9)	11 (4.6)	2 (4.7)	13 (5.3)	0 (0.0)	9 (5.8)	4 (3.2)
Current Sentence Length										
<1 Year	3 (2.2)	2 (1.4)	5 (2.0)	0 (0.0)	4 (1.7)	1 (2.3)	4 (1.6)	1 (1.7)	4 (2.6)	1 (0.8)
1 to 5 Years	32 (23.5)	19 (13.2)	47 (19.2)	4 (11.4)	45 (19.1)	6 (13.6)	48 (19.8)	3 (8.1)	34 (22.2)	17 (13.4)
6-10 Years	24 (17.6)	23 (16.0)	43 (17.6)	4 (11.4)	43 (18.2)	4 (9.1)	39 (16.0)	8 (21.6)	27 (17.6)	20 (15.7)
11-20 Years	26 (19.1)	40 (27.8)	54 (22.0)	12 (34.3)	51 (21.6)	15 (34.1)	54 (22.2)	12 (32.4)	30 (19.6)	36 (28.3)
>20, but not life	30 (22.1)	35 (24.3)	57 (23.3)	8 (22.9)	53 (22.5)	12 (27.3)	57 (23.5)	8 (21.6)	34 (22.2)	31 (24.4)
Life Sentence	21 (15.4)	25 (17.4)	39 (15.9)	7 (20.0)	40 (16.9)	6 (13.6)	41 (16.9)	5 (13.5)	24 (15.7)	22 (17.3)

Note. $p < .01$; $**p < .001$

Table 32

Relationship Between Prison Status and Prior Criminal Involvement by Incarcerated Women (N = 183) and Sexual Experiences in Prison

	Any-sex		Predatory		Victim		Bartered		Consensual	
	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
	N=77 (%)	N=106 (%)	N=178 (%)	N=5 (%)	N=134 (%)	N=49 (%)	N=165 (%)	N=18(%)	N=98 (%)	N=85 (%)
Self Reported Criminal Activity¹										
Violent	30 (42.3)	55* (60.4)	83 (52.9)	2 (40.0)	61 (50.8)	24 (57.1)	73 (50.3)	12 (70.6)	37 (41.6)	48** (65.8)
Non-Violent	57 (82.6)	82 (91.1)	135 (87.7)	4 (80.0)	101 (86.3)	38 (90.5)	123 (86.6)	16 (94.1)	73 (83.9)	66 (91.7)
Sexual	7 (10.8)	8 (9.3)	14 (9.6)	1 (20.0)	12 (10.8)	3 (7.5)	1 (10.4)	1 (6.2)	8 (9.6)	7 (10.3)
Number of Prior Incarcerations²										
None	17 (34.7)	25 (32.9)	42 (34.4)	0 (0.0)	30 (33.7)	12 (33.3)	37 (33.6)	5 (33.3)	22 (34.4)	20 (32.8)

One	3 (6.1)	9 (11.8)	12 (9.8)	0 (0.0)	5 (5.6)	7 (19.4)	9 (8.2)	3 (20.0)	6 (9.4)	6 (9.8)
Two	0 (0.0)	6 (7.9)	6 (4.9)	0 (0.0)	4 (4.5)	2 (5.6)	5 (4.5)	1 (6.7)	1 (1.6)	5 (8.2)
Three to Eight	16 (32.7)	21 (27.6)	37 (30.3)	0 (0.0)	29 (32.6)	8 (22.2)	34 (30.9)	3 (20.0)	19 (29.7)	18 (29.5)
Nine or More	13 (26.5)	15 (19.7)	25 (20.5)	3 (100.0)*	21 (23.6)	7 (19.4)	25 (22.7)	3 (20.0)	16 (25.0)	12 (19.7)
Previous Parole or Probation Violation										
One or More	41 (53.2)	59 (55.7)	96 (53.9)	4 (80.0)	74 (55.2)	26 (53.1)	92 (55.8)	8 (44.4)	52 (53.1)	48 (56.5)
Current Most Serious Offense										
Violent	18 (23.4)	30 (28.3)	48 (27.0)	0 (0.0)	31 (23.1)	17 (34.7)	42 (25.5)	6 (33.3)	23 (23.5)	25 (29.4)
Potentially Violent	10 (13.0)	25 (23.6)	34 (19.1)	1 (20.0)	24 (17.9)	11 (22.4)	29 (17.6)	6 (33.3)	16 (16.3)	19 (22.4)
Other Crimes	9 (11.7)	5 (4.7)	14 (7.9)	0 (0.0)	14 (10.4)	0 (0.0)	14 (8.5)	0 (0.0)	9 (9.2)	5 (5.9)
Against Person										
Sex	1 (1.3)	0 (0.0)	1 (0.6)	0 (0.0)	1 (0.7)	0 (0.0)	1 (0.6)	0 (0.0)	1 (1.0)	0 (0.0)
Property	25 (32.5)	19 (17.9)	42 (23.6)	2 (40.0)	37 (27.6)	7 (14.3)	42 (25.5)	2 (11.1)	29 (29.6)	15 (17.6)
Drug	11 (14.3)	25 (23.6)	34 (19.1)	2 (40.0)	24 (17.9)	12 (24.5)	32 (19.4)	4 (22.2)	16 (16.3)	20 (23.5)
Other	3 (3.9)	2* (1.9)	5 (2.8)	0 (0.0)	3 (2.2)	2 (4.1)	5 (3.0)	0 (0.0)	4 (4.1)	1 (1.2)
Current Sentence Length										
<1 Year	13 (17.6)	10 (9.4)	21 (12.0)	2 (40.0)	20 (15.3)	3 (6.1)	20 (12.3)	3 (16.7)	14 (14.7)	9 (10.6)
1 to 5 Years	43 (58.1)	34 (32.1)	76 (43.4)	1 (20.0)	58 (44.3)	19 (38.8)	71 (43.8)	6 (33.3)	52 (54.7)	25 (29.4)
6-10 Years	7 (9.5)	27 (27.5)	33 (18.9)	1 (20.0)	25 (19.1)	9 (18.4)	32 (19.8)	2 (11.1)	11 (11.6)	23 (27.1)
11-20 Years	3 (4.1)	16 (15.1)	18 (10.3)	1 (20.0)	10 (7.6)	9 (18.4)	14 (8.6)	5 (27.8)	8 (8.4)	11 (12.9)
>20, but not life	5 (6.8)	13 (12.3)	18 (10.3)	0 (0.0)	14 (10.7)	4 (8.2)	17 (10.5)	1 (5.6)	6 (6.3)	12 (14.1)
Life Sentence	3 (4.1)	6** (5.7)	9 (5.1)	0 (0.0)	4 (3.1)	5 (10.2)	8 (4.9)	1 (5.6)	4 (4.2)	5** (5.9)

Note. * $p < .01$; ** $p < .001$ ¹N= 162 due to missing data. ²N= 125 due to missing file data.

As with the male inmates, there was little association between most of the criminogenic risk factors and sexual behavior in prison. Prior involvement in a violent crime was associated with involvement in consensual sex while incarcerated for the female inmates. However as with the male inmates, patterns of sexual behavior in prison were unrelated to the number of prior incarcerations that these women had experienced, their prior supervision failures on parole or probation, their most serious instant offense, and the current length of their sentences.

Outcomes Associated with Institutional Nonsexual Victimization, Violence, and Gang Affiliation

Male and female nonsexual victimization in prison. Wolff, Blitz, Seigel and Bachman (2007) studied victimization in prison across a single state system and found that the 6 month prevalence of inmate-on-inmate physical victimization was 21% with this rate being comparable for male and female populations. However, physical assaults on males were more likely to involve the use of a weapon¹⁴. In addition, although male and female inmates were victimized by correctional officers, male inmates reported being physically assaulted by a staff member at a rate that was 3 times higher than for the female inmates (Wolff et al., 2007).

Demographic and personal characteristics have been found to differentiate inmates who are at higher and lower risk for physical victimization while imprisoned. Wolff, Shi and Bachman (2008) found that Hispanic and white inmates reported higher rates of inmate physical victimization than did African American inmates. Younger inmates also have been found to be at higher risk for personal and property crime (Kerbs and Jolley, 2007; Wolff & Shi, 2008; Wooldredge, 1998). Kerbs and Jolley (2007) found that 0.8% of inmates over the age of 50 reported having been “punched, kicked, pushed or attacked without a weapon in the past year, primarily by younger inmates.”¹⁵

Recently, Wolff and Shi (2009) identified seven distinct types of physical victimization encountered in prison environments. They found that theft (24.3%), being threatened or harmed with a knife or shank (12.4%), and being slapped, hit, kicked, or bit (10.2%) were the most common forms of physical victimization reported by the male inmates. The majority of the male inmates reported experiencing one of two types of physical victimization over the past six months with most stating that they did not report the incident to the authorities unless they were seriously injured. Wolff and Shi also found that the majority of the physical assaults occurred during the day in yard and recreational areas and were likely to involve gang-affiliated inmates who were acquainted with the victim. Only a minority of the victims reported knowing why they were assaulted but of those who offered a reason, one third

stated that the assault was motivated by racial or ethnic factors. Most victims were found to protect themselves by avoiding certain people and areas and generally isolating themselves from others.

Male and female sexual victimization in prison. Prior research has indicated that white inmates (Austin, Fabelo, Gunter, & McGinnis 2006; Chonco, 1989, Hensley, Castle & Tewksbury, 2003; Struckman- Johnson & Struckman-Johnson, 2000a, 2000b, 2006; Tewksbury, 1989 a, 1989b), who are diminutive in size (Lockwood, 1980; Chonco, 1989), and who are physically attractive (Chonco, 1989; Lockwood, 1980) are at greater risk for being sexually assaulted while imprisoned. Sexual orientation has also been found to be associated with risk for sexual victimization. Non-heterosexual inmates report higher rates of sexual assault in prison (Bowker, 1980; Hensley et al., 2003; Nacci & Kane, 1983; Struckman- Johnson & Struckman-Johnson, 2006; Wooden & Parker, 1982) with transgendered inmates reporting a 41% rate of sexual assault while incarcerated. This rate is 20 times higher than the 2% rate found among a random sample of inmates in the same prison system (Jenness, Maxson, Matsuda & Sumner, 2006).

In the BJS victimization study (2007, 2008), rates of sexual victimization were found to be largely unrelated to facility characteristics and more strongly related to inmate characteristics. These inmate characteristics included gender (women higher), race (multiple race higher), age (younger inmates higher), education (college education higher), sexual orientation (non-heterosexual higher), number of prior sexual partners (more than 21 sexual partners previously higher), prior experience with sexual assault in the community (prior sexual assault higher), and prior victimization experience in prison (prior prison assault higher).

Wolff et al. (2007) found that inmates who suffered from a mental disorder, who had attained higher levels of education, and who had experienced sexual victimization in the past were at significantly higher risk for sexual victimization while incarcerated. Male inmates who were involved in staff on inmate sexual victimization tended to be younger, to be African American, and to have experienced prior treatment for depression, anxiety and Post-Traumatic Stress Disorder. They were also found to have been convicted of a prior violent crime, to believe that gang activity was high in their particular institution, and to have experienced sexual victimization prior to the age of eighteen years. Wolff et al. (2008) later studied the context and aftermath of the incidents of sexual assault reported in their study. They found that the risk for sexual victimization between inmates was greatest between 6 PM and midnight and for sexual victimization involving staff between noon and 6 PM. Sexual orientation and mental illness were identified as the motivating factor in over one quarter of the incidents. Reactions of fear, nightmares, and flashbacks were reported by a majority of the victims.

Gang affiliation and prison violence. The impact of gang affiliation on prison violence was first observed in the 1970s when Texas, California, and Ohio had a series of prison homicides, each of which were found to be gang related (Crouch & Marquart, 1989; Irwin, 1980; Jacobs, 1977). Sheldon (1991) conducted one of the first studies of gang members in prison and found they had more total arrests, more juvenile court referrals, more felony arrests, and were more likely to have used a weapon during their last offense. These gang members were also found to be involved in more disciplinary actions including drug infractions and fighting than non-gang members. More recently, Gaes et al. (2002) used three-tiered data from the Federal Bureau of Prisons to evaluate both gang membership and gang embeddedness as it impacted on levels of rule infractions and violence throughout the federal prison system. As with street gang membership, they found that gang affiliation increased violent and almost all other forms of prison misconduct. This association was found to exist even when they controlled for individual risk factors including previous history for violence and current security-custody classification. Gaes et al. (2002) also found that gang embeddedness was associated with violence levels in prison. Core members were more likely than peripheral members to engage in violent misconduct, and peripheral members were more likely than non members to commit violent acts while incarcerated.

Study Analyses. The data concerning violence and victimization in prison were collected from two sources. Self-report data was collected from each inmate concerning their perpetration and victimization of threatened, physical, and sexual violence while imprisoned using the *Prison Violence Inventory* (PVI) (Warren, 2002). Gang participation and status as a sex offender were also collected from prison databases maintained both by Ohio and Texas. These behavioral domains were assessed first by gender (see Table 33) and then assessed in terms of their relationship to the various sub-categories of sexual behavior in prison (see Tables 34 and 35).

Table 33

Frequency of Institutional Misconduct Reported by Men (N = 288) and Women (N = 183)

	Men		Women		Effect Size	
	N	%	N	%	χ^2	Φ
Perpetration–Self Report						
Threatened Prison Violence (PVI)	162	57.2	39	21.5	57.29**	-0.35**
Physical Prison Violence (PVI)	199	70.3	43	23.8	95.10**	-0.46**
Sexual Violence/Harassment in Prison (SAP)	35	12.2	5	2.7	12.78**	-0.17**
Relational Aggression in Prison (PVI)	151	53.5	70	38.7	9.77**	-0.15**

Victimization						
Threatened Prison Violence (PVI)	187	66.1	66	36.5	39.05**	-0.29**
Physical Prison Violence (PVI)	191	67.5	60	33.1	52.43**	-0.34**
Sexual Violence/Harassment in Prison (SAP)	44	15.3	49	26.8	9.34**	0.14**
Relational Aggression in Prison (PVI)	238	84.4	135	74.6	6.78**	-0.12**
Sexual Offending						
Current Sex Offense	56	19.4	1	0.5	37.57**	-0.28**
Any History of Sex Offense (self or file report)	75	26.0	15	8.2	23.05**	-0.22**
Gang Member						
	28	9.9	5	2.8	8.36**	-0.13**

Note. * $p < .01$; ** $p < .001$.

The male inmates reported significantly higher rates of institutional violence both as perpetrators and victims across all four categories of behavior, i.e., threatened violence, physical violence, sexual violence, and relational violence. The most commonly referenced form of violence was physical assault followed by threatened violence and various forms of relational violence. The male inmates also reported higher levels of all forms of victimization with the exception of sexual victimization in which females had higher rates. Males also endorsed significant levels of relational disturbance, physical assault, and threatened violence. One fifth of the male inmates reported a current or past incarceration for a sex offense. Ten percent of the male inmates and 3% of the female inmates self identified as being a member of a gang during their current incarceration.

Table 34

Relationship Between Institutional Misconduct Reported by Incarcerated Men (N = 288) and Sexual Experiences in Prison

Risk Factor	Any-sex		Predatory		Victim		Bartered		Consensual	
	No N=143 (%)	Yes N=145 (%)	No N=253 (%)	Yes N=35 (%)	No N=244 (%)	Yes N=44 (%)	No N=251 (%)	Yes N=37 (%)	No N=160 (%)	Yes N=128 (%)
Perpetration–Self Report										
Threatened Prison Violence (PVI)	61 (43.0)	101** (71.6)	134 (53.6)	28** (84.8)	134 (55.6)	28(66.7)	129 (52.2)	33**(91.7)	69(43.4)	93**(75.0)
Physical Prison Violence (PVI)	83 (58.5)	116** (82.3)	169 (67.6)	30** (90.9)	167 (69.3)	32 (76.2)	166 (67.2)	33**(91.7)	95 (59.7)	104**(83.9)
Sexual Violence/Harassment in Prison (SAP)	--	--	--	--	20 (8.2)	15**(34.1)	19 (7.6)	16**(43.2)	3 (1.9)	32**(25.0)
Relational Aggression in Prison (PVI)	59 (41.5)	92** (65.7)	128 (51.2)	23* (71.9)	120 (50.0)	31**(73.8)	124 (50.4)	27**(75.0)	68 (42.8)	83**(67.5)
Victimization										
Threatened Prison Violence (PVI)	77 (54.2)	110** (78.0)	156 (62.4)	31** (93.9)	154 (63.9)	33(78.6)	152 (61.5)	35**(97.2)	89 (56.0)	98**(79.0)
Physical Prison Violence (PVI)	79 (55.6)	112** (79.4)	162 (64.8)	29** (87.9)	158(65.65)	33(78.6)	157 (63.6)	34**(94.4)	91 (57.2)	100**(80.6)
Sexual Violence/Harassment in Prison (SAP)	--	--	29 (11.5)	15** (42.9)	--	--	32 (12.7)	12**(32.4)	14 (8.8)	3** (23.4)
Relational Aggression in Prison (PVI)	106 (74.6)	132** (94.3)	206 (82.4)	32**(100.0)	198 (82.5)	40* (95.2)	202 (82.1)	36**(100)	121 (76.1)	117**(95.1)
Sexual Offending										

Current Sex Offense	30 (21.0)	26 (17.9)	52 (20.6)	4 (11.4)	44 (18.0)	12 (27.3)	53 (21.1)	3 (8.1)	37 (23.1)	19 (14.8)
Any History of Sex Offense (self or file report)	40 (28.0)	35(24.1)	69 (27.3)	6 (17.1)	62 (25.4)	13 (29.5)	69 (27.5)	6 (16.2)	47 (29.4)	28 (21.9)
Gang Member	10 (7.0)	18 (12.7)	23 (9.2)	5 (14.7)	23 (9.5)	5 (11.6)	18 (7.3)	10** (27.0)	10 (6.3)	18* (14.4)

Note. * $p < .01$; ** $p < .001$.

Table 35

Relationship Between Institutional Misconduct Reported by Incarcerated Women (N = 183) and Sexual Experiences in Prison

Risk Factor	Any-sex		Predatory		Victim		Bartered		Consensual	
	No N=77 (%)	Yes N=106 (%)	No N=178 (%)	Yes N=5 (%)	No N=134 (%)	Yes N=49 (%)	No N=165 (%)	Yes N=18 (%)	No N=98 (%)	Yes N=85 (%)
Perpetration–Self Report										
Threatened Prison Violence (PVI)	5 (6.5)	34**(32.7)	36 (20.5)	3* (60.0)	22 (16.7)	17**(34.7)	31(18.9)	8**(47.1)	7(7.1)	32**(38.6)
Physical Prison Violence (PVI)	8 (10.4)	35**(33.7)	39 (22.2)	4** (80.0)	28 (21.2)	15 (30.6)	33 (20.2)	10** (58.8)	9 (9.2)	34**(41.0)
Sexual Violence/Harassment in Prison (SAP)	--	--	--	--	2 (1.5)	3 (6.1)	2 (1.2)	3** (16.7)	0 (0.0)	5* (5.9)
Relational Aggression in Prison (PVI)	17 (22.1)	53**(51.0)	65 (36.9)	5** (100.0)	40 (30.3)	30**(61.2)	56 (34.1)	14**(82.4)	28 (28.6)	42**(50.6)
Victimization										
Threatened Prison Violence (PVI)	13 (16.9)	52**(51.0)	61 (34.7)	5**(100.0)	34 (25.8)	32**(65.3)	55 (33.5)	11* (64.7)	20 (20.4)	46**(55.4)

Physical Prison Violence (PVI)	13 (16.9)	47**(45.2)	56 (31.8)	4*(80.0)	34 (25.8)	26**(53.1)	49 (29.9)	11**(64.7)	17 (17.3)	43**(51.8)
Sexual Violence/Harassment in Prison (SAP)	--	--	46 (25.8)	3 (60.0)	--	--	41 (24.8)	8 (44.4)	21 (21.4)	28 (32.9)
Relational Aggression in Prison (PVI)	48 (62.3)	87**(83.7)	130 (73.9)	5 (100.0)	92 (69.7)	43*(87.8)	119 (72.6)	16 (94.1)	64 (65.3)	71**(85.5)
Sexual Offending										
Current Sex Offense	1 (1.3)	0 (0.0)	1 (1.6)	0 (0.0)	1 (0.7)	0 (0.0)	1 (0.6)	0 (0.0)	1 (1.0)	0 (0.0)
Any History of Sex Offense (self or file report)	7 (9.1)	8 (7.5)	14 (7.9)	1 (20.0)	12 (9.0)	3 (6.1)	14 (8.5)	1 (5.6)	8 (8.2)	7 (8.2)
Gang Member	0 (0.0)	5* (4.9)	5 (2.9)	0 (0.0)	3 (2.3)	2 (4.1)	4 (2.5)	1 (5.9)	0 (0.0)	5* (6.1)

Note. * $p < .01$; ** $p < .001$.

The male inmates reported consistent associations between various types of violent behavior in prison and their sexual behavior. Both the any-sex and the predatory sex categories were associated with the perpetration of threatened, physical and relational violence against other inmates and being the victim of threatened, physical and relational forms of violence by others. Among the male inmates, predatory sexual behavior was also highly correlated with having been the victim of sexually predatory behavior. Being the victim of coerced sexual behavior was also related to the perpetration of relational violence and being the victim of relational violence. Bartered sex correlated with the perpetration of threatened, physical sexual and relational violence, being victimized by threatened, physical sexual and relational violence; and self reported gang participation during their current incarceration. Consensual sex reported by the male inmates was associated with the full array of disruptive institutional behaviors including the perpetration of threatened, physical, sexual and relational violence; being the victim of threatened, physical, sexual, and relational victimization; and self reporting gang membership during their current incarceration.

The same comingling of sexual behavior with the various types of institutional violence was observed among the female inmates. Predatory sexual behavior was associated with perpetrating threatened, physical, and relational violence against other inmates; being the victim of threatened, physical and relational violence while incarcerated; and self reported gang involvement in prison. Being sexually victimized was associated with threatened and relational violence against others while also being the victim of threatened, physical, and relational violence. Being involved in bartered and consensual sexual activity was similarly associated with both perpetrating and being the victim of other types of violence and aggression along with being gang involved during the current period of incarceration.

Conclusions

Undoubtedly, the most significant finding of this chapter is the contextual nature of the predatory sex that is occurring in prison and the self initiated risk behaviors that are demonstrated by many inmates. Sexual behavior in prison, whether consensual or not, is highly correlated with other types of physical and interpersonal violence in the institutional setting. The male and female inmates who reported being sexually active in prison simultaneously reported being involved in the perpetration of more threatened, physical, and relational violence against other inmates and being victimized by other forms of violent behavior. The males who reported being sexually victimized also report having perpetrated sexual violence against others and having both perpetrated and been the victim of various forms of relational violence during the same incarceration. Among the female inmates, being sexually victimized was associated with having perpetrated threatened and relational violence against others and being the victim of other forms of threatened, physical and relational violence. These

associations between coerced sexuality and other forms of violence and aggression in prison suggest that there is a violent sub-culture in prison and that sexual violence and victimization are two significant aspects of involvement in it. It also underscores that role that the victim plays in making themselves vulnerable to sexual and other forms of victimization through aspects of their own behavior.

In contrast, our data did not support any predictive rigor in the criminogenic factors that are often used in prison risk and classification systems. Sexual activity as manifest by both the male and female inmates was not associated with the number of prior incarcerations, nature of the instant offense, past supervision failures, and/or length of the current sentence. These findings suggest that sexual activity in prison is not a simple and straightforward attempt to release pent up sexual feelings, nor a personal assimilation of the same sex encounters being observed over time. Rather it seems to represent one particular form of prison adaptation that is further characterized by other forms of physical violence and interpersonal aggression. Interestingly, the relational forms of violence often attributed to women were found to occur even more often among the male inmates in our sample.

Our analyses did document an association between domestic violence in the community and sexual activity in prison. For the male inmates, being the victim of negotiated abuse in a domestic relationship, perpetrating physical abuse against a partner, and experiencing physical injury in the context of battering were all associated with the various types of sexual behavior experienced while incarcerated. Similarly for the female inmates, being involved in domestic violence as either a victim or perpetrator was associated with the any-sex, bartered, and consensual sub-categories of sexual behavior in prisons. These findings suggest that the disruptive nature of the sexual behavior that occurs in prison might be a replication and continuation of the unstable and mutually violent relationships that occurred in the community. This type of hypothesis provides some support for the attributional hypothesis of importation theory which posits that the behaviors manifest in prison are the product of individual characteristics and tendencies rather than any adjustments motivated entirely by the characteristics and demands of the prison environment.

The analyses in this chapter further reinforce the associations between bartered sex in prison and other forms of predatory behavior. Among our two samples, bartered sex was found to be associated with perpetrating physical abuse against a domestic partner (male inmates), evoking greater injury to a domestic partner (female inmates), gang membership (male inmates), and most domains of threatened, physical sexual and relational predation among both the male and female inmates. It was also associated with threatened and physical victimization among the female inmates and

threatened, physical, sexual, and relational violence among the male inmates. These associations, while bilateral in their relation to predatory and victimized behavior, argue against the definition of bartering as a purely coerced activity that is forced upon the individual through the exertion of power and/or need. Rather it appears to be another form of exploitation or adaptation which is more common among both male and female inmates who are more aggressive in their behavior both while living in the community and during incarceration.

Finally, our data support both the gender threshold and gender effect outcomes observed in other prison research. Clearly, the male inmates report higher rates of institutional violence both as perpetrators and victims across all four categories of prison violence. They also report more significant correlations between their violent and sexual behavior in prison. However, this same pattern of associations between community and prison violence and various types of sexual behavior in prisons can also be observed among the female inmates, albeit at a reduced level. However, unlike with the male inmates, women who self reported prior violent offending were more likely to be involved in consensual sex in prison but are not at higher risk for sexual victimization while incarcerated. Taken at face value, this finding suggests that while community and prison violence is associated sexual behavior in prison for male and female inmates, self reported violent crime in the community appears to serve as a protective factor against sexual victimization in prison for women and as a risk factor for sexual victimization for men.

Chapter Six

Sex Risk Markers for Sexual Predation and Victimization

Sexually coercive behavior has been associated with a particular pattern of impersonal sexuality that has been observed among non-offending promiscuous males and females, delinquent youth, incarcerated adults, and individuals who have been charged specifically with sexual assault or rape. The name given this construct has varied over time with some of the more recent research referencing the sexual promiscuity path to sexual aggression (Malamuth, Heavey & Linz, 1993), the predominance of a mating strategy over parental investment in sexual behavior (Lalumière, Harris, Quinsey & Rice, 2005), and the relative and situational correlates of total sexual outlet (TSO) (Kafka, 1997). Unrelated to the issue of sexual arousal during a rape, these behavioral descriptors refer to the general pattern of sexual adaptation which characterize an individual and the possible relationship between precocious and impersonal sexuality and sexually coercive behavior.

Outcomes Associated with Indices of Impersonal Sex and Sexual Drive

The relationship of precocious and impersonal sex to rape. As one of the first cohesive theories of rape behavior, Malamuth et al. (1993) proposed a three component theory made up of six measurable risk factors. One of the predominant risk factors sought to describe the individual's prior sexual experience as it might reflect some aspect of motivation for coercive sex. Initially, this risk factor was measured by Malamuth and his colleagues using the *Sexual Behavior Inventory* (Bentler, 1968) which queried and quantified experience with conventional sexual experiences including fondling, oral sex, and sexual intercourse. Over time, he and his co-authors began to broaden this domain of behavior and to position it more centrally in their theory as one of the three primary pathways to sexual aggression. The assessment of the new broader construct was expanded to include the individual's age at first intercourse and the total number of lifetime sexual partners. The meaning of the construct was also reformulated. Originally conceptualized as a proxy measure for the amount of opportunity an individual had to rape, it came to be thought of as a form of sexual adaptation which reflected a preferential style with which an individual experienced and sought out sexual contact. Based upon this motivational theory, they posited that it was not sex drive per se that was significant in predicting future sexual coercion but rather the individual's attraction to impersonal sex. This preference for impersonal sex was seen as a factor that motivated sexual involvement with more partners, usually devoid of true intimacy, and which inevitably was characterized by a "strong connection between sex and power" (Malamuth, 1993 et al., p. 89).

Using latent variable structural equation modeling, Malamuth et al. (1993) explored their theory using data collected from a large national sample of male college students. They found that individuals who were above the mean on both sexual promiscuity and hostile masculinity were also significantly higher on sexual aggression as self reported on the *Sexual Experiences Survey* (SES). When they applied the theory to longitudinal data, they found that earlier self-reports of sexual aggression were predictive of adult sexual and non-sexual aggression toward women and that it correlated with maladaptive narcissism and an inability to experience or express feelings of empathy.

Knight and his colleagues later sought to replicate Malamuth's model using the *Multidimensional Assessment of Sex and Aggression* (MASA), a measure designed to quantify the various behaviors used in classifying rapists according to the MTC:3R rape classification system (Knight & Cerce, 1999). They found across studies that hyper-sexuality paired differentially with other behaviors in forming the motivational nexus for their primary rapist types (Johnson & Knight, 1998; Knight & Sims-Knight, 1999; Knight & Sims-Knight, 2003; Knight & Sims-Knight, 2004; Knight & Guay, 2006). The non-sadistic sexual rapists were found to be characterized primarily by a hypersexual motivation for rape with few other intervening factors. The opportunistic rapist was found to manifest a combination of impulsive and antisocial motivations. The angry and vindictive rapist types were found to be characterized by a combination of both motivational themes and their behavior was associated with the highest levels of offense related violence and associated victim injury.

Mating effort and parental investment. Lalumière et al. (2005) developed a construct they refer to as mating effort to explain individual differences in a male's propensity toward sexual aggression. In developing their theory, the authors explore the sexual behavior associated with various aspects of delinquency and antisocial behavior. They reference the research that underscores the relationship between aggressive antisocial behavior and early sexual intercourse (Bingham & Crockett, 1996), childhood aggression and early pregnancy (Serbin et al., 1998), and the association between fathering children in adolescence and involvement in serious crime (Stouthamer-Loeber & Wei, 1998). Citing the Oregon Youth Study sample, they observe that the boys who became fathers before the age of 20 were characterized by lower socioeconomic status, parental antisocial behavior, poor parental discipline, deviant peer involvement, academic failure, and antisocial behavior (Fagot, Pears, Capaldi, Crosby & Level, 1998). They also refer to the links found between the early onset of sexual behavior, number of sexual partners, criminality, and drug use compounded by the association found between gang membership and total number of lifetime sexual partners (Ellis & Walsh, 2000; Palmer & Tilley, 1995). Lalumière and Quinsey (1998) examined the attitudes and behavior of convicted rapists and found that rapists, when compared to non-sexual offenders, self reported an

earlier age of first intercourse, more life-time sexual partners, and higher degrees of involvement in uncommitted and short-term sexual relationships.

Research on delinquency and sexual promiscuity among women has been more limited although clinical practice and social welfare programming underscores the relationship between early pregnancy and involvement in drug use and other antisocial behavior with delinquent peers. The Dunedin study (Moffitt et al., 2001) found that conduct disordered females were more likely to develop physically and enter menses at a younger age, to become precociously sexually active with older male youth, to have more children while still in adolescence, and to more often become involved with and conceive children with males who were also antisocial in attitudes and behaviors. Moreover, the original description of the psychopathic female offered by Cleckley in 1941 portrayed the highly promiscuous behavior of two women and the lack of congruity between this behavior and their developmental history and life situation in adulthood.

Hyper-sexuality desire. Kafka was the first to coin the term hypersexual desire and to use it in informing treatment with men who reported life difficulties associated with particularly high rates of sexual interest and activity (Kafka, 1991; Kafka, 1994; Kafka, 1997; Kafka & Prentky, 1992a, 1992b; Kafka & Prentky, 1994). Referencing earlier research by Krafft-Ebing (1886), Kinsey, Pomeroy, & Martin (1948), Janus and Janus (1993), and Laumann, Gagnon, Michael and Michaels (1994), Kafka concludes that sexual response among men is best reflected by a continuous frequency distribution with some degree of overrepresentation at the upper ends of the distribution. Based upon a survey of 5300 males, Kinsey, Pomeroy & Martin (1948) found that the mean number of total sexual outlets (TSO) reported by males aged 14 through 30 was 2.14 per week. For males aged 15 through 85, the total number of sexual experiences declined only slightly to 1.99 per week. In their study of 1860 males, Janus and Janus (1993) found that 15% of males aged 18 through 50 years reported daily sexual activity. Kinsey, Pomeroy, Martin and Gebhard (1953), reporting on a sample of 5940 females, found the total sexual outlet for married women to be 2.2 sexual experiences per week for females aged 16 through 20 years, declining to 1.0 for ages 41 to 45 years, and 0.5 by the age of 60 years.

Based upon the convergence of behaviors identified in these large samples, Kafka identified a pattern of sexual behavior that he encountered in his treatment activities. Defined as a pattern of sexual behavior that reflected a minimum of 7 total sexual outlets (TSO) per week maintained over a six month period since the age of 15 years, he began a series of studies to explore the relationship of this condition to various paraphilic and non-paraphilic sexual disorders. When applying this definition to the men that he encountered in his clinical practice, he observed that it was often associated with

compulsive masturbation, protracted promiscuity, and dependence on pornography. When he compared this group to men who presented with a diagnosable paraphilic disorder, he found that there was no difference between the two groups in terms of amount of preferred sexual activity. Both groups reported a modal maximum frequency of two orgasms per day and a mean TSO of 7 or 8 orgasms each week over the six month period preceding their evaluation.

Based upon his research, Kafka (1997) recommended further research into the relationship between high levels of sexual outlet and impulsivity and aggression. He referenced the documented co-occurrence of heightened sexual desire and aggression with the dysregulation of the monoaminergic activity of the brain and the powerful use of serotonin reuptake inhibitors in the treatment of compulsive sexual disorders. Along similar lines, he references the earlier Kinsey study which found that almost half of the men involved in the “underworld occupations” reported a persistent TSO of seven or more orgasms a week.

Study Analyses. In the current study, we examined correlates of precocious sexuality, sexual drive, and mating strategy as it was associated with the various types of sexual behavior in prisons. We examined these constructs using both self report information and clinical assessment. The self-report information derived from items in the *Personal Background Information Survey* (PBIS) and the clinical coding was conducted as part of scoring of the *Psychopathy Checklist-Revised 2* (PCL-R-2).

Table 36

Frequency of Precocious Sexuality, Hyper-sexuality, and Mating Strategy of Incarcerated Men (N=288) and Women (N=183)

	Men		Women		χ^2	Φ
	N	%	N	%		
Race						
White	123	43.0	95	51.9	4.43	0.10
Other	52	18.2	23	12.6		
Black	111	38.8	65	35.3		
	M	SD	M	SD	T	
Age	37.0	10.5	37.8	10.7	-0.80	
Weight (lbs)	186.7	37.8	168.4	40.2	4.63**	
Height (inches)	67.1	9.7	64.2	3.1	4.51**	
BMI	30.2	7.7	28.8	6.8	1.89	
Self-reported Sexual Orientation	N	%	N	%	χ^2	Φ

Heterosexual	266	96.7		122	71.3		60.06**	0.37**
Bisexual	6	2.2		34	19.9			
Homosexual	3	1.1		15	8.8			
Age of First Experience								
< 10 Years	38	13.2		13	7.1		54.32**	0.34**
11-12 Years	64	22.2		10	5.5			
13-14 Years	99	34.4		48	26.2			
15-16 Years	46	16.0		62	33.9			
17-18 Years	24	8.3		37	20.2			
>18 Years	17	5.9		13	7.1			
Promiscuity on PCL-R	121	42.5		55	30.2		7.08**	-0.12**
On Outside	N	%	M Rank	N	%	M Rank	Z [§]	
# Orgasms/week			260.65			173.05	-7.17**	
0	6	2.2		25	14.4			
1-3	61	21.9		75	43.1			
4-8	98	35.1		44	25.3			
9-12	70	25.1		13	7.5			
+ 12	44	15.8		17	9.8			
On Inside			265.67			169.91	-8.35**	
# Orgasms/week								
0	104	37.3		135	76.3			
1-3	113	40.5		35	19.8			
4-8	40	14.3		6	3.4			
9-12	9	3.2		1	0.6			
+ 12	13	4.7		0	0.0			
# Partners			257.93			190.46	-5.48**	
0-5	41	14.6		61	33.7			
6-14	63	22.4		55	30.4			
15-35	84	29.9		28	15.5			
>35	93	33.1		37	20.4			

Note. * $p < .05$, ** $p < .001$, [§] for Mann-Whitney U test, Z represents standard score of difference between ranks.

National surveys have indicated that rates of homosexual behavior are higher among males than females. For example, results from the Project HOPE International Survey of AIDS-Risk Behaviors indicates that 6.2% of males and 3.6% of females in the United States reported engaging in sexual activity with someone of the same sex in the past five years (Sell, Wells & Wypij, 1995). Our sample was characterized by an overrepresentation of females who self-described themselves as being either bisexual or homosexual. In our female sample, 8.8% of the women self identified as homosexual and 19.9 as bisexual (see Table 36). This pattern was not observed with the male sample in which 96.7% of the men described themselves as being heterosexual, 2.2% bisexual and 1.1% homosexual. Given the community rates of homosexuality this would suggest the opposite trend among the men with there being an underrepresentation of homosexual males in our prison sample.

Both our male and female sample reported becoming sexually active at early ages. Over a third of the male inmates (35.4%) reported having had their first sexual experience by the age of 12 years and 69.8% by the time they reached 14 years of age, significantly higher than national samples of 25% by age 15 (Mosher, Chandra, & Jones, 2005). This age was older for the female inmates with 38.8% of the female inmates having their first sexual experience by the time they reached the age of 14 years. However, by age 16, 72.7 of the women had become sexually active, significantly higher than the average of 26% by age 15 years in national samples (Mosher et al., 2005). Community surveys indicate that the average age of first sexual intercourse for males is 16.9 years and 17.4 years for females (AGI, 2002).

Gender differences were found in the coding of lifetime promiscuity on the PCL-R-2. This item is defined as involvement in impersonal, casual and trivial sexual encounters, the indiscriminant selection of sexual partners, and participation in frequent sexual infidelities and one night stands. Within our sample, 42.4% of the male inmates were assessed as demonstrating his type of sexual behavior over time in contrast to 30.2% of the female inmates. These differences were also supported by differences in total sexual outlet reported by the male and female inmates. The modal number of orgasms per week in the community for the male inmates was 4 to 8 per week and 1 to 3 for the female inmates. With hypersexual desire being defined by Kafka more than seven orgasms per week, 40.9% of the male inmates would be classified as manifesting this behavioral pattern and 17.3% of the female inmates. While in prison, the majority of male inmates remained orgasmic on a weekly basis (62.7%) while the majority of female inmates did not (24.7%).

The number of lifetime sexual partners self-reported by the inmates varied by gender. The modal number of lifetime sexual partners for the male inmates was more than 35. The modal response for the female

inmates was 0 to 5 lifetime partners. However, many of the female inmates reported having at least 15 sexual partners with 20.4% reported having over 35 partners prior to their incarceration.

The associations between these various indices of impersonal sex and sexual behavior in prison are summarized in Table 37.

Our data reflect racial differences in the sexual adjustment of male inmates during incarceration. Black inmates self reported higher rates of sexual activity in the any-sex, bartered sex, and consensual sex categories. The consensual category of behavior was the most significant with 48.8% of our black, male sample reporting involvement in consensual sexual activity while incarcerated. This contrasted to rates of 37.0% for white, male inmates, and 14.2% for other male racial groups combined. Age also impacted the various types of sexual behavior experienced. Younger male inmates self-reported higher rates of involvement in the any-sex, bartered, and consensual categories of behavior. Men under the age of 35 years were more likely to report sexual activity than men over the age of 35 years. Physical size was found to be associated only with self-report victimization. Specifically, men who weighted a mean of 172 pounds as contrasted to a mean of 189 pounds and who were a mean of 70.1 inches tall as contrasted to 66.6 inches tall reported higher rates of sexual victimization during incarceration.

Sexual orientation was associated with predatory sex and bartered sex only. None of the homosexual males self-reported any type of predatory or bartered sexual behavior toward or with other inmates or correctional staff. Homosexual male inmates did, however, self-report higher rates of self-report sexual victimization.

Young age at first sexual experience was unrelated to the various indices of sexual behavior in prison. However, being over the age of 18 years at the time of first sexual intercourse was found to be associated with three of the five categories of sexual activity in prisons. Males who became sexually active at an age older than expected according to social norms self-reported less consensual activity and no bartered sexual behavior during their current incarceration.

Number of orgasms experienced while living in the community was unrelated to all five subcategories of sexual activity while imprisoned. However, having more than 12 orgasms per week during incarceration was found to be associated with the any-sex, bartered and consensual sex categories, with each of these being associated with greater degrees of hyper-sexuality.

Table 37

Relationship between Precocious Sexuality, Hyper-sexuality and Mating Strategy of Incarcerated Men (N=288) by Sexual Experiences in Prison

	Any-sex		Predatory		Victim		Bartered		Consensual	
	No N=143 (%)	Yes N=145 (%)	No N=253 (%)	Yes N=35 (%)	No N=244 (%)	Yes N=44 (%)	No N=251 (%)	Yes N=37 (%)	No N=160 (%)	Yes N=128 (%)
Race										
White	63 (44.4)	60 (41.7)	114 (45.2)	9 (26.5)	98 (40.3)	25 (58.1)	115 (46.2)	8 (21.6)	76 (47.8)	47 (37.0)
Other	33 (23.2)	19 (13.2)	44 (17.5)	8 (23.5)	46 (18.9)	6 (14.0)	43 (17.3)	9 (24.3)	34 (21.4)	18 (14.2)
Black	46 (32.4)	65 (45.1)*	94 (37.3)	17 (50.0)	99 (40.7)	12 (27.9)	91 (36.5)	20 (54.1)*	49 (30.8)	62 (48.8)**
	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)
Age	38.7 (11.1)	35.3 (9.6)**	37.2 (10.7)	36.0 (8.9)	36.8 (10.8)	37.9 (8.5)	37.6 (10.7)	32.6 (7.4)**	39.0 (11.0)	34.5 (9.2)**
Weight	189.3 33.1)	184.1(41.9)	188.1 (36.8)	177.3 (43.2)	189.2(37.2)	172.1(38.4) **	186.9(37.5)	184.6(40.0)	189.2(32.9)	183.4(43.0)
Height	66.4 (5.8)	67.9 (12.4)	66.8 (7.4)	69.4 (18.8)	66.6 (7.6)	70.1 (17.4)*	66.9 (7.4)	68.5 (19.4)	66.6 (5.7)	67.8 (13.1)
BMI	30.7 (7.1)	29.6 (8.1)	30.4 (7.5)	28.5 (8.3)	30.8 (7.6)	26.8 (7.0)**	30.1 (7.5)	30.8 (9.1)	30.6 (7.1)	29.7 (8.3)
Self- reported Sexual Orientation										
Heterosexual	136 (98.6)	130 (94.9)	237 (97.9)	29 (87.9)	228 (97.9)	38 (90.5)	233 (97.5)	33 (91.7)	151 (98.1)	115 (95.0)
Bisexual	1 (0.7)	5 (3.6)	2 (0.8)	4 (12.1)	4 (1.7)	2 (4.8)	3 (1.3)	3 (1.3)	1 (0.6)	5 (4.1)
Homosexual	1 (0.7)	2 (1.5)	3 (1.2)	0 (0.0)**	1 (0.4)	2 (4.8)**	3 (1.3)	0 (0.0)**	2 (1.3)	1 (0.8)
Age of first Experience										
< 10 Years	14 (9.8)	24 (16.6)	34 (13.4)	4 (11.4)	31 (12.7)	7 (15.9)	32 (12.7)	6 (16.2)	16 (10.0)	22 (17.2)
11-12 Years	26 (18.2)	38 (26.2)	53 (20.9)	11 (31.4)	52 (21.3)	12 (27.3)	50 (19.9)	14 (37.8)	28 (17.5)	36 (28.1)
13-14 Years	48 (33.6)	51 (35.2)	87 (34.4)	12 (34.3)	89 (36.5)	10 (2.7)	85 (33.9)	14 (37.8)	53 (33.1)	46 (35.9)

15-16 Years	28 (19.6)	18 (12.4)	40 (15.8)	6 (17.1)	37 (15.2)	9 (20.5)	45 (17.9)	1 (2.7)	32 (20.0)	14 (10.9)
17-18 Years	18 (12.6)	6 (4.1)	23 (9.1)	1 (2.9)	21 (8.6)	3 (6.8)	22 (8.8)	2 (5.4)	19 (11.9)	5 (3.9)
>18 Years	9 (6.3)	8 (5.5)**	16 (6.3)	1 (2.9)	14 (5.7)	3 (6.8)	17 (6.8)	0 (0.0)*	12 (7.5)	5 (3.9)**
Promiscuity on PCL-R-2	58 (41.1)	63 (43.8)	109 (43.6)	12 (34.3)	105 (43.6)	16 (36.4)	109 (44.0)	12 (32.4)	66 (41.8)	55 (43.3)
On Outside	Any-sex		Predatory		Victim		Bartered		Consensual	
# Orgasms/week	No N=143 (%)	Yes N=145 (%)	No N=253 (%)	Yes N=35 (%)	No N=244 (%)	Yes N=44 (%)	No N=251 (%)	Yes N=37 (%)	No N=160 (%)	Yes N=128 (%)
0	4 (2.9)	2 (1.4)	6 (2.5)	0 (0.0)	6 (2.5)	0 (0.0)	5 (2.1)	1 (2.7)	4 (2.6)	2 (1.6)
2 (1.6)	38 (27.5)	23 (16.3)	52 (21.3)	9 (25.7)	52 (22.0)	9 (20.9)	56 (23.1)	5 (13.5)	43 (27.7)	18 (14.5)
4-8	52 (37.7)	46 (32.6)	90 (36.9)	8 (22.9)	81 (34.3)	17 (39.5)	90 (37.2)	8 (21.6)	59 (38.1)	39 (31.5)
9-12	25 (18.1)	45 (31.9)	62 (25.4)	8 (22.9)	60 (25.4)	10 (23.3)	58 (24.0)	12 (32.4)	29 (18.7)	41 (33.1)
+ 12	19 (13.8)	25 (17.7)	34 (13.9)	10 (28.6)	37 (15.7)	7 (16.3)	33 (13.6)	11 (29.7)	20 (12.9)	24 (19.4)
On Inside										
# Orgasms/week										
*0	65 (47.4)	39 (27.5)	97 (39.8)	7 (20.0)	88 (37.4)	16 (36.4)	95 (39.3)	9 (24.3)	74 (48.1)	30 (24.0)
1-3	54 (39.4)	59 (41.5)	96 (39.3)	17 (48.6)	95 (40.4)	18 (40.9)	96 (39.7)	17 (45.9)	61 (39.6)	52 (41.6)
4-8	12 (8.8)	28 (19.7)	35 (14.3)	5 (14.3)	35 (14.9)	5 (11.4)	36 (14.9)	4 (10.8)	13 (8.4)	27 (21.6)
9-12	1 (0.7)	8 (5.6)	7 (2.9)	2 (5.7)	6 (2.6)	3 (6.8)	5 (2.1)	4 (10.8)	1 (0.6)	8 (6.4)
+ 12	5 (3.6)	8 (5.6)**	9 (3.7)	4 (11.4)	11 (4.7)	2 (4.5)	10 (4.1)	3 (8.1)**	5 (3.2)	8 (6.4)**
# Partners										
0-5	22 (15.8)	19 (13.4)	36 (14.6)	5 (14.3)	29 (12.2)	12 (27.9)	39 (16.0)	2 (5.4)	29 (18.6)	12 (9.6)
6-14	29 (20.9)	34 (23.9)	53 (21.5)	10 (28.6)	53 (22.3)	10 (23.3)	48 (19.7)	15 (40.5)	29 (18.6)	34 (27.2)
15-35	43 (30.9)	41 (28.9)	74 (30.1)	10 (28.6)	75 (31.5)	9 (20.9)	75 (30.7)	9 (24.3)	46 (29.5)	38 (30.4)
>35	45 (32.4)	48 (33.8)	83 (33.7)	10 (28.6)	81 (34.0)	12 (27.9)*	82 (33.6)	11 (29.7)	52 (33.3)	41 (32.8)

Note. * $p < .05$ ** $p < .001$,[§]for Mann-Whitney U test, Z represents standard score of difference between ranks

Table 38

Relationship between Precocious Sexuality, Hyper-sexuality and Mating Strategy of Incarcerated Women (N=183) by Sexual Experiences in Prison

	Any-sex		Predatory		Victim		Bartered		Consensual	
	No N=77 (%)	Yes N=106 (%)	No N=178 (%)	Yes N=5 (%)	No N=134 (%)	Yes N=49 (%)	No N=165 (%)	Yes N=18 (%)	No N=98 (%)	Yes N=85 (%)
Race										
White	44 (57.1)	51 (48.1)	92 (51.7)	3 (60.0)	70 (52.2)	25 (51.0)	87 (52.7)	8 (44.4)	57 (58.2)	38 (44.7)
Other	4 (5.2)	19 (17.9)	23 (12.9)	0 (0.0)	14 (10.4)	9 (18.4)	20 (12.1)	3 (16.7)	8 (8.2)	15 (17.6)
Black	29 (37.7)	36 (34.0)*	63 (35.4)	2 (40.0)	50 (37.3)	15 (30.6)	58 (35.2)	7 (38.9)	33 (33.7)	32 (37.6)
	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)
Age	40.2 (11.3)	36.1 0.0)**	37.9 (10.7)	36.2 (12.9)	38.3 (11.0)	36.6 (10.1)	38.2 (10.8)	34.4 (9.9)	39.9 (11.1)	35.5 (9.8)**
Weight	165.9 6.7)	170.2 42.7)	167.3 (39.1)	206.5 (67.5)	170.2 (41.5)	164.5 (36.5)	168.2 (39.1)	169.5 (49.1)	166.3 (36.9)	170.8 (43.9)
Height	64.0 (2.8)	64.3(3.2)	64.2 (3.1)	64.3 (2.2)	64.2 (3.2)	64.1 (2.8)	64.1 (3.0)	65.1 (3.3)	63.9 (2.8)	64.5 (3.4)
BMI	28.5 (6.4)	30.0 (7.1)	28.6 (6.5)	35.3 (12.6)	29.1 (6.9)	28.0 (6.3)	28.8 (6.5)	28.3 (8.8)	28.7 (6.5)	28.8 (7.1)
Self- reported Sexual Orientation										
Heterosexual	65 (91.5)	57 (57.0)	121 (72.0)	1 (20.0)	92 (71.9)	30 (69.8)	117 (76.0)	5 (29.4)	85 (92.4)	37 (46.8)
Bisexual	3 (4.2)	31 (31.0)	32 (19.3)	2 (40.0)	23 (18.0)	2 (4.7)	26 (16.9)	8 (47.1)	4 (4.3)	30 (38.0)
Homosexual	3 (4.2)	12 (12.0)**	13 (7.8)	2 (40.0)*	13 (10.2)	11 (25.6)	11 (7.1)	4 (23.5)**	3 (3.3)	12 (15.2)**
Age of first Experience										
< 10 Years	4 (5.2)	9 (8.5)	12 (6.7)	1 (20.0)	7 (5.2)	5 (12.2)	12 (7.3)	1 (5.6)	6 (6.1)	7 (8.2)
11-12 Years	3 (3.9)	7 (6.6)	9 (5.1)	1 (20.0)	5 (3.7)	5 (10.2)	10 (6.1)	0 (0.0)	5 (5.1)	5 (5.9)
13-14 Years	18 (23.4)	30 (28.3)	47 (26.4)	1 (20.0)	39 (29.1)	9 (18.4)	41 (24.8)	7 (38.9)	22 (22.4)	26 (30.6)
15-16 Years	27 (35.1)	35 (33.0)	61 (34.3)	1 (20.0)	45 (33.6)	17 (34.7)	58 (35.2)	4 (22.2)	32 (32.7)	30 (35.3)
17-18 Years	17 (22.1)	20 (18.9)	37 (20.8)	0 (0.0)	26 (19.4)	11 (22.4)	32 (19.4)	5 (27.8)	24 (24.5)	13 (15.3)

>18 Years	8 (10.4)	5 (4.7)	12 (6.7)	1 (20.0)	12 (9.0)	1 (2.0)	12 (7.3)	1 (5.6)	9 (9.2)	4 (4.7)*
Promiscuity on PCL-R-2	16 (20.8)	39 (37.1)*	51 (28.8)	4 (80.0)*	36 (26.9)	19 (39.6)	49 (29.7)	5 (35.3)	21 (21.4)	34 (40.5)**
On Outside										
# Orgasms/week										
0	13 (18.3)	12 (11.7)	25 (14.8)	0 (0.0)	20 (15.7)	5 (10.6)	23 (14.7)	2 (11.1)	16 (17.4)	9 (11.0)
2 (1.6)	33 (46.5)	42 (40.8)	73 (43.2)	2 (40.0)	51 (40.2)	24 (24.1)	67 (42.9)	8 (44.4)	40 (43.5)	35 (42.7)
4-8	17 (23.9)	27 (26.2)	43 (25.4)	1 (20.0)	35 (27.6)	9 (19.1)	39 (25.0)	5 (27.8)	23 (25.0)	21 (25.6)
9-12	3 (4.2)	10 (9.7)	12 (7.1)	1 (20.0)	10 (7.9)	3 (6.4)	11 (7.1)	2 (11.1)	6 (6.5)	7 (8.5)
+ 12	5 (7.0)	12 (11.7)*	16 (9.5)	1 (20.0)	11 (8.7)	6 (12.8)	16 (10.3)	1 (5.6)*	7 (7.6)	10 (12.2)**
On Inside										
# Orgasms/week										
*0	68 (93.2)	67 (64.4)	135 (78.5)	0 (0.0)	100 (76.9)	35 (74.5)	125 (78.6)	10 (55.6)	88 (93.6)	45 (56.6)
1-3	3 (4.1)	32 (30.8)	31 (18.0)	4 (80.0)	24 (18.5)	11 (23.4)	28 (17.6)	7 (38.9)	4 (4.3)	31 (37.3)
4-8	2 (2.7)	4 (3.8)	5 (2.9)	1 (20.0)	5 (3.8)	1 (2.1)	5 (3.1)	1 (5.6)	2 (2.1)	4 (4.8)
9-12	0 (0.0)	1 (1.0)	1 (0.6)	0 (0.0)	1 (0.8)	0 (0.0)	1 (0.6)	0 (0.0)	0 (0.0)	1 (1.2)
+ 12	0 (0.0)	0 (0.0)*	1 (0.6)	0 (0.0)**	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)**	0 (0.0)	0 (0.0)**
# Partners										
0-5	33 (42.9)	28 (26.9)	61 (34.7)	0 (0.0)	48 (36.4)	13 (26.5)	56 (36.2)	2 (11.1)	40 (40.8)	21 (25.3)
6-14	23 (29.9)	32 (30.8)	54 (30.7)	1 (20.0)	43 (32.6)	12 (24.5)	48 (29.4)	7 (38.9)	30 (30.6)	25 (30.1)
15-35	7 (9.1)	21 (20.2)	26 (24.8)	2 (40.0)	15 (11.4)	14 (26.5)	24 (14.7)	4 (22.2)	13 (13.3)	15 (18.1)
>35	14 (18.2)	23 (22.1)*	35 (19.9)	2 (40.0)*	26 (19.7)	11 (22.4)	32 (19.6)	5 (27.8)	15 (15.3)	22 (26.2)*

Note. * $p < .05$ ** $p < .001$,[§] for Mann-Whitney U test, Z represents standard score of difference between ranks

Number of life-time sexual partners prior to the current incarceration was unrelated to all five sub-categories of sexual behavior in prison. Similarly, sexual promiscuity as coded as part of the PCL-2R was also found to be uncorrelated with any of the sexual behaviors in prison.

Racial differences in sexual behavior were also found in the female sample (see Table 38). However, in contrast to the findings associated with the male inmates, black female inmates were found to endorse less sexual activity as measured by the any-sex category than white inmates and inmates from other combined racial groups. As with the male inmates, age was associated with sexual activity with the younger inmates reporting more sexual behavior, specifically those under forty being more sexually active than those over forty years. Weight and height were unrelated to any of the sub-categories of sexual behavior reported by the female inmates.

Self reported sexual orientation impacted four of the five sub-categories of sexual behavior. It was associated with more sexual activity as reported in the any-sex, predatory sex, bartered sex and consensual sex categories of behavior. While the numbers are small, 40% of the self reported predatory women self identified as being homosexual in their sexual orientation. Another 40% of the predatory women self described themselves as being bisexual in their sexual orientation. Among the women reporting consensual sex in prison, the homosexual (80%) and bisexual (88%) women reported far higher rates of sexual behavior when compared with the heterosexual women (30%).

Younger age at first sexual experience was not associated with any of the sexual behaviors in prison. However, as with the male inmates, having been over the age of eighteen at the time of first intercourse was associated with a significantly lower level of consensual sex in prison.

In contrast to the male inmates, sexual promiscuity as coded on the PCL-R-2 was associated with the any-sex, predatory, and consensual sub-categories of sexual behavior. Women who scored higher on this item were more likely to be identified in the any-sex category and to self report higher rates of bartered sex and higher rates of consensual sex during their incarceration.

Number of experienced orgasms while living in the community was associated with higher rates of consensual sex in prison but with none of the other subcategories of sexual behavior. There was only one women who reported having 12 or more orgasms per week in prison and she self-identified herself as being predatory in her prison sexual behavior.

Number of life-time sexual partners was associated with prison sexual behavior. Having more than 35 sexual partners was associated with inclusion in the any-sex category and with self reported predatory sex and higher rates of consensual sex during incarceration. Forty percent of the women who reported more than 15 life-time sexual partners also self-reported themselves as being predatory in their sexual behavior in prison.

Conclusions

In line with the earlier findings of Kinsey, our analyses reaffirm an exaggerated degree of hyper-sexuality among the male and female inmates. Both the male and female inmates reported higher levels of total sexual outlet than found in the general population with 40.9% of the male and 17.3% of the female inmates self-reporting an interest in more than eight orgasms per week while living in the community. For the male inmate, this attribute was not associated with any of the different types of sexual experience during incarceration. This finding suggests that the theory of deprivation sometimes used to explain same sex encounters between incarcerated males is not supported by the analyses that explored the impact of sexual drive to sexual adjustment in prison.

Hyper-sexuality was associated, however, with higher rates of consensual sex during incarceration among the female inmates. Similarly, while impersonal and promiscuous sexuality as coded on the PCL-R-2 was not associated with any of the indices of prison sexual behavior for the male inmates, it was associated with any-sex, predatory sex, and consensual sex for the female inmates. These findings contradict the evolutionary hypothesis of Lalumière et al. (2005) and suggest that impersonal sex is not associated with sexually predatory behavior among males in prison. Obviously, this finding is found in a gender-segregated environment and may not be theoretically linked to their assumptions concerning mating behavior and parental investment. In contrast, predatory behavior among the women, although infrequent, was correlated with an impersonal sexual style that was associated with promiscuity while these women were living in the community.

An early introduction into sexual behavior did not seem to impact upon sexual activity while incarcerated for either the male or female inmates. Inmates who had their first sexual experience before the age of ten were no more sexually active than the inmates who had their first sexual experience in mid to late adolescence. However, not having had a sexual experience until after the age of eighteen years served a protective function for the male and female inmates. For both genders, these inmates were less likely to be involved in consensual sex during incarceration.

Age was associated with sexual behavior in prison with males under the age of 35 years being more sexually active than males over 35 years, and women under 40 more sexually active than those over age 40. Race, however, played a different role across genders. Black males reported being more sexually active in prison than non-black males while black women reported being less sexually active than non-black women in our prison sample.

Perhaps the most striking difference between the men and women in our sample was the difference in sexual orientation reported within our two samples and the impact this had to their experiences in prison. Homosexual males were under-represented among the male sample and they were more likely to be sexually victimized. They were also less likely to self report involvement in any type of bartered sex during their incarceration. In contrast, homosexual women were over-represented in the female sample and reported more predatory, bartered, and consensual sex during incarceration. This factor seemed to overshadow any of the physical characteristics of the women with height and weight being unrelated to these indices of sexual behavior. For the men, a slighter build characterized by less weight and more height was associated with a higher level of sexual victimization.

These findings concerning sexual orientation may also help to explain the observation that more women become involved in same sex encounters than do men while incarcerated and that as a gender they are more comfortable with bisexuality and the prison adaptation referred to as “gay for the stay.” Only six male inmates (2%) described themselves as being bisexual in sexual orientation (despite 5.9 reporting sexual contact with other inmates) whereas 34 (19%) of the female inmates self-identified in this way (with 26.2% reporting sexual contact with other inmates). It is not clear if this difference reflects a self-identity that existed prior to incarceration or evolved, at least for the women, as a result of their experiences while incarcerated. It may be that women tend more often to identify themselves as bisexual after a sexual encounter with a woman whereas men maintain a self identification of being heterosexual even amidst same sex encounters. Alternatively more men did report consensual sexual encounters with female correctional staff suggesting that they may, in fact, creatively develop these boundary crossing relationships either to maintain their sexual identity as heterosexual men or because of a more innate disinterest in the sexual appeal of other men.

Chapter Seven

Affective and Perceptual States as Risk Marker for Sexual Predation and Victimization

Research has increasingly differentiated between reactive and more instrumental forms of violent behavior (Cornell et al., 1996; Heilbrun et al., 1998; Eaves, Douglas, Webster, Ogloff, & Hart, 2000). In the former instance, violence is thought to occur in the “heat of the moment” often in response to strong emotions and/or distorted perceptions. In the latter, the motivation for the violence is conceptualized as lying in a more rational and well planned set of behaviors designed to obtain some type of gain or extract some form of retribution. This distinction between reactive and instrumental aggression has been found to represent more of a continuum than dichotomy when applied to violence in the real world, yet its clarity of intent has served to punctuate interest in the affective and perceptual states that accompany some types of violent behavior. In the current chapter, we examine some of these indices of emotional arousal as they characterize the experience and behavior of the male and female inmates in our sample. Specifically, we examine indices of three affective states including anger, impulsivity, and fear along with two perceptual states involving thoughts of harming another or of being threatened by outside influences.

Outcomes Associated with Anger, Impulsivity and Fear

Anger and sexual violence. The role of anger as an affective state that precedes or precipitates aggressive behavior has historically been linked to the power of the human passions to overcome normal behavior. This association was addressed by Plato, Aristotle, and the philosophers of the Renaissance and the Enlightenment, all of whom commented on the power of anger to overcome civilized behavior and lead to mental disorder and violence. In modern times, anger has become one of the primary risk markers that has been identified in violence risk research and quantified using multiple domains as it pertains to interpersonal and sexual violence against others.

As part of violence risk research, Novaco (1994) developed a theory of anger which posited an association between anger as a subjective emotional state and condition of physiological arousal with behavior expressed through different forms of aggressive behavior. The Novaco Anger Scale (NAS) which was designed to capture these components of anger include cognitive items reflecting attentional focus, suspicion, rumination, and hostile attitude; arousal items that quantify the intensity, duration, somatic tension, and irritability of the experience; and behavioral items that capture the nature of the ensuing impulsive reactions, verbally aggressive acts, physical confrontations, and other indirect expressions of

the mental and physical state being experienced by the individual. The NAS was used in the MacArthur Violence Risk Study (Monahan et al., 2001), which found that the highest levels of anger were among individuals who were younger, of minority status, and who suffered from co-morbid major mental illnesses and substance abuse disorders. When exploring the relationship of anger to violence, Monahan et al. (2001) found that individuals with higher anger scores at hospitalization were twice as likely to engage in violent acts post discharge throughout the 12 month period following their discharge.

Lalumière and Quinsey (1996) sought to factor analyze the many behavioral indices that they found correlated with sexually coercive behavior in the community. The first factor was found to include a mix of antisocial behaviors and an impersonal mating strategy. The second factor was comprised of experiences and attitudes that reflected hostility and aggression toward others. Zamble and Quinsey (1997) found that negative moods were noted among released offenders including rapists prior to their relapse. Recent research conducted by Oliver, Beech, Fisher and Beckett (2007) examined the role of different emotional and behavioral precursors in the lives of murderers and rapists. They compared 58 sexual murderers and 112 rapists and found that rapists had more prior violent non-deviant offenses and scored higher on measures of paranoid suspicion and resentment.

Various rape paradigms developed either by law enforcement or in the context of criminological research have further emphasized the role of anger in rape behavior. The widely referenced crime scene taxonomy developed by Hazelwood (1987) identifies four primary rapist types including the power reassurance, power assertive, the anger retaliatory, and the anger excitation rapist. Hazelwood (1987) later adapted this original classification scheme to allow for the assessment of rapist type based only on information elicited from the victim. Hazelwood (2008) described the anger retaliatory rapist as an offender who is angry with women for a variety of real or imaged wrongdoings and who uses the sexual acts as a means of humiliating and degrading his victim. The MTC taxonomy, which was developed at the Massachusetts Treatment Center (MTC), was designed to distinguish between different types of rapists as part of an effort to better understand the etiology and life course of sexually aggressive behavior. The development of this typology went through three stages of revision and culminated in the MTC:3R which identifies nine rapist types including the opportunistic (low and high competence), pervasively angry, sexual seeking (sadistic and non-sadistic) and vindictive (low and moderate social competence) rapist types. These different types were found to cluster according to eight primary dimensions including juvenile and adult antisocial behavior, social competence, expressive aggression in the offense, offense planning, global or pervasive anger, overt and muted sadism, sexualized thoughts and paraphilic fantasies, and hostility toward women (Knight, 1999).

Study Analyses. In the current study we used the Novaco Anger Scale (NAS) and its three behavioral domains to explore the relationship of anger to the various types of sexual behavior manifest by the male and female inmates while incarcerated. We also used diagnostic criteria associated with Antisocial Personality Disorder (irritability) and Borderline PD (inappropriate anger). These measures were then explored as they impacted the various indices of sexual behavior in prison.

Table 39

Descriptive Statistics for Anger Measures for Incarcerated Men (N = 288) and Women (N = 183).

	Men		Women		Effect Size
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>T</i>
NAS-Cognitive	28.75	5.29	27.24	4.85	2.88**
NAS-Arousal	26.35	5.74	26.67	5.48	-0.57
NAS-Behavioral Regulation	26.10	5.50	24.80	5.05	2.37*
Anger Regulation	26.06	3.80	26.63	3.34	-1.55
NAS Total	81.19	15.45	78.72	13.48	1.68
	<i>N</i>	%	<i>N</i>	%	χ^2
Borderline-Inappropriate Anger	166	59.3	84	46.4	7.34**
Antisocial-Aggressiveness	187	68.8	62	34.8	50.08**

Note. * $p < .05$, ** $p < .01$; for Borderline and Antisocial Items, numbers reflect those in which criteria is endorsed.

The results in Table 39 reflect gender differences on two of the three NAS domains and on both of the Borderline PD and the Antisocial PD diagnostic criteria. On both the NAS cognitive and NAS behavioral regulation domains, the male inmates reported higher levels of agitation and distress, although there were no significant differences in the NAS total score for the male and female inmates. The males were also clinically assessed as demonstrating higher levels of anger on the borderline criteria of inappropriate anger and the antisocial criteria of aggressiveness.

Table 40

Relationship between Measures of Anger for Incarcerated Men (N = 288) and Sexual Experiences in Prison

Anger	Any-sex		Predatory		Victim		Bartered		Consensual	
	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
	N=143 (%)	N=145 (%)	N=253 (%)	N=35 (%)	N=244 (%)	N=44 (%)	N=251 (%)	N=37 (%)	N=160 (%)	N=128 (%)
	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)
NAS-Cognitive	27.5 (5.2)	30.2 (5.1)**	28.5 (5.3)	30.6 (4.6)	28.6 (5.2)	30.0 (5.5)	28.6 (5.2)	30.6 (5.7)	27.5 (5.1)	30.5 (5.1)**
NAS-Arousal	25.4 (5.7)	27.4**(5.6)	26.2 (5.8)	27.6 (5.2)	26.3 (5.7)	26.8 (6.1)	26.2 (5.7)	27.6 (6.1)**	25.3 (5.6)	27.8 (5.6)**
NAS-Behavioral Regulation	24.8 (5.2)	27.5 (5.5)**	25.8 (5.5)	28.7 (4.6)*	25.9 (5.3)	27.2 (6.5)*	25.8 (5.3)	29.1 (6.6)	24.8 (5.0)	28.0 (5.6)**
Anger Regulation	25.7(4.2)	26.4 (3.3)	26.1 (3.9)	26.0 (2.9)	25.8 (3.8)	27.4 (3.6)*	26.1 (3.9)	25.8 (2.9)	25.9 (4.1)	26.3 (3.3)
NAS Total	77.6 (15.0)	85.1 (15.0)**	80.5 (15.6)	86.9 (13.1)	80.8 (15.2)	83.9 (17.1)	80.5 (15.1)	87.3 (17.6)	77.6 (14.8)	86.2(15.1)**
	N(%)	N(%)	N(%)	N(%)	N(%)	N(%)	N(%)	N(%)	N(%)	N(%)
Borderline-Inappropriate Anger	72 (52.2)	94 (66.2)*	141 (57.6)	25 (71.4)	144 (61.0)	22 (50.0)	138 (56.6)	28 (77.8)*	80 (51.6)	86 (68.8)**
Antisocial-Aggressiveness	90 (65.2)	97 (72.4)	162 (68.4)	25(71.4)	165(71.7)	22 (52.4)*	159 (67.4)	28 (77.8)	96 (62.7)	91(76.5)*

Note. * $p < .05$, ** $p < .01$.

Table 41

Relationship between Measures of Anger for Incarcerated Women (N = 183) and Sexual Experiences in Prison

Anger	Any-sex		Predatory		Victim		Bartered		Consensual	
	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
	N=77 (%)	N=106 (%)	N=178 (%)	N=5 (%)	N=134 (%)	N=49 (%)	N=165 (%)	N=18 (%)	N=98 (%)	N=85 (%)
	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)
NAS-Cognitive	26.2 (4.2)	28.1 (5.2)**	27.2 (4.9)	28.6 (5.2)	26.8 (4.8)	28.5 (4.9)	27.0 (4.9)	29.4 (3.5)	26.4 (4.4)	28.3 (5.3)*
NAS-Arousal	25.8 (5.4)	27.4 (5.5)	26.6 (5.5)	27.8 (5.8)	26.5 (5.6)	27.1 (5.3)	26.4 (5.5)	28.9 (4.6)	25.9 (5.4)	27.7 (5.5)*
NAS-Behavioral Regulation	24.3 (4.5)	25.2 (5.4)	24.6 (4.9)	30.2 (6.9)*	24.8 (5.2)	25.0 (4.7)	24.6 (4.9)	26.8 (6.3)	24.2 (4.6)	25.6 (5.5)
Anger Regulation	26.7 (3.6)	26.5 (3.1)	26.7 (3.3)	25.6 (4.2)	26.6 (3.4)	26.7 (3.1)	26.8 (3.4)	25.1 (1.7)**	26.6 (3.5)	26.7 (3.1)
NAS Total	76.2 (12.6)	80.9 (13.9)*	78.5 (13.3)	86.6 (16.9)	78.1 (13.7)	80.5 (12.8)	78.0 (13.4)	85.1 (13.0)*	76.5 (12.7)	81.6 (14.0)*
	N(%)	N(%)	N(%)	N(%)	N(%)	N(%)	N(%)	N(%)	N(%)	N(%)
Borderline- Inappropriate Anger	33 (43.4)	51 (48.6)	89 (45.50)	4 (80.0)	62 (46.6)	22 (45.8)	73 (44.5)	11 (64.7)	41 (42.3)	43 (51.2)
Antisocial- Aggressiveness	21 (27.3)	41 (40.6)	60 (34.5)	2 (50.0)	42 (32.6)	19 (41.3)	54 (33.3)	8 (50.0)	27 (27.8)	35 (43.2)*

Note. * $p < .05$, ** $p < .01$.

The results in Table 40 suggest that male inmates who report higher levels of anger are more likely to be identified in the any-sex category of sexual behavior in prison. This association is found to occur across the various categories of sexual behavior including predatory, victimized, bartered and consensual sex in prison. Predatory sex was associated with elevated scores on the NAS Behavioral Regulation sub-scale, victimized sex with elevated scores on the Anger Regulation sub-scale, bartered sex with NAS arousal sub-scale, and consensual sex with the NAS Cognitive, NAS Arousal, NAS Behavioral Regulation, and NAS Total Score. Similar associations were found on clinical assessments of the Borderline Inappropriate Anger diagnostic criteria and the Antisocial PD Aggressiveness diagnostic criteria. Male inmates who met endorsement criteria for Borderline Inappropriate Anger were more likely to be involved in bartered sex and consensual sex while incarcerated. Male inmates who met endorsement criteria for Antisocial Aggressiveness were less likely to be sexually victimized and more likely to be involved in consensual sexual relationships during incarceration.

As with the male inmates, the various categories of sexual behavior in prison for the female inmates were associated with various indices of anger both self reported and clinically coded by the research interviewers (see Table 41). Among the women, the any-sex category was associated with NAS Cognitive domain, and NAS Total Scores; predatory sex with NAS Behavioral Regulation domain; bartered sex with the Anger Regulation and NAS Total Score; and consensual sex with the NAS Cognitive, NAS Arousal, and NAS Total score. Unlike the male inmates, there was no association between self reported anger and sexual victimization in prison. There were also no associations between the Borderline – Inappropriate Anger diagnostic criteria and any of the sexual behavior indices. Consensual sex was found to be associated with the Antisocial – Aggressiveness diagnostic criteria and in the same direction as seen with the male inmates, Female inmates who were coded as manifesting aggressiveness in the diagnostic assessment of Antisocial PD were more likely to be involved in consensual sex in prison than were the women who did not meet this diagnostic criteria.

Impulsivity and sexual violence. Impulsivity reflects a common set of behavioral and affective instability that results in erratic behavior, frequent moods changes, and a tendency to respond without reflection to both real and imagined insults and perceived sources of provocation. Moeller, Barratt, Dougherty, Schmitz and Swann (2001) examined the concept of impulsivity as it was used diagnostically in DSM-IV-TR and found that impulsivity is considered a significant symptom of disturbance within both Axis I and Axis II disorders, although it is not defined explicitly or differentially in the multiple disorders in which it appears.

Association between impulsivity and violence. Research has demonstrated a consistent relationship between impulsivity and antisocial behavior (Barratt, Stanford, Kent & Felthous, 1997). Wang and Diamond (1999) used structural equation modeling to predict institutional aggression among mentally disordered offenders and found that anger, antisocial personality style, and impulsivity were more robust predictors of institutional aggression than ethnicity or incarceration for a violent crime. Blackburn and Coid (1998) examined the association between psychopathy and the various personality disorders and found that impulsivity was the primary factor identified in a factor analytic analysis of DSM-III data. Moreover, it was the factor that correlated most robustly with psychopathy and other measures of violent and nonviolent criminality. Barratt (1991) studied the relationship between impulsivity and violence among violent male offenders. He found that aggressive inmates were characterized by higher levels of anger, more impulsivity, poorer performance on neuropsychological tests, and reduced neural involvement in frontal cortical areas when compared to non-inmate controls.

Research on female offenders similarly reflects higher rates of impulsivity among personality disordered offenders and more violent institutional infractions among women with higher scores on any of the three domains of the Barratt Impulsivity Scale (cognitive impulsivity, motor impulsivity, and non-planning impulsivity). Komarovskaya, Loper and Warren (2007) found in a study of 802 female inmates that the predictive power of impulsivity and institutional violence eradicated the earlier association between age and institutional violence. Cherek and Lane (1999) found that female parolees who had been charged with a violent offense tended more often to choose impulsive behavioral choices over a self-controlled behavioral choice using a structured research design. Hochhausen, Lorenz and Newman (2002) examined the relationship of Borderline PD to criminality and found that incarcerated women who had been diagnosed with Borderline PD committed more passive avoidance errors and reported more impulsivity than a group of controls on the same measures.

The MacArthur Violence Risk Study used the Barratt Impulsivity Scale (BIS) as one of the risk markers used in their study of 1136 male and female psychiatrically hospitalized subjects. They found that the BIS Non-planning subscale demonstrated a small but significant negative relationship with aggression in the community over twenty weeks after discharge (Monahan et al., 2001). Moffitt, Caspi, Harrington and Milne (2002) studied antisocial behavior in a birth cohort of males and females and found that impulsivity was a consistent predictor of delinquency for both their male and female respondents throughout their adolescence.

Impulsivity in rape behavior. The MTC:3R rape typology examined lifestyle impulsivity as it captured patterns of poor impulse control beginning in preadolescence and continuing in various forms

throughout adulthood. It was found to correlate robustly with other indices of antisocial behavior and to differentiate rates and timing of re-offense among a large sample of rapists following release (Prentky, Knight & Lee, 1989). The commonality of this behavior across all rapist types, however, diminished its usefulness as a classification dimension and necessitated it being replaced with the construct of social competence which was more powerful in differentiating between the opportunistic, sexual, and vindictive rape types. Within the revised taxonomy, the opportunistic rapist was described as being the most impulsive in his behavior. Knight (1999) described this type of rapist as tending to rape when encountering a woman during the commission of some other crime or when a woman became accessible through an impersonal social encounter (Knight & Prentky, 1990; Knight, 1999).

Study Analyses. In our study we used clinical assessments of impulsivity as defined and collected in four different domains. These included criteria 4 of Borderline PDs, criteria 3 Antisocial PD, item 14 in the coding of the PCL-R-2 and coding of item C4 on the HCR:20 violence risk assessment.

Table 42

Descriptive Statistics for Impulsivity Measures for Incarcerated Men (N = 288) and Women (N = 183).

	Men		Women		Effect Size	
	N	%	N	%	χ^2	Φ
Borderline-Impulsivity	236	84.3	133	73.1	8.62	-0.14**
Antisocial-Impulsivity	145	51.4	78	42.9	3.25	0.07
PCL-R-Impulsivity	127	44.6	77	42.1	0.28	-0.02
HCR-Instability					4.37	0.10
No	39	13.5	38	20.8		
Possible	113	39.2	62	33.9		
Yes	130	45.1	83	45.4		

Note. * $p < .05$, ** $p < .01$.

Our data indicated gender differences in levels of impulsivity as clinically assessed in the male and female samples (see Table 42). The male inmates were coded as manifesting more impulsive behavior on both the Borderline PD impulsivity criteria and on the Antisocial PD criteria addressing a failure to plan ahead. There were no gender differences on the impulsivity items contained in either the PCL-R-2 or the HCR:20.

Table 43

Relationship Between Impulsivity Measures for Incarcerated Men (N = 288) and Sexual Experiences in Prison

Impulsivity	Any-sex		Predatory		Victim		Bartered		Consensual	
	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
	N=143 (%)	N=145 (%)	N=253 (%)	N=35 (%)	N=244 (%)	N=44 (%)	N=251 (%)	N=37 (%)	N=160 (%)	N=128 (%)
Borderline-Impulsivity	114 (82.0)	122 (86.5)	203 (82.9)	44 (94.3)	202 (85.6)	34 (77.3)	205 (83.7)	31 (88.6)	125 (80.1)	111 (89.5)*
Antisocial-Impulsivity	63 (45.0)	82 (57.7)*	123 (49.8)	22 (62.9)	124 (51.9)	21 (48.8)	123 (50.0)	22 (61.1)	71 (45.2)	74 (59.2)*
PCL-R-Impulsivity	57 (40.7)	70 (48.3)	111 (44.4)	16 (45.7)	107 (44.4)	20 (45.5)	107 (43.1)	20 (54.1)	63 (40.1)	64 (50.0)
HCR-Instability										
No	26 (18.8)	13 (9.0)	37 (15.0)	2 (5.7)	33 (13.9)	5 (13.6)	38 (15.5)	1 (2.7)	29 (18.7)	10 (7.9)
Possible	53 (38.4)	60 (41.7)	99 (40.1)	14 (40.0)	92 (38.7)	21 (47.7)	101 (41.2)	12 (32.4)	61 (39.4)	52 (40.9)
Yes	59 (42.8)	71 (49.3)	111 (44.9)	19 (54.3)	113 (47.5)	17 (38.6)	106 (43.3)	24 (64.9)*	65 (41.9)	65 (51.2)*

Note. * $p < .05$, ** $p < .01$.

Table 44

Relationship Between Impulsivity Measures for Incarcerated Women (N = 183) and Sexual Experiences in Prison

Impulsivity	Any-sex		Predatory		Victim		Bartered		Consensual	
	No N=77 (%)	Yes N=106 (%)	No N=178 (%)	Yes N=5 (%)	No N=134 (%)	Yes N=49 (%)	No N=165 (%)	Yes N=18 (%)	No N=98 (%)	Yes N=85 (%)
Borderline- Impulsivity	47 (61)	86 (81.9)**	128 (72.3)	5 (100.0)	94 (70.1)	39 (81.2)	119 (72.1)	14 (82.4)	64 (65.3)	69 (82.1)*
Antisocial- Impulsivity	33 (42.9)	45 (42.9)	74 (41.8)	4 (80.0)	56 (42.1)	22 (44.9)	70 (42.7)	8 (44.4)	41 (41.8)	37 (44.0)
PCL-R- Impulsivity	28 (36.4)	49 (46.2)	74 (41.0)	4 (80.0)	54 (40.3)	23 (46.9)	68 (41.2)	9 (50.0)	36 (36.7)	41 (48.2)
HCR- Instability										
No	20 (26.0)	18 (17.0)	38 (21.3)	0 (0.0)	32 (23.9)	6 (12.2)	33 (20.0)	5 (27.8)	20 (20.4)	18 (21.2)
Possible	28 (36.4)	34 (32.1)	61 (34.3)	1 (20.0)	42 (31.3)	20 (40.8)	61 (37.0)	1 (5.6)	40 (40.8)	22 (25.9)
Yes	29 (37.7)	54 (50.9)	79 (44.4)	4 (80.0)	60 (44.8)	23 (46.9)	71 (43.0)	12 (66.7)*	38 (38.8)	45 (52.9)

Note. * $p < .05$, ** $p < .01$.

Among the male inmates, the any-sex category was associated with a more frequent endorsement of the Antisocial PD diagnostic criteria concerning an inability to plan ahead; bartered sex with the clinical endorsement of Instability on the HCR:20; and consensual sex with the Borderline PD diagnostic criteria concerning impulsivity associated with self-damaging behavior, the Antisocial Personality diagnostic criteria of failing to plan ahead, and the Impulsivity item on the Clinical dimension of the HCR:20 (see Table 43).

Similar although attenuated patterns were found among the female inmates and are presented in Table 44. The any-sex category was associated with higher levels of endorsement on the Borderline PD impulsivity diagnostic criteria; bartered sex with higher endorsement on the HCR:20 impulsivity clinical risk factor; and consensual sex with higher endorsement on the Borderline PD impulsivity diagnostic criteria.

Fear of victimization. Studies of fear of crime in the community became a topic of interest to researchers beginning in 1963 when the Presidential Commission on Law Enforcement urged researchers to begin to identify levels of fear of crime and the factors influencing perceived and real vulnerability for individuals across the country. This later became a focus of violence research when it was found that many youth who were involved in assaultive behavior demonstrated limited ability to perceptually assess situations without dominant feelings of fear and vulnerability. This interest was transferred to institutionalized and incarcerated populations beginning in the 1990s.

Fear of victimization in prison. McCorkle (1993a, 1993b) found that most prison inmates had been the subjects of a serious threat and a quarter had been approached for sexual favors. Although the largest proportion of inmates (49%) reported feeling reasonably safe, McCorkle found that an almost equal number of inmates reported feeling “somewhat” or “very” unsafe in the institutional setting in which they were living.

In a study of one adult and two juvenile facilities in England, O’Donnell and Edgar (1999) found that almost a third of the juvenile inmates had been assaulted over the past month and yet the majority reported feeling relatively safe in their current environments. In contrast, the adult inmates reported feeling much more unsafe particularly after experiencing any type of assault or incivility. Both the younger and older inmates reported feeling the most unsafe in the segregation unit, the showers, during their reception to the facility, and during movement to and from their residential units. In a study of inmates being released from the Texas prison system, Hemmens and Marquart (1999) found that age was the most relevant factor in perceptions of one’s experience while in prison. Younger inmates both at the

time of first arrest and at the time they completed the survey were more likely to report having problems with other inmates, feeling that there were not enough guards to guarantee safety and security, and tending to endorse the observation that “inmates attack other inmates very often.” Race was significant in one of the logistic models with white inmates more often than African-American inmates reporting that they were worried “a lot” while incarcerated about being beaten up or attacked while imprisoned.

Fear has been associated with various psychological and behavioral outcomes among both juvenile and adult offenders. Maitland and Sluder (1996) found that the fear of victimization was significant in predicting general well-being among youthful inmates and associated not only with various psychological symptoms but also different types of physical pain and illnesses. In a sample of 300 inmates in the Tennessee State Prison (maximum security prison), McCorkle (1993a) found that fear was significantly related to victimization, even after controlling for physical and social vulnerabilities.

There are currently no studies of fear of crime among incarcerated women. However, Warren et al. (2000) found in the study of 802 women incarcerated in a maximum security prison that the majority of women felt safer in prison than in the community. Only 23% of the women reported being more afraid of being attacked in prison than in the community. Similarly, 90% of the women reported being more concerned about fights while living in the community than while incarcerated.

Study Analyses. In the current study, we used a modified version of Fear of Victimization Survey (McCorkle, 1993a) to assess levels of fear self reported by the male and female inmates in our two prison samples. Items were coded on a five point scale of the degree to which each inmate felt safe in prison, worried about being attacked by another inmate or correctional officer, and believed that correctional officers and the warden would act to guarantee their safety in prison. Items were added to the survey regarding concerns about being sexually assaulted by another inmate or correctional officer and the extent to which correctional officers and wardens would take claims of sexual assault seriously if these were reported to officials.

Table 45

Descriptive Statistics for Fear of Assault in Prison for Incarcerated Men (N = 288) and Women (N = 183)

	Men		Women		Effect Size	
	N	%	N	%	X ²	Phi
How safe feel in prison?					21.08	0.21**
Safe	151	53.5	134	74.9		
Neutral	93	33.0	32	17.9		

Unsafe	38	13.5	13	7.3		
How much worry about attack/inmate?					0.34	0.03
Significantly	7	2.5	6	3.4		
Neutral	15	5.3	10	5.6		
Minimally	260	92.2	162	91.0		
How much worry about attack/prison staff?					38.8	0.29**
Significantly	38	13.5	3	1.7		
Neutral	58	20.6	13	7.3		
Minimally	185	65.8	162	91.0		
How much worry about sexual assault/inmate?					0.34	0.03
Significantly	7	2.5	6	3.4		
Neutral	15	5.3	10	5.6		
Minimally	260	92.2	163	91.0		
How much worry about sexual assault by prison staff?					1.13	0.05
Significantly	5	1.8	3	1.7		
Neutral	10	3.5	10	5.6		
Minimally	267	94.7	165	92.7		
How much does prison system protect you from sexual contact?					16.56	0.19**
Significantly	80	28.9	80	45.3		
Neutral	65	23.5	44	24.9		
Minimally	132	47.7	53	29.9		
How much do correctional officers monitor to keep you safe					9.80	0.15**
Significantly	84	30.1	77	43.5		
Neutral	74	26.5	45	25.4		
Minimally	121	23.4	55	31.3		
How much do correctional officers take sexual assault seriously?					10.52	0.15**
Significantly	131	47.3	110	62.5		
Neutral	67	24.2	34	19.3		
Minimally	79	28.5	32	18.2		
How much does warden take sexual assault seriously?					22.41	0.22**
Significantly	168	60.4	143	81.2		
Neutral	61	21.9	15	8.5		
Minimally	49	17.6	18	10.2		

Note. * $p < .05$, ** $p < .01$.

The results of analyses presented in Table 45 reflect significant gender differences on most of the measures of fear of physical and sexual victimization in prison. Most of the female inmates reported feeling safe in prison (75%). Only 54% of the male inmates reported feeling safe in prison with 13.5% of the men reported feeling significantly unsafe in prison. Both the male and female inmates reported little concern about being attacked by other inmates (92% of the male inmates and 91% of the female inmates)

but male inmates endorsed significant concerns about being attacked by prison staff (13.5%). Most of the male and female inmates reported few concerns about being sexual assaulted while incarcerated by other inmates (92% of the males and 91% of the females) or members of the prison staff (95% of the male inmates and 93% of the female inmates). However, both male and female inmates reported reservations concerning the commitment of the prison system to protect them from sexual assault (29% of the male inmates endorsed feeling significantly protected and 45% of the female inmates). They reflected reservations about the interest or ability of correctional officers to keep them safe (30% of the male inmates endorsed correctional officers monitoring to keep them sexually safe and 44% of the females), and of correctional officers taking sexual assault seriously (47% of the male inmates and 63% of the female inmates). However, the majority of the male inmates (60%) and most of the female inmates (81%) believed that the wardens of their prisons did take sexual assault seriously.

Among the male inmates, the any-sex category was endorsed by inmates who felt more concerned about being attacked by other inmates, more concerned about being attacked by prison staff, and more concerned about being sexually assaulted by other inmates (see Table 46). Male inmates who reported being sexually predatory toward other inmates or members of the prison staff also reported feeling significantly more unsafe in prison. They endorsed worrying more about being physically and sexually attacked by other inmates. Male inmates who reported being sexually victimized in prison also reported being more concerned about being physically and sexually victimized by other inmate. Male inmates who had been sexually victimized in prison did not report more concerns about being physically victimized by correctional staff and did not report more concerns about being sexually victimized by staff.

The male inmates who endorsed involvement in sexual bartering reported being concerned about being physically and sexually assaulted by other inmates but no heightened concerns about assault by the correctional staff.

Male inmates who reported being involved in consensual sexual encounters with either other inmates or members of the correctional staff reported feeling more concerned about being physically and sexually attacked by other inmates and similarly sexually and physically by members of the correctional staff.

Table 46

Relationship between Fear of Victimization in Incarcerated Men (N = 288) and Sexual Experiences in Prison

	Any-sex		Predatory		Victim		Bartered		Consensual	
	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
	N=143 (%)	N=145 (%)	N=253 (%)	N=35 (%)	N=244 (%)	N=44 (%)	N=251 (%)	N=37 (%)	N=160 (%)	N=128 (%)
How safe feel in prison?										
Safe	80 (56.7)	71 (50.4)	133 (53.6)	18 (52.9)	133 (55.4)	18 (42.9)	134 (54.7)	17 (45.9)	87 (55.1)	64 (51.6)
Neutral	47 (33.3)	46 (32.6)	86 (34.7)	7 (20.6)	79 (32.9)	14 (33.3)	81 (33.1)	12 (32.4)	54 (34.2)	39 (31.5)
Unsafe	14 (9.9)	24 (17.0)	29 (11.7)	9 (26.5)*	28 (11.7)	10 (23.8)	30 (12.22)	8 (21.6)	17 (10.8)	21 (16.9)
How much worry about attack/inmate?										
Significantly	0 (0.0)	7 (5.0)	4 (1.6)	3 (8.8)	2 (0.8)	5 (11.9)	3 (1.2)	4 (10.8)	1 (0.6)	6 (4.8)
Neutral	8 (5.7)	7 (5.0)	15 (6.0)	0 (0.0)	10 (4.2)	5 (11.9)	14 (5.7)	1 (2.7)	12 (7.6)	3 (2.4)
Minimally	133 (94.3)	127 (90.1)*	229 (92.3)	31 (91.2)*	228 (95.0)	32 (76.2)**	228 (93.1)	32 (86.5)**	145 (91.8)	115 (92.7)*
How much worry about attack/prison staff?										
Significantly	13 (9.3)	25 (17.7)	30 (12.1)	8 (23.5)	31 (13.0)	7 (16.7)	29 (11.9)	9 (24.3)	14 (8.9)	24 (19.4)
Neutral	25 (17.9)	33 (23.4)	52 (21.1)	6 (17.6)	46 (19.2)	12 (28.6)	49 (20.1)	9 (24.3)	30 (19.1)	28 (22.6)
Minimally	102 (72.9)	83 (58.9)*	165 (66.8)	20 (58.8)	162 (67.8)	23 (54.8)	166 (68.0)	19 (51.4)	113 (72.0)	72 (58.1)*
How much worry about sexual assault/inmate?										
Significantly	0 (0.0)	7 (5.0)	4 (1.6)	3 (8.8)	2 (0.8)	5 (11.9)	3 (1.2)	4 (10.8)	1 (0.6)	6 (4.8)
Neutral	8 (5.7)	7 (5.0)	15 (6.0)	0 (0.0)	10 (4.2)	5 (11.9)	14 (5.7)	1 (2.7)	12 (7.6)	3 (2.4)

Minimally	133 (94.3)	127 (90.1)*	229 (92.3)	31 (91.2)*	28 (95.0)	32 (76.2)**	228 (93.1)	32 (86.5)**	145 (91.8)	115 (92.7)*
How much worry about sexual assault by prison staff?										
Significantly	0 (0.0)	5 (3.5)	3 (1.2)	2 (5.9)	4 (1.7)	1 (2.4)	3 (1.2)	2 (5.4)	0 (0.0)	5 (4.0)
Neutral	5 (3.5)	5 (3.5)	10 (4.0)	0 (0.0)	7 (2.9)	3 (7.1)	10 (4.1)	0 (0.0)	7 (4.4)	3 (2.4)
Minimally	136 (96.5)	131 (92.9)	235 (94.8)	32 (94.1)	229 (95.4)	38 (90.5)	232 (94.7)	35 (94.6)	151 (95.6)	115 (93.5)*
How much does prison system protect you from sexual contact?										
Significantly	46 (33.1)	34 (24.6)	71 (29.2)	9 (26.5)	70 (29.7)	10 (24.4)	69 (28.6)	11 (30.6)	48 (31.0)	32 (26.2)
Neutral	35 (25.2)	30 (21.7)	61 (25.1)	4 (11.8)	60 (25.4)	5 (12.2)	59 (24.5)	6 (16.7)	36 (23.2)	29 (23.8)
Minimally	58 (41.7)	74 (53.6)	111 (45.7)	21 (61.8)	106 (44.9)	26 (63.4)	113 (46.9)	19 (52.8)	71 (45.8)	61 (50.0)
How much do correctional officers monitor to keep you safe										
Significantly	50 (36.0)	34 (24.3)	77 (31.4)	7 (20.6)	78 (32.8)	6 (14.6)	76 (31.4)	8 (21.6)	53 (34.0)	31 (25.2)
Neutral	37 (26.6)	37 (26.4)	64 (26.1)	10 (29.4)	65 (27.3)	9(22.0)	64 (26.4)	10 (27.0)	39 (25.0)	35 (28.5)
Minimally	52 (37.4)	69 (49.2)	104 (42.4)	17 (50.0)	95 (39.9)	26 (63.4)*	102 (42.1)	19 (51.4)	64 (41.0)	57 (46.3)
How much do correctional officers take sexual assault seriously?										
Significantly	67 (48.6)	64 (46.0)	115 (47.3)	16 (47.1)	112 (47.5)	19 (46.3)	112 (46.7)	19 (51.4)	72 (46.5)	59 (48.4)
Neutral	35 (25.4)	32 (23.0)	63 (25.9)	4 (11.8)	59 (25.0)	8 (19.5)	62 (25.8)	5 (13.5)	40 (25.8)	27 (22.1)
Minimally	36 (26.1)	43 (30.9)	65 (26.7)	14 (41.2)	65 (27.5)	14 (34.1)	66 (25.7)	13 (35.1)	43 (27.7)	36 (29.5)

How much does
warden take
sexual assault
seriously?

Significantly	78 (56.5)	90(64.3)	146 (59.8)	22 (64.7)	142 (59.9)	26 (63.4)	140 (58.1)	28 (75.7)	86 (55.5)	82 (66.7)
Neutral	33 (23.9)	28 (20.)	57 (23.4)	4 (11.8)	54 (22.8)	7 (17.1)	59 (24.5)	2 (5.4)	38 (24.5)	23 (18.7)
Minimally	27 (19.6)	22 (15.7)	41 (16.8)	8 (23.5)	41 (17.3)	8 (19.5)	42 (17.2)	7 (18.9)*	31 (20.0)	18 (14.6)

Note. * p < .05, ** p < .01.

Table 47

Relationship between Fear of Victimization in Incarcerated Women (N = 183) and Sexual Experiences in Prison

	Any-sex		Predatory		Victim		Bartered		Consensual	
	No N=77 (%)	Yes N=106 (%)	No N=178 (%)	Yes N=5 (%)	No N=134 (%)	Yes N=49 (%)	No N=165 (%)	Yes N=18 (%)	No N=98 (%)	Yes N=85 (%)
How safe feel in prison?										
Safe	61 (80.3)	73 (70.9)	132 (75.9)	2 (40.0)	103 (79.2)	31 (63.3)	123 (75.9)	11 (64.7)	73 (75.3)	61 (74.4)
Neutral	11 (14.9)	21 (20.4)	29 (16.7)	3 (60.0)	19 (14.6)	13 (26.5)	27 (16.7)	5 (29.4)	18 (18.6)	14 (17.1)
Unsafe	4 (5.3)	9 (8.7)	13 (7.5)	0 (0.0)*	8 (6.2)	5 (10.2)	12 (7.4)	1 (5.9)	6 (6.2)	7 (8.5)
How much worry about attack/inmate?										
Significantly	2 (2.6)	4 (4.0)	6 (3.5)	0 (0.0)	3 (2.3)	3 (6.4)	6 (3.7)	0 (0.0)	4 (4.1)	2 (2.5)
Neutral	1 (1.3)	9 (8.9)	10 (5.8)	0 (0.0)	3 (2.3)	7 (14.9)	10 (6.2)	0 (0.0)	7 (7.1)	3 (3.8)
Minimally	74 (96.1)	88 (87.1)	157 (90.8)	5 (100.)	125 (95.4)	37 (8.7)**	145 (90.1)	17 (100.)	87 (88.8)	75 (93.8)
How much worry about attack/prison staff?										
Significantly	1 (1.3)	2 (2.0)	3 (1.7)	0 (0.0)	2 (1.5)	1 (2.1)	3 (1.9)	0 (0.0)	1 (1.0)	2 (2.5)
Neutral	2 (2.6)	11 (10.9)	13 (7.5)	0 (0.0)	5 (3.8)	8 (17.0)	13 (8.1)	0 (0.)	7 (7.1)	6 (7.5)
Minimally	74 (96.1)	88 (87.1)	157 (90.8)	5 (100.0)	124 (94.7)	8 (80.9)*	145 (90.1)	17 (100.0)	90 (91.8)	72 (90.0)
How much worry about sexual assault/inmate?										
Significantly	2 (2.6)	4 (4.0)	6 (3.5)	0 (0.0)	3 (2.3)	3 (6.4)	6 (3.7)	0 (0.0)	4 (4.1)	2 (2.5)
Neutral	1 (1.3)	9 (8.9)	10 (5.8)	0 (0.0)	3 (2.3)	7 (14.9)	10 (6.2)	0 (0.0)	7 (7.1)	3 (3.8)
Minimally	74 (96.1)	88 (87.1)	157 (90.8)	5 (100.0)	125 (95.4)	37 (78.7)**	145 (90.1)	1 (100.0)	87 (88.8)	75 (93.8)
How much worry about sexual assault by prison staff?										
Significantly	1 (1.3)	2 (2.0)	3 (1.7)	0 (0.0)	2 (1.5)	1 (2.1)	3 (1.9)	0 (0.0)	2 (2.0)	1 (1.2)

Neutral	2 (2.6)	8 (7.9)	10 (5.8)	0 (0.0)	3 (2.3)	7 (14.9)	10 (6.2)	0 (0.0)	6 (6.1)	4 (5.0)
Minimally	74 (96.1)	91 (90.1)	160 (92.5)	5 (100.0)	126 (96.2)	39 (83.0)**	148 (91.9)	17 (100.0)	90 (91.8)	75 (93.8)
How much does prison system protect you from sexual contact?										
Significantly	41 (53.2)	39 (39.0)	80 (46.5)	0 (0.0)	63 (48.1)	17 (37.0)	74 (46.2)	6 (35.3)	48 (49.0)	32 (40.5)
Neutral	15 (19.5)	29 (29.0)	42 (24.4)	2 (40.0)	34 (26.0)	10 (21.7)	38 (23.8)	6 (35.3)	19 (19.4)	25 (31.6)
Minimally	21 (27.3)	32 (32.0)	50 (29.1)	3 (60.0)	34 (26.0)	19 (41.3)	48 (30.0)	5 (29.4)	31 (31.6)	22 (27.8)
How much do correctional officers monitor to keep you safe										
Significantly	40 (51.9)	37 (37.0)	76 (44.2)	1 (20.0)	61 (46.6)	16 (34.8)	71 (44.4)	6 (35.3)	46 (46.9)	31 (39.2)
Neutral	22 (28.6)	23 (23.0)	44 (25.6)	1 (20.0)	36 (27.5)	9 (19.6)	39 (24.4)	6 (35.3)	26 (26.5)	19 (24.1)
Minimally	15 (19.5)	40 (40.0)*	52 (30.2)	4 (60.0)	34 (26.0)	21 (45.7)*	50 (31.2)	5 (29.4)	26 (26.5)	29 (36.7)
How much do correctional officers take sexual assault seriously?										
Significantly	51 (67.1)	59 (59.0)	108 (63.2)	2 (40.0)	86 (66.2)	24 (52.2)	102 (64.2)	8 (47.1)	64 (66.0)	46 (58.2)
Neutral	13 (17.1)	21 (21.0)	32 (18.7)	2 (40.0)	25 (19.2)	9 (19.6)	29 (18.2)	5 (29.4)	15 (15.5)	19 (24.1)
Minimally	12 (15.8)	20 (20.0)	31 (18.1)	1 (20.0)	19 (14.6)	13 (28.3)	28 (17.6)	4 (23.5)	18 (18.6)	14 (17.7)
How much does warden take sexual assault seriously?										
Significantly	62 (81.6)	81 (81.0)	139 (81.3)	4 (80.0)	108 (83.1)	35 (76.1)	130 (81.8)	13 (76.5)	81 (83.5)	62 (78.5)
Neutral	7 (9.2)	8 (8.0)	14 (8.2)	1 (20.0)	9 (6.9)	6 (13.0)	13 (8.2)	2 (11.8)	7 (7.2)	8 (10.1)
Minimally	7 (9.2)	11 (11.0)	18 (10.5)	0 (0.0)	13 (10.0)	5 (10.9)	16 (10.1)	2 (11.8)	9 (9.3)	9 (11.4)

Note. * p < .05, ** p < .01.

The data indicated less association between levels of fear and sexual behavior of the female inmates in prison (see Table 47). Female inmates who reported being sexually victimized reported feeling more concern about being physically and sexually attacked by another inmate and physically and sexually attacked by correctional staff. Bartered and consensual sex as self-reported by the female inmates was unrelated to any of these fear measures.

Perceptual Risk Markers for Sexual Predation and Violence

Thoughts of Harm and Sexual Violence. While all psychiatric evaluations include questions concerning homicidal ideation, the principle of thinking about violence before perpetrating violence has seldom been studied empirically. This possible risk factor was included in the MacArthur Violence Risk Study using the Schedule of Imagined Violence (SIV; Grisso, Davis, Vesselinoc, Appelbaum & Monahan, 2000). The SIV quickly divides respondents according to a SIV positive or SIV negative status, and among the endorsing SIV+ group, explores the frequency, chronicity, and target focus of violent thoughts over the previous two months.

The SIV was used with all participants in the MacArthur study at baseline and during each follow-up assessment. It was present in 339 patients, or 30% of the sample, during their initial hospitalization and increased to 57% by the end of the one year follow-up. The rate of violent behavior among the entire sample was 19% during the first twenty weeks but 26% among those who reported having thoughts of harming others. This effect increased over time with 24% of the SIV patients being violent as contrasted to 36% of the SIV+ patients. This association was found to have significant interactions with race and gender. Minority males and women of all races who were SIV+ were found to be two to three times more likely than those who were SIV- to engage in some form of community violence. The effect of this variable remained significant in the multiple regression analyses and was the most significant factor in the third iteration of the classification tree development (Monahan et al., 2001).

No studies have used the SIV to study sexual violence in the community or within institutions.

Threat Control Override Symptoms. The MacArthur Violence Risk Study also sought to parse out the effects of specific psychotic symptoms on the manifestation of violent behavior. Link and Stueve (1994) examined 13 common psychotic symptoms and found that three of these symptoms, which they labeled threat control over-ride symptoms (TCO), explained almost all of the association between psychotic thinking and violent behavior. The TCO constellation included the perception that one's mind was being controlled by some external force, that thoughts were being inserted into one's mind, or that there were others around who wished to do harm. Link and Stueve found no association between other

odd perceptions, ideas of thought broadcasting, possession, special powers, and audio and visual hallucinations and violent behavior.

Swanson, Borum, Swartz and Monahan (1996) found that individuals with TCO symptoms were twice as likely to be assaultive as those with other delusions and hallucination and five time more likely to be assaultive than those with no mental disorder. This relationship was compounded when associated with substance abuse and intoxication. Final analyses of the MacArthur data, however, failed to confirm this relationship between TCO override symptoms and violent behavior in the community. Subsequent analyses of these data suggest that they may contain significant gender differences with men being more likely to be violent when they experience perceptions of being controlled or harmed by others while women are less likely to be violent when having these same internal perceptions (Teasdale, Silver & Monahan, 2006).

No studies have used TCO symptoms to study sexual violence in the community or within institutions. We chose in our analyses to include these symptoms under perceptual risk factors rather than those associated with mental illness. It appeared that most respondents interpreted the three TCO questions as reflecting reality-based perceptions of others wanting to do them harm and not as internal stimuli associated with a psychotic illness.

Study Analyses. In the current study, the SIV was used to code each participant as SIV+ or SIV-. The SIV queried the individual about daydreams or thoughts about physically hurting another person, the recency and frequency of these thoughts, the chronicity of the violent thoughts, similarity or diversity in the type of imagined harm, whether the violent thoughts were focused on the same person or others, if there had been a change in the seriousness of imagined harm, and the respondent's proximity to the target individual.

The threat control over-ride (TCO) symptoms were assessed through self-report queries embedded in the Personal Background Information Survey (PBIS). Respondents were asked if during their incarceration they had experienced others trying to control their thoughts, insert thoughts into their minds, and if they felt that others intended to do them harm.

Table 48

Descriptive Statistics for SIV and TCO Endorsement for Incarcerated Men (N = 288) and Women (N = 183)

Men		Women		χ^2	Φ
N	%	N	%		

Thoughts of Harming Others (SIV+)	89	31.9	20	11.3	25.27**	0.24**
Others Controlling Thoughts	35	12.3	29	16.2	1.39	-0.06
Others Want to Hurt You	110	39.0	67	37.2	0.15	0.02
Inserting Thoughts	19	6.7	6	3.3	2.44	0.07
Any Threat-Control Override	122	42.4	73	39.9	0.28	-0.02

Note. * $p < .05$, ** $p < .01$.

The results in Table 48 underscore the violent perceptions that characterize the experiences of the male and female inmates in our sample. Almost one third (31.9%) of the male inmates reported having had thought of harming a person during the previous two months while almost one half (42.4%) reported at least one of the three TCO symptoms, most often the perception that others were intending harm toward the individual. These rates were lower for the female inmates with 11.3% having had thoughts of physically harming another in the previous two months and 39.6% having perceptions of others wishing to do them harm. There were no gender differences concerning the experience of any of the three threat control over-ride symptoms.

The male inmates reflected a number of associations between these perceptual states and their violent behavior in prison (see Table 49). The any-sex category was correlated with SIV+ status and having the perceptions that others wished to do harm to the inmate. This sense of others wishing to do harm was further associated with predatory sex, being sexually victimized, and having been involved in some type of bartered sex. Consensual sexual behavior was associated with both SIV+ status and the perception that others wished to do the inmate harm.

Table 49

Relationship Between SIV and TCO Measures for Men (N = 288) by Sexual Experiences in Prison

	Any-sex		Predatory		Victim		Bartered		Consensual	
	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
	N=143(%)	N=145(%)	N=253(%)	N=35(%)	N=244(%)	N=44(%)	N=251(%)	N=37(%)	N=160(%)	N=128(%)
Thoughts of Harming Others (SIV+)	35 (24.8)	54 (39.1)*	70 (28.5)	19 (57.6)**	73 (30.5)	16 (40.0)	71 (29.2)	18 (50.0)*	40 (25.3)	49 (0.5)**
Others Controlling Thoughts	16 (11.3)	19 (13.4)	28 (11.2)	7 (20.0)	28 (11.6)	7 (16.7)	30 (12.1)	5 (13.5)	142 (89.3)	107 (85.6)
Others Want to Hurt You	41 (29.1)	69 (48.9)**	89 (36.0)	21 (60.0)**	87 (36.4)	23 (53.5)*	88 (35.9)	22 (9.5)**	47 (29.7)	63 (0.8)**
Inserting Thoughts	11 (7.7)	8 (5.6)	16 (6.4)	3 (8.6)	16 (6.6)	3 (7.0)	17 (6.9)	2 (5.4)	11 (6.9)	8 (6.4)
Any Threat-Control Override	47 (32.9)	75 (51.7)**	99 (39.1)	23 (65.7)**	98 (40.2)	24 (54.5)	99 (39.4)	37 (2.2)**	54 (33.8)	68 (3.1)**

Note. * $p < .05$, ** $p < .01$.

Table 50

Relationship Between SIV and TCO Measures for Women (N = 183) by Sexual Experiences in Prison

	Any-sex		Predatory		Victim		Bartered		Consensual	
	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
	N=77(%)	N=106(%)	N=178(%)	N=5 (%)	N=134(%)	N=49(%)	N=165(%)	N=18 (%)	N=98 (%)	N=85 (%)
Thoughts of Harming Others (SIV+)	4 (5.3)	16 (16.0)*	19 (11.0)	1 (20.0)	13 (9.9)	7 (15.2)	16 (10.0)	4 (23.5)	5 (5.1)	15 (19.0)**
Others Controlling Thoughts	9 (11.8)	20 (19.4)	27 (15.5)	2 (40.0)	21 (16.0)	9 (16.7)	24 (14.9)	5 (27.8)	11 (11.5)	18 (21.7)
Others Want to Hurt You	20 (26.3)	47 (45.2)*	64 (36.6)	3 (60.0)	41 (31.3)	26 (53.1)**	58 (35.8)	9 (50.0)	31 (32.0)	36 (43.4)
Inserting Thoughts	2 (2.6)	4 (3.8)	6 (3.4)	0 (0.0)	4 (3.1)	2 (4.1)	5 (3.1)	1 (5.6)	2 (2.1)	4 (4.8)
Any Threat-Control Override	23 (29.9)	50 (47.2)*	69 (38.8)	4 (80.0)	46 (34.3)	27 (55.1)*	63 (38.2)	10 (55.6)	34 (34.7)	39 (45.9)

Note. * $p < .05$, ** $p < .01$.

The association between these violence related perceptual states and sexual behavior in prison was less consistent among the female inmates (see Table 50). As with the male inmates, SIV+ status was associated with involvement in a consensual sexual experience with another inmate or member of the correctional staff. Similarly, thoughts that others intended harm to an inmate were associated with having been sexually victimized during incarceration.

Conclusions

Many of the male inmates who were sexually active in prison reported high levels of anger as assessed through both self report and clinical assessment. This affective state was associated with all four indices of sexual behavior including predatory, victimized, bartered, and consensual sex and seemed to further link these different types of sexual behavior with other forms of violent behavior in prison, at least among the male inmates. The emotional tenor of the anger also seemed to impact its particular effect on sexual behavior among the men in our sample. Male inmates who met endorsement criteria for the Borderline PD diagnostic criteria of Inappropriate Anger were more likely to be involved in bartered and consensual sex while incarcerated. Males who met endorsement criteria for the Antisocial PD diagnostic criteria for aggressiveness were less likely to be sexually victimized and more likely to be involved in consensual sexual relationships during incarceration. These findings suggests that anger can play different roles in the sexual adaptation of male inmates, apparently serving as a risk factor for higher levels of consensual sexual behavior and as a protective factor against sexual victimization. Similar patterns were observed among the female inmates. While Borderline PD Inappropriate Anger was unrelated to any of the sexual indices, Antisocial PD Aggressiveness was again found to be correlated with higher rates of consensual sexual behavior among the female inmates during incarceration although not with lower levels of victimization. These findings reflect not only an association between anger and coerced sex as posited in community based theories of rape behavior but also a significant link between anger and consensual sex for both the male and female inmates.

Impulsivity was similarly associated with the various categories of sexual behavior. Here again the association seemed to be strongest with involvement in consensual sexual relationships for both the male and female inmates. This association crossed diagnostic boundaries and was consistent across the Borderline PD, Antisocial PD, and HCR:20 descriptions of impulsive behavior. For the female inmates, the association with consensual sex was strongest with the Borderline PD impulsivity diagnostic criteria, a criterion that pairs the impulsivity with various types of self destructive behavior.

We encountered significant gender differences in the relative safety experienced and reported by the male and female inmates. The female inmates tended to describe feeling safe in prison and being

relatively unconcerned about being attacked by other inmates or by a member of the correctional staff. Only 54% of the male inmates reported feeling safe in prison and attributed most of their concerns to being attacked by a member of the correctional staff. Most of the male and female inmates reported few concerns about being sexually assaulted while incarcerated by other inmates (92% of the males and 91% of the females) or members of the prison staff (95% of the male inmates and 93% of the female inmates).

These findings suggest that consensual sex is different from sex in the community and not only because of the gender of the person with whom it is occurring but also because of the affective and perceptual states that are associated with it. Both the male and female inmates who become involved in consensual sex in prisons are angrier and more impulsive than those inmates who do not. This finding may help to explain the turbulence that is associated most broadly with the sexual behavior that occurs in prison.

Male inmates experience prison as a more dangerous place both physically and sexually than do female inmates. This undoubtedly reflects the higher rates of violence that do occur in male prisons. However, it also illustrates the fear that is associated with it for the male inmates and the emotional turmoil that derives from it. While the male inmates report being most concerned about being attacked by correctional officers both the male and female inmates report relatively few concerns about sexual assault by either other inmates or members of the prison staff. This suggested that most inmates, regardless of gender, experience themselves as sexually safe in prison and do not unilaterally experience themselves as vulnerable to sexual assault and victimization.

Chapter Eight

Personality Risk Markers for Sexual Predation and Victimization

In the following chapter, we examine the influence of the more static, personality-based risk makers as they impact sexual behavior in prison. We examine two constructs with a pivotal history in the assessment of violence and aggressive sexuality, antisociality and psychopathy. These two personality based constructs have a significant amount of overlap although psychopathy is less frequent in both community and prison samples, appears to be more biologically determined across all populations, and is viewed by many as representing the more malignant end of the antisocial continuum. We also explore the impact of the remaining nine personality disorders identified in the Diagnostic and Statistical Manual of Mental Disorders-IV–Text Revision (DSM-IV-TR; American Psychiatric Association, 1994) as they may influence the inmate’s sexual behavior in prison including both predation against and victimization by other inmates and prison staff.

The Role of Antisociality in the Prediction of Sexual Aggression and Violence in Prison

Defining antisociality. Sixty years of developmental and risk research has documented the relationship between general antisociality and violent crime including rape. Whether explored through patterns of violent crime, the patterned behavior of sexually coercive offenders, or the assessment of psychopathy as it predicts future behavior, the research underscores the relationship between personality and life-style and the perpetration of sexual aggression and other forms of interpersonal violence. Recent longitudinal research has also begun to broaden this inquiry by describing the evolution of these patterns of behavior from childhood through adolescence into adulthood.

Sexual coercion in community samples. Community studies of rape have demonstrated a relationship between sexually coercive behavior in non-incarcerated males and attitudes that reflect antisocial values. Using the Sexual Experiences Survey (SES), Koss and Dinero (1988) studied the self-report behavior of a national sample of 2,972 male college students. They found that 4% of the sample reported having raped a woman, 3% having attempted to rape a woman, 7% having used sexually coercive tactics to obtain sexual contact, and 10% having used a position of authority or threats to obtain sexual gratification. The sexually coercive men were found to be characterized by psychopathic-like traits such as callousness, a lack of empathy, aggression, and non-sexual antisocial behaviors (Kosson, Kelly & White, 1997; Walter, Rowe & Quinsey, 1993; Wheeler, George & Dahl, 2002). Malamuth, Linz, Heavy, Barnes and Acker (1995) later conducted a follow-up study of men who had been assessed while attending college and were able to locate 132 of these individuals along with their current romantic

partner. They found that the men who had self-reported sexually coercive acts while in college were more likely to self-report sexual coercion in adulthood ($r = .41$). Their partners also reported a higher incidence of non-sexual aggression being directed toward them in the context of their current relationship ($r = .55$).

Fromuth and Conn (1997) surveyed college women and found that 22% acknowledged having had sexual contact with younger children, usually when they were children or adolescents. None of these young women had ever come to the attention of the police or a mental health counselor although many reported prior sexual abuse as children.

Criminal Behavior of Male Rapists. Bard et al. (1987) studied the criminal history of 100 rapists using information contained in their treatment files. They found that 93% of their sample had committed various forms of property crime including breaking and entering. Another 45% had committed a non-sexual violent crime such as assault. Barbaree and Seto (1998) examined the official criminal histories of 200 rapists and found that they had perpetrated a mean of 13 non-violent, non-sexual crimes and a mean of 2 non-sexual violent crimes. Weinrott and Saylor (1991) used a computerized self-report measure of criminal behavior with 37 convicted rapists. This group self-reported 19,000 nonsexual crimes in the 12 months preceding their arrest. This reflected a mean of 136 offenses per offender including public drunkenness, stealing, the use of hard drugs, and physically assaulting a woman. Hagan and Gust-Brey (1999) conducted a ten year follow-up of 50 youth who had been committed to a secure treatment facility after having been determined to be sexually aggressive youth. Following release from the intensive treatment milieu, 90% of the youth were involved in one or more nonsexual crimes, with many of them being incarcerated for their adult crimes. Only 16% of the sample perpetrated another sexual assault by the end of the ten year follow-up.

Female Rapists. Research on sexually coercive behavior among women has been expanded recently based upon data obtained from sexual offender registries in Texas and New York. In Texas, Vandiver and Kercher (2004) identified six distinct groups that differentiated offenders based upon their sexual orientation, victim choice, and motivations for the crimes. The *female sexual predators* were found to be slightly younger and to behave in a manner that suggested a sexual preference for male victims who were slightly under the age of puberty. They were found to have a fairly high rate of re-arrest for crimes that were similar in nature to the one that led to their registration. The *homosexual criminals* were in their mid-thirties and targeted females who were similar to them in age. They had multiple arrest histories, displayed a variety of antisocial behaviors, and often forced their female victims into prostitution which they used as source of support.

Sandler and Freeman (2007) replicated this research using 390 women registered in New York, a group

that constituted 2% of the offenders registered statewide. They also identified six offender groups but differentiated them based upon their choice of victim and their perceived level of risk for re-offense. The *criminally-prone hebephile* group tended to chose male and female victims around the age of 14 years and had high rates of prior arrests, re-arrests, more periods of incarcerations (52%), and more frequent supervision failures. The *high risk chronic offenders* group abused children who were on average five years of age. They tended to have a mean of 15 prior convictions, high rates of re-arrest, numerous prior incarcerations, and the highest rate of supervision failures.

Study analyses. In this section, we examine the relationship between Antisocial PD as described in the DSM-IV-TR and our various domains of sexual behavior in prison. We used the Structured Interview for DSM-IV Personality Disorders (SIDP-IV) developed by Pfohl, Blum and Zimmerman (1995) to assess the presence of Antisocial PD in each of our male and female inmates. The SIDP-IV is a semi-structured interview designed to assess the 10 DSM-IV-TR personality disorders.

The results in Table 51 reflect the commonly observed gender differences in antisociality with 60% of the male inmates meeting diagnostic criteria for Antisocial PD and 36% of the female inmates. These gender differences while substantial are lower than those found in the community where seven times more men than women are found to meet diagnostic criteria for Antisocial PD (Robins, Tipp, & Przybeck, 1991). There were also gender differences in symptom patterns found in making this diagnosis with the males reporting more aggressive/irritable behavior (38.9%) and the women higher rates of irresponsibility (25.6%).

By definition, individuals must meet criteria for a conduct disorder before the age of 15 to be diagnosed with Antisocial PD in adulthood. In the current data, the majority of males (74%) who met criteria for Conduct Disorder did go on to meet criteria for Antisocial PD as adults. In contrast, only 50% of the females who met diagnostic criteria for Conduct Disorder by the age of 15 years met criteria for Antisocial PD as adults. These data may reflect a different trajectory of personality development in girls with these adolescent behaviors more often being associated among women with the development of other Cluster B diagnoses, severe levels of PTSD, and depression in women.

Table 51

Frequency of Antisocial PD Symptoms by Antisocial PD (APD), Stratified by and Across Gender for Incarcerated Men (N = 288) and Women (N = 183)

	Men						Women					
	Non		ASPD		Non v. ASPD		Non		ASPD		Non v. ASPD	
	(n = 116)		(n = 165)		(N= 281)		(n = 115)		(n = 65)		(N= 180)	
	N	%	N	%	χ^2	Φ	N	%	N	%	χ^2	Φ
Conduct Disorder < Age 15	43	37.1	165	100.00	140.28**	0.71**	26	22.6	65	100.0	99.5-**	0.74**
Fail to Conform to Norms	55	50.5	149	92.0	60.35**	0.47**	53	46.1	61	93.8	40.79**	0.48**
Deceitfulness	24	21.6	96	58.5	35.68**	0.37**	29	24.8	39	60.0	22.14**	0.35**
Impulsivity	31	27.2	114	69.1	47.41**	0.41**	37	31.9	40	61.5	14.97**	0.29**
Irritability/Aggressiveness	42	38.9	142	88.2	72.72**	0.52**	29	25.2	33	52.4	13.23**	0.27**
Recklessness	21	18.4	75	46.3	22.92**	0.29**	19	16.4	24	36.9	9.71**	0.23**
Irresponsibility	21	18.4	70	42.9	18.29**	0.26**	30	25.6	40	61.5	22.75**	0.35**
Lack of Remorse	36	32.1	112	68.7	35.71**	0.36**	38	32.5	30	46.2	3.34	0.14

Note. * $p < .05$, ** $p < .01$; frequencies reflect number who met DSM-IV criteria for symptom.

Table 52

Relationship Between Antisocial PD Symptoms for Incarcerated Men (N = 288) and Sexual Experiences in Prison

	Any-sex		Predatory		Victim		Bartered		Consensual	
	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
	N=143(%)	N=145(%)	N=253(%)	N=35(%)	N=244(%)	N=44(%)	N=251(%)	N=37(%)	N=160 (%)	N=128 (%)
Conduct Disorder < Age 15	93 (66.5)	115 (81.0)**	178 (72.1)	30 (88.2)*	176 (73.9)	32 (74.4)	175(71.7)	33 (89.2)*	101(64.76)	107(85.6)**
Fail to Conform to Norms	95 (68.8)	112 (82.4)**	180 (74.7)	27 (81.8)	178(76.7)	29 (69.0)	180(74.7)	27 (81.8)	107(69.0)	100(84.0)**
Deceitfulness	60 (43.2)	62 (44.6)	106 (43.3)	16 (48.5)	107(45.7)	15 (34.1)	106(43.6)	16 (45.7)	64 (41.0)	58 (47.5)
Impulsivity	65 (45.0)	82 (57.7)*	123 (49.8)	22 (62.9)	124(51.9)	21 (48.8)	123(50.0)	22 (61.1)	71 (45.2)	74 (59.2)*
Irritability/Aggressiveness	90 (65.2)	97 (72.4)	162(68.4)	25 (71.4)	165(71.7)	22 (52.4)*	159(7.4)	28 (77.8)	96 (62.7)	91 (76.5)*
Recklessness	41 (29.5)	56 (40.0)	80 (32.8)	17 (48.6)	82 (34.9)	15 (34.1)	82 (33.6)	15 (42.9)	46 (29.5)	51 (41.5)*
Irresponsibility	49 (35.5)	43 (30.3)	78 (31.8)	14 (40.0)	77 (32.6)	15 (34.1)	81 (33.2)	11 (30.6)	53 (34.2)	39 (31.2)
Lack of Remorse	71 (51.1)	89 (57.6)	129(52.7)	22 (66.7)	133(56.6)	18 (41.9)	126 (51.9)	25 (71.4)*	79 (50.6)	72 (59.0)

Note. * $p < .05$, ** $p < .01$.

Table 53

Relationship Between Antisocial PD Symptoms for Incarcerated Women (N = 183) and Sexual Experiences in Prison

	Any-sex		Predatory		Victim		Bartered		Consensual	
	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
	N=77(%)	N=106(%)	N=178(%)	N=5(%)	N=134(%)	N=49(%)	N=165(%)	N=18 (%)	N=98(%)	N=85(%)
Conduct Disorder < Age 15	31 (40.3)	60 (58.3)*	88 (50.3)	3 (60.0)	69 (51.9)	22 (46.8)	85 (52.1)	6 (35.3)	39 (39.8)	52 (63.4)**
Fail to Conform to Norms	38 (49.4)	77 (74.0)**	111 (63.1)	4 (80.0)	82 (61.2)	33 (70.2)	101 (61.6)	14 (82.4)	50 (51.5)	65 (77.4)**
Deceitfulness	25 (32.5)	43 (40.6)	65 (36.5)	3 (60.0)	50 (37.3)	18 (36.7)	60 (36.4)	8 (44.4)	33 (33.7)	35 (41.2)
Impulsivity	33 (42.9)	45 (42.9)	74 (41.8)	4 (80.0)	56 (42.1)	22 (44.9)	70 (42.7)	8 (44.4)	41 (41.8)	37 (44.0)
Irritability/Aggressiveness	21 (27.3)	41 (40.6)	60 (34.5)	2 (50.0)	43 (32.6)	19 (41.3)	54 (33.3)	8 (50.0)	27 (27.8)	35 (43.2)*
Recklessness	12 (15.6)	32 (30.5)*	41 (23.2)	3 (60.0)	28 (20.9)	16 (33.3)	38 (23.0)	6 (35.3)	17 (17.3)	27 (32.1)*
Irresponsibility	26 (33.8)	44 (41.5)	68 (38.2)	2 (40.0)	55 (41.0)	15 (30.6)	63 (38.2)	7 (38.9)	32 (32.7)	38 (44.7)
Lack of Remorse	33 (42.9)	36 (34.0)	66 (37.1)	3 (60.0)	50 (37.3)	19 (38.8)	59 (35.8)	10 (55.6)	40 (40.8)	29 (34.1)

Note. * $p < .05$, ** $p < .01$.

Symptoms of a conduct disorder prior to age 15 years were associated with higher rates of any-sex, predatory, bartered and consensual sex among the male inmates (see Table 52). Victimization was associated only with lower levels of irritability and aggressiveness. Consensual sex was associated with the most diagnostic criteria of Antisocial PD including higher levels of conduct disorder, failure to conform to norms, impulsivity, irritability/aggressiveness, and recklessness.

These data reflect a similar if attenuated association between the diagnostic criteria for Antisocial PD and sexual behavior in prison among the female inmates (see Table 53). While predatory, victimized and bartered sex was unrelated to any of the Antisocial PD criteria, four of the criteria of Antisocial PD were associated with higher rates of consensual sex in prison. These included the presence of a conduct disorder prior to age 15 years, a failure to conform to norms, higher levels of irritability and aggressiveness, and higher levels of reckless behavior.

The Role of Psychopathy in the Prediction of Sexual Aggression and Violence in Prison

The relationship between personality and violence has been rigorously studied using the construct of psychopathy developed by Hare (1978) and operationalized by him using the Psychopathy Checklist (PCL; PCL-R; PCL-R-2). Hare attributes the development of his powerful instrument to the early writings of Hervey Cleckley who in 1941 published his book, *The Mask of Sanity: An Attempt to Clarify Some Issues About the So-Called Psychopathic Personality and Psychopathy*. As reflected in his title, Cleckley was interested in trying to describe systematically a group of patients who were by nature unsuited for the dominant mode of treatment at that time, psychoanalysis. He structured his description using 15 case studies which included both men and women and which culminated in the identification of 16 common features of their characters and often unstable lifestyles. Cleckley's case descriptions included two women, both of whom demonstrated chronic patterns of lying, stealing, truancy, and sexual promiscuity.

In the 1970's, Hare began the process of identifying a set of 20 attributes that he believed could be assessed empirically and used to quantify the clinical syndrome identified by Cleckley. He integrated these into the first version of the PCL with each attribute being scored 0 (not present), 1 (possibly present) or 2 (definitely present) based upon both a face to face interview and a review of all available records. A score over 25 or 30 out of a maximum score of 40 was determined to be indicative of psychopathy both in men and women. The PCL was first used within the Canadian prison system and quickly grew in recognition throughout the world as it began to demonstrate a rather uncanny ability to predict violent behavior.

Since its inception, the PCL has undergone three revisions that reflect both changes in the item number and the factor structure that is used to interpret and score the instrument (Hare, 1991; Hare, 2003). For many years, a two-factor model dominated the research literature (Harpur, Hakstian & Hare, 1988). Meta-

analyses of composite datasets, however, led Cooke and Michie (2001) to propose a three factor model made up of an *Arrogant and Deceitful Interpersonal Style*; *Deficient Affective Experience*; and *Impulsive and Irresponsible Behavior*. In the revised PCL-R 2nd (PCL-R-2) Edition Manual, Hare (2003) advocates for a four factor model that combines Cooke's three factors with a fourth factor, *Persistent and Varied Rule Breaking*.

Psychopathy and criminal offending in men. Research conducted since the inception of the PCL suggests that the construct has an ability to predict violent behavior among male inmates and forensic patients with predictive capabilities that exceeds most, if not all, other risk markers (Chase, O'Leary & Heyman, 2001; Edens, Buffington-Vollum, Keilen, Roskamp & Anthony, 2005; Hare, Clark, Grann & Thornton, 2000; Hart, Kropp & Hare, 1988; Hart, Cox & Hare, 1995; Harris et al., 2003; Hemphill, Hare & Wong, 1998; Hicks, Rogers & Cashel, 2000; Quinsey, Harris, Rice & Cormier, 1998). General research comparing male psychopathic offenders with non-psychopathic offenders has found that the psychopaths have more extensive and varied criminal histories, manifest higher levels of instrumental violence, more frequently use weapons, and cause more significant injuries to their victims (Gacono, 2000). One of the first meta-analyses conducted by Hemphill, Hare and Wong (1998) using only prospective data from offenders released into the community found a weighted correlation of .27 for general recidivism (N = 1275), .27 for violent recidivism (N= 1374) and .23 for sexual recidivism (N = 178). Later meta-analyses conducted by Gendreau, Goggin and Smith (2002) and Walters (2003) reported weighted effect sizes of .23 to .26 for general recidivism, and .21 for violent recidivism.

Psychopathy and sexual offending by men. When this construct is explored in the context of sex offending, the role of psychopathy again appears to be appreciable, at least among those who are involved in forcible rapes against others. Psychopathy serves as a dominant risk marker for high levels of recidivism among institutionalized rapists following release (Hanson & Morton-Bourgon, 2004; Harris, Quinsey, Lalumière, Boer & Lang, 2005) and sexual recidivism among sex offenders even when controlling for age, criminal history, and psychiatric history (Rice, Harris & Quinsey, 1990). When compared to other types of sexual offenders, rapists were found by Rice and Harris (1997) to have higher scores on the PCL:R than other offenders held in the same federal prison system. Brown and Forth (1997) studied psychopathy in the context of the MTC:3 Revised Rapist Typology and found that the psychopathic rapists tended to fall within the Opportunistic and Pervasively Angry categories. They were found to demonstrate more extensive criminal histories beginning at an earlier age, but to inflict similar amounts of victim injury as non-psychopathic rapists. Prentky and Knight (2000) reviewed base rate data from the MTC treatment sample and concluded that the opportunistic, pervasively angry, and overtly sadistic rapists were the most psychopathic in their behavior and attitudes. Within these groups, higher levels of psychopathy were associated with more violence and a more sexualized fantasy underlying the assault.

Psychopathy and criminal offending in women. Studies of female inmates suggest slightly lower rates of psychopathy compared to male inmates when the score of 30 is used to diagnose or identify the condition. Research in Canada and the US suggest base rates ranging from 9 to 31 percent depending on the sample size and the security level of the female inmates being studied (Salekin, Rogers & Sewell, 1997; Strachan, 1993; Vitale, Smith, Brinkley & Newman, 2002; Loucks & Zamble, 2000). These reduced rates have led to speculations of a possible gender bias in some PCL-R items such as criminal versatility, juvenile delinquency, and the revocation of conditional release. Jackson, Jackson, Rogers, Neumann and Lambert (2002) reviewed the various studies and their samples and concluded that PCL-R scores among female samples average about 4 to 6 points lower than among male samples, but that the construct remains consistent in its ability to identify a continuum of similar behavior among women.

Research suggests that psychopathy might have a different relationship to violent crime when encountered in women. Warren and her colleagues found that PCL-R scores demonstrated an inverse ability to predict convictions for murder, a close to chance ability to predict violent crime, and a shared ability to predict property and minor crime among a group of incarcerated female felons (Warren et al., 2005). Salekin et al. (1997) found in their follow-up of 78 female inmates that scores on the PCL-R were unrelated to violent behavior, verbal aggression, noncompliant behavior, and estimated overall dangerousness while incarcerated. They also found that psychopathy scores were modest to poor predictors of recidivism when the women returned to the community. Strachen (1993), in her dissertation research, found psychopathic women being more involved in prostitution and more likely to surrender their children for adoption when compared to non-psychopathic female inmates.

Study Analyses. In our study, we used the Psychopathy Checklist Revised-2 (PCL-R-2) to assess psychopathy among both the male and female inmates. It was coded based upon the questions included in our Prison Violence Risk Interview (PVRI) combined with the information obtained from each inmate's prison file. The 20 PCL-R-2 items were scored on a three-point Likert scale and analyzed using the four facet model advocated by Hare (2003). Frequencies and factor scores are presented in Table 54.

Table 54

Frequency of Psychopathy Checklist Items and Factor Scores for Incarcerated Men (N = 288) and Women (N = 183)

	Men		Women		Effect Size	
	N	%	N	%	χ^2	Φ
1. Glibness					10.88 ^{***}	0.15 ^{***}
No	130	45.5	112	61.2		

Possible	94	33.0	44	24.0		
Yes	61	21.4	27	14.6		
2. Grandiose					0.01	0.01
No	118	41.3	76	41.6		
Possible	90	31.5	57	31.3		
Yes	78	27.3	49	26.9		
3. Needs Stimulation					0.67	0.04
No	65	22.8	40	21.9		
Possible	103	36.1	61	33.3		
Yes	117	41.1	82	44.8		
4. Pathological Lying					9.62^{**}	0.14^{**}
No	144	50.7	117	64.3		
Possible	96	33.8	39	21.4		
Yes	44	15.5	26	14.3		
5. Manipulative					4.84	0.10
No	116	40.8	56	30.8		
Possible	85	29.9	64	35.2		
Yes	83	29.2	62	34.1		
6. Lacks Remorse					13.96^{**}	0.17^{***}
No	63	22.1	69	37.9		
Possible	107	37.5	58	31.9		
Yes	115	40.4	55	30.2		
7. Shallow Affect					16.91^{**}	0.19^{***}
No	148	51.9	116	63.7		
Possible	79	27.7	54	29.7		
Yes	58	20.4	12	6.6		
8. Callous					11.07^{**}	0.15^{***}
No	95	33.3	86	47.3		
Possible	118	41.4	68	37.4		
Yes	72	25.3	28	15.4		
9. Parasitic Lifestyle					4.96	0.10
No	121	44.2	64	35.4		
Possible	96	35.0	65	35.9		
Yes	57	20.8	52	28.7		

10. Poor Behavioral Control					24.37**	0.23**
No	50	17.5	67	36.6		
Possible	94	32.9	57	31.1		
Yes	142	49.7	59	32.2		
11. Promiscuous					21.19**	0.21**
No	94	33.0	99	54.4		
Possible	70	24.6	28	15.4		
Yes	121	42.5	55	30.2		
12. Early Behavior Problems					18.02**	0.20**
No	94	32.9	94	51.4		
Possible	68	23.8	40	21.9		
Yes	124	43.4	49	26.8		
13. Lacks Goals					7.20*	0.13*
No	116	41.1	96	52.7		
Possible	96	34.0	56	30.8		
Yes	70	24.8	30	16.5		
14. Impulsivity					5.37	0.11
No	34	11.9	36	19.7		
Possible	124	43.5	70	38.3		
Yes	127	44.6	77	42.1		
15. Irresponsibility					1.36	0.05
No	96	33.7	53	29.1		
Possible	110	38.6	79	43.4		
Yes	79	27.7	50	27.5		
16. Fails to Accept Responsibility					11.78**	0.16**
No	86	30.2	80	44.0		
Possible	103	36.1	63	34.6		
Yes	96	33.7	39	21.4		
17. Many Marital Relationships					7.88*	0.14*
No	185	73.1	106	60.6		
Possible	27	10.7	31	17.7		
Yes	41	16.2	38	21.7		
18. Juvenile Delinquency					65.38**	0.37**
No	104	36.4	125	68.3		

Possible	39	13.6	31	16.9		
Yes	143	50.0	27	14.8		
19. Revocation of Conditional Release					0.49	0.03
No	111	41.9	74	45.1		
Possible	18	6.8	11	5.7		
Yes	136	51.3	79	48.2		
20. Criminal Versatility					37.70**	0.28**
No	155	54.0	147	80.8		
Possible	77	26.8	27	14.8		
Yes	55	19.2	8	4.4		
PCL-R > 30	30	10.5	6	3.3	8.16**	-0.13**
PCL-R > 25	67	23.5	22	12.1	9.36**	-0.14**
	M	SD	M	SD	t	
Factor 1: Interpersonal (1,2,4,5)	3.16	2.31	2.91	2.10	1.18	
Factor 2: Affective (6,7,8,16)	3.82	2.33	2.81	2.24	4.69**	
Factor 3: Behavioral (3,9,13,14)	4.13	2.07	4.03	2.02	0.50	
Factor 4: Antisocial (10,12,18,19,20)	5.31	2.64	3.39	2.42	8.09**	
Total Score (all items)	18.95	7.77	15.51	7.21	4.80**	

Note. * $p < .05$, ** $p < .01$.

The scores on the PCL-R-2 ranged from a low of 4 to a high of 36 with a mean score of 19 for the males and 16 for the females, total scores that were statistically significantly different, but not clinically meaningfully different. As summarized above, 10.5% of the males and 3.3% of the females scored above a score of 30, and 23.5% of the males and 12.1% of the females scored above a cut-off score of 25. Gender differences were found on 15 of the 20 item scores. All of these involved the males scoring higher on the item when compared to the females except for the multiple marital relationships, an item on which more females than males received a score of 2 (21.7%, 16.2%). Seven scales did not reflect gender differences: grandiosity (item 2), the need for stimulation (item 3), manipulativeness (item 5), parasitic life-style (item 9), impulsivity (item 14), irresponsibility (item 15), and the revocation of conditional release (item 19). Gender differences were found on two of the factors scores -- the Affective (Factor 2) and Antisocial (Factor 4) facets, again with the male inmates scoring higher. No gender differences were found on the Interpersonal (Factor 1) and Behavioral (Factor 3) scores.

Unlike with Antisociality, scores on the PCL-R-2 reflected relatively few associations with the various types of sex reported by the male inmates (see Table 55). Only bartered sex was associated with total scores of

over 25 on the PCL-R-2, along with elevated scores on Factor 3, *Irresponsible Behavior*, and Factor 4, *Persistent and Varied Rule Breaking*.

As seen in Table 56, more consistent associations were found between psychopathy and sexual behavior in prison among the female inmates. Predatory behavior was associated with a total score of over 30 on the PCL-R-2 and elevated scores on the Factor 2, *Interpersonal Style*, and Factor 3, *Deficient Affective Experience* dimensions of the instrument. Bartered sex was similarly associated with a total score of over 30 on the PCL-R2. Two of the five women who reported predatory sexual behavior scored over 30 on the instrument. Consensual sex among the female inmates was associated with total scores on the PCL-R-2 and an elevated score on Factor 4, *Persistent and Varied Rule Breaking*.

Table 55

Relationship Between Psychopathy Checklist Total and Factor Scores for Incarcerated Men (N = 288) and Sexual Experiences in Prison

	Any-sex		Predatory		Victim		Bartered		Consensual	
	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
	N=143 (%)	N=145 (%)	N=253 (%)	N=35 (%)	N=244 (%)	N=44 (%)	N=251 (%)	N=37 (%)	N=160 (%)	N=12 (%)
PCL-R > 30	15 (10.7)	15 (10.3)	24 (9.6)	6 (17.1)	25 (10.4)	5 (11.4)	23 (9.3)	7 (18.9)	15 (9.6)	15 (11.7)
PCL-R > 25	29 (20.7)	38 (26.2)	57 (22.8)	10 (28.6)	57 (23.7)	10 (22.7)	53 (21.4)	14 (37.8)*	32 (20.4)	35 (27.3)
	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)
Factor 1: Interpersonal (1,2,4,5)	3.0 (2.4)	3.3 (2.2)	3.2 (2.3)	3.2 (2.1)	3.2 (2.4)	3.0 (2.0)	3.1 (2.3)	3.7 (2.3)	2.9 (2.4)	3.5 (2.2)
Factor 2: Affective (6,7,8,16)	3.8 (2.4)	3.8 (2.3)	3.8 (2.3)	4.2 (2.3)	3.9 (2.3)	3.5 (2.4)	3.8 (2.3)	4.1 (2.3)	3.8 (2.4)	3.8 (2.3)
Factor 3: Behavioral (3,9,13,14)	4.1 (2.1)	4.2 (2.1)	4.1 (2.1)	4.2 (2.0)	4.2 (2.1)	3.7 (1.9)	4.0 (2.1)	4.8 (2.0)*	4.0 (2.1)	4.3 (2.0)
Factor 4: Antisocial (10,12,18,19,20)	4.9 (2.6)	5.7 (2.6)**	5.2 (2.7)	5.9 (2.5)	5.4 (2.6)	5.1 (2.9)	5.2 (2.6)	6.2 (2.6)*	4.8 (2.7)	6.0 (2.4)**
Total Score (all items)	18.2 (8.0)	19.6 (7.5)	18.7 (7.7)	20.4 (8.0)	19.1 (7.7)	18.1 (8.2)	18.6 (7.8)	21.4(7.5)*	17.9 (8.0)	20.2 (7.3)*

Note. * $p < .05$, ** $p < .01$.

Table 56

Relationship Between Psychopathy Checklist Total and Factor Scores for Incarcerated Women (N = 183) and Sexual Experiences in Prison

	Any-sex		Predatory		Victim		Bartered		Consensual	
	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
	N=77(%)	N=106 (%)	N=178 (%)	N=5(%)	N=134 (%)	N=49(%)	N=165 (%)	N=18 (%)	N=98(%)	N=85 (%)
PCL-R > 30	2 (2.6)	4 (3.8)	5 (2.8)	1(20.0)*	6 (4.5)	0 (0.0)	4 (2.4)	2 (11.8)*	2 (2.0)	4 (4.8)
PCL-R > 25	9 (11.7)	13 (12.4)	20 (11.3)	2 (40.0)	16 (11.9)	6 (12.5)	20 (12.1)	2 (11.8)	10 (10.2)	12 (14.3)
	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)
Factor 1: Interpersonal (1,2,4,5)	2.6 (2.2)	3.1 (2.0)	2.9 (2.1)	4.2 (3.1)	2.8 (2.1)	3.3 (2.1)	2.9 (2.1)	3.2 (2.2)	2.7 (2.2)	3.1 (2.0)
Factor 2: Affective (6,7,8,16)	3.1 (2.3)	2.6 (2.2)	2.8 (2.2)	4.8 (2.9)*	2.8 (2.3)	2.8 (2.2)	2.8 (2.2)	3.2 (2.7)	3.0 (2.3)	2.6 (2.2)
Factor 3: Behavioral (3,9,13,14)	3.7 (2.0)	4.3 (2.0)	4.0 (2.0)	5.8 (2.9)*	4.0 (2.1)	4.3 (1.9)	4.0 (2.0)	4.6 (2.5)	3.8 (2.0)	4.3 (2.1)
Factor 4: Antisocial (10,12,18,19,20)	3.0 (2.4)	3.7 (2.4)*	3.4 (2.4)	4.4 (2.3)	3.4 (2.4)	3.4 (2.4)	3.4 (2.4)	3.5 (2.5)	2.9 (2.4)	4.0 (2.4)*
Total Score (all items)	14.6 (7.4)	16.2 (7.0)	15.3 (7.0)	22.9 (10.0)*	15.4 (7.2)	15.9 (7.2)	15.4 (7.1)	16.5 (8.7)	14.5 (7.1)	16.7 (7.2)*

Note. * $p < .05$, ** $p < .01$.

The Role of Personality Disorders in the Prediction of Sexual Aggression and Violence in Prison

Only recently has research begun to examine the high prevalence of DSM personality disorders among criminal populations (Casey, 2000; Davison, Lesse & Taylor, 2001; Singleton, Meltzer, Gatward, Coid & Deasy, 1998). This has been found to be especially true for the four disorders identified as the Cluster B disorders -- Antisocial, Borderline, Histrionic, and Narcissistic – all of which have been found to be overrepresented in both forensic and criminal justice settings (Daniel, Robins, Reid & Wifley, 1988; Fazel & Danesh, 2002; Hiscoke, Langstrom, Ottosson & Grann, 2003; Maden, Curie, Meux, Burrow & Gunn, 1995).

Personality disorders and criminality. Taylor et al. (1998) conducted a study of 1,740 male and female patients committed to two British hospitals for dangerous, violent, or criminal behavior over a six-month period. They found that 58% of the patients were suffering from some type of psychotic illness, with one-quarter of these individuals also meeting criteria for an independent personality disorder. Another 26% of the sample was found to be suffering from a personality disorder without any psychotic complications. Of the 119 individuals who were diagnosed with a personality disorder only, 26% had been committed for a homicide, 40% for other violent acts, 15% for sex offenses, and 18% for arson.

In a longitudinal study of 717 American youth, Johnson et al. (2000) found that adolescents with symptoms of DSM-IV Cluster A and B personality disorders were more likely than community-living adolescents to commit violent acts during adolescence. These results were found to remain significant after controlling for the youths' age, gender, socio-economic status, degree of parental pathology, and co-occurring psychiatric disorder.

Using a combination of structured clinical interviews and a battery of instruments, Coid (1992) studied personality disorders among 243 male and female violent offenders detained under either the psychopathic civil law or highly dangerous criminal law in England. Only 10% of the sample did not meet criteria for at least one Axis II diagnosis. Within this sample, the most common diagnoses were Borderline (69%) and Antisocial PD (53%), with a high degree of co-morbidity reflected in a mean of 3.6 Axis II diagnoses per offender. Blackburn (2007) obtained similar results with a sample of 168 male mentally disordered offenders. He found a strong association between a factor-analytically derived antisocial dimension of behavior and Narcissistic–Histrionic personality traits and violence. He found no relationship between the various personality diagnoses and a conviction for sexual offending,

Among female prison inmates, Warren et al. (2004) examined Cluster B personality disorders among a group of 261 female inmates incarcerated at a maximum security prison. As a group, the four Cluster B disorders did not predict incarceration for a violent crime or violent institutional infractions, but they were associated with self-reported violence within the institution. Narcissistic PD alone was found to predict current incarceration for any violent crime including murder, and any violent crime excluding murder, with an odds ratio of 7.57 and 4.92, respectively.

Lynam and Derefinko (2006) recently identified eight published studies that examined the relationship between the 10 personality disorders and scores on the PCL-R. They found the strongest association to be with Antisocial PD combined with Paranoid PD, Histrionic PD, and Narcissistic PD. Warren, et al. (2003) examined independent assessments of Axis II disorders and scores on the PCL-R among female inmates and found a strong inter-correlation of PCL-R scores with Antisocial, Narcissistic, Histrionic and Paranoid PDs. Widiger (2006) recently explored the relationship between psychopathy and the various DSM-IV diagnoses and emphasized the many clinical formulations have traditionally linked psychopathy to Narcissistic PD (Blackburn, Logan, Donnelly & Renwick, 2003; Salekin, Trobst & Krioukova, 2001).

Study analyses. As described earlier in this chapter, the diagnosis of the 10 personality disorders was determined using the SID-P, a semi-structured interview for assessing Axis II psychopathology. As indicated in DSM-IV-TR, the Cluster A diagnoses are described as reflecting odd and eccentric behavior (Paranoid, Schizoid, Schizotypal), Cluster B behavior that is dramatic, emotional, or erratic (Antisocial, Borderline, Histrionic, Narcissistic), and Cluster C behavior that is fearful and anxious (Avoidant, Dependent, Obsessive-Compulsive).

Table 57

Frequency of Personality disorders among Incarcerated Men (N = 288) and Women (N = 183)

Diagnosis	Men		Women		Effect Size	
	N	%	N	%	x2	phi
Cluster A						
Paranoid PD	86	30.0	66	36.1	1.90	0.06
Schizoid PD	10	3.5	4	2.2	0.65	-0.04
Schizotypal PD	10	3.5	8	4.4	0.24	0.02
Cluster B						
Antisocial PD	165	58.1	65	35.7	22.23	-0.22**
Borderline PD	36	12.5	55	30.1	21.95	0.22**
Histrionic PD	7	2.4	12	6.6	4.89	0.10*
Narcissistic PD	53	18.5	38	20.8	0.38	0.03
Cluster C						
Avoidant PD	26	9.1	34	18.6	9.09	0.14**

Dependent PD	6	2.1	13	7.1	7.24	0.12**
Obsessive-Compulsive PD	45	15.7	65	35.5	24.53	0.23**
Continuous Score	M	SD	M	SD	T	
Cluster A						
Paranoid PD	2.37	2.03	2.75	1.99	-1.97*	
Schizoid PD	0.87	1.14	0.85	1.09	0.17	
Schizotypal PD	1.27	1.45	1.24	1.34	0.28	
Cluster B						
Antisocial PD	4.21	2.11	3.26	2.03	4.83**	
Borderline PD	2.57	1.81	3.18	2.30	-3.06**	
Histrionic PD	1.22	1.30	1.68	1.70	-3.13**	
Narcissistic PD	2.48	2.25	2.61	2.28	-0.63	
Cluster C						
Avoidant PD	0.94	1.50	1.56	2.02	-3.52**	
Dependent PD	0.65	1.07	1.32	1.67	-4.80**	
Obsessive-Compulsive PD	1.86	1.62	2.62	1.94	-4.38**	

Note. * $p < .05$, ** $p < .01$.

These data underscore the high rates of personality disorder found among these prison inmates (see Table 57). Fifty-eight percent of the male inmates met diagnostic criteria for Antisocial PD as did 36% of the female sample. Thirty percent of the female sample met diagnostic criteria for Borderline PD as did 13% of the male sample. Rates of Narcissistic PD were comparable across the male and female sample with 19% of the male inmates and 21% of the female inmates meeting diagnostic criteria for this particular disorder. The female inmates were also diagnosed with significantly higher rates of Avoidant, Dependent, and Obsessive-Compulsive PDs. Fifteen percent of the male inmates and 36% of the female inmates met diagnostic criteria for Obsessive-Compulsive PD.

Table 58

Frequency Count of all Personality Disorder Diagnoses among Incarcerated Men (N = 288) and Women (N = 183)

	Men		Women		Effect Size	
	N	%	N	%	χ^2	Φ
Number of PDs					17.07*	0.19*
0	81	28.2	48	26.2		
1	80	27.9	41	22.4		
2	53	18.5	31	16.9		
3	45	15.7	24	13.1		
4	20	7.0	19	10.4		
5	5	1.7	13	7.1		

6	3	1.0	5	2.7		
7	0	0.0	2	1.1		
Any Cluster A	90	31.4	67	36.6	1.39	0.05
Any Cluster B	181	63.1	100	54.6	3.30	-0.08
Any Cluster C	64	22.3	82	44.8	26.44**	0.24**
Any PD	206	71.8	135	73.8	0.22	0.02
# of PD diagnoses mean (SD)	1.55	1.40	1.97	1.78	T=-2.70**	

Note. * $p < .05$, ** $p < .01$.

The results in Table 58 underscore the high incidence and significant degree of co-morbidity of personality disorder (PD) diagnoses found among the male and female inmates in our sample. Only 28% of the male inmates and 26% of the female inmates did not meet criteria for at least one PD diagnosis. This reflects a rate that is 10 to 20 times higher than found in the general population for both genders. The Cluster B constellation was found to be over represented among both samples with over half of both the male and female inmates meeting diagnostic criteria for at least one of these Cluster B diagnoses. The female inmates reflected a higher degree of co-morbidity across the various PD diagnoses with the mean number of PD diagnoses being 1.97 with a SD of 1.78.

Among the male inmates, Antisocial PD was associated with any-sex, predatory, bartered, and consensual sexual behavior (see Table 59). Consensual sex was associated with higher rates of endorsement of criteria of Antisocial PD and Histrionic PD along with elevated continuous scores on the Narcissistic PD diagnostic criteria. None of the male inmates meeting diagnostic criteria for Avoidant PD reported involvement in bartered sex in prison. Males meeting diagnostic criteria for Schizotypal PD were more likely to be sexually victimized when compared to those without a Cluster A diagnoses.

Table 59

Relationship Between Personality Disorders among Incarcerated Men (N = 288) and Sexual Experiences in Prison

Diagnosis	Any-sex		Predatory		Victim		Bartered		Consensual	
	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
	N=143 (%)	N=145 (%)	N=253 (%)	N=35 (%)	N=244 (%)	N=44 (%)	N=251 (%)	N=37 (%)	N=160 (%)	N=128 (%)
Cluster A										
Paranoid	41 (28.9)	45 (31.0)	74 (29.4)	12 (34.3)	72 (29.6)	14 (31.8)	74 (29.6)	12 (32.4)	47 (29.6)	39 (30.5)
Schizoid	6 (4.2)	4 (2.8)	8 (3.2)	2 (5.7)	8 (3.3)	2 (4.5)	10 (4.0)	0 (0.0)	7 (4.4)	3 (2.3)
Schizotypal	4 (2.8)	6 (4.1)	8 (3.2)	2 (5.7)	6 (2.5)	4 (9.1)*	10 (4.0)	0 (0.0)	5 (3.1)	5 (3.9)
Cluster B										
Antisocial	72 (51.4)	93 (64.6)*	139 (55.8)	26 (74.3)*	142 (59.2)	23 (52.3)	136 (55.1)	29 (78.4)**	77 (49.0)	88 (69.3)**
Borderline	20 (14.1)	16 (11.0)	32 (12.7)	4 (11.4)	32 (13.2)	4 (9.1)	30 (12.0)	6 (16.2)	21 (13.5)	15 (11.7)
Histrionic	1 (0.7)	6 (4.1)	6 (2.4)	1 (2.9)	7 (2.9)	0 (0.0)	6 (2.4)	1 (2.7)	1 (0.6)	6 (4.7)*
Narcissistic	23 (16.2)	30 (20.7)	44 (17.5)	9 (25.7)	44 (18.1)	9 (20.5)	44 (17.6)	9 (24.3)	24 (15.1)	29 (22.7)
Cluster C										
Avoidant	13(9.2)	13 (9.0)	24 (9.5)	2 (5.7)	19 (7.8)	7 (15.9)	26 (10.4)	0 (0.0)*	18 (11.3)	8 (6.2)
Dependent	3 (2.1)	3 (2.1)	5 (2.0)	1 (2.9)	5 (2.1)	1 (2.3)	5 (2.0)	1 (2.7)	4 (2.5)	2 (1.6)
Obsessive-Compulsive	23 (16.2)	22 (15.2)	40 (25.9)	5 (14.3)	36 (14.8)	9 (20.5)	42 (16.8)	3 (8.1)	29 (18.2)	16 (12.5)
Continuous Score										
Cluster A										
Paranoid	2.2 (2.1)	2.6 (2.0)	2.3 (2.0)	2.7 (2.0)	2.3 (2.0)	2.7 (2.0)	2.3 (2.1)	2.8 (1.8)	2.3 (2.1)	2.5 (2.0)
Schizoid	0.8 (1.2)	0.9 (1.1)	0.8 (1.1)	1.2 (1.3)*	0.8 (1.2)	1.0 (1.1)	0.9 (1.2)	0.7 (0.9)	0.9 (1.2)	0.9 (1.1)
Schizotypal	1.2 (1.3)	1.4 (1.6)	1.2 (1.4)	1.7 (1.9)	1.2 (1.3)	1.7 (2.0)	1.3 (1.5)	1.3 (1.2)	1.2 (1.4)	1.3 (1.6)
Cluster B										
Antisocial	4.0 (2.2)	4.5 (1.9)*	4.1 (2.1)	5.0 (1.8)*	4.3 (2.1)	3.8 (2.0)	4.1 (2.1)	4.8 (2.0)	3.9 (2.2)	4.6 (1.9)**
Borderline	2.5 (2.0)	2.7 (1.7)	2.5 (1.9)	2.9 (1.4)	2.6 (1.8)	2.5 (1.8)	2.5 (1.8)	2.9 (1.9)	2.4 (1.9)	2.8 (1.6)
Histrionic	1.0 (1.1)	1.4 (1.4)*	1.2 (1.3)	1.3 (1.4)	1.2 (1.3)	1.2 (1.1)	1.2 (1.3)	1.5 (1.4)	1.0 (1.1)	1.5 (1.4)**
Narcissistic	2.3 (2.2)	2.7 (2.3)	2.4 (2.2)	2.8 (2.5)	2.5 (2.2)	2.5 (2.4)	2.4 (2.2)	2.8 (2.4)	2.2 (2.2)	2.8 (2.3)*

Cluster C										
Avoidant	0.9 (1.5)	1.0 (1.5)	0.9 (1.5)	0.9 (1.4)	0.9 (1.4)	1.4 (1.9)	1.0 (1.6)	0.6 (0.9)	1.0 (1.6)	0.9 (1.4)
Dependent	0.7 (1.1)	0.6 (1.0)	0.6 (1.1)	0.8 (1.2)	0.6 (1.1)	0.8 (1.1)	0.6 (1.1)	0.8 (1.1)	0.7 (1.1)	0.6 (1.0)
Obsessive-Compulsive	2.0 (1.7)	1.8 (1.6)	1.9 (1.6)	1.6 (1.6)	1.8 (1.6)	2.1 (1.7)	1.9 (1.6)	1.4 (1.6)	2.0 (1.7)	1.7(1.5)

Note. * $p < .05$, ** $p < .01$.

Table 60

Relationship Between Personality Disorders among Incarcerated Women (N = 183) and Sexual Experiences in Prison

Diagnosis	Any-sex		Predatory		Victim		Bartered		Consensual	
	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
	N=77 (%)	N=106 (%)	N=178 (%)	N=5 (%)	N=134 (%)	N=49 (%)	N=165 (%)	N=18 (%)	N=98 (%)	N=85 (%)
Cluster A										
Paranoid	26 (33.8)	40 (37.7)	64 (36.)	2 (40.0)	43 (32.1)	23 (46.9)	58 (35.2)	8 (44.4)	35 (35.7)	31 (36.5)
Schizoid	3 (3.9)	1 (0.9)	4 (2.2)	0 (0.0)	4 (3.0)	0 (0.0)	4 (2.4)	0 (0.0)	3 (3.1)	1 (1.2)
Schizotypal	4 (5.2)	4 (3.8)	8 (4.5)	0 (0.0)	5 (3.7)	3 (6.1)	8 (4.8)	0 (0.0)	6 (6.1)	2 (2.4)
Cluster B										
Antisocial	24 (31.2)	41 (39.0)	63 (35.6)	2 (40.0)	51 (38.1)	14 (29.2)	60 (36.4)	5 (29.4)	27 (27.6)	38 (45.2)*
Borderline	20 (26.0)	35 (33.0)	53 (29.8)	2 (40.0)	37 (27.6)	18 (36.7)	49 (29.7)	6 (33.3)	30 (30.6)	25 (29.4)
Histrionic	3 (3.9)	9 (8.5)	11 (6.2)	1 (20.0)	9 (6.7)	3 (6.1)	11 (6.7)	1 (5.6)	5 (5.1)	7 (8.2)
Narcissistic	9 (11.7)	29 (27.4)*	35 (18.7)	3 (60.0)*	25 (18.7)	13 (26.5)	31 (18.8)	7 (38.9)*	14 (14.3)	24 (28.2)*
Cluster C										
Avoidant	16 (20.8)	18 (17.0)	32 (18.0)	2 (40.0)	21 (15.7)	13 (26.5)	33 (20.0)	1 (5.6)	23 (23.5)	11 (12.9)
Dependent	3 (3.9)	10 (9.4)	12 (6.7)	1 (20.0)	6 (4.5)	7 (14.3)*	12 (7.3)	1 (5.6)	8 (8.2)	5 (5.9)
Obsessive-Compulsive	32 (41.6)	33 (31.1)	64 (36.0)	1 (20.0)	48 (35.8)	17 (34.7)	60 (36.4)	5 (27.8)	41 (41.8)	24 (28.2)
Continuous Score										
Cluster A										
Paranoid	2.6 (2.1)	2.8 (1.9)	2.7 (2.0)	2.8 (1.9)	2.5 (2.0)	3.3 (1.9)*	2.7 (2.0)	3.4 (2.1)	2.8 (2.1)	2.7 (1.9)
Schizoid	1.0 (1.2)	0.7 (1.0)	0.9 (1.1)	0.6 (0.5)	0.9 (1.1)	0.7 (1.0)	0.8 (1.1)	0.9 (0.9)	1.0 (1.2)	0.7 (1.0)
Schizotypal	1.4 (1.4)	1.1 (1.3)	1.3 (1.4)	0.6 (0.5)	1.2 (1.3)	1.4 (1.5)	1.3 (1.4)	1.0 (1.0)	1.5 (1.4)	0.9 (1.2)**

Cluster B										
Antisocial	2.8 (2.0)	3.6 (2.0)*	3.2 (2.0)	4.8 (2.4)	3.2 (2.0)	3.3 (2.1)	3.2 (2.0)	3.7 (2.1)	2.8 (2.0)	3.7 (2.0)**
Borderline	2.8 (2.1)	3.4 (2.4)	3.2 (2.3)	4.2 (2.2)	3.0 (2.2)	3.6 (2.5)	3.2 (2.3)	3.3 (1.9)	3.2 (2.3)	3.2 (2.3)
Histrionic	1.2 (1.4)	2.0 (1.8)**	1.7 (1.7)	2.4 (2.2)	1.5 (1.7)	2.1 (1.7)*	1.6 (1.7)	1.9 (1.6)	1.4 (1.6)	2.0 (1.8)*
Narcissistic	2.2 (2.0)	3.0 (2.4)*	2.6 (2.3)	4.6 (2.1)*	2.5 (2.3)	3.0 (2.2)	2.5 (2.2)	4.0 (2.6)**	2.2 (2.1)	3.1 (2.4)**
Cluster C										
Avoidant	1.6 (2.2)	1.6 (1.9)	1.5 (2.0)	2.4 (2.9)	1.4 (2.0)	2.0 (2.1)	1.6 (2.1)	0.9 (1.3)	1.8 (2.2)	1.3 (1.8)
Dependent	1.1 (1.4)	1.5 (1.8)	1.3 (1.6)	1.8 (2.5)	1.2 (1.5)	1.7 (2.0)	1.3 (1.7)	1.1 (1.5)	1.4 (1.7)	1.3 (1.6)
Obsessive-Compulsive	2.7 (1.9)	2.6 (2.0)	2.6 (1.9)	1.8 (1.3)	2.6 (1.9)	2.7 (2.1)	2.6 (2.0)	2.4 (1.7)	2.8 (2.0)	2.4 (1.9)

Note. * $p < .05$, ** $p < .01$.

These analyses indicate that female inmates who meet diagnostic criteria for Narcissistic PD, using either diagnostic cut-offs or continuous scores, report higher rates of any-sex, predatory sex, bartered sex, and consensual sex during their incarceration (see Table 60). To a lesser extent than seen with the male inmates, a diagnosis of Antisocial PD was also associated with the any-sex and consensual sex categories among the female inmates. Victimization sexually was associated among the females with a diagnosis of Dependent PD only using the diagnostic criteria and not when using a continuous score.

Conclusions

These data provide confirmation to the earlier research that found high rates of personality disorders among prison inmates. Our data indicates that three quarters of the inmates in our sample met diagnostic criteria for at least one personality disorder with many of these individuals meeting criteria for two or more PD diagnoses. Rates of personality disorders in the community generally fall below 5%, and in comparison, convey the significant role that these chronic patterns of maladjustment play in the behavior that leads to incarceration for the majority of these individuals.

The nature of these personality disorder diagnoses, however, differed across genders with more males meeting diagnostic criteria for Antisocial PD and more women meeting criteria for Borderline PD. Rates of Narcissistic PD were found to occur at similar rates across the two genders with about one in five of the inmates meeting criteria for this particular Cluster B diagnosis. More of the female inmates also met criteria for the various Cluster C diagnoses including Avoidant, Dependent, and Obsessive-Compulsive PDs. Such high rates of endorsement raise complex questions concerning rehabilitation and the role that these Axis II psychiatric diagnoses can play in mitigating and exacerbating culpability and the assessment of future risk. Theoretically, they lend support to the importation theory of prison behavior and the role that these individual tendencies play in influencing the behavior that leads to incarceration and the experiences that occur while imprisoned.

Antisocial PD and Narcissistic PD were the two personality disorders that exerted the greatest effect on the sexual behavior of the male and female inmates. For the males, irritability/aggressiveness, and recklessness associated with Antisocial PD contributed not only to higher rates of predatory sex but also to involvement in bartered and consensual sexual encounters. For the women, Antisocial PD had an effect on their consensual sexual behavior in prison but not to the extent of Narcissistic PD which exerted a powerful effect on their endorsement of predatory sex, bartered sex, and consensual sex during their incarceration. The robustness of these differences could be indicative that the underlying motivations for sex in prison differ between the men and women in our sample. The dominance of Antisocial PD among the male inmates places their sexual behavior in the context of chronic patterns of aggressive, reckless, and

impulsive behavior. The impact of Narcissistic PD on the sexual behavior of the female inmates implies an association with attention seeking and self aggrandizement which might be available by other means while living in the community.

The presence of a personality disorder also served as a risk factor for sexual victimization in prison. Males who met diagnostic criteria for Schizotypal PD and females who met diagnostic criteria for Dependent PD were both at higher risk for sexual victimization during incarceration. These findings again point toward gendered differences in perceived vulnerability. Male inmates who were odd and eccentric in their behavior appeared to be at higher risk for sexual victimization. Women who were anxious, unsure, and dependent in their relationships appeared to be at higher risk for sexual victimization. Both diagnoses suggest less autonomy and a more vulnerable personality style which seems to heighten the risk for being coerced into sexual contact. This finding is in line with previous research that suggests that inmates with a mental illness are at higher risk for all types of victimization during incarceration.

Psychopathy as measured by the PCL-R-2 played a relatively minor role in predicting sexual behavior among the male inmates. It demonstrated no role in elevating the risk for predatory sexual behavior. It did, however, increase the likelihood that the inmates would be involved in bartering sex. Specifically, total scores over 25 on the PCL-R-2 and elevated scores on Factor 3, *Irresponsible Behavior*, and Factor 4, *Persistent and Varied Rule Breaking*, of the PCL-R-2 were associated with more self reported bartering behavior that involved sex. With the female inmates, PCL-R-2 scores were more robust in predicting predatory, bartered, and consensual sex during incarceration. Total scores over 30 was associated with elevated rates of predatory and bartered sex and a score of at least 16 with consensual sex as reported by the female inmates. These gender differences suggest that psychopathic males are not sexually violent but sexually manipulative in their behavior while incarcerated. In contrast, psychopathic females are more predatory, more manipulative, and more likely to get involved in consensual sexual relationships while living in the confines of a prison environment.

Chapter Nine

Structured and Actuarial Instruments for Assessing Violence Risk

Twenty-five years ago the area of clinical risk assessment was plagued by pervasive inconsistencies in practice methodology and a disturbing tendency for clinicians to over-estimate the likelihood of violence in most settings (Monahan, 1981). These limitations were acknowledged but not subjected to serious scrutiny as long as they occurred primarily in the context of commitment hearings which focused solely on the commitment of a mentally ill individual to a psychiatric hospital for a short period of time. These clinical applications, however, were transformed and expanded substantially in the 1970s and 1980s by two court decisions which upheld their relevance in cases of capital murder (*Barefoot v Estelle*, 1983) and which identified for the first time the responsibility of all clinicians to anticipate and predict the violent behavior of the patients under their care (*Tarasoff v Regents of the University of California*, 1974, 1976). These court opinions served as a powerful impetus for further research in the field of clinical risk research and resulted in the development of both structured and actuarial instruments to guide and inform practice.

MacArthur Violence Risk Study (COVR)

It was in the context of these historical trends that the John D. and Catherine T. MacArthur foundation chose to address this aspect of mental health law and the clinical, empirical, and legal questions embedded within it. It was based upon this mandate that the MacArthur Violence Risk Study was funded and which garnered the expertise of leading researchers in the US, Canada, and England to explore and enrich the fledgling field of risk assessment with empirical robustness and methodological rigor. Growing out of these integrated efforts was the emerging consensus that actuarial instruments were more accurate than clinical assessment and that structured clinical risk assessment provided a more comprehensive and useful form of evaluation than unstructured clinical assessment. To overcome the methodological problems intrinsic to their particular study population, the psychiatrically mentally ill, Monahan and his colleagues (2001) chose to study a wide array of risk factors, triangulated their outcome measures of violence, and studied both male and female patients at three primary sites throughout the US. These were later integrated into a software program called the Classification of Violence Risk (COVR) and applied to risk assessment in a variety of clinical settings.

Each of the risk factors entered into the multiple iterative models of the MacArthur Violence Risk Study were included in the current project. A few additional risk factors were added to make the list more relevant to a prison population.

Table 61

Frequency of MacArthur risk factors among Incarcerated Men (N=288) and Women (N=183)

By Inmates	Men		Women		T	
	M	SD	M	SD		
Demographic						
Age	37.0	10.5	37.8	10.7	-0.80	
	N	%	N	%	χ^2	Φ
Ethnicity					4.43	0.10
White	123	43.0	95	51.9		
Other	52	18.2	23	12.6		
Black	111	38.8	65	35.3		
Ever Married	219	76.8	157	85.8	5.65	-0.11*
High School Education	136	47.4	60	32.8	13.61**	0.17**
Employment Problems					1.65	.06
None	54	20	32	18		
Possible/Less Serious	43	16	23	13		
Definite/Serious	169	64	124	69		
Criminogenic						
Father's Arrest	144	55.0	70	42.9	5.81*	-.12*
Father Alcohol Misuse	122	45.9	81	48.2	0.23	.02
Mother Drug Addiction	40	14.2	39	21.9	4.58*	.10*
Mother Arrest*	72	26.3	37	21.0	1.61	-.06
Violent Instant Offense	91	32.3	48	26.2	69.28**	0.39**
Developmental						
Head Injury	133	46.5	66	36.1	4.98*	-.10*
Away from Family Prior to age 15	105	36.8	60	33.3	0.73	-0.04
Any Psychological Abuse	165	57.9	109	60.2	0.25	.02
Any Physical Abuse	141	49.5	89	49.2	<.01	<-.01
Any Violence toward Mother	124	44.9	87	48.9	0.68	.04
Any Violence toward Father	97	35.5	53	29.8	1.61	-.06
Sex Abuse Before Age 18	185	65.1	109	60.6	1.00	-.05
Clinical						
Psychopathy Over 25	67	23.5	22	12.1	9.36**	-0.14**
Any PD	206	71.8	135	73.8	0.22	0.02

Antisocial PD	165	58.1	65	35.7	22.23	-0.22**
Suicidal Ideation					3.81	.15
None	208	73	124	68		
Possible/Less Serious	32	11	17	9		
Definite/Serious	44	16	41	23		
History of Mental Illness					39.47**	.29***
					*	
None	191	68	71	39		
Possible/Less Serious	38	14	35	19		
Definite/Serious	53	19	76	42		
Active Mental Illness					24.91**	.23***
					*	
None	225	80	106	58		
Possible/Less Serious	37	13	44	24		
Definite/Serious	21	7	32	18		
Alcohol Abuse					3.32	0.09
0	67	23.7	44	24.3		
1 or 2	124	43.8	86	47.5		
3	41	14.5	16	8.8		
4 or 5	51	18.0	36	19.3		
Substance Use Problems					7.29*	.13*
None	52	18	44	24		
Possible/Less Serious	64	23	24	13		
Definite/Serious	166	59	114	63		
Violent Fantasies (SIV+)	89	31.9	20	11.3	25.27**	0.24**
Threats in Prison (PVI)	162	57.2	39	21.5	57.29**	-0.35**
Anger						
Borderline-Inappropriate Anger	166	59.3	84	46.4	7.34**	
Antisocial-Aggressiveness	187	68.8	62	34.8	50.08**	
	M	SD	M	SD	T	
NAS Total	81.19	15.45	78.72	13.48	1.68	
	N	%	N	%	χ^2	Φ
Impulsivity						

Borderline-Impulsivity	236	84.3	133	73.1	8.62	-0.14**
Antisocial-Impulsivity	145	51.4	78	42.9	3.25	0.07
PCL-R-Impulsivity	127	44.6	77	42.1	0.28	-0.02
TCO Symptoms						
Others Controlling Thoughts	35	12.3	29	16.2	1.39	-0.06
Others Want to Hurt You	110	39.0	67	37.2	0.15	0.02
Inserting Thoughts	19	6.7	6	3.3	2.44	0.07
Any Threat-Control Override	122	42.4	73	39.9	0.28	-0.02
Prison Specific (Not included in COVR)						
Belongs to Gang#	28	9.9	5	2.8	8.36**	-0.13**
Sexual Orientation#					60.06**	0.37**
Heterosexual	266	96.7	122	71.3		
Bisexual	6	2.2	34	19.9		
Homosexual	3	1.1	15	8.8		
	M	SD	M	SD	T	
Height Inches #	67.1	9.7	64.2	3.1	4.51**	
Weight Pounds#	186.7	37.8	168.4	40.2	4.63**	

Note. * $p < .05$, ** $p < .01$, *** $p < .001$. # Prison variables added to current study.

These data confirm the differences that have been noted earlier regarding the characteristics of the male and female inmates. The male inmates were more educated but less often married; had higher rates of paternal arrest and early home leaving; more head injuries and patterns of violent offending; higher rates of assessed anger, impulsivity, and antisociality/psychopathy; and more violent fantasies and gang involvement. In contrast, the female inmates were assessed to demonstrate higher levels maternal drug addiction, history of mental illness, active mental illness, and substance abuse. These findings are congruent with many gender specific descriptions of male and female prison inmates with the males being more antisocial and violent and the females more psychologically impaired and addicted to substances.

As summarized below, some of the early life experiences including head injury with loss of consciousness and experiencing psychological and physical abuse were associated with predatory sexual behavior among the male inmates. Internal states that included violent fantasies and threatening perceptions (and behaviors) were also associated with predation primarily among the male inmates. These findings suggest

that some of the risk factors that contribute to violent behavior in the community also impact sexual violence in prison.

Sexual victimization was associated with a different set of risk variables including separation from family prior to the age of 15 year and sexual abuse prior to the age of 18 years. These findings suggest that vulnerabilities that derive from earlier stages in life make some inmates more vulnerable to sexual victimization in prison. A lower level of anger also seemed to represent the absence of a significant protective factor and was associated with experiencing more victimizing behaviors from others. The association between early sexual abuse and sexual victimization in prison is similar to that found by Coid et al. (2001) for women and the continuity they discovered between early sex abuse and later sexual assault and rape in adulthood. A slighter build among the men also placed them at increased risk for sexual victimization.

Bartered sex was associated with a greater number of the COVR risk markers including age, race, father's arrest, psychological abuse in childhood, physical abuse in childhood, sexual abuse prior to the age of 18 years, scoring over 25 on the PCL-R2, meeting criteria for Antisocial PD, being angrier in a self destructive manner, and perceiving others as threatening and having threatening thoughts toward others. These risk factors for bartered sex in prison underscore the chaotic and aggressive correlates of this behavior as reflected in the lives of the male inmates and highlight the association between risk makers for violence and this particular type of sexual exchange while incarcerated.

Consensual sex in prison as experienced by the male inmates was associated with the largest number of the COVR risk markers for violence. These included demographic risk factors (younger age, minority status, never married), a number of developmental problems (father arrest, separation from family prior to age 15 years, psychological abuse, physical abuse, sexual abuse prior to age 18 years), clinical factors (Antisocial PD, violent fantasies, anger and aggressiveness, impulsivity, and perceptions of other intending one harm), and prison behaviors (belonging to a gang). These consistencies between risk makers for violence in the community and consensual sexual behavior in prison began to alert us to the aggressive underpinning of these sexual behaviors and diverted us from a more simplistic assumption that consensual sex in prison was the same in motivation and intent as consensual sex in the community. The research that suggests that many of these encounters occur with female correctional staff and that the staff involved in them perceives them as romantic in nature further substantiates the complex and possibly discrepant motivations and experiences that are encapsulated in these relationships.

Table 62
Relationship Between MacArthur Risk Factors among Incarcerated Men (N=288) and Sexual Experiences in Prison

By Inmates	Any-sex		Predation		Victim		Bartered		Consensual	
	No (%)	Yes (%)	No (%)	Yes (%)	No (%)	Yes (%)	No (%)	Yes (%)	No (%)	Yes (%)
Demographic										
Age	38.7(11.1)	35.3(9.6)**	37.2(10.7)	36 (8.9)	36.8 (0.8)	37.9 (8.5)	37.6 (0.7)	32.6(7.4)**	39 (11.0)	34.5(9.2)**
Ethnicity										
White	63 (44.4)	60 (41.7)	114(45.2)	9 (26.5)	98 (40.3)	25 (58.1)	115(46.2)	8 (21.6)	76 (47.8)	47 (37.0)
Other	33 (23.2)	19 (13.2)	44 (17.5)	8 (23.5)	46 (18.9)	6 (14.0)	43 (17.3)	9 (24.3)	34 (21.4)	18 (14.2)
Black	46 (32.4)	65 (45.1)*	94 (37.3)	17 (50.0)	99 (40.7)	12 (27.9)	91 (36.5)	20 (54.1)*	49 (30.8)	62 (48.8)**
Ever Married	115 (81.6)	104(72.2)	193(76.9)	26 (76.5)	183 75.9)	36 (81.8)	193(77.5)	26 (72.2)	131(82.9)	88 (69.3)**
Employment Problems										
None	29 (21.6)	25 (18.9)	49 (21.0)	5 (15.2)	4 (19.5)	10 (25.0)	50 (21.6)	4 (11.8)	34 (22.7)	20 (17.2)
Possible/Less Serious	23 (17.2)	20 (15.2)	37 (15.9)	6 (18.2)	34 (15.0)	9 (22.5)	36 (15.5)	7 (20.6)	26 (17.3)	17 (14.7)
Definite/Serious	82 (61.2)	87 (65.9)	147(63.1)	22 (66.7)	148 65.5)	21 (52.5)	146(62.9)	23 (67.6)	90 (60.0)	79 (68.1)
Criminogenic										
Father's Arrest	68 (51.9)	76 (58.0)	124 (54.1)	20 (60.6)	128 57.1)	16 (42.1)	118 52.0)	26 (74.3)*	71 (48.6)	73 (62.9)*
Father Alcohol Misuse	53 (40.2)	69 (51.5)	104 (44.6)	18 (54.5)	99 (44.0)	23 (56.1)	102 44.2)	20 (57.1)	62 (41.9)	60 (50.8)
Mother Ever Use Drugs	15 (10.8)	25 (17.5)	35 (14.2)	5 (14.3)	32 (13.4)	8 (18.6)	34 (13.9)	6 (16.2)	17 (10.9)	23 (18.3)
Mother Arrest*	35 (25.5)	37 (27.0)	65 (27.0)	7 (21.2)	62 (26.3)	10 (26.3)	62 (25.9)	10 (28.6)	38 (25.0)	34 (27.9)
Violent Instant Offense	39 (27.9)	52 (36.6)	78 (31.6)	13 (37.1)	81 (33.9)	10 (23.3)	76 (31.0)	15 (40.5)	40 (25.6)	51 (40.5)
Developmental										
Head Injury	65 (46.1)	68 (46.9)*	111 (44.2)	22 62.9)*	109 45.0)	24 (54.5)	114(45.8)	19 (51.4)	75 (47.5)	58 (45.3)
Separation from Family Prior to age 15	43 (30.7)	62 (42.8)*	87 (34.8)	18 (51.4)	83 (34.4)	22 50.0)*	86 (34.7)	19 (51.4)	45 (28.7)	60 (46.9)**
Any Psychological Abuse	68 (48.2)	97 (67.4)**	140 (55.8)	25 73.5)*	135 55.8)	30 (69.8)	137 55.2)	28 (75.7)*	79 (50.0)	86 (67.7)**
Any Physical Abuse	58 (41.1)	83 (57.6)**	117 (46.6)	24 0.6)**	115 47.5)	26 (60.5)	115 46.4)	26 (70.3)**	67 (42.4)	74 (58.3)**
Any Violence towards Mother	55 (41.0)	69 (48.6)	104 (43.0)	20 (58.8)	102 43.6)	22 (52.4)	102 42.5)	22 (61.1)	61 (40.4)	63 (50.4)
Any Violence towards Father	37 (28.2)	60 (42.3)	81 (33.9)	16 (47.1)	79 (34.2)	18 (42.9)	79 (33.3)	18 (50.0)	43 (29.1)	54 (43.2)
Sex Abuse Before Age 18	78 (55.3)	107 (74.8)**	156 (62.4)	29 83.5)**	152 62.8)	33 78.6)*	154 62.3)	31 (83.8)*	88 (56.1)	97 (76.4)**
Clinical										

Psychopathy Over 25	29 (20.7)	38 (26.2)	57(22.8)	10 (28.6)	57 (23.7)	10 (22.7)	53 (21.4)	14 (37.8)*	32 (20.4)	35 (27.3)
Antisocial PD	72 (51.4)	93 (64.6)*	139(55.8)	26(74.3)*	142(59.2)	23 (52.3)	136(55.1)	29(78.4)**	77 (49.0)	88 (69.3)**
Suicidal Ideation										
None	110 (78.7)	98 (68.10)	186(74.7)	22 (62.9)	185(77.1)	23 (52.3)	184(74.5)	24 (64.9)	121 77.1)	87 (68.5)
Possible/Less Serious	9 (6.4)	23 (16.0)	23 (9.2)	9 (25.7)	21 (8.8)	11 (25.0)	23 (9.3)	9 (24.3)	12 (7.6)	20 (15.7)
Definite/Serious	21 (15.0)	23 (16.0)*	40 (16.1)	4 (11.4)*	34 (14.2)	10	40 (16.2)	4 (10.8)*	24 (15.3)	20 (15.7)
						22.7)**				
History of Mental Illness-										
None	95 (68.3)	96 (67.1)	168(68.0)	23 (65.7)	165(69.0)	26 (60.5)	163(66.5)	28 (75.7)	103(66.5)	88 (69.3)
Possible/Less Serious	15 (10.8)	23 (16.1)	32 (13.0)	6 (17.1)	32 (13.4)	6 (14.0)	35 (14.3)	3 (8.1)	19 (12.3)	19 (15.0)
Definite/Serious	29 (20.9)	24 (16.8)	47 (19.0)	6 (17.1)	42 (17.6)	11 (25.6)	47 (19.2)	6 (16.2)	33 (21.3)	20 (15.7)
Active Mental Illness-										
None	108 (77.7)	117 (81.2)	196(79.0)	29 (82.9)	196(82.0)	29 (65.9)	195(79.3)	30 (81.1)	117(75.0)	108(85.0)
Possible/Less Serious	21 (15.1)	16 (11.1)	32 (12.9)	5 (14.3)	29 (12.1)	8 (18.2)	32 (13.0)	5 (13.5)	25 (16.0)	12 (9.4)
Definite/Serious	10 (7.2)	11 (7.6)	20 (8.1)	1 (2.9)	14 (5.9)	7 (15.9)*	19 (7.7)	2 (5.4)	14 (9.0)	7 (5.5)
Alcohol Abuse										
0	33 (23.6)	34 (23.8)	60 (24.1)	7 (20.6)	54 (22.6)	13 (29.5)	54 (22.6)	13 (29.5)	55 (22.3)	12 (33.3)
1 or 2	60 (42.9)	64 (44.8)	107(43.0)	17 (50.0)	103 43.1)	21 (47.7)	103(43.1)	21 (47.7)	107(43.3)	17 (47.2)
3	20 (14.3)	21 (14.7)	37 (14.9)	4 (11.8)	38 (15.9)	3 (6.8)	38 (15.9)	3 (6.8)	38 (15.4)	3 (8.3)
4 or 5	27 (19.3)	24 (16.8)	45 (18.1)	6 (17.6)	44 (18.4)	7 (15.9)	44 (18.4)	7 (15.9)	47 (19.0)	4 (11.1)
Substance Use Problems										
None	26 (18.8)	26 (18.1)	49 (19.8)	3 (8.6)	43 (18.1)	9 (20.5)	44 (18.0)	8 (21.6)	30 (19.4)	22 (17.3)
Possible/Less Serious	27 (19.6)	37 (25.7)	52 (21.1)	12 (34.3)	52 (21.8)	12 (27.3)	52 (21.2)	12 (32.4)	30 (19.4)	34 (26.8)
Definite/Serious	85 (61.6)	81 (56.2)	146(56.1)	20 (57.1)	142(60.1)	23 (52.3)	149(60.8)	17 (45.9)	95 (61.3)	71 (55.9)
Violent Fantasies (SIV+)	35 (24.8)	54 (39.1)*	70 (28.5)	19	73 (30.5)	16 (40.0)	71 (29.2)	18 (50.0)*	40 (25.3)	49(40.5)**
				57.6)**						
Threats in Prison (PVI)	61 (43.0)	101**(71.6)	134(53.6)	28	134(55.6)	28 (66.7)	129(52.2)	33 (91.7)**	69 (43.4)	93 (75.0)**
				84.8)**						

Anger										
Borderline-Inappropriate Anger	72 (52.2)	94 (66.2)*	141 (57.6)	25 (71.4)	144(61.0)	22 (50.0)	138(56.6)	28 (77.8)*	80 (51.6)	86 (68.8)**
Antisocial-Aggressiveness	90 (65.2)	97 (72.4)	162(68.4)	25 (71.4)	165(71.7)	22 52.4)*	159(67.4)	28 (77.8)	96 (62.7)	91 (76.5)*
	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)
NAS Total	77.6 (15.0)	85.1 (15.0)**	80.5 (15.6)	86.9 (13.1)	80.8 (15.2)	83.9 (17.1)	80.5 (15.1)	87.3 (17.6)	77.6 (14.8)	86.2 (15.1)**
	N(%)	N(%)	N(%)	N(%)	N(%)	N(%)	N(%)	N(%)	N(%)	N(%)
Impulsivity										
Borderline-Impulsivity	114 (82.0)	122(86.5)	203(82.9)	44 (94.3)	202(85.6)	34 (77.3)	205(83.7)	31 (88.6)	125 80.1)	111(89.5)*
Antisocial-Impulsivity	63 (45.0)	82 (57.7)*	123(49.8)	22 (62.9)	124(51.9)	21 (48.8)	123(50.0)	22 (61.1)	71 (45.2)	74(59.2)*
PCL-R-Impulsivity	57 (40.7)	70 (48.3)	111(44.4)	16 (45.7)	107(44.4)	20 (45.5)	107(43.1)	20 (54.1)	63 (40.1)	64 (50.0)
TCO Symptoms										
Others Controlling Thoughts	16 (11.3)	19 (13.4)	28 (11.2)	7 (20.0)	28 (11.6)	7 (16.7)	30 (12.1)	5 (13.5)	142 89.3)	107(85.6)
Others Want to Hurt You	41 (29.1)	69 (48.9)**	89 (36.0)	21 60.0)**	87 (36.4)	23 53.5)*	88 (35.9)	22(59.5)**	47 (29.7)	63(50.8)**
Inserting Thoughts	11 (7.7)	8 (5.6)	16 (6.4)	3 (8.6)	16 (6.6)	3 (7.0)	17 (6.9)	2 (5.4)	11 (6.9)	8 (6.4)
Any Threat-Control Override	47 (32.9)	75 (51.7)**	99 (39.1)	23 65.7)**	98 (40.2)	24 (54.5)	99 (39.4)	37 (62.2)**	54 (33.8)	68(53.1)**
Prison Specific										
Belongs to Gang#	10 (7.0)	18 (12.7)	23 (9.2)	5 (14.7)	23 (9.5)	5 (11.6)	18 (7.3)	10**(27.0)	10 (6.3)	18 (14.4)*
Sexual Orientation#										
Heterosexual	136 (98.6)	130 (94.9)	237 (97.9)	29 (87.9)	228(97.9)	38 (90.5)	233 97.5)	33 (91.7)	151 98.1)	115 (95.0)
Bisexual	1 (0.7)	5 (3.6)	2 (0.8)	4 (12.1)	4 (1.7)	2 (4.8)	3 (1.3)	3 (1.3)	1 (0.6)	5 (4.1)
Homosexual	1 (0.7)	2 (1.5)	3 (1.2)	0 (0.0)**	1 (0.4)	2 (4.8)**	3 (1.3)	0 (0.0)**	2 (1.3)	1 (0.8)
Height Inches #	66.4 (5.8)	67.9 (12.4)	66.8 (7.4)	69.4 (18.8)	66.6 (7.6)	70.1 (17.4)*	66.9 (7.4)	68.5 (19.4)	66.6 (5.7)	67.8 (13.1)
Weight Pounds#	189.3 (33.1)	184.1 (41.9)	188.1 (36.8)	177.3 (43.2)	189.2 (37.2)	172.1 (38.4)**	186.9 (37.5)	184.6 (40.0)	189.2 (32.9)	183.4 (43.0)

Note. * $p < .05$, ** $p < .01$, *** $p < .001$. # Prison variables added to current study.

Table 63

Relationship Between MacArthur Risk Factors among Incarcerated Women (N=183) and Sexual Experiences in Prison

By Inmates	Any-sex		Predation		Victim		Bartered		Consensual	
	No (%)	Yes (%)	No (%)	Yes (%)	No (%)	Yes (%)	No (%)	Yes (%)	No (%)	Yes (%)
Demographic										
Age	40.2 (11.3)	36.1 (10)**	37.9 (10.7)	36.2 (12.9)	38.3 (11.0)	36.6 (10.1)	38.2 (10.8)	34.4 (9.9)	39.9 (11.1)	36(9.8)**
Ethnicity										
White	44 (57.1)	51 (48.1)	92 (51.7)	3 (60.0)	70 (52.2)	25 (51.0)	87 (52.7)	8 (44.4)	57 (58.2)	38 (44.7)
Other	4 (5.2)	19 (17.9)	23 (12.9)	0 (0.0)	14 (10.4)	9 (18.4)	20 (12.1)	3 (16.7)	8 (8.2)	15 (17.6)
Black	29 (37.7)	36 (34.0)*	63 (35.4)	2 (40.0)	50 (37.3)	15 (30.6)	58 (35.2)	7 (38.9)	33 (33.7)	32 (37.6)
Ever Married	67 (87.0)	90 (84.9)	154(86.5)	3 (60.0)	115(85.8)	42 (85.7)	142(86.1)	15 (83.3)	86 (87.7)	71 (83.5)
Employment Problems										
None	14 (18.4)	18 (17.5)	32 (18.4)	0 (0.0)	21 (15.9)	11 (23.4)	26 (16.0)	6 (35.3)	19 (19.6)	13 (15.9)
Possible/Less Serious	5 (6.6)	18 (17.5)	22 (12.6)	1 (20.0)	14 (10.6)	9 (19.1)	22 (13.6)	1 (5.9)	10(10.3)	13 (15.9)
Definite/Serious	57 (75.0)	67 (65.0)	120(69.0)	4 (80.0)	97 (73.5)	27 (57.4)	114 (70.4)	10 (58.8)	68 (70.1)	56 (68.3)
Criminogenic										
Father's Arrest	26 (36.1)	44 (48.4)	69 (43.1)	1 (33.3)	51 (41.8)	19 (46.3)	63 (42.6)	7 (46.7)	34 (37.0)	36 (50.7)
Father Alcohol Misuse	33 (44.6)	48 (51.1)	80 (48.5)	1 (33.3)	61 (48.4)	20 (47.6)	75 (49.3)	6 (37.5)	43 (45.3)	38 (32.1)
Mother Ever Use Drugs	12 (15.6)	27 (26.7)	36 (20.8)	3 (60.0)*	27 (20.3)	12 (26.7)	34 (21.2)	5 (27.8)	13 (13.3)	26 (2.5)**
Mother Arrest	10 (13.3)	27 (26.7)*	34 (19.9)	3 (60.0)*	27 (20.6)	10 (22.2)	32 (20.3)	5 (27.8)	12 (12.5)	25 (31.2)**
Violent Instant Offense	18 (23.4)	30 (28.3)	48 (27.0)	0 (0.0)	31 (23.1)	17 (34.7)	42(25.5)	6 (33.3)	23 (23.5)	25 (29.4)
Developmental										
Head Injury	28 (36.4)	38 (35.8)	65 (36.5)	1 (20.0)	49 (36.6)	17 (34.7)	59 (35.8)	7 (38.9)	34 (34.7)	32 (37.6)
Separation from Family Prior to age 15	22 (28.6)	38 (36.2)	58 (32.8)	2 (40.0)	43 (32.1)	18 (35.4)	55 (33.5)	5 (27.8)	28 (28.6)	32 (38.1)
Any Psychological Abuse	38 (49.4)	71 (8.3)**	104 (59.1)	5 (100.0)	73 (55.3)	36(73.5)*	96 (58.5)	13 (76.5)	53 (54.1)	56 (67.5)
Any Physical Abuse	31 (40.3)	58 (55.8)*	85 (48.2)	4 (80.0)	60 (45.5)	29 (59.2)	79 (48.2)	10 (58.8)	43 (43.9)	46 (55.4)
Any Violence towards Mother	30 (39.5)	57 (55.9)*	84 (48.6)	3 (60.0)	62 (47.3)	25 (5.32)	77 (47.8)	10 (58.8)	40 (41.2)	47(58.0)*
Any Violence towards Father	18 (23.7)	35 (34.3)	49 (28.3)	4 (80.0)*	34 (26.0)	19 (40.4)	45 (28.0)	8 (47.1)	23 (23.7)	30 (37.0)
Sex Abuse Before Age 18	37 (48.1)	72(69.9)*	104 (59.4)	5 (100.0)	75 (57.3)	34 (69.4)	95 (58.3)	14 (82.4)	50 (51.0)	59 (72.0)**

*

Clinical										
Psychopathy Over 25	9 (11.7)	13 (12.4)	20 (11.3)	2 (40.0)	16 (11.9)	6 (12.5)	20 (12.1)	2 (11.8)	10 (10.2)	12 (14.3)
Antisocial PD	24 (31.2)	41 (39.0)	63 (35.6)	2 (40.0)	51 (38.1)	14 (29.2)	60 (36.4)	5 (29.4)	27 (27.6)	38 (45.2)*
Suicidal Ideation										
None	62 (81.6)	62 (58.5)	123(69.5)	1 (20.0)	99 (74.4)	25 (51.0)	115 (70.1)	9 (50.0)	74 (76.3)	50 (58.8)
Possible/Less Serious	3 (3.9)	14 (13.2)	15 (8.5)	2 (40.0)	7 (5.3)	10 (20.4)	11 (6.7)	6 (33.3)	4 (4.1)	13 (15.3)
Definite/Serious	11 (14.5)	30(28.3)*	39 (22.0)	2 (40.0)*	27 (20.3)	14 (8.6)**	38 (23.2)	3 (16.7)**	19 (19.6)	22 (25.9)*
*										
History of Mental Illness										
None	29 (37.7)	42 (40.0)	70 (39.5)	1 (20.0)	56 (41.8)	15 (31.2)	65 (39.6)	6 (33.3)	36 (36.7)	35 (41.7)
Possible/Less Serious	16 (20.8)	19 (18.1)	34 (19.2)	1 (20.0)	26 (19.4)	9 (18.8)	27 (16.5)	8 (44.4)	18 (18.4)	17 (20.2)
Definite/Serious	32 (41.6)	44 (41.9)	73 (41.2)	3 (60.0)	52 (38.8)	24 (50.0)	72 (43.9)	4 (22.2)*	44 (44.9)	32 (38.1)
Active Mental Illness										
None	41 (53.2)	65 (61.9)	104(58.8)	2 (40.0)	80 (59.7)	26 (54.2)	93 (56.7)	13 (72.2)	51 (52.0)	55 (65.5)
Possible/Less Serious	22 (28.6)	22 (21.0)	42 (23.7)	2 (40.0)	32 (23.9)	12 (25.0)	40 (24.4)	4 (22.2)	26 (26.5)	18 (21.4)
Definite/Serious	14 (18.2)	18 (17.1)	31 (17.5)	1 (20.0)	22 (16.4)	10 (20.8)	31(18.9)	1 (5.6)	21 (21.4)	11 (13.1)
Alcohol Abuse										
0	22 (28.6)	22 (21.2)	42 (23.9)	2 (40.0)	32 (23.9)	12 (25.5)	38 (23.2)	6 (35.3)	25 (25.5)	19 (22.9)
1 or 2	32 (41.6)	54 (51.9)	85 (48.3)	1 (20.0)	64 (47.8)	22 (46.8)	78 (47.6)	8 (47.1)	43 (43.9)	43 (51.8)
3	8 (10.4)	8 (7.7)	15 (8.5)	1 (20.0)	12 (9.0)	4 (8.5)	15 (9.1)	1 (5.9)	9 (9.2)	7 (8.4)
4 or 5	15 (19.5)	20 (19.2)	34 (19.3)	1 (20.0)	26 (19.4)	9 (19.1)	33 (20.1)	2 (11.8)	21 (21.4)	14 (16.9)
Substance Use Problems										
None	21 (27.3)	23 (21.9)	44 (24.9)	0 (0.0)	33 (24.6)	11 (22.9)	40 (24.2)	4 (23.5)	26 (26.5)	18 (21.4)
Possible/Less Serious	9 (11.7)	15 (14.3)	24 (13.6)	0 (0.0)	19 (14.2)	5 (10.4)	23 (13.9)	1 (5.9)	12 (12.2)	12 (14.3)
Definite/Serious	47 (61.0)	67 (63.8)	109(61.6)	5 (100.0)	82 (61.2)	32 (66.7)	102(61.8)	12 (70.6)	60 (61.2)	54 (64.3)
Violent Fantasies (SIV+)	4 (5.3)	16 (16.0)*	19 (11.0)	1 (20.0)	13 (9.9)	7 (15.2)	16 (10.0)	4 (23.5)	5 (5.1)	15 (9.0)**
Threats in Prison (PVI)	5 (6.5)	34	36 (20.5)	3 (60.0)*	22 (16.7)	17(34.7)*	31 (18.9)	8 (47.1)**	7 (7.1)	32

		32.7)**				*				38.6)**
Anger										
Borderline-Inappropriate Anger	33 (43.4)	51 (48.6)	89 (45.5)	4 (80.0)	62 (46.6)	22 (45.8)	73 (44.5)	11 (64.7)	41 (42.3)	43 (51.2)
Antisocial-Aggressiveness	21 (27.3)	41 (40.6)	60 (34.5)	2 (50.0)	42 (32.6)	19 (41.3)	54 (33.3)	8 (50.0)	27 (27.8)	35 (43.2)*
	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)
NAS Total	76.2 (12.6)	80.9 (13.9)*	78.5 (13.3)	86.6 (16.9)	78.1 (13.7)	80.5 (12.8)	78.0 (13.4)	85.1 (13.0)*	76.5 (12.7)	81.6 (14.0)*
	N(%)	N(%)	N(%)	N(%)	N(%)	N(%)	N(%)	N(%)	N(%)	N(%)
Impulsivity										
Borderline-Impulsivity	47 (61.)	86 (81.9)**	128(72.3)	5 (100.0)	94 (70.1)	39 (81.2)	119(72.1)	14 (82.4)	64 (65.3)	69 82.1)*
Antisocial-Impulsivity	33 (42.9)	45 (42.9)	74 (41.8)	4 (80.0)	56 (42.1)	22 (44.9)	70 (42.7)	8 (44.4)	41 (41.8)	37 (44.0)
PCL-R-Impulsivity	28 (36.4)	49 (46.2)	74 (41.0)	4 (80.0)	54 (40.3)	23 (46.9)	68 (41.2)	9 (50.0)	36 (36.7)	41 (48.2)
TCO Symptoms										
Others Controlling Thoughts	9 (11.8)	20 (19.4)	27 (15.5)	2 (40.0)	21 (16.0)	9 (16.7)	24 (14.9)	5 (27.8)	11 (11.5)	18 (21.7)
Others Want to Hurt You	20 (26.3)	47(45.2)*	64 (36.6)	3 (60.0)	41 31.3)	26(53.1)*	58 (35.8)	9 (50.0)	31 (32.0)	36 (43.4)
						*				
Inserting Thoughts	2 (2.6)	4 (3.8)	6 (3.4)	0 (0.0)	4 (3.1)	2 (4.1)	5 (3.1)	1 (5.6)	2 (2.1)	4 (4.8)
Any Threat-Control Override	23 (29.9)	50(47.2)*	69 (38.8)	4 (80.0)	46 (34.3)	27 55.1)*	63 (38.2)	10 (55.6)	34 (34.7)	39 (45.9)
Prison Specific										
Belongs to Gang#	0 (0.0)	5 (4.9)*	5 (2.9)	0 (0.0)	3 (2.3)	2 (4.1)	4 (2.5)	1 (5.9)	0 (0.0)	5 (6.1)*
Sexual Orientation#										
Heterosexual	65 (91.5)	57 (57.0)	121 72.0)	1 (20.0)	92 (71.9)	30 (69.8)	117(76.0)	5 (29.4)	85 (92.4)	37 (46.8)
Bisexual	3 (4.2)	31 (31.0)	32 (19.3)	2 (40.0)	23 (18.0)	2 (4.7)	26 (16.9)	8 (47.1)	4 (4.3)	30 (38.0)
Homosexual	3 (4.2)	12(12.0)*	13 (7.8)	2 (40.0)*	13 (10.2)	11 (25.6)	11 (7.1)	4 23.5)**	3 (3.3)	12 (15.2)**
		*								
Height Inches #	64.0 (2.8)	64.3 (3.2)	64.2 (3.1)	64.3 (2.2)	64.2 (3.2)	64.1 (2.8)	64.1 (3.0)	65.1 (3.3)	63.9 (2.8)	64.5 (3.4)
Weight Pounds#	165.9 (36.7)	170.2 (42.7)	167.3 (39.1)	206.5 (67.5)	170.2 (41.5)	164.5 (36.5)	168.2 (39.1)	169.5 (49.1)	166.3 (36.9)	170.8 (43.9)

Note. * $p < .05$, ** $p < .01$, *** $p < .001$. # Prison variables added to current study.

These data concerning the female inmates reflected far fewer associations between risk markers for violence in the community and sexual behavior in prison. Predatory sexual behavior by female inmates was associated with a history of maternal drug use, mother arrest, and a homosexual sexual orientation. Being sexually victimized was related to being psychologically abused as a child, having violent thoughts toward others, acting in a threatening way toward others, and perceiving that others wanted to do one harm. Bartered sex was associated with only one of the identified risk markers, i.e. being homosexual in sexual orientation. Finally, consensual sex as experienced by the female inmates was associated with younger age, maternal arrest, sexual abuse prior to the age of 18 years, meeting criteria for Antisocial PD, having violent thoughts toward others, acting in a threatening way toward others, being more angry and aggressiveness, being more impulsive, belonging to a gang and being homosexual in sexual orientation. In a way that is similar as that found with the male inmates, consensual sex in prison appears to be a behaviors associated with chaotic, aggressive, and impulsive tendencies along with abuse and disruptive experiences in childhood.

Assessing the Risk for Violence, Version Two (HCR:20)

The HCR:20 is a structured clinical risk assessment protocol that integrates a clinical interview and file review with the coding of twenty risk factors that have been associated with threatened, attempted, or physical harm to another person (Webster, Douglas, Eaves & Hart, 1997). The HCR:20 was developed based upon a thorough review of the primary risk factors identified in the empirical literature concerning risk for violent behavior and was designed to reflect a professional standard for the clinical assessment of violence risk. This process underscores the importance of a consistent number of empirically derived risk factors, the use of third party verification of the information that is elicited and applied, and the integration of clinical judgment concerning certain exceptional circumstances which are integrated into the assessment process.

Research using the HCR:20 has demonstrated predictive accuracy with correctional populations (Belfrage, Fransson & Strand, 2004; Cooke, Michie, & Ryan, 2001; Dahle, 2001; de Vogel & de Ruiter, 2005; Douglas & Webster, 1999; Dolan & Khawaja, 2004; Doyle, Dolan, & McGovern., 2002; Dunbar, 2003; Gray et al., 2003; Kromer & Mills, 2001; Vincent, 1998; Vincent et al., 2001). The research conducted with correctional populations, including female inmates across multiple countries, found Area Under the Curve (AUC) values ranging from .16 to .39 for violence upon return to the community and from .77 to .81 for violence perpetrated during incarceration. AUC is the probability that a randomly selected (e.g.,) recidivist would score higher on the instrument than a randomly selected nonrecidivist. An AUC value of .70 and above is generally considered to be a moderate predictor, and values of .75 or above are considered to be good predictors (Douglas, 2001). Scores on the HCR:20 have also been found to predict violence among

civil psychiatric patients (Douglas, Ogloff, Nicholls & Grant, 1999; Nicholls, Ogloff & Douglas, 2004; Ross, Hart & Webster, 1998) and forensic populations (Belfrage, 1998; Brown, 2001; Dernevik, Falkheim, Holmqvist, & Sandell, 2001; Dernevik, Grann, & Johansson, 2002; de Vogel, de Ruiter, & Vandeputte, 2001; Pham, 2001; Ross, Hart, Eaves, & Webster, 2001; Strand, Belfrage, Fransson, & Levander, 1999; Tengström, 2001; Urheim, Jakobsen, & Rasmussen, 2003; Vincent, 1998; Whittemore, 1999; Wintrup, 1996). Research in forensic settings indicates that both the HCR:20 and the Psychopathy Checklist (PCL-R) correlate just under .30 with measures of later community violence, .38 with re-admission to the forensic hospital, and .45 with subsequent psychiatric hospitalization.

Nicholls, Douglas, and Ogloff (1997) utilized retrospective file review to investigate the predictive validity of the historical and clinical items (HC-15), as well as the screening version of the Psychopathy Checklist (PCL:SV) and the Violence Screening Checklist (VSC; McNeil & Binder, 1994). Results from psychometric reliability investigations conducted by Douglas and Webster (1999) indicated that inmates with scores above the median on the HCR:20 have increased odds of past violence and antisocial behavior by an average of 4 times. In addition, total scores, clinical scores, and risk scores have been found to be predictive of institutional violence by psychopaths in prison (Belfrage, 2000). Douglas et al. (1999) found that the AUC ranged from .68 (any physical violence) to .80 (violent crime), depending on the offense. Douglas et al. (2003) obtained AUCs for the HCR:20 Total ranging from moderate to good (.67, any violence; .70, physical violence; .67, non-physical violence).

The HCR:20 has demonstrated adequate concurrent validity through corollary analysis with existing violence risk measures and comparison with relevant outcome variables. The HCR:20 historical score, clinical score, risk score, and total score have been found to be correlated with the Hare Psychopathy Checklist: Screening Version (PCL:SV) Total Score ($r = .56$, $r = .40$, $r = .47$, and $r = .61$, respectively), as well as the McNeil-Binder Violence Screening Checklist (VSC) ($r = .17$, $r = .34$, and $r = .15$, no total score; McNeil, Eisner, & Binder, 2003). Additional studies have found that the HCR: 20 is correlated with minor ($r = .32$) and major ($r = .11$) institutional misconduct (Kroner & Mills, 2001) and previous violence ($r = .50$) (Douglas & Webster, 1999).

Study Analyses. The HCR:20 produces scores in three areas: the individual's past (historical items), present (clinical items), and future (risk management) in addition to a total score. The authors of the HCR:20 have also proposed eleven additional variables possibly related to violence risk for inclusion in future revisions of the HCR:20. These eleven experimental items were added to the protocol and include previous nonviolent criminal conduct, previous violent criminality, substance use problems associated with criminality, early maladjustment: victim of child abuse, early maladjustment: conduct problems, relationship problems in adolescence, educational problems in adolescence, homicidal ideation and

suicidal ideation. In reaching a final decision regarding risk for violence, the authors advise against any derivation of a continuous total composite score. Rather, they suggest quantification of the information contained in the three risk domains into a three-point rating scale indicting low, moderate, and high levels of risk.

Table 64

Frequency of HCR: 20 Items by Gender among Incarcerated Men (N=288) and Women (N=183)

Historical	Men		Women		Effect Size	
	N	%	N	%	χ^2	Φ
H1. Previous Violence						
None	16	6%	47	26%		
1-2 Moderate	45	16%	43	24%		
>2 or Any Severe	222	78%	93	51%	48.92***	.32***
H2. Young Age at First Violent Act						
\geq 40 Years	23	8%	60	33%		
20-39 Years	65	23%	51	28%		
< 20 Years	196	69%	70	39%	57.89***	.35***
H3. Relationships Instability						
Stable/Conflict Free	52	19%	16	9%		
Possible/Less Serious Instability	118	42%	54	30%		
Definite/Serious Instability	108	39%	112	62%	23.95***	.23***
H4. Employment Problems						
None	54	20%	32	18%		
Possible/Less Serious	43	16%	23	13%		
Definite/Serious	169	64%	124	69%	1.65	.06
H5. Substance Use Problems						
None	52	18%	44	24%		
Possible/Less Serious	64	23%	24	13%		
Definite/Serious	166	59%	114	63%	7.29*	.13*
H6a. Major Psychotic Mental Illness						
None	247	87%	146	80%		
Possible/Less Serious	13	5%	13	5%		
Definite/Serious	23	8%	24	13%	4.74	.10

H6b. Major Non-Psychotic Mental Illness						
None	205	73%	87	48%		
Possible/Less Serious	35	12%	34	19%		
Definite/Serious	42	15%	61	34%	31.10***	.26***
H7. Psychopathy						
PCL-R < 20	154	54%	126	69%		
PCL-R 20-29	101	35%	50	28%		
PCL-R 30-40	30	11%	6	3%	13.99**	.17**
H8. Early Maladjustment						
None	78	28%	53	29%		
Possible/Less Serious	77	27%	37	20%		
Definite/Serious	128	28%	93	51%	3.03	.08
H9. PD						
None	81	28%	48	26%		
Possible/Less Serious						
Definite/Serious	206	72%	135	74%	0.22	.02
H10. Supervision Failure						
None	102	36%	89	49%		
Possible/Less Serious	27	10%	13	7%		
Definite/Serious	151	54%	80	44%	7.14*	.12*
	Men		Women		Effect Size	
Clinical	N	%	N	N	%	N
C1. Lack of Insight						
None	101	36%	67	37%		
Possible/Less Serious	110	39%	80	44%		
Definite/Serious	72	25%	36	20%	2.26	.07
C2. Negative Attitudes						
None	82	29%	72	40%		
Possible/Less Serious	109	38%	81	45%		
Definite/Serious	93	33%	29	16%	16.83***	.19***
C3a. Active Psychotic/Major Mental Illness						
None	267	94%	162	89%		
Possible/Less Serious	8	3%	10	6%		

Definite/Serious	9	3%	11	6%	4.49	.10
C3b. Active Non-Psychotic Mental Illness						
None	233	82%	120	66%		
Possible/Less Serious	34	12%	38	21%		
Definite/Serious	16	6%	24	13%	16.85***	.19***
C4. Impulsivity						
None	39	14%	38	21%		
Possible/Less Serious	113	40%	62	34%		
Definite/Serious	130	46%	83	45%	4.37	.10
C5. Unresponsive to Treatment						
None	134	48%	109	60%		
Possible/Less Serious	85	30%	56	31%		
Definite/Serious	63	22%	16	9%	15.19**	.18**
	Men		Women		Effect Size	
Risk	N	%	N	N	%	N
R1. Plans Lack Feasibility						
Low Probability	98	35%	77	42%		
Moderate Probability	115	41%	75	41%		
High Probability	69	25%	31	17%	4.51	.10
R2. Exposure to Destabilizers						
None	94	33%	71	39%		
Possible/Less Serious	118	42%	73	40%		
Definite/Serious	71	25%	39	21%	1.74	.06
R3. Lack of Personal Support						
Low Probability	117	41%	96	53%		
Moderate Probability	112	40%	58	32%		
High Probability	54	19%	29	16%	5.50	.11
R4. Noncompliance with Remediation						
Low Probability	135	48%	106	58%		
Moderate Probability	81	29%	56	31%		
High Probability	66	23%	21	12%	10.74**	.15**
R5. Stress						
Low Probability	59	21%	24	13%		

Moderate Probability	140	50%	103	56%		
High Probability	83	29%	56	31%	4.78	.10
	Men		Women		Effect Size	
Additional Items	N	%	N	N	%	N
Ha. Previous Non-Violent Criminal						
None	12	4%	25	14%		
Possible/Less Serious	27	10%	7	4%		
Definite/Serious	245	86%	150	82%	17.70***	.20***
Hb. Previous Violent Criminality						
None	36	13%	75	41%		
Possible/Less Serious	42	15%	29	16%		
Definite/Serious	205	72%	78	43%	53.67***	.34***
Hc. Substance Use Problems Assoc. with Criminality						
None	80	28%	57	31%		
Possible/Less Serious	58	21%	17	9%		
Definite/Serious	145	51%	108	59%	10.23**	.15**
Hd. Early Maladjustment-Victim of Abuse						
None	156	55%	69	38%		
Possible/Less Serious	50	18%	29	16%		
Definite/Serious	78	28%	84	46%	17.98***	.20***
He. Early Maladjustment-Conduct Problems						
None	37	13%	59	32%		
Possible/Less Serious	65	23%	37	20%		
Definite/Serious	182	64%	86	47%	26.04***	.24***
Hf. Adolescence: Failure to Establish and Maintain Relationships						
None	112	40%	61	34%		
Possible/Less Serious	85	30%	47	26%		
Definite/Serious	87	31%	74	41%	4.93	.10
Hg. Educational Problems						
None	41	15%	58	32%		
Possible/Less Serious	58	21%	35	19%		
Definite/Serious	184	65%	88	49%	21.09***	.21***

Ca. Homicidal Ideation					
None	153	54%	139	76%	
Possible/Less Serious	57	20%	24	13%	
Definite/Serious	74	26%	19	10%	25.54*** .23***
Cb. Suicidal Ideation					
None	208	73%	124	68%	
Possible/Less Serious	32	11%	17	9%	
Definite/Serious	44	16%	41	23%	3.81 .15
H6. History of Mental Illness-a & b					
Above					
None	191	68%	71	39%	
Possible/Less Serious	38	14%	35	19%	
Definite/Serious	53	19%	76	42%	39.47*** .29***
C3. Active Mental Illness- a & b					
Above					
None	225	80%	106	58%	
Possible/Less Serious	37	13%	44	24%	
Definite/Serious	21	7%	32	18%	24.91*** .23***
	M	SD	M	SD	T
Historical (Traditional)	12.19	4.02	11.74	4.21	1.15
Clinical (Traditional)	4.30	2.35	3.94	2.34	1.64
Risk (Traditional)	4.43	2.67	3.92	2.38	2.18*
Total	20.94	7.63	19.60	7.33	1.89

Note. * $p < .05$, ** $p < .01$.

These data confirm the violence that characterizes the history of both the male and female inmates (see Table 64). Over three quarters of the male inmates (78%) and over half of the female inmates (51%) were coded as having demonstrated high levels of previous violence, either in terms of frequency or severity. Moreover, 69% of the males and 39% of the females reported being less than 20 years of age at the time of their first violent incident. Combined with this high endorsement of violence was the finding that 72% of the male inmates and 74% of the female inmates met diagnostic criteria for at least one personality disorder.

In the experimental items, both male and female inmates endorsed high levels of previous non-violent criminality (86%, 82% definite/serious), previous violent criminality (72%, 43% definite/serious), and substance abuse being associated with their criminal behavior (51%, 59% definite/serious). These

appeared to be associated with high rates of early conduct disorder (51%, 47% definite/serious) and educational problems (65%, 49% definite/serious). Reported history of mental illness was relatively low for the male inmates but high for the female inmates, with 42% of them reporting a history of mental illness and 18% current symptoms of mental illness possibly involving suicidal ideation.

There were a number of other gender differences on the individual items, but no significant gender differences on the final Risk Composite Score. On the individual items, the female inmates scored higher on relationship instability, substance abuse disorders, major non-psychotic mental illness, and active non-psychotic mental illness. The male inmates scored higher on previous violence, young age at first violent offense, psychopathy, supervision failure, negative attitudes, being unresponsive to treatment, and being noncompliant with remediation efforts.

On the experimental items, the males scored higher on previous non-violent criminality, previous violent crime, conduct disorder in adolescence, educational problems, and homicidal ideation. The female inmates scored higher on being victims of early abuse, having a history of mental illness, and having active symptoms of mental illness.

Table 65 illustrates that the HCR:20 with and without the experimental items demonstrated consistent correlations with self reported consensual sex in prison among the male inmates. Specifically, young age at first violence, impulsivity, future plans that lack feasibility, future exposure to destabilizing influences, early maladjustment and conduct disorder, failure to establish relationships in adolescence, homicidal ideation, and Total HCR:20 scores all were significantly associated with higher rates of consensual sex in prison. Only substance abuse associated with criminality was related to predatory sexual behavior, and impulsivity and Total HCR:20 scores with bartered sex in prison.

Table 65

Relationship Between HCR:20 Items by Gender among Incarcerated Men (N=288) and Sexual Experiences in Prison

Historical	Any-sex		Predation		Victim		Bartered		Consensual	
	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
	N=143(%)	N=145(%)	N=253(%)	N=35(%)	N=244(%)	N=44(%)	N=251(%)	N=37(%)	N=160(%)	N=128(%)
H1. Previous Violence										
None	9 (6.5)	7 (4.5)	15 (6.0)	1 (2.9)	12 (5.0)	4 (9.1)	16 (16.5)	0 (0.0)	11 (7.1)	5 (3.9)
1-2 Moderate	24 (17.3)	21 (14.6)	39 (15.7)	6 (17.1)	36 (15.2)	9 (20.5)	39 (15.9)	6 (16.2)	29 (17.9)	17 (13.4)
>2 or Any Severe	106 (76.3)	116 (80.6)	194 (78.2)	28 (80.0)	191 (79.9)	31 (70.5)	191 (77.6)	31 (83.8)	117 (75.0)	105 (82.7)
H2. Young Age at First Violent Act										
≥ 40 Years	11 (7.9)	12 (8.3)	21 (8.4)	2 (5.7)	14 (5.8)	9 (20.5)	22 (8.9)	1 (2.7)	16 (10.2)	7 (5.5)
20-39 Years	39 (27.9)	26 (18.1)	62 (24.9)	3 (8.6)	58 (24.2)	7 (15.9)	60 (24.3)	5 (13.5)	44 (28.0)	21 (16.5)
< 20 Years	90 (64.3)	106 (73.6)	166 (66.7)	30 (85.7)	168 (70.0)	28 (63.6)**	165 (66.8)	31 (82.8)	97 (61.8)	99 (78.0)*
H3. Relationships Instability										
Stable/Conflict Free	24 (17.6)	28 (19.7)	50 (20.5)	2 (5.9)	46 (19.6)	6 (14.0)	48 (19.6)	4 (11.1)	26 (17.0)	26 (20.8)
Possible/Less Serious Instability	59 (43.4)	59 (41.5)	100 (41.0)	18 (52.9)	99 (42.1)	19 (44.2)	104 (43.0)	14 (38.9)	70 (45.8)	48 (38.4)
Definite/Serious Instability	53 (39.0)	55 (38.7)	94 (38.5)	14 (41.2)	90 (38.3)	18 (41.9)	90 (37.2)	18 (50.0)	57 (37.3)	51 (40.8)
H4. Employment Problems										
None	29 (21.6)	25 (18.9)	49 (21.0)	5 (15.2)	4 (19.5)	10 (25.0)	50 (21.6)	4 (11.8)	34 (22.7)	20 (17.2)
Possible/Less Serious	23 (17.2)	20 (15.2)	37 (15.9)	6 (18.2)	34 (15.0)	9 (22.5)	36 (15.5)	7 (20.6)	26 (17.3)	17 (14.7)
Definite/Serious	82 (61.2)	87 (65.9)	147 (63.1)	22 (66.7)	148 (65.5)	21 (52.5)	146 (62.9)	23 (67.6)	90 (60.0)	79 (68.1)
H5. Substance Use Problems										
None	26 (18.8)	26 (18.1)	49 (19.8)	3 (8.6)	43 (18.1)	9 (20.5)	44 (18.0)	8 (21.6)	30 (19.4)	22 (17.3)
Possible/Less Serious	27 (19.6)	37 (25.7)	52 (21.1)	12 (34.3)	52 (21.8)	12 (27.3)	52 (21.2)	12 (32.4)	30 (19.4)	34 (26.8)

Definite/Serious	85 (61.6)	81 (56.2)	146(56.1)	20 (57.1)	142(60.1)	23 (52.3)	149 (60.8)	17 (45.9)	95 (61.3)	71 (55.9)
<hr/>										
H6a. Major Psychotic Mental Illness										
None	121 (87.1)	126(87.5)	213(85.9)	34 (97.1)	208(27.0)	39 (88.6)	213(86.6)	34 (91.9)	136(87.2)	111(87.4)
Possible/Less Serious	5 (3.6)	8 (5.6)	13 (5.2)	0 (0.0)	13 (5.6)	0 (0.0)	11 (4.5)	2 (5.4)	5 (3.2)	8 (6.3)
Definite/Serious	13 (9.4)	10 (6.9)	22 (8.9)	1 (2.9)	18 (7.5)	5 (11.4)	22 (8.9)	1 (2.7)	15 (9.6)	8 (6.3)
<hr/>										
H6b. Major Non-Psychotic Mental Illness										
None	103(72.4)	103 (72.0)	182(73.7)	23 (65.7)	179(74.9)	26 (60.5)	176(71.8)	29 (78.)	110(71.0)	95 (74.8)
Possible/Less Serious	14 (10.1)	21 (14.7)	28 (11.3)	7 (20.0)	27 (11.3)	8 (18.6)	33 (13.5)	2 (5.4)	19 (12.3)	16 (12.6)
Definite/Serious	23 (16.5)	19 (13.3)	37 (15.0)	5 (14.3)	33 (13.6)	9 (20.9)	36 (14.7)	6 (16.2)	26 (16.8)	16 (12.6)
<hr/>										
H7. Psychopathy										
PCL-R < 20	81 (57.9)	73 (50.3)	139 (55.6)	15 (42.9)	127 (52.7)	27 (61.4)	138(55.6)	16 (43.2)	92 (58.6)	62 (48.4)
PCL-R 20-29	44 (31.4)	57 (39.3)	87 (34.8)	14 (40.0)	89 (36.4)	12 (27.3)	87 (35.1)	14 (37.8)	50 (31.8)	51 (39.8)
PCL-R 30-40	15 (10.7)	15 (10.3)	24 (9.6)	6 (17.1)	25 (10.4)	5 (11.4)	23 (9.3)	7 (18.9)	15 (9.6)	15 (11.7)
<hr/>										
H8. Early Maladjustment										
None	44 (31.7)	34 (23.6)	73 (29.4)	5 (14.3)	7 (29.3)	8 (19.2)	73 (29.7)	5 (13.5)	50 (32.1)	28 (22.0)
Possible/Less Serious	34 (24.5)	43 (29.9)	66 (26.6)	11 (31.4)	67 (28.0)	10 (22.7)	64 (26.0)	13 (35.1)	40 (25.6)	37 (29.1)
Definite/Serious	61 (43.9)	67 (46.5)	109 (44.0)	19 (54.3)	102(42.7)	26 (59.1)	109(44.3)	19 (51.4)	66 (42.3)	62 (48.8)
<hr/>										
H9. PD										
None	46 (32.6)	35 (24.1)	74 (29.4)	7 (20.0)	70 (28.8)	11 (25.0)	74 (29.6)	7 (18.9)	50 (31.4)	31 (24.2)
Definite/Serious	96 (67.6)	110 (75.9)	178(70.6)	28 (80.0)	173(71.2)	33 (75.0)	176(70.4)	30 (81.1)	109(68.6)	97 (75.8)
<hr/>										
H10. Supervision Failure										
None	52 (37.1)	50 (35.7)	92 (37.4)	10 (29.4)	89 (37.6)	13 (30.2)	89 (39.3)	13 (37.1)	61 (38.9)	41 (33.3)
Possible/Less Serious	12 (8.6)	15 (10.7)	21 (8.5)	6 (17.6)	22 (9.3)	5 (11.6)	23 (9.4)	4 (11.4)	13 (8.3)	14(11.4)
Definite/Serious	76 (54.6)	75 (53.6)	133	18 (52.9)	126	25 (58.1)	133	18 (51.4)	83 (52.9)	68 (55.3)

<i>Clinical</i>	Any-sex		(54.1) Predation		(53.2) Victim		(54.3) Bartered		Consensual	
	N	Y	N	Y	N	Y	N	Y	N	Y
	C1. Lack of Insight									
None	57 (41.0)	44 (30.6)	91 (36.7)	10 (28.6)	89 (37.2)	12 (27.3)	91 (37.0)	10 (27.0)	60 (38.5)	41 (32.3)
Possible/Less Serious	51 (36.7)	59 (41.0)	93 (37.5)	17 (48.6)	90 (37.7)	20 (45.5)	92 (37.4)	18 (48.6)	60 (38.5)	50 (39.4)
Definite/Serious	31 (22.3)	41 (28.5)	64 (25.8)	8 (22.9)	60 (25.1)	12 (27.3)	63 (25.6)	9 (24.3)	36 (23.1)	36 (28.3)
C2. Negative Attitudes										
None	47 (33.6)	35 (24.3)	71 (28.5)	11 (31.4)	67 (27.9)	15 (34.1)	73 (29.6)	9 (24.3)	51 (32.5)	31 (24.4)
Possible/Less Serious	48 (34.3)	61 (42.4)	95 (38.2)	14 (40.0)	92 (38.3)	17 (38.6)	96 (38.9)	113(35.1)	53 (33.8)	56 (44.1)
Definite/Serious	45 (32.1)	48 (33.3)	83 (33.3)	10 (28.6)	81 (33.6)	12 (27.3)	78 (31.6)	15 (40.5)	53 (33.8)	40 (31.5)
C3a.Active Psychotic/Major Mental Illness										
None	130(92.9)	137(95.1)	233(93.6)	34 (97.1)	227(94.6)	40 (90.6)	231(93.5)	36 (97.3)	146(93.0)	121(95.3)
Possible/Less Serious	5 (3.6)	3 (2.1)	8 (3.2)	0 (0.0)	7 (2.9)	1 (2.3)	7 (2.8)	1 (2.7)	6 (3.8)	2 (1.6)
Definite/Serious	5 (3.6)	4 (2.8)	8 (3.2)	1 (2.9)	6 (2.5)	3 (6.8)	9 (3.6)	0 (0.0)	5 (3.2)	4 (3.1)
C3b. Active Non-Psychotic Mental Illness										
None	113 (81.3)	120(83.3)	203(81.9)	30 (85.7)	203(84.9)	30 (68.2)	202(82.1)	31 (83.8)	122(78.2)	111(87.4)
Possible/Less Serious	19 (13.7)	15 (10.4)	29 (11.7)	5 (14.3)	26 (10.9)	8 (18.2)	30 (12.2)	4 (10.8)	23 (14.7)	11 (8.7)
Definite/Serious	7 (5.0)	9 (6.2)	16 (6.5)	0 (0.0)	10 (4.2)	6 (13.6)*	14 (5.7)	2 (5.4)	11 (7.1)	5 (3.9)
C4. Impulsivity										
None	26 (18.8)	13 (9.0)	37 (15.0)	2 (5.7)	33 (13.9)	6 (13.6)	38 (15.5)	1 (2.7)	29 (18.7)	10 (7.9)
Possible/Less Serious	53 (38.4)	60 (41.7)	99 (40.1)	14 (40.0)	92 (38.7)	21 (47.7)	101(41.2)	12 (32.4)	61 (39.4)	52 (40.9)
Definite/Serious	59 (42.8)	71 (49.3)	111(44.9)	19 (54.3)	113(47.5)	17 (38.6)	106(43.3)	24 (64.9)*	65 (41.9)	65 (51.2)*
C5. Unresponsive to Treatment										

None	75 (54.0)	59 (41.3)	120(48.4)	14 (41.2)	116(48.7)	18 (40.9)	120(48.8)	14 (38.9)	81 (51.9)	53 (42.1)
Possible/Less Serious	36 (25.9)	49 (34.3)	72 (29.0)	13 (38.2)	72 (30.3)	13 (29.5)	76 (30.9)	9 (25.0)	42 (26.9)	43 (34.1)
Definite/Serious	28 (20.1)	35 (24.5)	56 (22.6)	7 (20.6)	50 (21.0)	13 (29.5)	50 (20.3)	13 (36.1)	33 (21.2)	30 (23.8)
	Any-sex		Predation		Victim		Bartered		Consensual	
Risk	N	Y	N	Y	N	Y	N	Y	N	Y
R1. Plans Lack Feasibility										
Low Probability	56 (40.3)	42 (29.4)	88 (35.6)	10 (28.6)	84 (35.3)	14 (31.8)	93 (38.0)	5 (13.5)	64 (41.)	34 (27.0)
Moderate Probability	51 (36.7)	64 (44.8)	97 (39.3)	18 (51.4)	96 (40.3)	19 (43.2)	97 (39.6)	18 (48.6)	57 (36.5)	58 (46.0)
High Probability	32 (23.0)	37 (25.9)	62 (25.1)	7 (20.0)	58 (24.2)	11 (25.0)	55 (22.4)	14 (37.8)*	35 (22.5)	34 (27.0)*
R2. Exposure to Destabilizers										
None	54 (38.6)	40 (28.0)	85 (34.3)	9 (25.7)	79 (33.1)	15 (34.1)	86 (35.0)	8 (21.6)	62 (35.9)	32 (25.4)
Possible/Less Serious	57 (40.1)	61 (42.7)	104 (41.9)	14 (40.0)	103(43.1)	15 (34.1)	104 (42.3)	14 (37.8)	63 (40.1)	55 (43.7)
Definite/Serious	29 (20.7)	42 (29.4)	59 (23.8)	12 (34.3)	57 (23.8)	14 (31.8)	56 (22.8)	15 (40.5)	32 (20.4)	39 (31.0)*
R3. Lack of Personal Support										
Low Probability	65 (46.4)	52 (36.4)	102(41.1)	15 (42.9)	104(43.5)	13 (29.5)	104(42.3)	13 (35.1)	72 (45.9)	45 (35.7)
Moderate Probability	50 (35.7)	62 (43.4)	99 (39.9)	13 (37.1)	91 (38.0)	21 (47.7)	96 (39.0)	15 (43.2)	54 (34.4)	58 (46.0)
High Probability	25 (17.9)	29 (20.3)	47 (19.0)	7 (20.0)	44 (18.4)	10 (22.7)	46 (18.7)	8 (21.6)	31 (19.7)	23 (18.3)
R4. Noncompliance with Remediation										
Low Probability	72 (51.8)	63 (44.1)	115 (46.6)	20 (57.1)	110(46.2)	25 (56.8)	122(49.8)	13 (35.1)	80 (51.30)	55 (43.7)
Moderate Probability	40 (28.8)	41 (28.7)	74 (30.0)	7 (20.0)	73 (30.7)	8 (18.2)	69 (28.2)	12 (32.4)	45 (28.8)	36 (28.6)
High Probability	27 (19.4)	39 (27.3)	58 (23.5)	8 (22.9)	55 (23.1)	11 (25.0)	54 (22.0)	12 (32.4)	31 (19.9)	35 (27.8)
R5. Stress										
Low Probability	34 (24.5)	25 (17.5)	50 (20.2)	9 (25.7)	53 (22.3)	6 (13.6)	50 (20.4)	9 (24.3)	36 (23.1)	23 (18.3)
Moderate Probability	66 (47.5)	74 (51.7)	123(49.8)	17 (48.6)	121 (50.8)	19 (43.2)	123(50.2)	17 (45.9)	73 (46.8)	67 (53.2)

High Probability	39 (28.1)	44 (30.8)	74 (30.0)	9 (25.7)	64 (29.6)	19 (43.2)	72 (29.4)	11 (29.7)	47 (30.1)	36 (28.6)
	Any-sex		Predation		Victim		Bartered		Consensual	
Additional Items	N	Y	N	Y	N	Y	N	Y	N	Y
Ha. Previous Non-Violent Criminal										
None	8 (5.7)	4 (2.8)	12 (4.8)	0 (0.0)	10 (4.2)	2 (4.5)	12 (4.9)	0 (0.0)	10 (6.4)	2 (1.6)
Possible/Less Serious	14 (10.0)	13 (9.0)	24 (9.6)	3 (8.6)	20 (8.3)	7 (15.9)	22 (8.9)	5 (13.5)	17 (10.8)	10 (7.9)
Definite/Serious	118(84.3)	127(88.2)	213(85.5)	32 (91.4)	210(87.5)	35 (79.5)	213(86.2)	32 (86.5)	130(82.3)	115(90.6)
Hb. Previous Violent Criminality										
None	20 (14.4)	16 (11.1)	31 (12.5)	5 (14.3)	28 (11.7)	8 (18.2)	31 (12.6)	5 (13.5)	21 (13.5)	15 (11.8)
Possible/Less Serious	21 (15.1)	21 (14.6)	37 (14.9)	5 (14.3)	34 (14.2)	8 (18.2)	35 (14.2)	7 (18.9)	24 (15.4)	18 (14.2)
Definite/Serious	98 (70.5)	107(74.3)	180(72.6)	25 (71.4)	177(74.1)	28 (63.6)	180(73.2)	25 (67.6)	111 (71.2)	94 (74.0)
Hc. Substance Use Problems Assoc. with Criminality										
None	42 (30.2)	38 (26.4)	77 (31.0)	3 (8.6)	68 (28.5)	12 (27.3)	70 (28.5)	10 (27.0)	47 (30.1)	33 (26.0)
Possible/Less Serious	26 (18.7)	32 (22.2)	48 (19.4)	10 (28.6)	47 (19.7)	11 (25.0)	47 (19.1)	11 (29.7)	30 (19.2)	28 (22.0)
Definite/Serious	71 (51.1)	74 (51.4)	123(49.6)	22 (62.9)*	124(51.9)	21 (47.7)	129(52.4)	16 (43.2)	79 (50.6)	66 (52.0)
Hd. Early Maladjustment-Victim of Abuse										
None	81 (57.9)	75 (52.1)	137(55.0)	19 (54.3)	140(58.3)	16 (36.4)	137(55.5)	19 (51.4)	90 (57.3)	66 (52.0)
Possible/Less Serious	25 (17.9)	25 (17.4)	41 (16.5)	9 (25.7)	41 (17.1)	9 (20.5)	42 (17.0)	8 (21.6)	28 (17.8)	22 (17.3)
Definite/Serious	34 (24.3)	44 (30.6)	71 (28.5)	7 (20.0)	59 (24.6)	19 (43.2)*	68 (27.5)	10 (27.0)	39 (24.8)	39 (30.7)
He. Early Maladjustment-Conduct Problems										
None	20 (14.3)	17 (11.8)	34 (13.7)	3 (8.6)	28 (11.7)	9 (20.5)	33 (13.4)	4 (10.8)	26 (16.6)	11 (8.7)
Possible/Less Serious	40 (28.6)	25 (17.4)	57 (22.9)	8 (22.9)	58 (24.2)	7 (15.9)	60 (24.3)	5 (13.5)	43 (27.4)	22 (17.3)
Definite/Serious	80 (57.1)	102 70.8)*	158 (63.9)	24 (68.6)	154 (16.2)	28 (63.6)	154(62.3)	28 (75.7)	88 (56.1)	94 74.0)**
Hf. Adolescence: Failure to										

Establish and Maintain Relationships										
None	66 (47.1)	46 (31.9)	99 (38.9)	13 (37.1)	101 (42.1)	11 (25.0)	100 (40.5)	12 (32.4)	72 (42.9)	40 (31.5)
Possible/Less Serious	36 (25.7)	49 (34.0)	71 (28.5)	14 (40.0)	68 (28.3)	17 (38.6)	75 (30.4)	10 (27.0)	4 (28.0)	41 (32.3)
Definite/Serious	38 (27.1)	49 (34.0)*	79 (31.7)	8 (22.9)	71 (29.6)	16 (36.4)	72 (29.1)	15 (40.5)	41 (26.1)	46 (36.2)*
Hg. Educational Problems										
None	23 (16.5)	18 (12.5)	40 (16.1)	1 (2.9)	34 (14.2)	7 (15.9)	39 (15.9)	2 (5.4)	28 (17.9)	13 (10.2)
Possible/Less Serious	30 (21.6)	28 (19.4)	48 (19.4)	10 (28.6)	45 (18.8)	13 (29.5)	51 (20.7)	7 (18.9)	35 (22.4)	23 (18.1)
Definite/Serious	86 (61.9)	98 (68.1)	160(64.5)	24 (68.6)	160(66.9)	24 (54.5)	156(63.4)	28 (75.7)	93 (59.6)	91 (71.7)
Ca. Homicidal Ideation										
None	86 (61.4)	67 (46.5)	139 (55.8)	14 (40.0)	129(53.8)	24 (54.5)	138(55.9)	15 (40.5)	101(64.3)	52 (40.9)
Possible/Less Serious	27 (19.3)	30 (20.8)	48 (19.3)	9 (25.7)	46 (19.2)	11 (25.0)	48 (19.4)	9 (24.3)	29 (18.5)	28 (22.0)
Definite/Serious	27 (19.3)	47 (32.6)*	62 (24.9)	12 (34.3)	65 (27.1)	9 (20.5)	61 (24.7)	13 (35.1)	27 (17.2)	47 37.0)**
Cb. Suicidal Ideation										
None	110(78.7)	98 (68.10)	186 (74.7)	22 (62.9)	185(77.1)	23 (52.3)	184(74.5)	24 (64.9)	121(77.1)	87 (68.5)
Possible/Less Serious	9 (6.4)	23 (16.0)	23 (9.2)	9 (25.7)	21 (8.8)	11 (25.0)	23 (9.3)	9 (24.3)	12 (7.6)	20 (15.7)
Definite/Serious	21 (15.0)	23 (16.0)*	40 (16.1)	4 (11.4)*	34 (14.2)	10(22.7)**	40 (16.2)	4 (10.8)*	24 (15.3)	20 (15.7)
H6. History of Mental Illness-a & b Above										
None	95 (68.3)	96 (67.1)	168(68.0)	23 (65.7)	165(69.0)	26 (60.5)	163(66.5)	28 (75.7)	103(66.5)	88 (69.3)
Possible/Less Serious	15 (10.8)	23 (16.1)	32 (13.0)	6 (17.1)	32 (13.4)	6 (14.0)	35 (14.3)	3 (8.1)	19 (12.3)	19 (15.0)
Definite/Serious	29 (20.9)	24 (16.8)	47 (19.0)	6 (17.1)	42 (17.6)	11 (25.6)	47 (19.2)	6 (16.2)	33 (21.3)	20 (15.7)
C3. Active Mental Illness- a & b Above										
None	108 (77.7)	117(81.2)	196(79.0)	29 (82.9)	196(82.0)	29 (65.9)	195(79.3)	30 (81.1)	117(75.0)	108(85.0)
Possible/Less Serious	21 (15.1)	16 (11.1)	32 (12.9)	5 (14.3)	29 (12.1)	8 (18.2)	32 (13.0)	5 (13.5)	25 (16.0)	12 (9.4)
Definite/Serious	10 (7.2)	11 (7.6)	20 (8.1)	1 (2.9)	14 (5.9)	7 (15.9)*	19 (7.7)	2 (5.4)	14 (9.0)	7 (5.5)

	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)
Historical (Traditional)	11.9 (4.2)	12.4 (3.8)	12.0 (4.1)	13.4 (3.4)	12.2 (4.0)	12.2 (4.1)	12.1 (4.0)	13.1 (3.8)	11.8 (4.1)	12.7 (3.8)
Clinical (Traditional)	4.0 (2.5)	4.6 (2.2)	4.3 (2.4)	4.4 (2.2)	4.3 (2.4)	4.6 (2.3)	4.2 (2.4)	5.0 (2.2)	4.2 (2.5)	4.5 (2.2)
Risk (Traditional)	4.1 (2.7)	4.8 (2.6)*	4.4 (2.7)	4.4 (2.7)	4.4 (2.7)	4.8 (2.7)	4.3 (2.6)	5.3 (2.8)*	4.1 (2.7)	4.8 (2.6)*
Total	20.1 (7.9)	21.8 (7.2)	20.8 (7.7)	22.2 (7.3)	20.8 (7.7)	21.6 (7.5)	20.6 (7.5)	23.4 (7.9)*	20.1 (7.7)	22.0 (7.4)*

Note. * $p < .05$, ** $p < .01$.

Table 66

Relationship Between HCR:20 Items by Gender among Incarcerated Women (N=183) and Sexual Experiences in Prison

Historical	Any-sex		Predatory		Victim		Bartered		Consensual	
	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
	N=77 (%)	N=106(%)	N=178(%)	N=5 (%)	N=134(%)	N=49 (%)	N=165(%)	N=18 (%)	N=98 (%)	N=85 (%)
H1. Previous Violence										
None	24 (31.2)	23 (21.7)	47 (26.4)	0 (0.0)	36 (26.9)	11 (22.4)	44 (26.7)	3 (16.7)	32 (32.7)	15 (17.6)
1-2 Moderate	19 (24.7)	24 (22.6)	41 (23.0)	2 (40.0)	30 (22.4)	13 (26.5)	40 (24.2)	3 (16.7)	23 (23.5)	20 (23.5)
>2 or Any Severe	34 (44.2)	59 (55.7)	90 (50.6)	3 (60.0)	68 (50.7)	25 (51.0)	81 (49.1)	12 (66.7)	43 (43.9)	50 (58.8)*
H2. Young Age at First Violent Act										
≥ 40 Years	35 (45.5)	25 (24.0)	60 (34.1)	0 (0.0)	49 (36.8)	11 (22.9)	57 (35.0)	3 (16.7)	42 (42.9)	18 (21.7)
20-39 Years	20 (26.0)	31 (29.8)	48 (27.3)	3 (60.0)	36 (27.1)	15 (31.2)	43 (26.4)	8 (44.4)	23 (23.5)	28 (33.7)
< 20 Years	22 (28.6)	48(46.2)**	6 (38.6)	2 (40.0)	48 (36.1)	22 (45.8)	63 (38.7)	7 (38.9)	33 (33.7)	37 44.6)**
H3. Relationships Instability										
Stable/Conflict Free	10 (13.0)	6 (5.7)	16 (9.0)	0 (0.0)	13 (9.8)	3 (6.1)	14 (8.5)	2 (11.1)	11 (11.2)	5 (6.0)
Possible/Less Serious Instability	21 (27.3)	33 (31.4)	54 (30.5)	0 (0.0)	39 (29.3)	15 (30.6)	49 (29.3)	6 (33.3)	26 (26.5)	28 (33.3)
Definite/Serious Instability	46 (59.7)	66 (62.9)	107(60.5)	5 (100.0)	81 (60.9)	31 (63.3)	102(62.2)	10 (55.6)	61 (62.2)	51 (60.7)
H4. Employment Problems										
None	14 (18.4)	18 (17.5)	32 (18.4)	0 (0.0)	21 (15.9)	11 (23.4)	26 (16.0)	6 (35.3)	19 (19.6)	13 (15.9)
Possible/Less Serious	5 (6.6)	18 (17.5)	22 (12.6)	1 (20.0)	14 (10.6)	9 (19.1)	22 (13.6)	1 (5.9)	10 (10.3)	13 (15.9)
Definite/Serious	57 (75.0)	67 (65.0)	120(69.0)	4 (80.0)	97 (73.5)	27 (57.4)	114(70.4)	10 (58.8)	68 (70.1)	56 (68.3)
H5. Substance Use Problems										

None	21 (27.3)	23 (21.9)	44 (24.9)	0 (0.0)	33 (24.6)	11 (22.9)	40 (24.2)	4 (23.5)	26 (26.5)	18 (21.4)
Possible/Less Serious	9 (11.7)	15 (14.3)	24 (13.6)	0 (0.0)	19 (14.2)	5 (10.4)	23 (13.9)	1 (5.9)	12 (12.2)	12 (14.3)
Definite/Serious	47 (61.0)	67 (63.8)	109(61.6)	5 (100.0)	82 (61.2)	32 (66.7)	102(61.8)	12 (70.6)	60 (61.2)	54 (64.3)
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H6a. Major Psychotic Mental Illness										
None	61 (79.2)	85 (80.2)	142(79.8)	4 (80.0)	110(82.1)	36 (73.5)	130(78.8)	16 (88.9)	75 (76.5)	71 (83.5)
Possible/Less Serious	5 (6.5)	8 (7.5)	12 (6.7)	1 (20.0)	7 (5.2)	6 (12.2)	11 (6.7)	2 (11.1)	7 (7.1)	6 (7.1)
Definite/Serious	11 (14.3)	13 (12.3)	24 (13.5)	0 (0.0)	17 (12.7)	7 (14.3)	24 (14.5)	0 (0.0)	16 (16.3)	8 (9.4)
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H6b. Major Non-Psychotic Mental Illness										
None	34 (44.2)	53 (50.5)	86 (48.6)	1 (20.0)	65 (48.5)	22 (45.8)	80 (48.8)	7 (38.9)	44 (44.9)	43 (51.2)
Possible/Less Serious	16 (20.8)	18 (17.1)	33 (18.6)	1 (20.0)	25 (18.7)	9 (18.8)	27 (16.5)	7 (38.9)	20 (20.4)	14 (16.7)
Definite/Serious	27 (35.1)	34 (32.4)	58 (32.8)	3 (60.0)	44 (32.8)	17 (35.4)	57 (34.8)	4 (22.2)	34 (34.7)	27 (32.1)
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H7. Psychopathy										
PCL-R < 20	57 (74.0)	69 (65.7)	125 (70.6)	1 (20.0)	94 (70.1)	32 (66.7)	116(70.3)	10 (58.8)	73 (74.5)	53 (63.1)
PCL-R 20-29	18 (23.4)	32 (30.5)	47 (26.6)	3 (60.0)	34 (25.4)	15 (33.3)	45 (27.3)	5 (29.4)	23 (23.5)	27 (32.1)
PCL-R 30-40	2(2.6)	4(3.8)	5 (2.8)	1*(20.0)	6(4.5)	0(0.0)	4(2.4)	2(11.8)	2(2.0)	4(4.8)
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H8. Early Maladjustment										
None	28 (36.4)	25 (23.6)	53 (29.8)	0 (0.0)	38 (28.4)	15 (30.6)	48 (29.1)	5 (27.8)	35 (35.7)	18 (21.2)
Possible/Less Serious	13 (16.9)	23 (22.6)	35 (19.7)	2 (40.0)	23 (17.2)	14 (28.6)	32 (19.4)	5 (27.8)	18 (18.4)	19 (22.4)
Definite/Serious	36 (46.8)	57 (53.8)	90 (50.6)	3 (60.0)	73 (54.5)	20 (40.8)	85 (51.5)	8 (44.4)	45 (45.9)	48 (56.5)
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H9. PD										
None	21 (27.3)	27 (25.5)	48 (27.0)	0 (0.0)	37 (27.6)	11 (22.4)	44 (26.7)	4 (22.2)	26 (26.5)	22 (25.9)
Definite/Serious	56 (72.6)	79 (74.5)	130(73.0)	5 (100.0)	97 (72.4)	38 (77.6)	121(73.3)	14 (77.8)	72 (73.5)	63 (74.1)
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H10. Supervision Failure										

None	41 (53.2)	48 (45.7)	88 (49.7)	1 (20.0)	67 (50.0)	22 (45.8)	80 (48.5)	9 (52.9)	51 (52.0)	38 (45.2)
Possible/Less Serious	6 (7.8)	7 (6.7)	13 (7.3)	0 (0.0)	10 (7.5)	3 (6.2)	13 (7.9)	0 (0.0)	7 (7.1)	6 (7.1)
Definite/Serious	30 (39.0)	50 (47.6)	76 (42.9)	4 (80.0)	57 (42.5)	23 (47.9)	72 (43.6)	8 (47.1)	40 (40.8)	40(47.6)
	Any-sex		Predation		Victim		Bartered		Consensual	
Clinical	N	Y	N	Y	N	Y	N	Y	N	Y
C1. Lack of Insight										
None	25 (32.5)	42 (39.6)	66 (37.1)	1 (20.0)	51 (38.1)	16 (32.7)	58 (35.2)	9 (50.0)	32 (32.7)	35 (41.2)
Possible/Less Serious	35 (45.5)	45 (42.5)	79 (44.4)	1 (20.0)	59 (44.0)	21 (42.9)	74 (44.8)	6 (33.3)	43 (43.9)	37 (43.5)
Definite/Serious	17 (22.1)	19 (17.9)	33 (18.5)	3 (60.0)	24 (17.9)	12 (24.5)	33 (20.0)	3 (16.7)	23 (23.5)	13 (15.3)
C2. Negative Attitudes										
None	26 (33.8)	46 (43.8)	70 (39.5)	2 (40.0)	50 (37.3)	22 (45.8)	64 (38.8)	8 (47.1)	38 (38.8)	34 (40.5)
Possible/Less Serious	40 (51.9)	41 (39.0)	80 (45.2)	1 (20.0)	63 (47.0)	18 (37.5)	77 (46.7)	4 (23.5)	47 (48.0)	34 (40.5)
Definite/Serious	11 (14.3)	18 (17.1)	27 (15.3)	2 (40.0)	21 (15.7)	8 (16.7)	24 (14.5)	5 (29.4)	13 (13.3)	16 (19.0)
C3a.Active Psychotic/Major Mental Illness										
None	69 (89.6)	93 (87.7)	158(88.8)	4 (80.0)	120(89.6)	42 (85.7)	146 (88.5)	16 (88.9)	85 (86.7)	77 (90.6)
Possible/Less Serious	3 (3.9)	7 (6.6)	9 (5.1)	1 (20.0)	6 (4.5)	4 (8.2)	8 (4.8)	2 (11.1)	5 (5.1)	5 (5.9)
Definite/Serious	5 (6.5)	6 (5.7)	11 (6.2)	0 (0.0)	8 (6.0)	3 (6.1)	11 (6.7)	0 (0.0)	8 (8.2)	3 (3.5)
C3b. Active Non-Psychotic Mental Illness										
None	45 (58.4)	75 (71.4)	117 (66.1)	3 (60.0)	88 (65.7)	32 (66.7)	105(64.0)	15 (83.3)	59 (60.2)	61 (72.6)
Possible/Less Serious	21 (27.3)	17 (16.2)	37 (20.9)	1 (20.0)	29 (21.6)	9 (18.8)	36 (22.0)	2 (11.1)	24 (24.5)	14 (16.7)
Definite/Serious	11 (14.3)	13 (12.4)	23 (13.0)	1 (20.0)	17 (12.7)	7 (14.6)	23 (14.0)	1 (5.6)	15 (15.3)	9 (10.7)
C4. Impulsivity										
None	20 (20.6)	18 (17.0)	38 (21.3)	0 (0.0)	32 (23.9)	6 (12.2)	33 (20.0)	5 (27.8)	20 (20.4)	18 (21.2)
Possible/Less Serious	28 (36.4)	34 (32.1)	61 (34.3)	1 (20.0)	42 (31.3)	20 (40.8)	61 (37.0)	1 (5.6)	40 (40.8)	22 (25.9)

Definite/Serious	29 (37.7)	54 (50.9)	79 (44.4)	4 (80.0)	60 (44.8)	23 (46.9)	71 (43.0)	12 (66.7)*	38 (38.8)	45 (52.9)
C5. Unresponsive to Treatment										
None	47 (61.8)	62 (59.0)	108(61.4)	1 (20.0)	79 (59.4)	30 (62.5)	102(62.2)	7 (41.2)	61 (62.9)	48 (57.1)
Possible/Less Serious	22 (28.9)	34 (32.4)	55 (31.2)	1 (20.0)	43 (32.3)	13 (27.1)	50 (30.5)	6 (35.3)	29 (29.9)	27 (32.1)
Definite/Serious	7 (9.2)	9 (8.6)	13 (7.4)	3 (60.0)**	11 (8.3)	5 (10.4)	12 (7.3)	4 (23.5)	7 (7.2)	9 (10.7)
	Any-sex		Predation		Victim		Bartered		Consensual	
Risk	N	Y	N	Y	N	Y	N	Y	N	Y
R1. Plans Lack Feasibility										
Low Probability	36 (46.8)	41 (38.7)	76 (42.1)	1 (20.0)	60 (44.8)	17 (34.7)	71 (43.0)	6 (33.3)	46 (46.9)	31 (36.5)
Moderate Probability	25 (33.8)	49 (46.2)	74 (41.6)	1 (20.0)	49 (36.6)	26 (53.1)	66 (40.0)	9 (50.0)	36 (36.7)	39 (45.9)
High Probability	15 (19.5)	16 (15.1)	28 (15.7)	3 (60.0)*	25 (18.1)	6 (12.2)	28 (17.0)	3 (16.7)	16 (16.3)	15 (17.6)
R2. Exposure to Destabilizers										
None	30 (39.0)	41 (38.7)	70 (39.3)	1 (20.0)	53 (39.6)	18 (36.7)	66 (40.0)	5 (27.8)	38 (38.8)	33 (38.8)
Possible/Less Serious	31 (40.3)	42 (39.6)	72 (40.4)	1 (20.0)	52 (38.8)	21 (42.9)	64 (38.8)	9 (50.0)	40 (40.8)	33 (38.8)
Definite/Serious	16 (20.8)	23 (21.7)	36 (20.2)	3 (60.0)	29 (21.6)	10 (20.4)	35 (21.2)	3 (22.2)	20 (20.4)	19 (22.4)
R3. Lack of Personal Support										
Low Probability	39 (50.6)	57 (53.8)	95 (53.5)	1 (20.0)	70 (52.2)	26 (53.1)	84 (50.9)	12 (66.7)	49 (50.0)	47 (55.3)
Moderate Probability	24 (31.2)	34 (32.1)	56 (31.5)	2 (40.0)	42 (31.3)	16 (32.7)	54 (32.7)	4 (22.2)	32 (32.7)	26 (30.6)
High Probability	14 (18.2)	15 (14.2)	27 (15.2)	2 (40.0)	22 (16.4)	7 (14.3)	27 (16.4)	2 (11.1)	17 (17.3)	12 (14.1)
R4. Noncompliance with Remediation										
Low Probability	47 (61.0)	59 (55.7)	105 (59.0)	1 (20.0)	78 (58.2)	28 (57.1)	97 (58.8)	9 (50.0)	60 (61.2)	46 (54.1)
Moderate Probability	22 (28.6)	34 (32.1)	55 (30.9)	1 (20.0)	40 (29.9)	16 (32.7)	50 (30.3)	6 (33.3)	30 (30.6)	26 (30.6)
High Probability	8 (10.4)	13 (12.3)	18 (10.1)	3 (60.0)**	16 (11.9)	5 (10.2)	18 (10.9)	3 (16.7)	8 (8.2)	13 (15.3)
R5. Stress										

Low Probability	7 (9.1)	17 (16.0)	24 (13.5)	0 (0.0)	16 (11.9)	8 (16.3)	22 (13.3)	2 (11.1)	11 (11.2)	13 (15.3)
Moderate Probability	47 (61.0)	56 (52.8)	102(57.3)	1 (20.0)	77 (57.5)	26 (53.1)	94 (57.0)	9 (54.0)	58 (59.2)	45 (52.9)
High Probability	23 (29.9)	33 (31.1)	52 (29.2)	4 (80.0)*	41 (30.6)	15 (30.6)	49 (29.7)	7 (38.9)	29 (29.6)	27 (31.8)
	Any-sex		Predation		Victim		Bartered		Consensual	
Additional Items	N	Y	N	Y	N	Y	N	Y	N	Y
Ha. Previous Non-Violent Criminal										
None	12 (15.8)	13 (12.3)	24 (13.6)	1 (20.0)	16 (12.0)	9 (18.4)	23 (14.0)	2 (11.1)	16 (16.5)	9 (10.6)
Possible/Less Serious	4 (5.3)	2 (2.8)	7 (4.0)	0 (0.0)	6 (4.5)	1 (2.0)	7 (4.3)	0 (0.0)	5 (5.2)	2 (2.4)
Definite/Serious	60 (78.9)	90 (84.9)	146(82.6)	4 (80.0)	111(83.5)	39(79.6)	134(81.7)	16 (88.9)	76 (78.4)	74 (87.1)
Hb. Previous Violent Criminality										
None	35 (46.1)	40 (37.7)	72 (40.7)	3 (60.0)	57 (42.9)	18 (36.7)	68 (41.5)	7 (38.9)	44 (45.4)	31 (36.5)
Possible/Less Serious	11 (14.5)	18 (17.0)	29 (16.4)	0 (0.0)	19 (14.3)	10 (20.4)	27 (16.5)	2 (11.1)	16 (16.5)	13 (15.3)
Definite/Serious	30 (39.5)	48 (45.3)	76 (42.9)	4 (80.0)	57 (42.9)	21 (42.9)	69 (42.1)	9 (50.0)	37 (38.1)	41 (48.2)
Hc. Substance Use Problems Assoc. with Criminality										
None	25 (32.9)	32 (30.9)	57 (32.2)	0 (0.0)	43 (32.3)	14 (28.6)	52 (31.7)	5 (27.8)	32 (33.0)	25 (29.4)
Possible/Less Serious	7 (9.2)	10 (9.4)	17 (9.6)	0 (0.0)	12 (9.0)	5 (10.2)	17 (10.4)	0 (0.0)	11 (11.3)	6 (7.1)
Definite/Serious	44 (57.9)	64 (60.4)	103 (58.2)	5 (100.0)	78 (58.6)	30 (61.2)	95 (57.6)	13 (72.2)	54 (55.7)	54 (63.5)
Hd. Early Maladjustment-Victim of Abuse										
None	34 (44.7)	35 (33.0)	69 (39.0)	0 (0.0)	52 (39.1)	17 (34.7)	63 (38.4)	6 (33.3)	44 (45.4)	25 (29.4)
Possible/Less Serious	12 (15.8)	17 (16.0)	28 (15.8)	1 (20.0)	20 (15.0)	9 (18.4)	26 (15.9)	3 (16.7)	15 (15.5)	14 (16.4)
Definite/Serious	30 (39.5)	54 (50.9)	80 (45.2)	4 (80.0)	61 (45.9)	23 (46.9)	75 (45.7)	9 (50.0)	38 (39.2)	46 (54.1)
He. Early Maladjustment-Conduct Problems										
None	31 (40.8)	38 (26.4)	58 (32.8)	1 (20.0)	44 (33.1)	15 (30.6)	51 (31.1)	8 (44.4)	40 (41.2)	19 (22.4)

Possible/Less Serious	12 (15.8)	25 (23.6)	37 (20.9)	0 (0.0)	25 (18.8)	12 (24.5)	33 (20.1)	4 (22.2)	17 (17.5)	20 (23.5)
Definite/Serious	33 (43.4)	53 (50.0)	82 (46.3)	4 (80.0)	64 (48.1)	22 (44.9)	80 (48.8)	6 (33.3)	40 (41.2)	46 (54.1)*
<hr/>										
Hf. Adolescence: Failure to Establish and Maintain Relationships										
None	29 (38.2)	32 (30.2)	61 (34.5)	0 (0.0)	42 (31.6)	19 (38.8)	55 (33.5)	6 (33.3)	36 (37.1)	25 (29.4)
Possible/Less Serious	18 (23.7)	29 (27.4)	46 (26.0)	1 (20.0)	36 (27.1)	11 (22.4)	43 (26.2)	4 (22.2)	24 (24.7)	23 (27.1)
Definite/Serious	29 (38.2)	45 (42.5)	70 (39.5)	4 (80.0)	55 (41.4)	19 (38.8)	66 (40.2)	8 (44.4)	37 (38.10)	37 (43.5)
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Hg. Educational Problems										
None	26 (34.7)	32 (30.2)	57 (32.4)	1 (20.0)	41 (31.1)	17 (34.7)	52 (31.9)	6 (33.3)	36 (37.5)	22 (25.9)
Possible/Less Serious	10 (13.3)	25 (23.6)	34 (19.3)	1 (20.0)	21 (15.9)	14 (28.6)	31 (19.0)	4 (22.2)	13 (13.5)	22 (25.9)
Definite/Serious	39 (52.0)	49 (46.2)	85 (48.3)	3 (60.0)	70 (53.0)	18 (36.7)	80 (49.1)	8 (44.4)	47 (49.0)	41 (48.2)
<hr/>										
Ca. Homicidal Ideation										
None	64 (84.2)	75 (70.8)	136 (76.8)	3 (60.0)	101(75.9)	38 (77.6)	127(77.4)	12 (66.7)	82 (84.5)	57 (67.1)
Possible/Less Serious	6 (7.9)	18 (17.0)	22 (12.4)	2 (40.0)	18 (13.5)	6 (12.2)	20 (12.2)	4 (22.2)	8 (8.2)	16 (18.8)
Definite/Serious	6 (7.9)	13 (12.3)	19 (10.7)	0 (0.0)	14 (10.5)	5 (10.2)	17 (10.4)	2 (11.1)	7 (7.2)	12 (14.1)*
<hr/>										
Cb. Suicidal Ideation										
None	62 (81.6)	62 (58.5)	123(69.5)	1 (20.0)	99 (74.4)	25 (51.0)	115(70.1)	9 (50.0)	74 (76.3)	50 (58.8)
Possible/Less Serious	3 (3.9)	14 (13.2)	15 (8.5)	2 (40.0)	7 (5.3)	10 (20.4)	11 (6.7)	6 (33.3)	4 (4.1)	13 (15.3)
Definite/Serious	11 (14.5)	30 28.3)**	39 (22.0)	2 (40.0)*	27 (20.3)	14 28.6)**	38 (23.2)	3 (16.7)**	19 (19.6)	22 (25.9)*
<hr/>										
H6. History of Mental Illness-a & b Above										
None	29 (37.7)	42 (40.0)	70 (39.5)	1 (20.0)	56 (41.8)	15 (31.2)	65 (39.6)	6 (33.3)	36 (36.7)	35 (41.7)
Possible/Less Serious	16 (20.8)	19 (18.1)	34 (19.2)	1 (20.0)	26 (19.4)	9 (18.8)	27 (16.5)	8 (44.4)	18 (18.4)	17 (20.2)
Definite/Serious	32 (41.6)	44 (41.9)	73 (41.2)	3 (60.0)	52 (38.8)	24 (50.0)	72 (43.9)	4 (22.2)*	44 (44.9)	32 (38.1)
<hr/>										
C3. Active Mental Illness- a & b										

Above											
None	41 (53.2)	65 (61.9)	104(58.8)	2 (40.0)	80 (59.7)	26 (54.2)	93 (56.7)	13 (72.2)	51 (52.0)	55 (65.5)	
Possible/Less Serious	22 (28.6)	22 (21.0)	42 (23.7)	2 (40.0)	32 (23.9)	12 (25.0)	40 (24.4)	4 (22.2)	26 (26.5)	18 (21.4)	
Definite/Serious	14 (18.2)	18 (17.1)	31 (17.5)	1 (20.0)	22 (16.4)	10 (20.8)	31 (18.9)	1 (5.6)	21 (21.4)	11 (13.1)	
	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)	
Historical (Traditional)	11.1 (4.3)	12.2 (4.1)	11.6 (4.2)	16.4 (1.8)*	11.6 (4.2)	12.1 (4.3)	11.7 (4.1)	12.1 (5.4)	11.2 (4.3)	4.0 (4.0)	
Clinical (Traditional)	4.0 (2.3)	3.9 (2.4)	3.9 (2.3)	6.4 (2.4)*	3.9 (2.3)	4.2 (2.4)	3.9 (2.3)	4.1 (2.9)	4.0 (2.2)	3.9 (2.5)	
Risk (Traditional)	3.9 (2.4)	3.9 (2.3)	3.8 (2.3)	7.2 (3.6)**	3.9 (2.4)	3.9 (2.5)	3.9 (2.3)	4.2 (2.9)	3.8 (2.3)	4.0 (2.4)	
Total	18.9 (7.6)	20.1 (7.1)	19.3 (7.1)	30.0(7.0)*	19.4 (7.3)	20.1 (7.4)	19.5 (7.0)	20.3 (10.0)	19.0 (7.2)	20.3 (7.5)	
				*							

Note. * $p < .05$, ** $p < .01$.

For the female inmates, the individual and total scores were robustly associated primarily with predatory sex in prison (see Table 66). Ten indices including PCL-R score, being unresponsive to treatment, having future plans that lacked feasibility, being non-compliant with remediation efforts, reporting high levels of stress, having suicidal ideation, and total scores on the Historical, Clinical, Risk and HCR:20 Total Score all were associated with higher rates of predatory sexual behavior in prison. Consensual sex was associated with four items: Previous violence, young age at first violence, homicidal ideation, and suicidal ideation. Bartered sex was associated with suicidal ideation and a past history of mental illness. Being the victim of sexual coercion was associated only with suicidal ideation among the female inmates.

Violence Risk Appraisal Instrument (VRAG)

In 1998, Quinsey, Harris, Rice and Cormier published two actuarial instruments, one designed to predict violent recidivism of any type (VRAG), including sex crimes, and the other to predict sexual recidivism exclusively (SORAG). We chose to use only the VRAG in the current study as it was more encompassing and because the SORAG required a phallometric sexual deviance score which was unavailable for our male subjects and inapplicable to our female subjects.

Research using the VRAG suggests a strong relationship between Total Score on the instrument and violent recidivism among males (Quinsey, Harris, Rice & Cormier, 1998). Using 618 male offenders, Quinsey et al. (1998) found a classification accuracy of 74% over a 7 year period. Later inclusion of an additional 150 inmates, including some juveniles and some offenders with developmental delays was found not to diminish the predictive power of the assessment instrument. Subsequent studies have yielded an ROC area of .80 in predicting violent recidivism in a forensic sample (Harris, Rice, & Cormier, 2002) and .72 in predicting violent recidivism in a non-forensic sample (Harris, Rice, & Camilleri., 2004). The VRAG was also shown to reliably predict sexual recidivism, but the effect size for the prediction of sexual recidivism was smaller (ROC area = .60; Rice & Harris, 1997). No research has been conducted using the VRAG with female offenders.

Study Analyses. The VRAG is comprised of 12 items that are scored with different weighted values. The scores of the responses to the various items are summed and used to predict different levels of recidivism over a 7 and 10 year period. These are reflected in 9 categories (-22, -21 to -15, -14 to -8, -7 to -1, 0 to +5, +7 to +13, 14 to 20, 21 to 27, 28) which translate into recidivism rates varying from 0 to 1 over the 7 to 10 year tracking period.

Table 67

Frequency of VRAG Item Scores for Incarcerated Men (N=288) and Women (N=183)

Risk Factor	Men		Women		Effect Size	
	<i>N</i>	(%)	<i>N</i>	(%)	χ^2	Φ
Lived with a Biological Parents to Age 16 years 9 Except for Death of Parent (-2, +3)	88	31.0	49	26.8	0.95	0.05
Elementary School Maladjustment (-1, +2, +5)					20.68	0.21**
No problems	111	38.9	110	60.4		
Slight	91	31.9	36	19.8		
Severe	83	29.1	36	19.8		
History of Alcohol Problems (-1, 0, +1, +2)					3.32	0.09
0	67	23.7	44	24.3		
1 or 2	124	43.8	86	47.5		
3	41	14.5	16	8.8		
4 or 5	51	18.0	36	19.3		
Ever Married	219	76.8	157	85.8	5.65	-0.11*
Criminal History Score for Non-Violent Offenses (-2, 0, +3)					10.59**	0.15**
0	29	10.2	34	18.6		
1 or 2	74	26.1	58	31.7		
	180	63.6	91	49.7		
Failure on Conditional Release (0, +3)	165	58.1	91	49.7	3.15	-0.08
Age at Index Offense (-5, -2, -1, 0 +2)					36.48	0.28**
>39	43	15.1	45	24.6		
34-38	36	12.6	40	21.9		
28-33	40	14.0	43	23.5		
27	13	4.6	2	1.1		
<26	153	53.7	53	29.0		
Victim Injury (-2, 0, +1, +2)					5.67	0.11
Death	68	24.1	32	17.5		
Hospitalized	38	13.5	19	10.4		
Treated and released	37	13.1	22	12.0		
None or slight	139	49.3	110	60.1		
Any Female Victims (-1, +1)	108	38.3	53	29.0	4.27	0.10*

Meets DSM for a PD (-2, +3)	8	2.8	7	3.8	0.37	-0.03
Meets DSM-III Criteria for Schizophrenia (-3, +1)	206	71.8	135	73.8	0.22	0.02
Psychopathy Checklist Score (-5, 3, -1, 0 +4, +12)					22.28	0.22**
<4	2	0.7	9	4.9		
5-9	36	12.6	34	18.7		
10-14	14	16.5	39	21.4		
15-25	133	46.7	78	42.9		
25-34	61	21.4	22	12.1		
>35	6	2.1	0	0.0		
	M	SD	M	SD	T	
Total Score	8.70	9.07	5.38	8.23	4.01**	

Note. * $p < .05$, ** $p < .01$, *** $p < .001$. # Prison variables added to current study.

As seen in Table 67, the VRAG item scores demonstrate gender difference on six of the eleven items. These include higher endorsement scores for the male inmates on elementary school problems, never having been married, involvement in nonviolent criminality, younger age at index offense, having had a female victim, and more scores over 25 on the Psychopathy Checklist (PCL-R-2). On the Total Score, the male inmates obtained a mean score of 8.70, placing them as a group within the second to highest risk category with a cumulative risk of 0.76 over the next 7 years and 0.82 over the next 10 years. The female inmates obtained a mean score of 5.36, placing them as a group in the fifth level with an associated group recidivism rate of 0.35 over the next 7 years and 0.48 over the next 10 years.

The VRAG items and Total Scores were associated with bartered and consensual sex in prison for the male inmates (see Table 68). Having lived away from parents at an early age, being under the age of 26 years at the time of the instant offense, and VRAG Total Scores were all associated with higher rates or reported bartered sex. Consensual sex was associated with living away from biological parents prior to the age of 16 years, school maladjustment, never having been married, higher criminal history scores, being less than 26 years old at the time of the instant offense, and Total VRAG score. None of the VRAG items or Total Score were associated with predatory sex in prison for the male inmates.

Table 68

Relationship Between VRAG Item Scores for Incarcerated Men (N=288) and Sexual Experiences in Prison

By Inmates	Any-sex		Predation		Victim		Bartered		Consensual	
	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
	N=143 (%)	N=145 (%)	N=253 (%)	N=35 (%)	N=244 (%)	N=44 (%)	N=251 (%)	N=37 (%)	N=160 (%)	N=128 (%)
Lived with a Biological Parents to Age 16 years 9 Except for Death of Parent (-2, +3)	46 (32.9)	42 (29.2)	78 (31.2)	10 (29.4)	77 (32.1)	11 (25.0)	81 (32.7)	9 (19.4)	53 (33.8)	35 (27.6)
Elementary School Maladjustment (-1, +2, +5)										
None	64 (45.4)	47 (32.6)	99 (39.4)	12 (35.3)	90 (37.3)	21 (47.7)	102 (41.0)	9 (25.0)	76 (48.1)	35 (27.6)
Slight	44 (31.2)	47 (32.6)	81 (32.3)	10 (29.4)	83 (34.4)	8 (18.2)	83 (33.3)	8 (22.2)	45 (28.5)	46 (36.2)
Severe	33 (23.4)	50 (34.7)*	71 (28.3)	12 (35.3)	68 (28.2)	15 (34.1)	65 (25.7)	19 (52.8)**	37 (23.4)	46 (36.2)**
History of Alcohol Problems (-1, 0, +1, +2)										
0	33 (23.6)	34 (23.8)	60 (24.1)	7 (20.6)	54 (22.6)	13 (29.5)	54 (22.6)	13 (29.5)	55 (22.3)	12 (33.3)
1 or 2	60 (42.9)	64 (44.8)	107 (43.0)	17 (50.0)	103 (43.1)	21 (47.7)	103 (43.1)	21 (47.7)	107 (43.3)	17 (47.2)
3	20 (14.3)	21 (14.7)	37 (14.9)	4 (11.8)	38 (15.9)	3 (6.8)	38 (15.9)	3 (6.8)	38 (15.4)	3 (8.3)
4 or 5	27 (19.3)	24 (16.8)	45 (18.1)	6 (17.6)	44 (18.4)	7 (15.9)	44 (18.4)	7 (15.9)	47 (19.0)	4 (11.1)
Ever Married	115 (81.6)	104 (72.2)	193 (76.9)	26 (76.5)	183 (75.9)	36 (81.8)	193 (77.5)	26 (72.2)	131 (82.9)	88 (69.3)**
Criminal History Score for Non-Violent Offenses (-2, 0, +3)										

0	16 (11.4)	13 (9.1)	26 (10.4)	3 (8.8)	23 (9.6)	6 (13.6)	24 (9.7)	5 (13.9)	19 (12.1)	10 (7.9)
1 or 2	41 (29.3)	33 (23.1)	66 (26.5)	8 (23.5)	60 (25.1)	14 (31.8)	64 (25.9)	10 (27.8)	49 (31.2)	25 (19.8)
3>	83 (59.3)	97 (67.8)	157 (63.1)	23 (67.6)	156 (65.3)	24 (54.5)	159 (64.4)	21 (58.3)	89 (56.7)	91 (72.2)*
Failure on Conditional Release (0, +3)	85 (60.3)	80 (55.9)	144 (57.6)	21 (61.8)	137 (56.8)	28 (65.1)	144 (57.8)	21 (60.0)	92 (58.2)	73 (57.9)
Age at Index Offense (-5, -2, -1, 0 +2)										
>39	27 (19.2)	16 (11.1)	39 (15.5)	3 (11.8)	36 (14.9)	7 (15.9)	42 (16.9)	1 (2.8)	31 (19.6)	12 (9.4)
34-38	23 (16.3)	13 (9.0)	34 (13.5)	2 (5.9)	30 (12.4)	6 (13.6)	34 (13.7)	2 (5.6)	27 (17.1)	9 (7.1)
28-33	25 (17.7)	15 (10.4)	39 (15.5)	1 (2.9)	35 (14.5)	5 (11.4)	38 (15.3)	2 (5.6)	26 (15.6)	14 (11.0)
27	6 (4.3)	7 (4.9)	10 (4.0)	3 (8.8)	12 (5.0)	1 (2.3)	12 (4.8)	1 (2.8)	6 (3.8)	7 (5.5)
<26	60 (42.6)	93 (64.6)**	129 (51.4)	24 (70.6)	128 (53.1)	25 (26.8)	123 (49.4)	30 (83.3)**	68 (43.0)	85 (66.9)***
Victim Injury (-2, 0, +1, +2)										
Death	29 (20.7)	39 (27.5)	58 (23.4)	10 (29.4)	58 (24.4)	10 (22.7)	59 (24.0)	9 (25.0)	31 (19.7)	37 (29.6)
Hospitalized	21 (15.0)	17 (12.0)	36 (14.5)	2 (5.9)	34 (14.3)	4 (9.1)	32 (13.0)	6 (16.7)	22 (14.0)	16 (12.8)
Treated and released	17 (12.1)	20 (14.1)	32 (12.9)	5 (14.7)	31 (13.0)	6 (13.6)	32 (13.0)	5 (13.9)	21 (13.4)	16 (12.8)
None or slight	73 (52.1)	66 (46.5)	122 (49.2)	17 (50.0)	115 (48.3)	24 (54.5)	123 (50.0)	16 (44.4)	83 (52.9)	56 (44.8)
Any Female Victims (-1, +1)	57 (41.0)	51 (35.7)	101 (40.7)	7 (20.6)*	94 (39.5)	14 (31.8)	96 (39.0)	12 (33.3)	64 (41.0)	44 (34.9)
Meets DSM for a PD (-2, +3)	96 (67.6)	110 (75.9)	178 (70.6)	28 (80.0)	173 (71.2)	33 (75.0)	176 (70.4)	30 (81.1)	109 (68.6)	97 (75.8)
Meets DSM-III Criteria for Schizophrenia (-3, +1)	7 (5.0)	1 (0.7)*	7 (2.8)	1 (2.9)	7 (2.9)	1 (2.3)	8 (3.2)	0 (0.0)	7 (4.4)	1 (0.8)
Psychopathy Checklist Score (-5- 3, -1, 0 +4, +12)										

<4	1 (0.7)	1 (0.7)	2 (0.8)	0 (0.0)	1 (0.4)	1 (2.3)	2 (0.8)	0 (0.0)	2 (1.3)	0 (0.0)
5-9	22 (15.7)	14 (9.7)	32 (12.8)	4 (11.4)	31 (12.9)	5 (11.5)	33 (13.3)	3 (8.1)	25 (15.9)	11 (8.6)
10-14	23 (16.4)	24 (16.6)	40 (16.0)	7 (20.0)	36 (14.9)	11 (25.0)	42 (16.9)	5 (13.5)	26 (16.6)	21 (16.4)
15-25	65 (45.4)	68 (46.9)	119 (47.6)	14 (40.0)	116 (48.1)	17 (38.6)	118 (47.6)	15 (40.5)	72 (45.9)	61 (47.7)
25-34	27 (19.3)	34 (23.4)	53 (21.2)	8 (22.9)	52 (21.6)	9 (20.5)	49 (19.4)	13 (35.1)	30 (19.1)	31 (24.2)
>35	2 (1.4)	4 (2.8)	4 (1.6)	2 (5.7)	5 (2.1)	1 (2.3)	5 (2.0)	1 (2.7)	2 (1.3)	4 (3.1)
	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)
VRAG TOTAL	7.1 (9.6)	10.2 (8.2)**	8.4 (9.1)	11.0 (8.5)	8.7 (9.1)	8.7 (9.1)	8.2 (9.1)	12.2 (8.3)*	6.8 (9.5)	11.0 (8.0)**

Note. * $p < .05$, ** $p < .01$, *** $p < .001$. # Prison variables added to current study.

Table 69

Relationship Between VRAG Item Scores for Incarcerated Women (N=183) and Sexual Experiences in Prison

By Inmates	Any-sex		Predatory		Victim		Bartered		Consensual	
	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
	N=77 (%)	N=106 (%)	N=178 (%)	N=5 (%)	N=134 (%)	N=49 (%)	N=165 (%)	N=18 (%)	N=98 (%)	N=85 (%)
Lived with a Biological Parents to Age 16 years 9 Except for Death of Parent (-2, +3)	22 (28.6)	27 (25.5)	48 (27.0)	1 (20.0)	32 (23.9)	17 (34.7)	46 (27.9)	3 (16.7)	31 (31.6)	18 (21.2)
Elementary School Maladjustment (-1, +2, +5)										
None	46 (59.7)	64 (61.0)	107 (60.5)	3 (60.0)	78 (58.6)	32 (65.3)	99 (60.4)	11 (61.1)	62 (63.3)	48 (57.1)
Slight	18 (23.4)	18 (17.1)	35 (19.8)	1 (20.0)	30 (22.6)	6 (12.2)	32 (19.5)	4 (22.2)	19 (19.4)	17 (20.7)
Severe	13 (16.9)	23 (21.9)	35 (19.8)	1 (20.0)	25 (18.8)	11 (22.4)	33 (20.1)	3 (16.7)	17 (17.3)	19 (22.6)
History of Alcohol Problems (-1, 0, +1, +2)										
0	22 (28.6)	22 (21.2)	42 (23.9)	2 (40.0)	32 (23.9)	12 (25.5)	38 (23.2)	6 (35.3)	25 (25.5)	19 (22.9)
1 or 2	32 (41.6)	54 (51.9)	85 (48.3)	1 (20.0)	64 (47.8)	22 (46.8)	78 (47.6)	8 (47.1)	43 (43.9)	43 (51.8)
3	8 (10.4)	8 (7.7)	15 (8.5)	1 (20.0)	12 (9.0)	4 (8.5)	15 (9.1)	1 (5.9)	9 (9.2)	7 (8.4)
4 or 5	15 (19.5)	20 (19.2)	34 (19.3)	1 (20.0)	26 (19.4)	9 (19.1)	33 (20.1)	2 (11.8)	21 (21.4)	14 (16.9)
Ever Married	67 (87.0)	90 (84.9)	154 (86.5)	3 (60.0)	115 (85.8)	42 (85.7)	142 (86.1)	15 (83.3)	86 (87.7)	71 (83.5)
Criminal History Score for Non-Violent Offenses (-2, 0, +3)										
0	16 (20.8)	18 (17.0)	33 (18.5)	1 (20.0)	26 (19.4)	8 (16.3)	30 (18.2)	4 (22.2)	19 (19.4)	15 (17.6)
1 or 2	23 (29.9)	35 (33.0)	57 (32.0)	1 (20.0)	38 (28.4)	20 (40.8)	55 (33.3)	3 (16.7)	29 (29.6)	19 (34.1)

3>	38 (49.4)	53 (50.0)	88 (49.4)	3 (60.0)	70 (52.2)	21 (42.9)	80 (48.5)	11 (61.1)	50 (51.0)	41 (48.2)
Failure on Conditional Release (0, +3)	35 (45.5)	56 (52.8)	88 (49.4)	3 (60.0)	66 (49.3)	25 (51.0)	83 (50.3)	8 (44.4)	46 (46.9)	45 (52.9)
Age at Index Offense (-5, -2, -1, 0 +2)										
>39	29 (37.7)	16 (15.1)	44 (24.7)	1 (20.0)	37 (27.6)	8 (16.3)	42 (25.5)	3 (16.7)	34 (34.7)	11 (12.9)
34-38	13 (16.9)	27 (25.5)	39 (21.9)	1 (20.0)	25 (18.7)	15 (30.6)	38 (23.0)	2 (11.1)	21 (21.4)	19 (22.4)
28-33	20 (26.0)	23 (21.7)	41 (23.0)	2 (40.0)	34 (25.4)	9 (18.4)	36 (21.8)	7 (38.9)	23 (23.5)	20 (23.5)
27	1 (1.3)	1 (0.9)	2 (1.1)	0 (0.0)	2 (1.5)	0 (0.0)	2 (1.2)	0 (0.0)	1 (1.0)	1 (1.2)
<26	14 (18.2)	39 (36.8)**	52 (29.2)	1 (20.0)	36 (26.9)	17 (34.7)	47 (28.5)	6 (33.3)	19 (19.4)	34 (40.0)**
Victim Injury (-2, 0, +1, +2)										
Death	13 (16.9)	19 (17.9)	32 (18.0)	0 (0.0)	25 (18.7)	7 (14.3)	30 (18.2)	2 (11.1)	14 (14.3)	18 (21.2)
Hospitalized	5 (6.5)	14 (13.2)	18 (10.1)	1 (20.0)	12 (9.0)	7 (14.3)	15 (9.1)	4 (22.2)	8 (8.2)	11 (12.9)
Treated and released	11 (14.3)	11 (10.4)	22 (12.4)	0 (0.0)	16 (11.9)	6 (12.2)	21 (12.7)	1 (5.6)	15 (15.3)	7 (8.2)
None or slight	48 (62.3)	62 (58.5)	106 (59.6)	4 (80.0)	81 (60.4)	29 (59.2)	99 (60.0)	11 (61.1)	61 (62.2)	49 (57.6)
Any Female Victims (-1, +1)	24 (31.2)	29 (27.4)	52 (29.2)	1 (20.0)	43 (32.1)	10 (20.4)	47 (28.5)	6 (33.3)	26 (26.5)	27 (31.8)
Meets DSM for a PD (-2, +3)	56 (72.7)	79 (74.5)	130 (73.0)	5 (100.0)	97 (72.4)	38 (77.6)	121 (73.3)	14 (77.8)	72 (73.5)	63 (74.1)
Meets DSM-III Criteria for Schizophrenia (-3, +1)	4 (5.2)	3 (2.8)	6 (3.4)	1 (20.0)	6 (4.5)	1 (2.0)	5 (3.0)	2 (11.1)	4 (4.1)	3 (3.5)
Psychopathy Checklist Score (-5, 3, -1, 0 +4, +12)										
<4	5 (6.5)	4 (3.8)	9 (4.1)	0 (0.0)	6 (4.5)	3 (6.2)	8 (4.8)	1 (5.9)	6 (6.1)	3 (3.6)
5-9	20 (26.0)	14 (13.3)	33 (18.6)	1 (20.0)	28 (20.9)	6 (12.5)	31 (18.8)	3 (17.6)	23 (23.5)	11 (13.1)

10-14	12 (15.6)	27 (25.7)	39 (22.0)	0 (0.0)	29 (21.6)	10 (20.8)	36 (21.8)	3 (17.6)	20 (20.4)	19 (22.6)
15-25	31 (40.3)	47 (44.8)	76 (42.9)	2 (40.0)	55 (41.0)	23 (47.9)	70 (42.4)	8 (47.1)	39 (39.8)	39 (46.4)
25-34	9 (11.7)	13 (12.4)	20 (11.3)	2 (40.0)	16 (11.9)	6 (12.5)	20 (21.1)	2 (11.8)	10 (10.2)	12 (14.3)
>35	0(0.0)	0(0.0)	0(0.0)	0(0.0)	0(0.0)	0(0.0)	0(0.0)	0(0.0)	0(0.0)	0(0.0)
	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)	M(SD)
VRAG TOTAL	3.9 (8.6)	6.4 (7.8)*	5.3 (8.2)	10.0 (10.1)	5.2 (8.5)	5.8 (7.6)	5.3 (8.2)	6.2 (8.5)	4.2 (8.4)	6.8 (7.9)*

Note. * $p < .05$, ** $p < .01$, *** $p < .001$. # Prison variables added to current study.

As illustrated in Table 69, the VRAG was not associated with predatory, victimized, or bartered sex among the female inmates. The female inmates who were involved in consensual sex did reflect an overall higher Total Score on the VRAG.

Conclusions

The analyses that involved a review of the COVR risk makers for violent behavior in the community further informed our understanding of bartered and consensual sex in prison. As suggested by some of the earlier analyses, bartered and consensual sex in prison is associated with many of the disruptive events of childhood and the affective and perceptual states of adulthood that lead to violent behavior in community settings. Most fundamentally, these findings argue for a prison specific interpretation and understanding of these sexual behaviors and argue against a premature application of community motivations and meaning to these behaviors when they occur in a prison setting. At a minimum, they intimate that the individuals who are sexually active in prison are in general more emotionally volatile, threatening in their behavior, and plagued by various forms of abuse and family disruption in childhood.

The HCR:20 demonstrated an ability to predict sexual behavior in prison for both the male and female inmates. However, the type of sex associated with its items and total score differed across genders. The HCR:20 demonstrated consistent associations with consensual sex among the male inmates. Many of the individual items made reference to early behavioral problems including young age at first violence, early maladjustment and conduct disorder, and failure to establish relationships in adolescence, all suggesting the early onset of disruptive and antisocial behavior. Homicidal ideation was also associated with consensual sex, again suggesting that it is associated with higher levels of violence and aggression and not the positive bonds normatively associated with consensual sex in the community.

In contrast, the HCR:20 did demonstrate a consistent association with predatory sexual behavior among the female inmates. Six individual items and scores on the Historical, Clinical, Risk and HCR:20 Total Score were associated with higher rates of self reported predatory sexual behavior in prison. Taken most broadly, this suggests that predatory female inmates are generally violent in their behavior and are characterized by many of the attributes and experiences that characterize individuals who manifest high levels of physical violence both in the community and in various institutional settings.

Suicidal ideation, one of the experimental items on the HCR:20 was found to be associated with many aspects of sexual behavior in prison for both the male and females. Among the male inmates, it was associated with predatory sex, being sexually victimized, and being involved in bartered sex during incarceration. Among the female inmates, it was correlated with all four categories of sexual behavior

including predatory, victimized, bartered, and consensual sex. The consistencies of these associations suggest that the instability and depression associated with suicidal thoughts is also a part of the experience that motivates sexual behavior with others in prison. Our data did not allow us to further examine whether the suicidal ideation reflects a state of emotional instability that prompts or results from sexual experience in prison or reflected a general state of impulsive and reckless behavior toward self and others.

The VRAG was associated with bartered and consensual sex among the male inmates and consensual sex among the female inmates. With the male inmates, this association again seemed to derive from items that reflected living away from home prior to the age of 16 years, school maladjustment, and being younger at the time of the instant offense. These again suggest an association with early disruptions including early home leaving. The female inmates who were involved in consensual sex also reflected an overall higher Total Score on the VRAG. This association might suggest that consensual sex in prison is a predictor of higher rates of recidivism for both male and female inmates either through its inculcation into the prison culture or through its association with other indices of violent behavior and future recidivism.

Chapter Ten

Social Environment Risk Markers for Sexual Predation and Victimization

There is a substantial body of literature suggesting that the social environment affects behavior, yet most studies of violent and victimized inmates focus on the attributes of the individual (Ristroph, 2006; Perez, Gover, Tennyson & Santos, 2009; Wright, 1991). However, there is accumulating evidence of the importance of environmental factors that influence rates of physical violence and sexual violence (Austin, Fabelo, Gunter & McGinnis, 2006; Camp, Gaes, Langan & Saylor, 2003; CDC, 2004; Cunningham & Sorensen, 2006; Wolff, Shi & Seigel, 2009). The social environment is comprised of correctional officers' and wardens' knowledge and attitudes, the institution's policies and procedures, institutional characteristics and the characteristics of individuals within the institution.

The Contribution of Correctional Officers to the Social Environment.

Correctional officers play a crucial role in controlling physical and sexual violence in prison (Eigenberg, 2002; O'Donnell, 2004; Struckman-Johnson et al. 1996; Tewksbury, 1989). Their knowledge of the existence and rates of physical and sexual violence in prison may contribute to the social environment within the institution (e.g., it may affect the way in which correctional officers respond to allegations of sexual violence). Furthermore, correctional officers work in an environment in which they interact with individuals that are significantly more violent than in the general population (Catalano, 2005). Rates of inmate-on-inmate physical victimization range from 10% to 20% over a 6 month period (Wolff et al., 2007; O'Donnell & Edgar, 1998; Wooldredge, 1998). Although Wolff et al. (2007) reported similar rates for physical assault among male and female inmates, physical assaults against males were more likely to involve the use of a weapon. Indeed, it is recognized that a significant number of inmates appear to carry weapons (McCorkle, 1992). Among staff-on-inmate physical assaults, a recent study reported that 24.6% of male inmates reported being physically assaulted by a staff member, a percentage that was 3 times as high as for female inmates (Wolff et al., 2007).

Correctional officers also work in an environment in which they must respond to allegations of sexual violence. BJS reported that 60,500 inmates (or 4.5% of the prison population) experienced sexual violence by either another inmate or by staff (Beck & Harrison, 2007). Of those reporting sexual victimization, 2.1% reported the incident involved another inmate and 2.9% reported the incident involved a correctional officer, although 1.7% of those inmates described the relationship as romantic in nature. Consistent with this study, Worley (2007) reported that the vast majority of correctional

officers in a Texas study reported that some (unidentified number of) staff members have inappropriate sexual relationships with inmates. Interestingly, he found that correctional officers were more likely to report on the inappropriate behavior of coworkers than to admit to their own inappropriate behavior with inmates. Finally, research has demonstrated that inmates make sexual advances towards correctional officers. Worley & Cheeseman (2006) interviewed inmates about inmate-on-staff inappropriate relationships (not exclusively sexual relationships). They reported that inmates were able to manipulate correctional staff into inappropriate relationships, and that these correctional staff exhibited a variety of problems such as personal, financial, and relationship problems. The study concluded that inmates identify and target these vulnerable staff members and then easily manipulate them into breaking prison rules to their benefit.

The Contribution of Wardens to the Social Environment

Wardens are responsible for setting the reporting and responding atmosphere in their institution. Wardens oversee the operation of the entire correctional institution and their perceptions influence the culture, structure and activities of the institution (Hensley & Tewksbury, 2005). Research on wardens' beliefs generally concludes that wardens do not believe that there is a significant level of sexual activity (coercive or consensual) occurring in their institution (Hensley & Tewksbury, 2005; Moster & Jeglic, 2009). Furthermore, a majority of wardens (65%) believe that the prevalence of inmate fear of sexual assault is relatively low (Hensley & Tewksbury, 2005b). Interestingly, Hensley and Tewksbury (2005b) conclude that sexual assaults (actual or probability of occurrence) are not a major factor in the day-to-day operation and structure of prisons. Dumond (2003) and Mariner (2001) assert that because prison rape is not a top priority for wardens, it is unlikely that prison rape will garner much attention from wardens.

The Contribution of Prison Policies on Social Environment

The policies and procedures adopted by prison administration also contribute to the social environment of the institution. For example, administrative policies and procedures for investigating and responding to sexual assault in prison may set the tone for the inmate's willingness to report sexual assaults and how the institution responds to allegations. Man and Cronan (2001) reported that procedures for investigating rapes, to the extent they exist, were not followed; some reported incidents were not investigated at all; there was no discipline for prison rapists while the victim lives in fear of reprisal from the offender's friends; and the victim is segregated during the investigation and then returned to general population. Sending victims to protective custody or transferring victims to another facility is considered by some scholars to be a form of punishment for the victim (Chonco, 1989). Either the victim is isolated from the general population or other inmates soon learn of the victim's status where he may receive the label of

“snitch”. These kinds of responses to reporting sexual assault surely have a chilling effect on inmates’ willingness to report sexual assault.

The Contribution of Institutional Characteristics on Social Environment

Although little empirical research exists on the effects of the architecture of the institution on sexual violence, in fact, it has long been recognized that the institutional architecture plays a role in sexual assault in prisons (Atlas, 1983; Corlew, 2006; Johnston, 1991). It is generally believed that single bunking is the most desirable living arrangement for reducing sexual violence (Atlas, 1983; Johnston, 1991; Struckman-Johnson & Struckman-Johnson, 1999).

Characteristics of the institution such as security level, surveillance, and crowding also contribute to the social environment of the institution. Higher security level institutions have been associated with higher rates of physical violence within the institution (Cooley, 1993; Harer & Steffensmeier, 1996; Hensley et al., 2003; Keller & Wang, 2005; Perez et al., 2009). This may be the case for sexual violence as well although this remains an empirical question. The amount of supervision also has been related to institutional violence. Fuller and Orsaugh (1977), for example, found that the amount of supervision inmates received was inversely related to physical victimization rates. Struckman-Johnson and Struckman-Johnson (2002) found that low security (inadequate surveillance, predatory staff, and policies that protected staff) was related to higher rates of sexual victimization in a woman’s prison. Although disputable (Wolff, Shi & Seigel, 2009), research generally confirms the association between prison violence and overcrowding (Farrington & Nuttal, 1980; Gae & McGuire, 1985; Harer & Steffensmeier, 1996) as well as prison sexual violence and overcrowding (density) (Struckman-Johnson & Struckman-Johnson, 2002; Toch, 1985).

The characteristics of the inmates within the institution may also play a role in sexual violence. These characteristics of inmates at greater risk for victimization include individuals with mental illness (Baskin et al., 1991), younger inmates (Cooley, 1993; Hensley, Castle & Tewksbury, 2003; Mabli et al., 1979; Wolff, Blitz, Shi, Siegel & Bachman, 2007), incarceration for interpersonal violence (Keller & Wang, 2005; Struckman-Johnson & Struckman-Johnson, 2002), participation in gang activity (Austin et al., 2006; Fong, 1990; Zaitzow & Houston, 1999), shorter sentences (Cooley, 1993; Cunningham & Sorensen, 2006) and greater racial diversity within the institution (Struckman-Johnson & Struckman-Johnson, 2002) .

Finally, the composition of correctional officers may contribute to the social environment within the institution (Camp, Gaes, Langan & Saylor, 2003). Rowan (1996) reported that facilities with a higher proportion of female correctional officers had lower rates of inmate-on-staff violence (Rowan, 1996).

Study Analyses. Fifteen indicators of the prison environment in Ohio institutions were selected for inclusion in the study. Comparable Texas data was unavailable. These variables were selected from the state databases, reports provided by the state, the correctional officer's survey, and warden interviews. Variables were then correlated using Spearman's Rho with the five types of sexual behavior among incarcerated individuals. Because these variables were not individual-level variables, they were not included in the CHAID analyses (Chapter 10). However, they do provide some evidence of the importance of institutional-level variables in understanding institutional sex.

As presented in Table 70, significant correlations were found between environmental variables and types of sex. Specifically, prison crowding, as reported by the correctional officers, was positively related to victimization and negatively related to bartered and consensual sex. That is, the more crowding within an

Table 70

Relationship Between Institutional Variables by Ohio Institutions (N = 6)^{1,2} and Sexual Experiences in Prison

	Any Sex	Predatory	Victim	Bartered ³	Consensual ³
Prison Safety and Security	(N =6)	(N =6)	(N =6)	(N =6)	(N =6)
Crowding	-.26	-.49	.84*	-.81*	-.81*
Inmate-on-Inmate Sexual Assaults in the Last 6 months	-.49	-.67	.73	-.70	-.70
Are the Arguments and Assaults Bothersome	-.55	-.49	.09	-.23	-.23
Inmate Pressured for Sex in the Last 6 months	-.20	-.38	.67	-.70	-.70
Likelihood an Inmate is Assaulted	-.03	.03	-.09	-.06	-.06
Frequency Inmates have had Weapons in Quarters in Past 6 months	.44	.55	-.55	.58	.58
Instances of staff on inmate physical sexual contact in past 6 months	.38	.20	.20	.17	.17
Adequacy of policies and procedures preventing staff sexual misconduct with inmates	.03	-.03	.09	.06	.06
Adequacy of policies and procedures providing for safety of inmates who have been victim of staff sexual misconduct	-.44	-.55	.55	-.58	-.58
Warden emphasizes need for safe environment for all	-.49	-.55	.49	-.70	-.70
Impact of Physical Design on Surveillance	.26	.49	-.84*	.81*	.81*
Freedom of Inmates to move around the Institution	-.49	-.67	.73	-.70	-.70
Warden Interview					
Time Spent in Units (N=7)	.47	.00	.16	.32	.00
Philosophy regarding Prison Sex (N=7)	-.41	-.20	.20	.00	-.20
Significance of Prison Sex (N=6)	-.46	-.46	.74	-.46	-.93**

Note. * $p < .05$, ** $p < .01$. ¹ N=6 due to missing data from 1 institution. ²This data was not collected in Texas. ³ These results were reviewed and the similarities between Bartered and Consensual are likely due to the ranking process involved with Spearman's Rho.

institution the more likely an inmate was to be the victim of sexual victimization and the less likely inmates were to engage in bartered and consensual sex.

Surveillance also was related to prison sexual experiences. The more the design of the institution facilitated surveillance of inmates, also reported by correctional officers, the less likely the inmate was to be a victimized sexually and conversely, the more the design of the institution inhibited surveillance of inmates, the more likely the inmate was to engage in bartered and consensual sex.

Finally, the significance of prison sex to wardens was related to consensual sexual behavior among inmates. Wardens who believed prison sex was a significant issue for them were less likely to have inmates engaging in consensual sex.

Conclusions

The correlations to emerge from this data are consistent with expectations. Crowding and surveillance were related to victimization, bartered and consensual sex, albeit in different directions, pointing to the importance of institutional-level variables in understanding prison sex. The other significant variable to emerge from the data was the perceptions by wardens of the importance of prison sex. Wardens who perceived prison sex as a significant issue were less likely to have inmates engaging in consensual sex. This underscores the importance noted by other scholars of the importance of the warden in setting the tone and tolerance for prison sex.

Institutional variables, however, failed to significantly correlate with predatory sex or any sex, although the results were in the expected directions.

Our inclusion of these environmental factors reflects our belief in the importance of these variables in understanding prison sex. And indeed, several variables did correlate with sexual experiences in prison. However, our ability to use these variables was limited as they were not individual-level variables and therefore could not be included in our CHAID analyses. Future research will need to develop these environmental factors for inclusion in models predicting prison sex.

Chapter Eleven

CHAID Classification for Sexual Behavior in Prison

We used CHAID analyses to explore preliminary risk models for the various types of sex in prisons. Outcome variables were created using the Sexual Aggression in Prison (SAP) measure. Each of the bivariate variables that were found to correlate significantly with some type of sex was entered into the CHAID analyses for that type of sex (see Appendix F for a full listing). For example, if child maltreatment only correlated with consensual sex, then child maltreatment was included as a predictor variable in the consensual sex CHAID model, but not the other CHAID models. Models for each type of sex ($N = 5$) were created separately for the male and female inmates as the prior analyses suggested significant gender differences across most variables. CHAIDs were used to create decision trees for predicting sex in prison.

Specifically, we used exploratory exhaustive Chi Square Automated Interaction Detector (CHAID) a technique used to create decision trees. CHAID can be conducted on either continuous or categorical data, though it groups continuous data into homogeneous categories. This method of analysis selects the best predictor variables using a statistic test (Chi square for categorical and F for continuous, $p < .05$ with Bonferroni adjustment) to act as the first node in the tree and repeats this process until a full tree is grown. Due to the relatively small sample size, analyses are exploratory in nature and we used a cross-validation method (which divides the sample into 10 folds and verifies the original risk model). This method allows us to compute a risk estimate as well as a cross-validated risk estimate that represents the average of all risk estimates across the 10 sub-samples. We allowed as few as 5 cases per cell.

Self-report criminal history and the Conflict Tactics Scale were not included in the analyses because of missing data limitations.

Model Predicting Any Sex in Prison for Male Inmates

Risk estimate for model (% of misclassified cases) = 0.295, SE = 0.027

Cross validation risk estimated = 0.392, SE = 0.029

N = 288

False Positives: 61 cases

False Negatives: 24

True Positives: 121

True Negatives: 82

Sensitivity (True + rate)	0.834
Specificity	0.573
PPV	0.665
NPV	0.774
False + rate	0.427
False – rate	0.166
Accuracy	0.705

The model correctly classified roughly 71% of all cases and had a sensitivity rate of 83% and a specificity rate of 58%. False positives were more common than false negatives.

Of the overall sample, 145 men (50.4%) admitted to *having sex in prison*. Perpetration of threatened physical violence in prison was the best predictor of sexual activity in prison ($\chi^2 = 24.95$, $df = 1$, $p < .0001$). Of those who admitted to threatened physical violence 62.9% admitted to sex in prison as compared to 33.1% of those who denied threatening physical violence.

Among those admitting to threatened physical violence, NAS Behavior regulation scores were the next best predictor of sex in prison ($\chi^2 = 13.81$, $df = 1$, $p < .001$); with those reporting scores under 25 more likely to report sex in prison (71.3%) than those reporting scores equal to or more than 25 (40.0%). Among those with scores above 25, inmates from Texas were more likely to admit to sexual activity than inmates from Ohio (59.1% vs 21.7% respectively; $\chi^2 = 6.54$, $df = 1$, $p < .01$).

Among those denying perpetration of threatened physical violence, those who admitted to victimization by relational aggression were more likely to report sexual activity (39.8%) than those who denied victimization (18.4%) by relational aggression ($\chi^2 = 5.36$, $df = 1$, $p = .02$). Finally, among those reporting victimization by relational aggression, those endorsing the Antisocial PD symptom of irritability/aggressiveness were less likely to report sexual activity than those without this symptom (26.7% vs 55.3%; $\chi^2 = 7.03$, $df = 1$, $p = 0.02$).

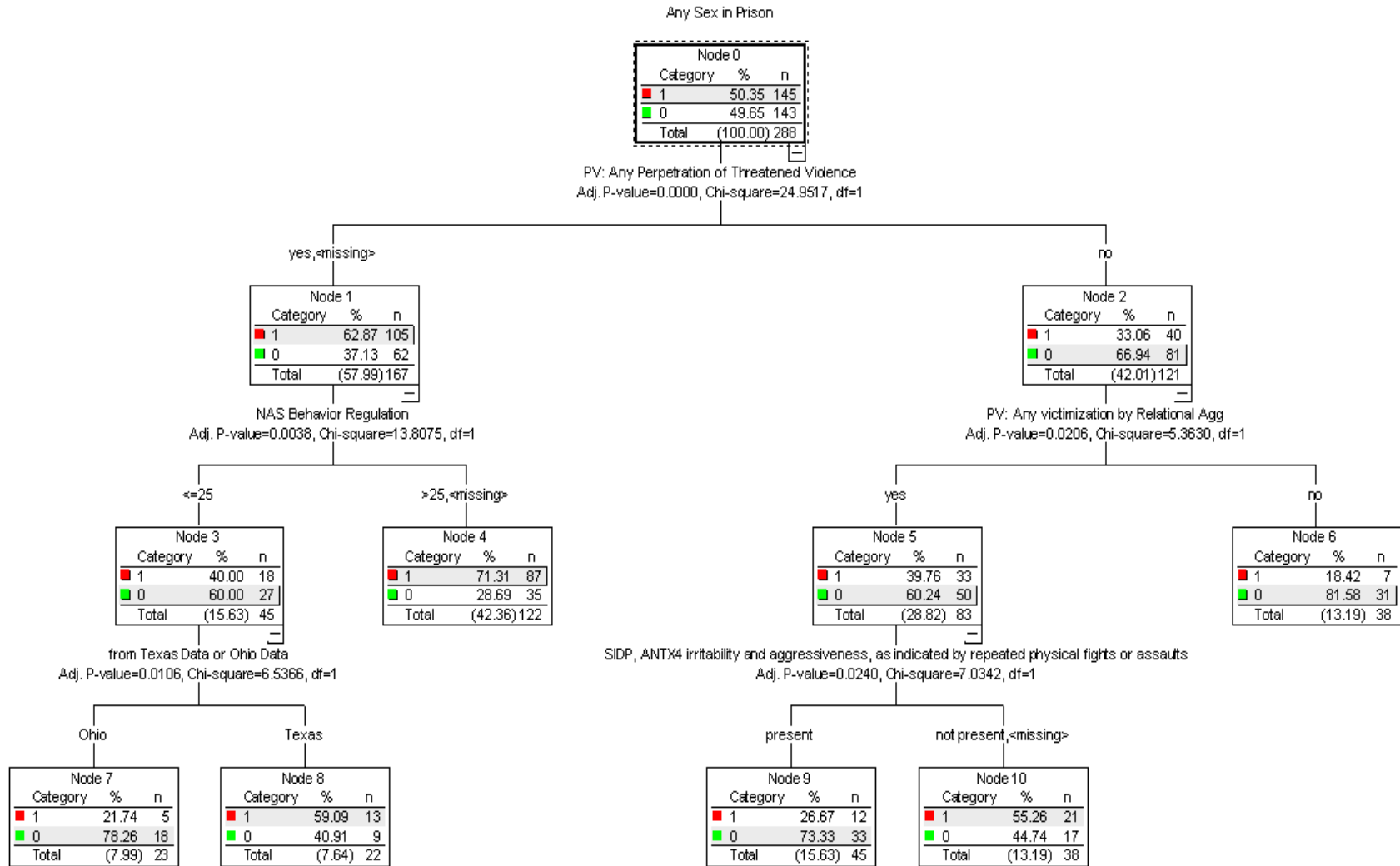


Figure 1. CHAID Analyses for Any Sexual Behavior for Male Inmates.

Model Predicting Sexual Predation for Male Inmates

Risk estimate for model (% of misclassified cases) = 0.108, SE = 0.018

Cross validation risk estimated = 0.132, SE = 0.020 N = 288

False Positives: 26 cases

False Negatives: 5

True Positives: 248

True Negatives: 9

Sensitivity (True + rate)	0.980
Specificity	0.257
PPV	0.905
NPV	0.642
False + rate	0.743
False – rate	0.020
Accuracy	0.892

The model correctly classified roughly 89% of all cases and had a sensitivity rate of 98% and a specificity rate of 26%. False positives were more common than false negatives.

Of the overall sample, 35 men (12.2%) admitted to sexual perpetration in prison. Sexual victimization was the best predictor of perpetration ($\chi^2 = 23.42$, $df = 1$, $p < .0001$). Men who admitted to sexual victimization were far more likely to admit to perpetration than those who denied sexual victimization (34.1% vs 8.2%).

Among those denying sexual victimization, perpetration of threatened physical violence was the next best predictor of sexual perpetration ($\chi^2 = 14.14$, $df = 1$, $p < .001$); with those reporting perpetration of threatened physical violence being more likely to report sexual perpetration (14% vs 1%). Among those reporting threatened physical violence, inmates from Texas (24.0%) were more likely than inmates from Ohio (8.3%) to report sexual perpetration ($\chi^2 = 6.32$, $df = 1$, $p = .02$). Among those denying threatened physical violence, those with continuous scores on the SIDP-IV Antisocial scale less than or equal to 6, (0%) were less likely than those with higher scores (14.3%) to admit sexual predation ($\chi^2 = 14.85$, $df = 1$, $p < .01$).

Among those admitting to sexual victimization, those who were diagnosed with Antisocial PD were more likely to admit to sexual predation (47.8%) than those who did not (19.1% $\chi^2 = 4.04$, $df = 1$, $p = .04$). Among those with an Antisocial PD diagnosis, those with a history of head injury with loss of consciousness were more likely to admit to sexual predation (64.3%) than those without (22.2%; $\chi^2 = 3.89$, $df = 1$, $p = .05$).

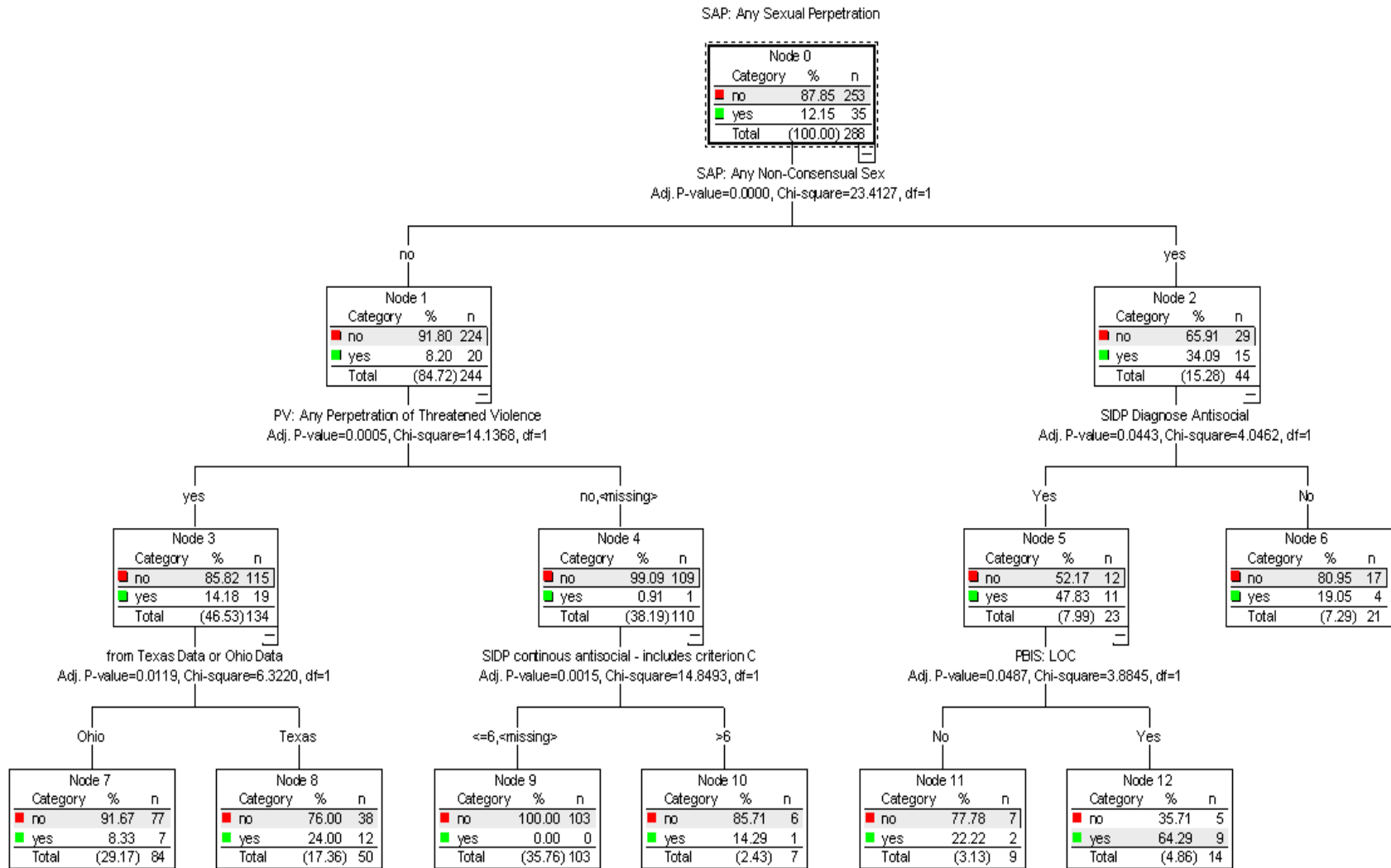


Figure 2. CHAID Analyses for Sexual Predation for Male Inmates.

Model Predicting Sexual Victimization for Male Inmates

Risk estimate for model (% of misclassified cases) = 0.111, SE = 0.019

Cross validation risk estimated = 0.160, SE = 0.022 N = 288

False Positives: 28 cases

False Negatives: 4

True Positives: 240

True Negatives: 16

Sensitivity (True + rate)	0.984
Specificity	0.363
PPV	0.900
NPV	0.800
False + rate	0.636
False – rate	0.016
Accuracy	0.889

The model correctly classified roughly 89% of all cases and had a sensitivity rate of 98% and a specificity rate of 36%. False positives were more common than false negatives.

Of the overall sample, 44 men (15.3%) admitted to sexual victimization in prison. Sexual perpetration was the best predictor of victimization ($\chi^2 = 23.42$, $df = 1$, $p < .0001$). Men who admitted to sexual perpetration were far more likely to admit victimization than those who denied sexual perpetration (42.9% vs 11.5%).

Among those denying sexual perpetration, worry about being sexually assaulted was the next best predictor of sexual victimization ($\chi^2 = 18.60$, $df = 1$, $p < .001$); with those reporting worry within the range of “a great deal” to “not much” range being more likely to report sexual victimization (26.2% vs 6.4%). Among this group, those with possible (83.3%) or present (31.3%) suicidal ideation on the HCR-20 were more likely to report sexual victimization than those without suicidal ideation (16.3%; $\chi^2 = 12.54$, $df = 2$, $p < .01$). Among those reporting no worry at all, those who were older than 40 at the age of their first violence incident were more likely to report sexual victimization ($\chi^2 = 8.53$, $df = 1$, $p = .02$; 27.3% vs 5.1% among those who were younger than 40 at the age of their first violent incident).

Among those reporting sexual perpetration, those who were less than or equal to 164lbs were more likely to report sexual victimization in prison ($\chi^2 = 12.15$, $df = 1$, $p < .01$; 78.6% vs 19.1%).

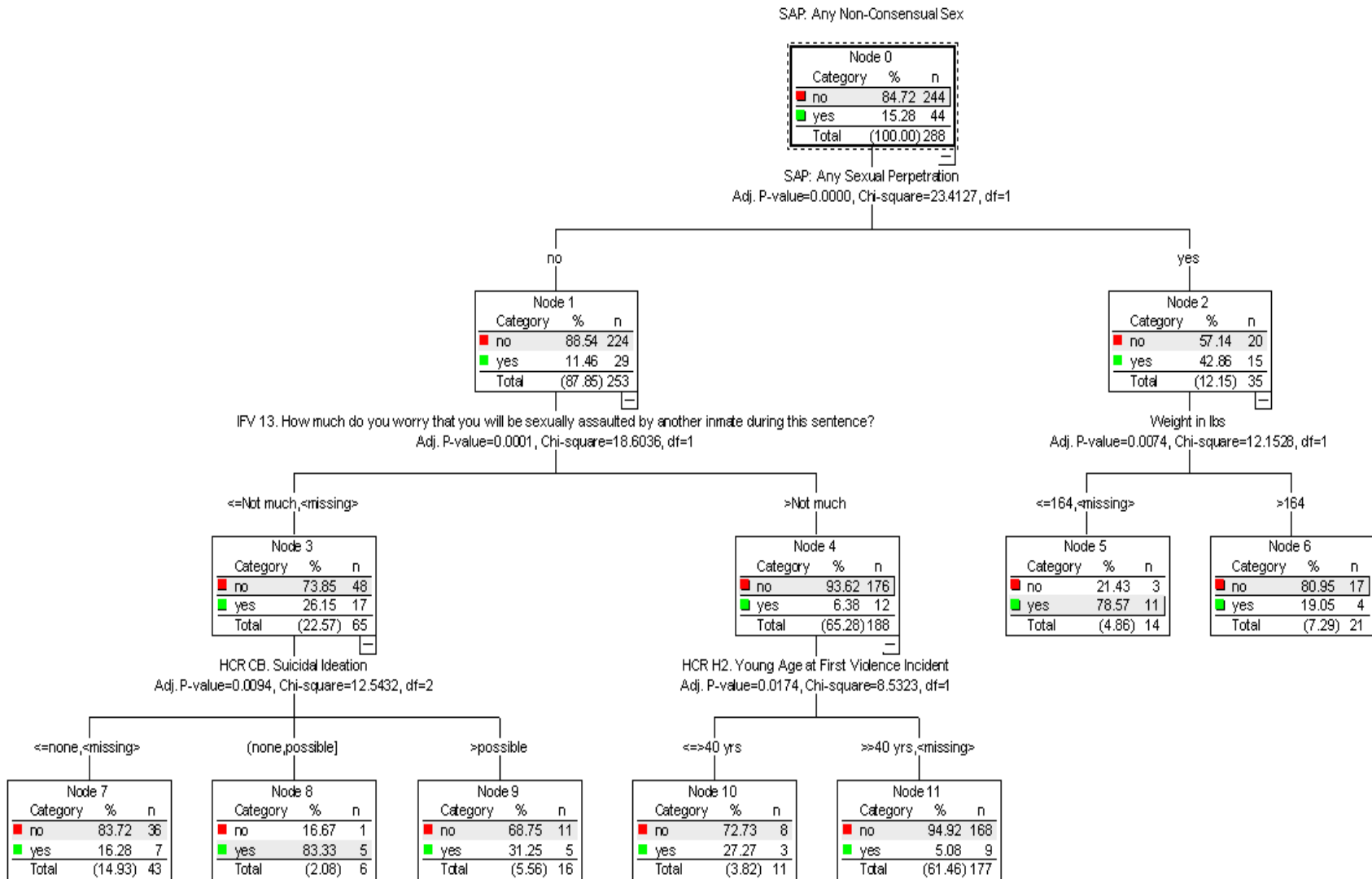


Figure 3. CHAID Analyses for Sexual Victimization for Male Inmates.

Model Predicting Sexual Bartering for Male Inmates

Risk estimate for model (% of misclassified cases) = 0.090, SE = 0.017

Cross validation risk estimated = 0.118, SE = 0.019 N = 288

False Positives: 0 cases

False Negatives: 26

True Positives: 11

True Negatives: 251

Sensitivity (True + rate)	0.300
Specificity	1.00
PPV	1.00
NPV	0.906
False + rate	<0.01
False – rate	0.703
Accuracy	0.910

The model correctly classified roughly 91% of all cases and had a sensitivity rate of 30% and a specificity rate of 100%. False negatives were more common than false positives.

Of the overall sample, 37 men (12.9%) admitted to sexual bartering in prison. Sexual perpetration was the best predictor of sexual bartering ($\chi^2 = 38.44$, $df = 1$, $p < .001$). Those who reported sexual perpetration (45.7%) were more likely to report bartering than those who did not (8.3%).

Among those who denied sexual perpetration, perpetration of threatened physical violence was the next best predictor; 14.9% of those reporting threatened physical violence also reported bartering for sex as compared to 1% of those who denied threatened physical violence. Among those reporting threatened physical violence, those meeting criteria for Borderline PD symptom of inappropriate anger were more likely to report bartering than those without this symptom (20.7% vs 2.4%; $\chi^2 = 7.58$, $df = 1$, $p = .02$).

Among those reporting sexual perpetration, those with NAS arousal scores less than 22.7 were more likely to report bartering sex than those with scores greater than 22.7 (76.5% vs 16.7%; $\chi^2 = 12.60$, $df = 1$, $p < .001$). Among those with scores below 22.7, those who felt the warden was more likely to take claims of sexual assault seriously were more likely to report bartering sex than those who felt the warden would not take their claims seriously (100% vs 33.3%; $\chi^2 = 9.59$, $df = 1$, $p = .02$).

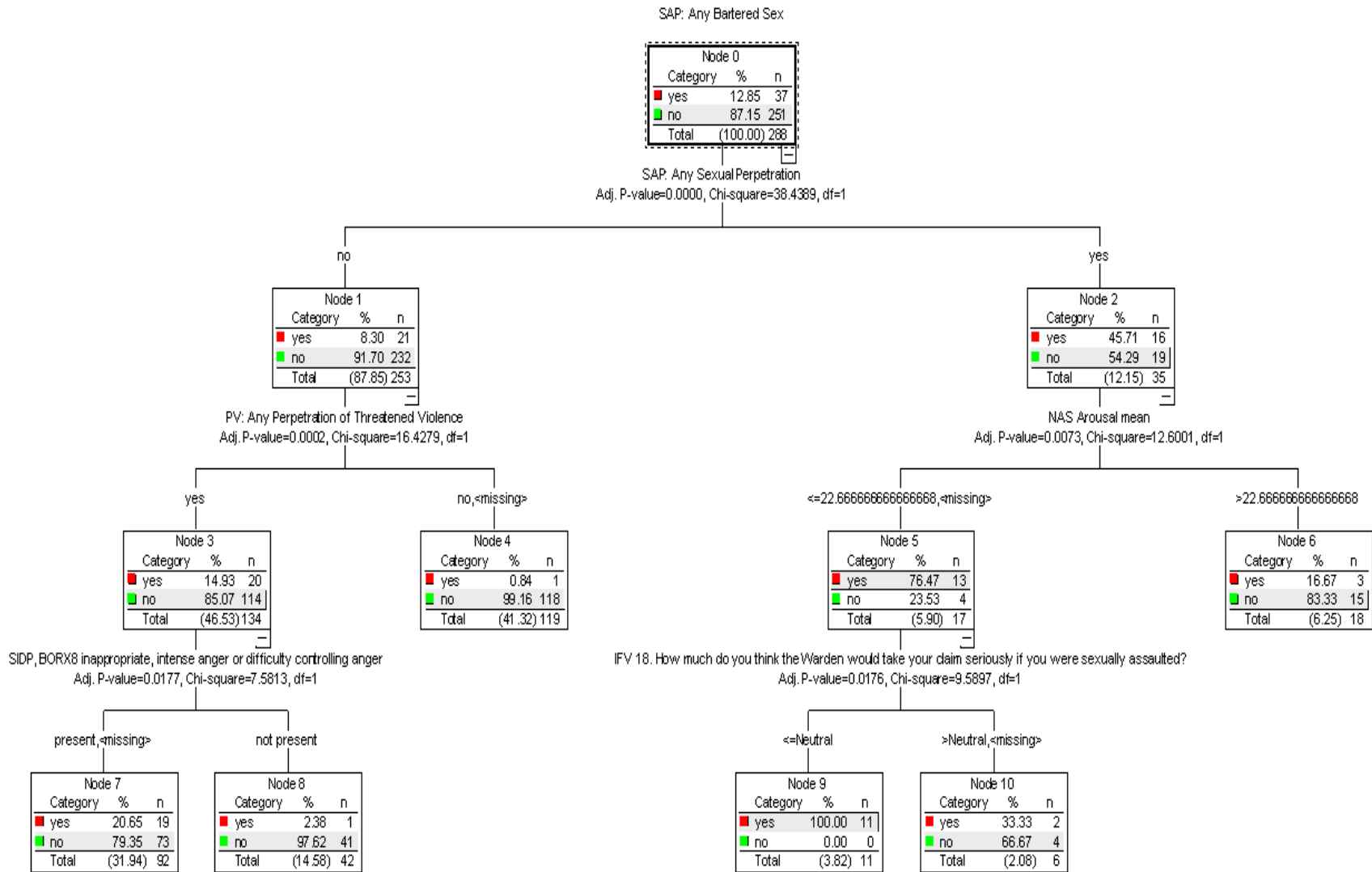


Figure 4. CHAID Analyses for Sexual Bartering for Male Inmates.

Model Predicting Consensual Sex for Male Inmates

Risk estimate for model (% of misclassified cases) = 0.285, SE = 0.027

Cross validation risk estimated = 0.378, SE = 0.029 N = 288

False Positives: 45 cases

False Negatives: 37

True Positives: 91

True Negatives: 115

Sensitivity (True + rate)	0.711
Specificity	0.719
PPV	0.670
NPV	0.757
False + rate	0.281
False – rate	0.289
Accuracy	0.715

The model correctly classified roughly 72% of all cases and had a sensitivity rate of 72% and a specificity rate of 72%. False negatives were more common than false positives.

In the sample, 127 inmates reported consensual sexual activity in prison (44.4%). Sexual perpetration was the best predictor of consensual sex, with 91.4% of those reporting sexual perpetration also reporting consensual sex, as compared to 37.9% of those denying sexual perpetration ($\chi^2 = 35.62$, $df = 1$, $p < .0001$).

Among those denying sexual perpetration, those who reported perpetration of threatening violence were more likely than those denying threatened physical violence to report consensual sex in prison (50.4% vs 23.23%; $\chi^2 = 19.58$, $df = 1$, $p < .001$). Among those reporting threatened physical violence, those who also reported perpetration of relational aggression were more likely to report consensual sex, as compared to those who did not report perpetration of relational aggression (59.1% vs 24.7%; $\chi^2 = 7.49$, $df = 1$, $p = .02$). Among those denying perpetration of threatened physical violence, those who reported paternal drug addiction were more likely than those not reporting paternal drug addiction to report consensual sex (50.0% vs 18.4%; $\chi^2 = 8.52$, $df = 1$, $p = .02$).

Among those who reported sexual perpetration, those who reported threat/control delusions were more likely to report consensual sex in prison (100% vs 75%; $\chi^2 = 6.29$, $df = 1$, $p = .01$). Among those without threat/control delusions, more denied having a failure to establish and maintain stable adolescent relationships in the HCR:20 (100% vs 40%; $\chi^2 = 5.60$, $df = 1$, $p = .04$).

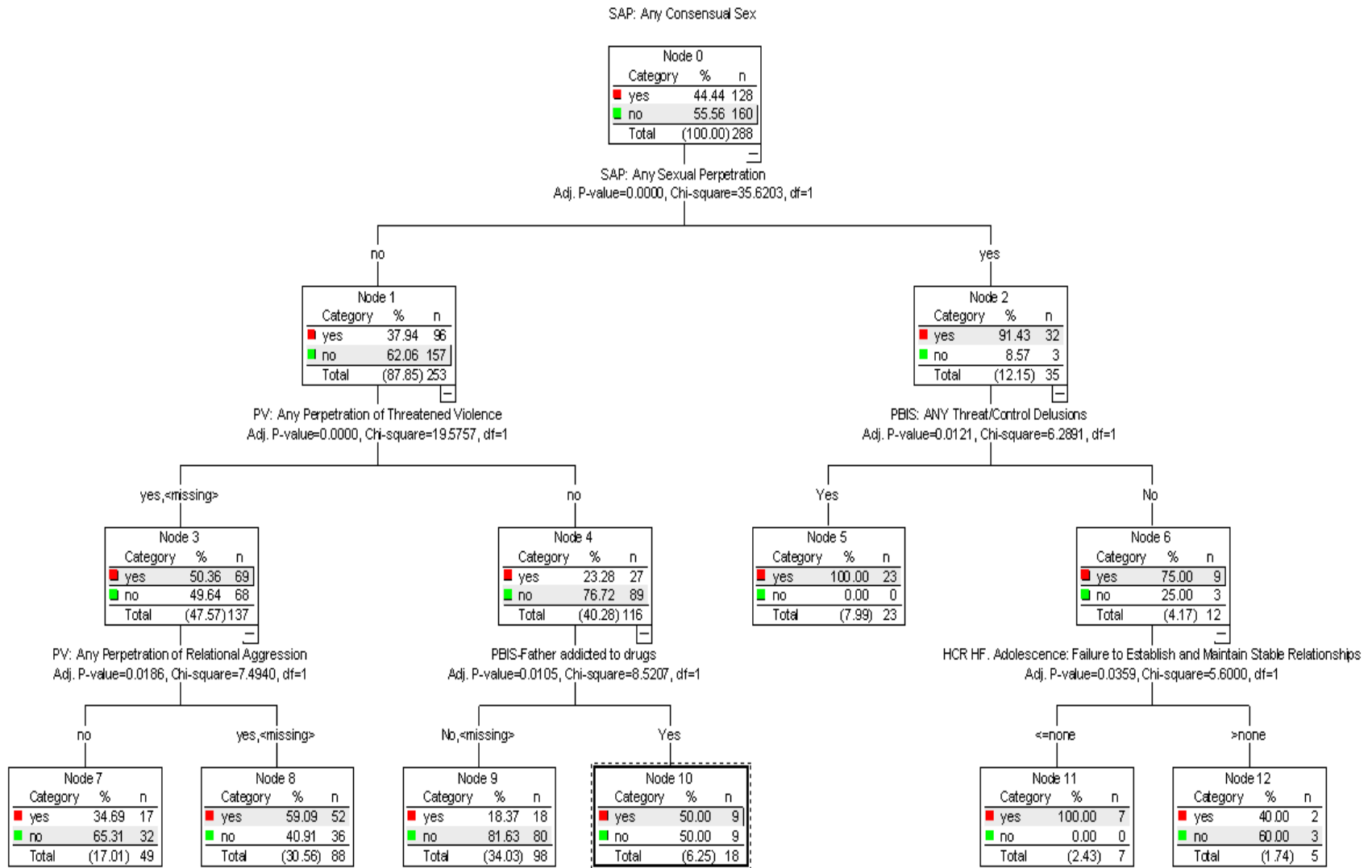


Figure 5. CHAID Analyses for Consensual Sex for Male Inmates.

Model Predicting Any Sex in Prison for Female Inmates

Risk estimate for model (% of misclassified cases) = 0.224, SE = 0.031

Cross validation risk estimated = 0.371, SE = 0.036 N = 183

False Positives: 61 cases

False Negatives: 24

True Positives: 121

True Negatives: 82

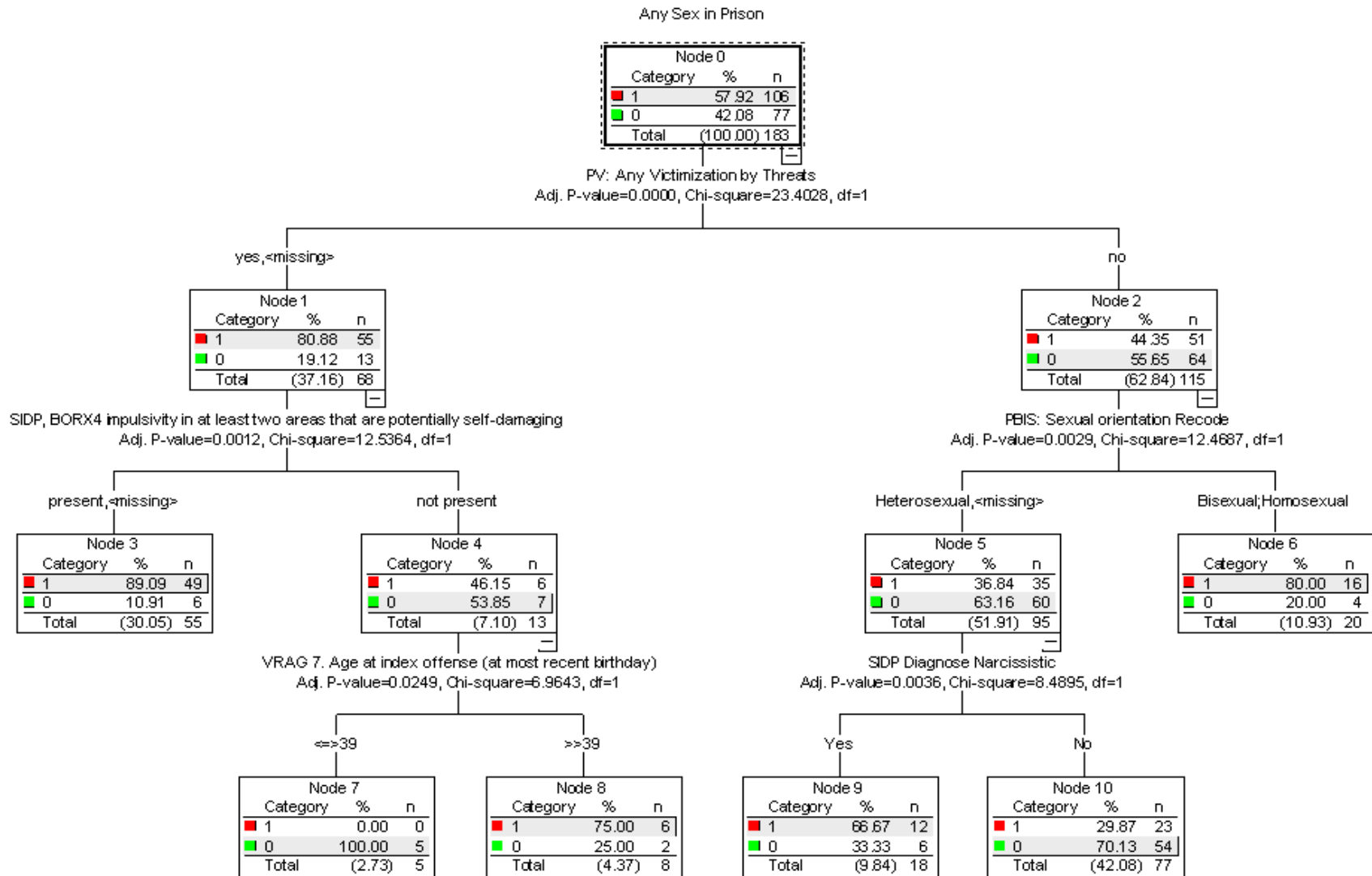
Sensitivity (True + rate)	0.783
Specificity	0.767
PPV	0.822
NPV	0.720
False + rate	0.234
False – rate	0.217
Accuracy	0.776

The model correctly classified roughly 77% of all cases and had a sensitivity rate of 78% and a specificity rate of 77%. False positives were more common than false negatives.

Of the overall sample, 106 women (57.9%) admitted to *having sex in prison*. Victimization by threats was the best predictor of sexual activity in prison ($\chi^2 = 23.41$, $df = 1$, $p < .0001$). Of those who admitted to being threatened with physical violence, 80.9% admitted to sex in prison as compared to 44.4% of those who denied being threatening with physical violence.

Among those admitting to victimization by threats, those who endorsed the Borderline PD symptom of impulsivity were more likely to admit to sex in prison than women who did not endorse this symptom ($\chi^2 = 12.54$, $df = 1$, $p = .001$; 89.1% vs 46.2% respectively). Among those without this symptom, those who were younger than 39 at the time of their current offense were more likely to report sex in prison than those who were 39 and older (75% vs 0% respectively; $\chi^2 = 6.96$, $df = 1$, $p = .02$).

Among those denying victimization by threats, women who self-identified as homosexual or bisexual were more likely to report sex in prison than women who self-identified as heterosexual (80% vs 36.8% respectively; $\chi^2 = 12.47$, $df = 1$, $p < .01$). Among heterosexual women, those who met criteria for Narcissistic PD were more likely to report sex in prison than women not meeting diagnostic criteria for the disorder (66.7% vs 29.9% respectively; $\chi^2 = 8.49$, $df = 1$, $p = .02$).



Model Predicting Sexual Predation for Female Inmates

Risk estimate for model (% of misclassified cases) = 0.011, SE = 0.001

Cross validation risk estimated = 0.038, SE = 0.015

N = 183

False Positives: 1 cases

False Negatives: 1

True Positives: 177

True Negatives: 4

Sensitivity (True + rate)	0.994
Specificity	0.800
PPV	0.994
NPV	0.80
False + rate	0.200
False – rate	0.006
Accuracy	0.990

The model correctly classified roughly 99% of all cases and had a sensitivity rate of 99% and a specificity rate of 80%. False positives were more common than false negatives.

Of the overall sample, 5 women (2.7%) admitted to sexual perpetration in prison. HCR:20 scores were the best predictor of sexual perpetration in women. Higher scores tended to be associated with increased reporting of sexual predation ($\chi^2 = 30.4$, $df = 3$, $p < .001$).

Among women with scores higher than 29, women who reported having had an orgasm with a partner in prison were more likely to report sexual predation (80% vs 0% respectively; $\chi^2 = 13.37$, $df = 1$, $p = .001$).

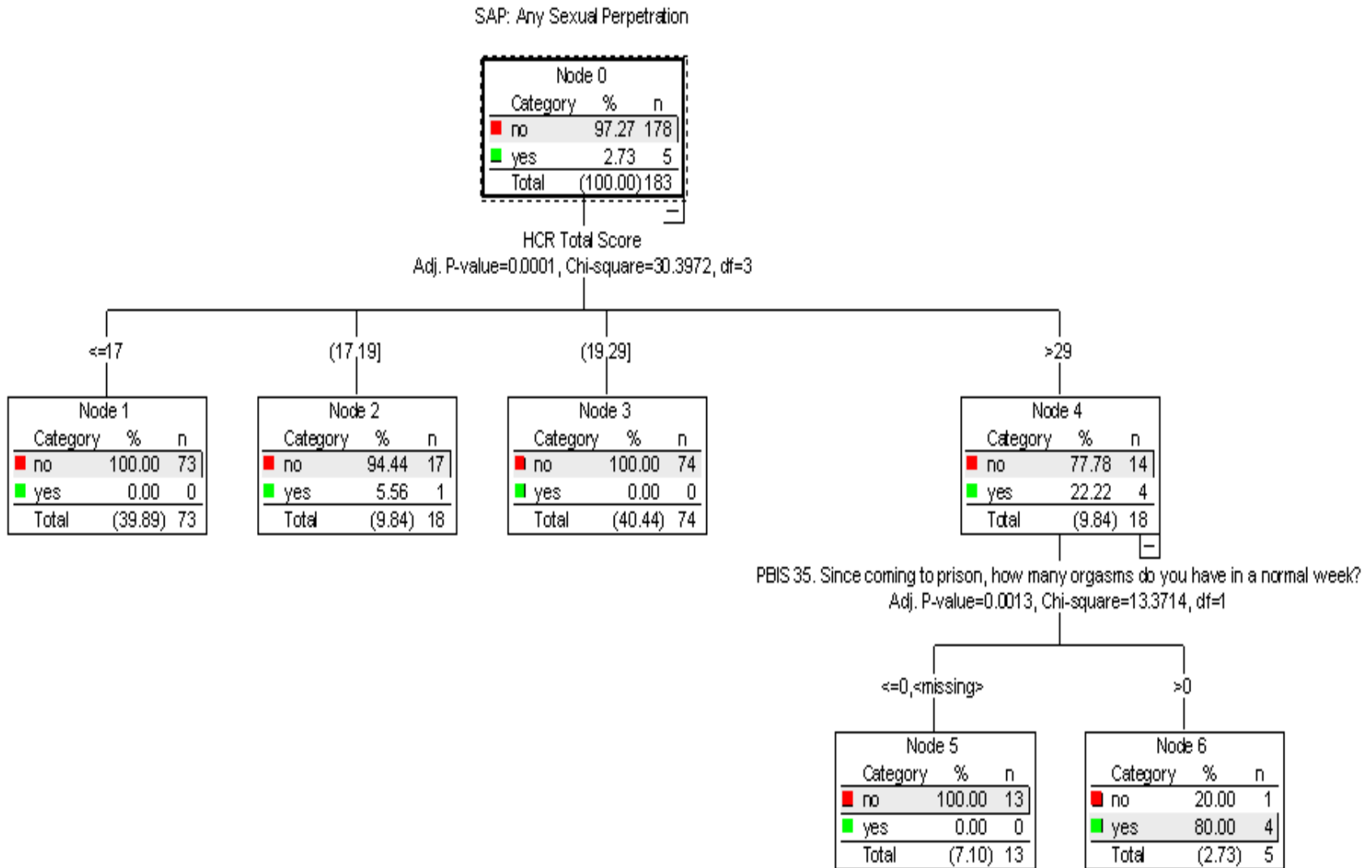


Figure 7. CHAID Analyses for Sexual Predation for Female Inmates.

Model Predicting Sexual Victimization for Female Inmates

Risk estimate for model (% of misclassified cases) = 0.175, SE = 0.028

Cross validation risk estimated = 0.235, SE = 0.031 N = 183

False Positives: 22 cases

False Negatives: 10

True Positives: 39

True Negatives: 112

Sensitivity (True + rate)	0.800
Specificity	0.836
PPV	0.640
NPV	0.918
False + rate	0.164
False – rate	0.204
Accuracy	0.825

The model correctly classified roughly 83% of all cases and had a sensitivity rate of 80% and a specificity rate of 84%. False negatives were more common than false positives.

Of the overall sample, 49 women (26.8%) admitted to sexual victimization in prison. Threatened victimization was the best predictor of victimization ($\chi^2=24.81$, $df=1$, $p<.0001$). Women who admitted to victimization by threats were far more likely to admit to sexual victimization than those who denied to victimization by threats (48.5% vs 14.5%).

Among those admitting to victimization by threats, those who admitted to perpetrating relational aggression were more likely to admit to sexual victimization in prison (60.5% vs 32.10% respectively; $\chi^2=5.20$, $df=1$, $p=.03$). Among those denying perpetration by relational aggression, those who reported concerns of being assaulted by staff or guards were more likely to report victimization (85.7% vs 14.3% respectively; $\chi^2=12.28$, $df=1$, $p<.001$).

Among women denying victimization by threats, those who worried that they would be attacked by staff or guards were more likely to report sexual victimization in prison (38.5% vs 7.7% respectively; $\chi^2=15.41$, $df=1$, $p<.001$). Among women reporting concern about being attacked by staff, those with some symptoms of Histrionic PD were more likely to report sexual victimization (62.5% vs 0% respectively; $\chi^2=10.16$, $df=1$, $p<.001$).

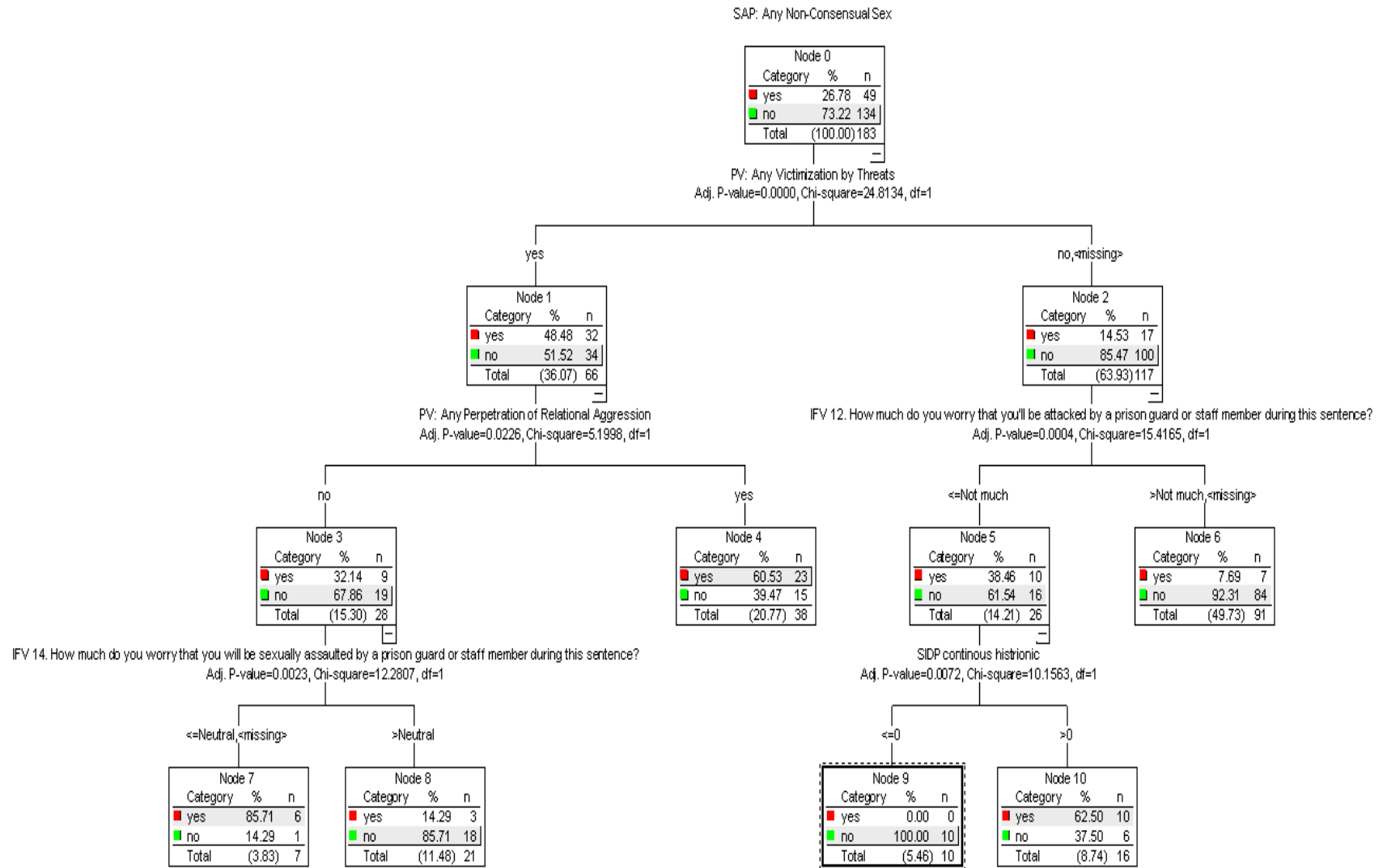


Figure 8. CHAID Analyses for Sexual Victimization for Female Inmates.

Model Predicting Sexual Bartering for Female Inmates

Risk estimate for model (% of misclassified cases) = 0.093, SE = 0.021

Cross validation risk estimated = 0.120, SE = 0.024 N = 183

False Positives: 15 cases

False Negatives: 2

True Positives: 163

True Negatives: 3

Sensitivity (True + rate)	0.988
Specificity	.167
PPV	0.916
NPV	0.60
False + rate	0.833
False – rate	0.012
Accuracy	0.907

The model correctly classified roughly 91% of all cases and had a sensitivity rate of 99% and a specificity rate of 17%. False positives were more common than false negatives.

Of the overall sample, 18 women (9.8%) admitted to sexual bartering in prison. Sexual perpetration was the best predictor of sexual bartering ($\chi^2 = 14.59$, $df = 1$, $p < .001$). Those who reported sexual perpetration (60.0%) were more likely to report bartering than those who did not (8.4%).

Among those who denied sexual perpetration, perpetration of relational aggression was the next best predictor; 17.9% of those reporting relational aggression also reported bartering for sex as compared to 2.7% of those who denied relational aggression. Among those denying relational aggression, a history of childhood neglect was the next best predictor; 7% of women with a history of neglect reported bartering sex as compared to 0% of the women without such a history.

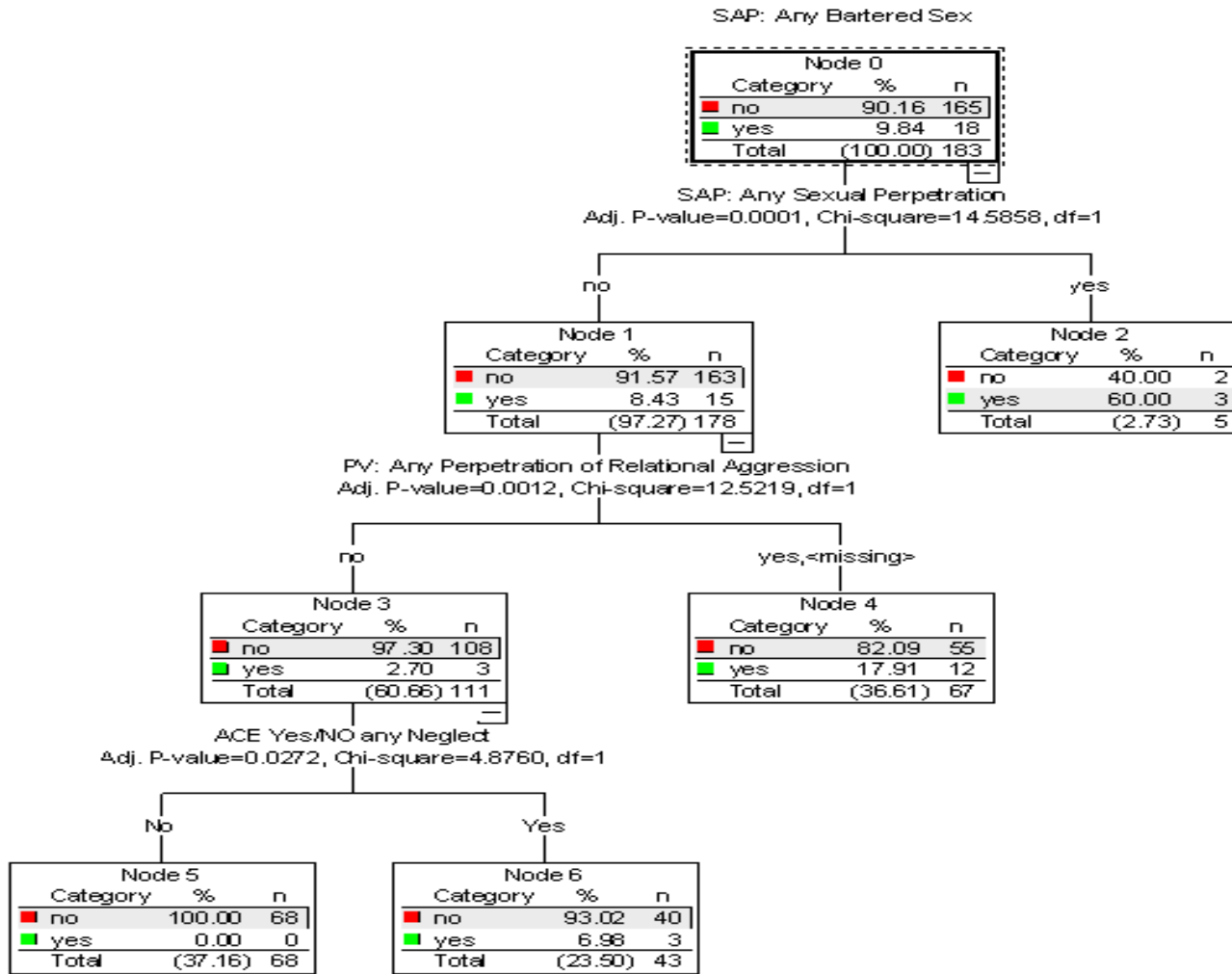


Figure 9. CHAID Analyses for Sexual Bartering for Female Inmates.

Model Predicting Consensual Sex for Female Inmates

Risk estimate for model (% of misclassified cases) = 0.163, SE = 0.027

Cross validation risk estimated = 0.345, SE = 0.035 N = 183

False Positives: 11 cases

False Negatives: 19

True Positives: 66

True Negatives: 87

Sensitivity (True + rate)	0.776
Specificity	0.888
PPV	0.857
NPV	0.820
False + rate	0.112
False – rate	0.224
Accuracy	0.836

The model correctly classified roughly 84% of all cases and had a sensitivity rate of 78% and a specificity rate of 89%. False negatives were more common than false positives.

Among the sample, 85 inmates reported consensual sexual activity in prison (46.5%). Sexual orientation was the best predictor of consensual sex; women who self-identified as homosexual or bisexual were more likely to report consensual sex than women who self-identified as heterosexual (85.7% vs 32.1% respectively; $\chi^2 = 41.5$, $df = 1$, $p < .001$).

Among women identifying as heterosexual, those who reported physical victimization while in prison were more likely to report consensual sex than those denying physical victimization (58.3% vs 22.5% respectively; $\chi^2 = 15.56$, $df = 1$, $p < .001$). Among women reporting physical victimization, those who were older than 39 at the time of their offense were less likely to report consensual sex than those who were younger than 39 (77.8% vs 0% respectively; $\chi^2 = 16.8$, $df = 1$, $p < .001$). Among women denying physical victimization, those with thoughts of harming others were more likely to report consensual sex than those without those thoughts (63.6% vs 17.2% respectively; $\chi^2 = 12.1$, $df = 1$, $p < .01$).

Among women identifying as homosexual or bisexual, women reporting Schizotypal PD symptoms were more likely to report consensual sex (62.5% vs 97.0% respectively; $\chi^2 = 10.5$, $df = 1$, $p < .01$). Among those with symptoms, women who reported orgasms in prison were more likely to report consensual sex (100% vs 0% respectively; $\chi^2 = 5.76$, $df = 1$, $p = .05$).

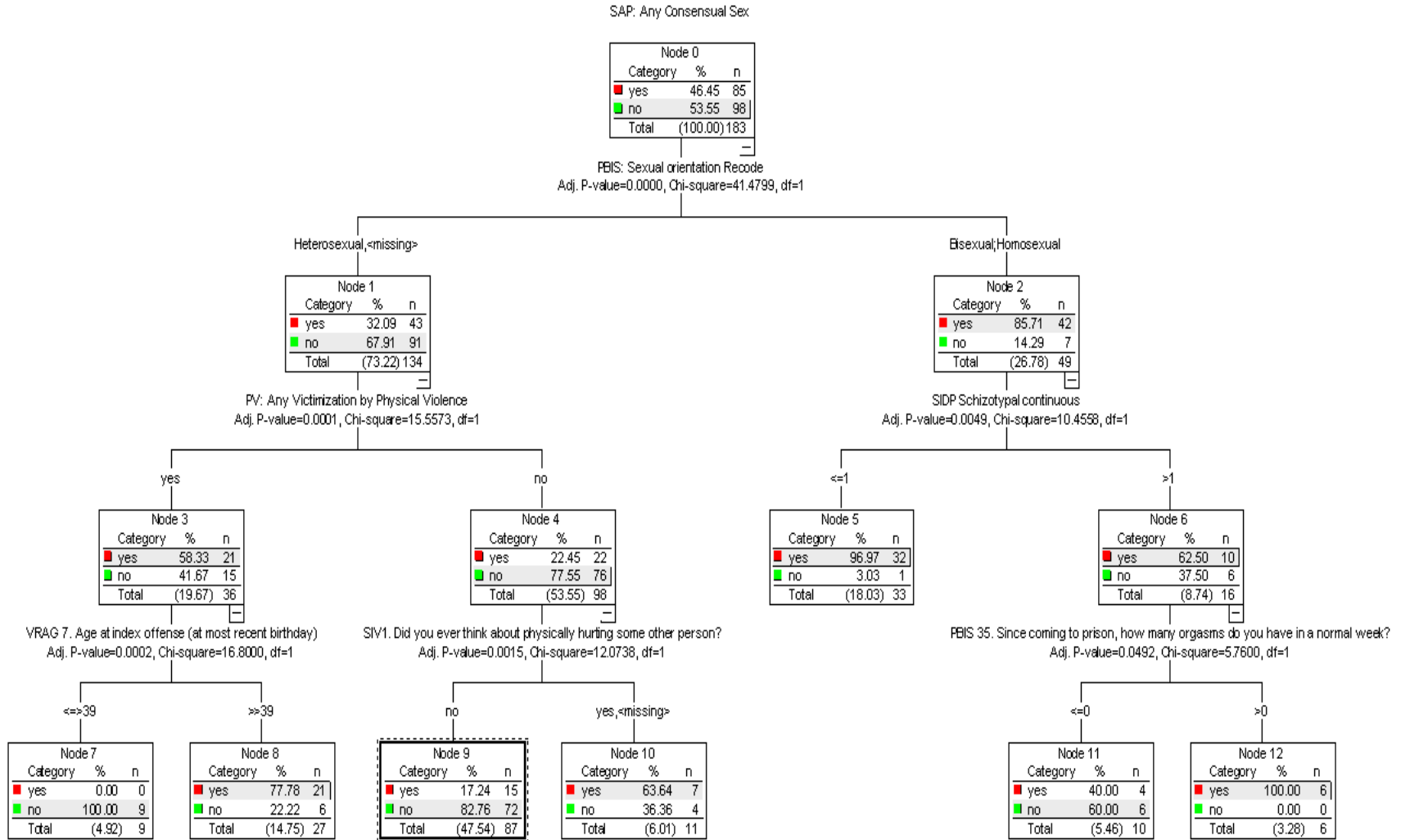


Figure 10. CHAID Analyses for Consensual Sex for Female Inmates.

Conclusions

Although still exploratory in nature, these classification analyses offer us some room for speculation about the prediction of sexual behavior in prison. First, it appears that with further study and replication, we will be able to develop predictive paradigms that will alert institutions to the individuals at highest risk for sexual predation and victimization in prison. Second, these predictive endeavors appear to optimally integrate characteristics and past experiences of the individual inmate, aspects of their behavior and adjustment since arriving in prison, and attributes of the prison system as reflected in state differences in the exploratory models. Third, these preliminary models reflect significant gender differences with there being very little overlap in the variables that are most significant in the prediction of the different types of sexual behavior as manifest by the male and female inmates. Fourth, these models differ from one type of sex to another although there is some predictive affinity between the different types of sexual behaviors, primarily among the male inmates. Fifth, the full expanse of variables relevant to these models underscores the importance of exploring a full array of historical, clinical, and criminogenic variables along with the full continuum of the sexual and violent behavior that is manifest by the individual in the prison environment.

Rates of sexual predation vary greatly between the male and female inmates. Of the overall sample, 35 men (12.2%) admitted to sexual perpetration in prison. In contrast, only 5 women (2.7%) admitted to sexual perpetration in prison. Among the male inmates, sexually predatory behavior was most powerfully associated with sexual victimization. This was an interesting finding as it argues for the deconstruction of the predator-victim distinction often used in describing sexually violent acts, at least among men in prison, and suggests a reflective combination of behaviors that characterize the experience of a single individual. Our data did not allow us to determine whether the one behavior motivated or necessitated the other or if both were part of a violent adaptation to prison life. The relevance of threatened physical violence and diagnostic elements of Antisocial PDs to the same predictive model, did however, lend some support to the hypothesis of a violent sub-culture among the male inmates and the interplay of predation and victimization that occurred within this particular grouping of inmates. State differences also remained within model suggesting that either the prison system or the inmate population contained within it affected the rates of sexual predation that occurred within the various institutions across Ohio and Texas. This finding was supported by the epidemiological research conducted by the BJS which also found some of its highest rates of sexual assault in state prisons in Texas. A history of head injury with loss of consciousness further predicted sexual predation with a threefold increase among one arm of the classification tree. This finding coincides with other violent risk research which has confirmed an association between head injury with loss of consciousness and various forms of violent behavior.

It was not possible to create a valid model of sexual predation for female inmates with a sample size of 5 women. It is interesting to note, however, that all of these women scored over 29 on the HCR:20, the structured violence risk assessment used in the current study. Given the instrument's use of historical, clinical and risk markers, this finding suggests that sexually predatory women in prison are characterized by many of the same risk markers as men and women who are at higher risk for violence in the community and various types of institutional settings. The predictive inclusion of having had an orgasm in prison may be tautological to the model or alternatively a marker for the hyper-sexuality that characterizes a minority of the women in our sample.

Of the overall sample, 44 men (15.3%) admitted to sexual victimization in prison. For the male inmates, sexual predation was the most powerful predictor of victimization. Men who admitted to sexual perpetration were almost four times more likely to admit victimization than those who denied sexual perpetration. Within this group, size mattered with men weighing less than 164 pounds being four times more likely to be sexually victimized than those who weighed over 164 pounds. Among the second group of male victims -- those who were sexually victimized but who denied being involved in sexual predation -- were individuals who expressed worry and fear about being sexually assaulted by other inmates, who had experienced suicidal ideation at some time in the past, and who were non-violent in their behavior were also at an increased risk for sexual victimization. These distinctions between groups suggest two pathways to sexual victimization for male inmates. One appears to involve a retaliatory outcome associated with a violent and aggressive stance toward other inmates. The other reflects a more vulnerable presentation that is associated with a fearful experience of being in prison combined with suicidal ideation or alternatively no fears of sexual assault but being over the age of 40 years at the time for first violence.

The rate of sexual victimization was higher among the female inmates (26.6%) than among the male inmates (15.3%). The best predictor of sexual victimization among the female inmates was having been simultaneously the victim of threatened physical violence by other inmates. Among this group, a portion of the women reported having perpetrated relational aggression against other inmates, and the other segment of women, more pronounced concerns about being sexually assaulted by correctional staff. Among the second group of female victims, women who had not been victimized by threatened physical violence in prison, one portion was characterized by higher levels of fear concerning sexual assault by correctional staff and the other with higher continuous scores on diagnostic criteria of Histrionic PD. These findings suggest, as we found with the male inmates, that there were two pathways that lead to sexual victimization among the female inmate. One group is victimized by threatened physical violence but appears to play a role in this through the perpetration of relational aggression against other inmates. The other group is free of other forms of victimization yet reports either higher levels of fear of sexual

assault by prison staff or more symptoms of a dramatizing and attentions seeking personality style. These pathways again point toward a role that the victim plays in instigating or attracting victimizing experiences based upon their own behavior in prison.

More male inmates (12.9%) than female inmates (9.8%) admitted to sexual bartering in prison. Male inmates who acknowledged sexual bartering were five times more likely to have been predatory in their sexual behavior than those who did not. Among this group, those who were less angry as assessed on the NAS Arousal score and who were more confident that the warden would take claims of sexual assault seriously were more likely to be involved in sexual bartering. Among those inmates who did not describe themselves as being sexually predatory, most were threatening toward other inmates, and among these inmates more likely to manifest inappropriate anger as assessed as one criterion of Borderline PD. These two pathways both confirm the impression of bartered sex being more aggressive than coercive in nature and suggests that some inmates see it as a manipulative way of obtaining both sex and goods in an environment in which sexual assault would be taken seriously by the prison administration.

As with the male inmates, sexual perpetration was the best predictor of sexual bartering among the female inmates. Those who reported sexual perpetration were seven times more likely to report bartering than those who did not. Among the female inmates who denied sexual perpetration, sexual bartering was associated with relational aggression among one group and a history of childhood neglect among the other. As with the male inmates, these pathways argue for a more aggressive interpretation of the bartering that occurs in prison. However, unlike with the male inmates, it is also associated for some women with neglect in childhood and the lack of familial support that might be implied by this early life experience.

Consensual sex was reported by 127 male inmates (44.4%) and 85 female inmates (46.5%). Among the male inmates, sexual perpetration was the best predictor of consensual sex. This group of male inmates was also characterized by at least one of the TCO override symptoms (most often believing that others intended to do harm) and having had trouble with establishing and maintaining relationships in adolescence. For those who denied sexual predation, consensual sex was associated with threatened physical violence, relational violence, and paternal drug addiction.

Among the female inmates, sexual orientation was the best predictor of consensual sex. Women who self-identified as homosexual or bisexual were two and one half times more likely to report consensual sex than women who self-identified as heterosexual. Among this group, having more symptoms of Schizotypal PD and reporting having reached orgasm with a partner in prison were also associated with

consensual sexual contact. For the women who described themselves as heterosexual, consensual sex was associated with physical victimization in prison, being under the age of 39 years, and having had thoughts of harming others in the past two months as measured by the Schedule of Imagined Violence (SIV).

These findings further support the image of sex in prison being an aggressively tinged experience regardless its label or intent. Despite the majority of the male inmates reporting that their consensual sex occurred with members of their prison staff, these inmates were none the less more predatory in their behavior and distressed in their social relationships. Similarly, heterosexual females who reported consensual sex usually with other inmates, reported having perpetrated more threatened physical and relational violence and having experienced more thoughts of harming others in the past two months. Interpreted most broadly, these findings suggest that inmates of both genders who chose to be sexually active in prison are generally more troubled by violence – both as perpetrator or victim – and that they have more frequent thoughts of either harming others or of being harmed by them. These behavioral or cognitive correlates appears to constitute a more violent sub-culture in which these aggressive and sexual experiences co-occur at higher rates than among prisoners who are not involved in either type of interpersonal behavior.

Chapter Twelve

Conclusions and Recommendations

Our research was exploratory and sought for the first time to apply empirically validated static and dynamic risk makers for violence in the community to sexual predation and victimization in prisons. This translational process proved to be fitting to the goals that we had articulated at the beginning of our project and culminated in the construction of conceptual models for predatory, victimized, bartered, and consensual sex in prison. The models were characterized by good to excellent (.70 to.99) accuracy with high levels of sensitivity and relatively low levels of specificity. These statistics suggest that our casting of a wide net for predictive risk markers was successful in orienting us to the various risk domains that might be most useful in predicting various types of sexual behavior in prison. The differential ability of the models to identify sexually active individuals more adeptly than sexually inactive individuals further underscores the value of these models for informing broad based educational and violence reduction strategies. However, the low levels of specificity alert us to the need for replication and refinement before any of the risk markers or conceptual models are integrated into investigative strategies or prosecutorial endeavors.

In reflecting on the overall significance of our study, there are two intertwined observations that are crucial to an informed understanding of the various outcomes of the project. These two observations reflect different perspectives on the same phenomenon and provide two important lenses through which sexual behavior in prison is best understood experientially and programmatically. The first of these emerged from our decision to include different types of sexual activity in our definition of the outcome measures and to explore all of these behaviors through our multivariate statistical analyses. At the beginning of the study, we decided to step out of the mandated focus on predatory sex and sexual victimization, choosing instead to include in our instrumentation and interviews the full continuum of sexual behaviors that we had come to believe took place in prison. As described in our introductory chapter, this decision was motivated by trends that we began to discern in the research literature as well our experiences we went out into the field to begin our pilot testing. Our initial conversations with wardens and inmates began to suggest to us that a singular focus on predation and victimization might turn into the proverbial search for the needle in the haystack with considerable expense and professional effort embedded in it while missing the complex set of sexual interchanges that were routinely occurring in the prisons that we were scheduled to study.

Auspiciously, this more inclusive approach proved rich in meaning and came to constitute the foundation for all the most important findings of our study. Firstly, it documented with substantive detail the fact that there is a significant amount of sexual behavior occurring in our prisons across the country. This sex is occurring despite firm institutional regulations prohibiting it and in the context of increasingly criminal sanctions regarding it. This sex is varied in form and intent and can be based upon different types of relationships between the inmates and with members of the prison staff. Some of the sex is coerced, other is not. Some involves relationships between same gendered inmates, others illicit relationships with members of the prison staff. The intent of the sex is also found to vary at times reflecting a predatory imposition of a degrading experience upon another, at other times a bartered exchange of goods and interpersonal commodities, and at other times, the consensual exchange of sexual gratification often designed to obtain immediate pleasure and future control of another individual. These different domains of sexual behavior are not substantially different than those found in the community but they are made unique in the prison environment by the fact that they are prohibited, commonly involve single-gendered pairings by heterosexual individuals, and entail two adults, one of whom might be deemed capable of giving consent while the other is not.

Secondly, our data analyses further deepened our understanding of these sexual exchanges by demonstrating that the different kinds of sexual behaviors were significantly correlated and that our sex-specific distinctions, when applied to descriptions of an individual, were misleading if not illusory. In developing our risk models, we found that the male inmates engaged in more predatory, bartered, and consensual sex with visitors or staff while the female inmates engaged in more bartered and consensual sex with other inmates. However, these different types of sex were found to correlate in many significant ways suggesting that inmates who engage in one type of sex are far more likely to be involved in the other types of sex and that these inmates are different in many substantial ways from the inmates who adopt a largely asexual stance while living in prison. These correlations were less apparent initially among the female inmates when examining their vulnerability to victimization, yet even among the female inmates, predatory, bartered and consensual sex correlated consistently across their self reported behavior. Fleisher and Krienert (2006) came upon a similar set of observations as part of ethnographic study of prison sex and referred to this panorama of sexual behaviors as the “sex scene” in prison.

Our findings, while affirming empirically the importance of this integrated aspect of prison life, offered a different interpretation of the meaning and origins of these behaviors for the individual and for the institution. Specifically, the sexual behavior that we encountered across the different prisons and different prison systems states was consistently associated with higher levels of threatened, physical, and relational violence within both the male and female institutions. Similarly, many of the risk makers for sex

in prison were the same as those that have been identified as predicting violent behavior in the community. Inmates who experienced conduct problems as juveniles, who had problems in establishing relationship with others during adolescence, who had past history of early violence, and who suffered from one of the Cluster B personality diagnoses tended to be more sexually active in prison. The HCR: 20 used to predict violence risk in the community was found to correlate with the different types of sexual behavior in prison for both the male and female inmates. Further, various affective states such as anger, impulsivity and violent thoughts to self and others, often associated with reactive forms of physical violence, clustered in our sample among those whose reported involvement in predatory, victimized, bartered, or consensual sex while incarcerated. This affinity between sexual and aggressive behavior in prison suggest that it is not merely a “sex scene” that defines the behaviors of some inmates, but rather engagement in a turbulent set of interpersonal relationships that are sexual, aggressive, and occasionally violent. This turbulence seems to have been reflected in chaotic early lives, domestically violent relationships prior to coming too prison, and an adjustment to prison that is tinged with hostility in its many forms. The impetus for this kind of behavior seems to lie in the past expressed through the personality into the present where it recreates the same interpersonally distressed mêlée as was apparent in the sexual and intimate lives of these individuals before they came to prison.

It is with these over arching observations in mind that we will now turn our attention to our initial research questions and use these to organize our findings as they might best inform programming and policy. We present these findings in the hope that they will contribute to the effort of the PREA legislation to make prisons more humane and dignified while also developing interventions that will minimize unintended hardship for the inmates and correctional staff who live and work within them.

Is it possible to combine individual-specific dynamic and static risk factors to create a model to predict which inmates are most likely to be at high risk for perpetrating sexually aggressive behavior in prison prior to a first sexually violent event?

The empirical scaffolding of our study lay in the identification of eight domains of risk factors for violent behavior including sexual predation in the community and in prison. We sought these risk markers through a thorough review of the clinical violence risk research, criminological research concerning sexual violence in the community and in prison, and the development of risk classifications schemes for incarcerated men and women. This review directed us to the potential relevance of a wide array of historical, criminological, clinical, and contextual risk factors that included: early adverse life experiences; prior adolescent and domestic violence; criminality and prison violence; hyper-sexuality and impersonal sexuality; affective and cognitive states including anger, impulsivity and thoughts of harm; personality traits and disorders including psychopathy; extant risk instruments for violence including the COVR,

HCR:20 and VRAG; and the social environment as reflected in the attitudes and behaviors of the correctional staff in each institution. Our analytic strategy focused on an initial examination of gender differences on each of the individual risk makers followed by an examination of the bivariate association of each of these risk makers to the five categories of sexual behavior (any-sex, predatory, victimized, bartered, and consensual) that was self reported. Following this level of analyses, all significant risk makers were entered into the CHAID analyses for each of the five categories of sexual behavior. This process culminated in the building of five valid risk models for the male inmates and four valid risk models for the female inmates (only five women reported sexual predation limiting our model building efforts). This model building process and the risk models that resulted from it were different across genders for all five of our outcome measures.

Through this analytic process, we were able to build a *Male Sexual Predation Model* that predicted sexual predation among the male inmates using variables that did not rely on past incidents of sexual violence. The *Male Sexual Predation Model* correctly classified roughly 89 percent of all cases and had a sensitivity rate of 98 percent and a specificity rate of 26 percent (see page 255, Figure 2 for the CHAID diagram)

Of the overall sample, 35 men (12.2%) admitted to sexual perpetration in prison. Among this group of male inmates, sexual victimization was the most powerfully risk maker associated with sexually predatory behavior in prison. Thirty four percent of the males who admitted to sexual victimization also admitted to being sexually predatory toward others. This was compared to eight percent of those who did not report any prior sexual victimization. As mentioned, this intermingling of victimization and predation argues against more traditional depictions of these terms as reflecting different inmates and suggests instead that the two experiences are in some ways like two sides of the same coin and combined in the sexual experience of a single individual, at least when they are living in prison.

Following from this initial decision point, two other groups appeared within the *Male Sexual Predation Model*. Among the inmates who did not report sexual victimization, those who reported perpetrating threatening violence against others and who were incarcerated in Texas were many times more likely to report sexually predatory behavior. Among those who did report threatened violence, inmates with continuous scores of six or more on the diagnostic criteria for Antisocial Personality Disorder were more likely to report sexually predatory behavior. A history of head injury with loss of consciousness further increased the likelihood of sexual predation by a factor of three among this group of inmates.

When these numbers are extrapolated to the male prison population across the country, they suggest that approximately one in ten male inmates endorse involvement in some type of contact (4.2 %) or

noncontact sexually predatory act (11.5%) toward either another inmate or members of the prison staff. The risk factors that predict this behavior are found to be both individual and systemic and to reflect behavior in the present and impairments from the past. The reflective nature of these behaviors combined with the presence of Antisocial Personality Disorders and at least one head injury with loss of consciousness point towards a particular sub-group of inmates who are impulsive and somewhat reckless and who are involved in reciprocal violence with other inmates. The presence of state differences, however, also suggests that there are prison specific differences that mediate these behaviors either through administrative edict or the racial mix of the inmates that populate the various prisons. These systemic differences converge with the BJS research which documented some of the highest rates of sexual assault within the Texas prison system.

We were unable to create a valid model for sexual predation among the female inmates as the rates of self reported sexual predation were too low. Of the overall sample, only 5 women (2.7%) admitted to sexual perpetration in prison.

However, to inform future research we did conduct a CHAID analysis on these data and surprisingly created a model that correctly classified roughly 99 percent of all cases and had a sensitivity rate of 99 percent and a specificity rate of 80 percent. The CHAID diagram of this model is displayed in Chapter 10 on page 263, Figure 7.

In these analyses, HCR:20 scores were the best predictor of sexual perpetration in women. Women who scored over 29 on the Total Score of the HCR:20 and who reported having had an orgasm with a partner in prison were more likely to report sexual predation (80% versus 0% respectively).

Although preliminary in nature, these findings do point to the programmatic usefulness of the HCR:20 in identifying sexually violent women in prison. Theoretically, they suggest that sexually violent, incarcerated women are characterized by many of the same historical, clinical, risk factors that predict community and institutional violence among both male and females. The significance of orgasmic activity with a partner may reflect a homosexual or bisexual sexual orientation or conversely the impact of a more intense sexual drive, two variables that were found to be associated with predatory sex by female inmates in the initial bivariate series of analyses.

Is it possible to combine individual-specific dynamic and static risk factors to create a model to predict which inmates are most likely to be at risk for being sexually victimized in prison prior to a first experience of victimization?

Our CHAID analyses were successful in building a significant *Male Sexual Victimization Model* and a *Female Sexual Victimization Model*. Past victimization was not included in either of these models. The CHAID diagrams of these two models are displayed on page 257, Figure 3 and page 267, Figure 8.

Of the overall sample, 44 men (15.3%) admitted to sexual victimization in prison. As with the previous model, sexual predation was the most powerful predictor of victimization. Men who admitted to sexual perpetration were almost four times more likely to admit victimization than those who denied sexual perpetration. Within this group, physical size mattered with men weighing less than 164 pounds being four times more likely to be sexually victimized than those who weighed over 164 pounds. A second group of male victims reported no prior sexual predation. Among this group, a more vulnerable psychological state seemed most influential in their victimization. This experience was characterized by more worries and fears of being sexually assaulted by other inmates, having experienced suicidal ideation at some time in the past, and being essentially non-violent prior to and during their incarceration.

The rate of sexual victimization was higher among the female inmates (26.6%). The most powerful predictor of sexual victimization among the female victims involved simultaneously being the recipient of threatened violence by other inmates. This first tier effect suggests that sexual victimization is paired for most women with other types of victimization and that they appear to experience themselves as being vulnerable in a number of different ways. However, similar in some ways with the *Male Victimization Model*, a proportion of these female inmates reported having perpetrated some type of relational violence against the other inmates. This group was twice as likely to report sexual victimization when compared to those who had not participated in this type of behavior. A second group of female victims reported higher levels of concerns about being sexually assaulted by correctional staff and demonstrated more consistent symptoms of Histrionic Personality Disorder. These findings suggest that the first group of female victims is entangled with other inmates in a reciprocal dynamic of aggressive and intrusive interactions while the second is more concerned about unwanted sexual interactions with staff which may to some extent be elicited by their own attention seeking behavior.

In reflecting on the *Male Victimization Model*, we were reminded of two forms of adaption that we observed or heard reported to us by male inmates. Many of the inmates in higher security units were physically fit and robust with well defined musculatures, an effort that required rigorous exercise regimes often maintained over long periods of time, alone, in their single cells. Other inmates described to us the importance of fighting when they first entered the prison, often as young ages, to ensure that this would build an institutional image that would protect them over the course of their incarceration. Both of these adaptations reflect an intuitive response to the factors that, in fact, are shown empirically to place them

at higher risk for sexual victimization, size and history of violence, regardless of security level or placement in a particular state institution.

The multi-tiered nature of the *Male Victimization Model* and the *Female Victimization Model* further alerts us programmatically to the multiplicity of victim types and the importance of designing programs that are responsive to the behaviors that are associated with each of them. The retaliatory nature of some victimization requires that the cyclical nature of these behaviors be addressed with the inmates and that the less egregious behaviors addressed as incubators for the more problematic types of sexual victimization. For example, promiscuity among males and relational aggression among females constitute significant risk markers for victimization. For the more vulnerable victims of both genders, the affective instability of the men and the provocative behavior of the women can be attended to through programs designed to create resiliency to the different types of victimization that they might experience. Each approach underscores the behaviors that increase risk and which use behavior of the victim to strengthen their position in the institution and inoculate them against multiple forms of victimization. Systemically, these combined behaviors also suggest that individual victimization is not only a problem for the individual but also one tendril of the network of behaviors that contribute to some of the most explosive behavior that must be handled by both the male and female prisons across the nation. Routinely, the wardens told us of the violence and bloodshed that they have encountered often traced back to the jealousy and distress that is paired with the romantic and sexual lives of the inmates. Akin to the links proposed between nuisance behavior and violence in the broken window theory of violence prevention, the behavioral risk markers for sexual violence represent viable and productive entry points for interventions that might change the inner dynamics of this sexual world and provide alternatives to unidimensional efforts to create higher and more consistent levels of social control.

Fleisher and Krienert (2006) concluded based upon their interviews that the inmates' definition of victimization is quite different than that associated with it in community settings. They suggest that coercion is not defined in prison by the sexual act but rather the circumstances that proceed and follow it. For example, they observe that an inmate who voluntarily submits to threats ("Do it or I'll take you") is considered to have participated in a consensual sexual act with another. If the act is justifiable, for example retribution for a debt, it also seems as justifiable and the victim is often blamed because they allow themselves to be perceived as weak. If an inmate does not fight back, it is also interpreted as consensual and assumed that the inmate "really wanted it." These different interpretations have not been examined empirically but they do highlight the complexity of the behavior being studied and the importance of integrating the inmates' interpretation of these behaviors into the programming that is designed to interrupt or alter its expression in particular prison environments.

Are these risk markers and model building efforts gender specific, and if so, what are the primary differences for males and female inmates?

Each of the five risk models for sexual behavior in prison (any-sex, predatory, victimized, bartered, and consensual) differed one from the other and also differed across genders. These differences reflected different vulnerabilities and reciprocal forms of behavior that were distinct and unique in their significance to the individual models. As such, they demonstrate the importance of understanding prison sex differentially for men and women and developing programs that are responsive and receptive to these gender specific needs. When considered in the context of the extant literature, these differences support the premise of predictive diversity argued by Cunningham and Sorensen (2006) and argue against the comparability position of Harer and Langan (2001) who assert that the contributory factors for prison violence are the same, albeit at different levels, for male and female inmates.

Many other interesting and thought provoking gender differences emerged throughout the analyses of our data. Both genders reported remarkably similar rates of non-contact and contact consensual sex in prison (44.4% versus 46.5%) although the male inmates described these encounters occurring with visitors or staff and the female inmates with other female inmates. We also learned that consensual sex was initiated within a month of arrival at the institution, whereas the male inmates reported taking a year to initiate a consensual relationship with a correctional staff or inmate.

Consensual sex was reported by 127 male inmates (44.4%) and 85 female inmates (46.5%). Among the male inmates, sexual perpetration was the best predictor of consensual sex, with 91.4 percent of those reporting sexual perpetration also reporting consensual sex, as compared to 37.9 percent of those denying sexual perpetration. This group of male inmates was also characterized by at least one of the TCO override symptoms (most often believing that others intended to do harm) and having had trouble with establishing and maintaining relationships in adolescence. For those who denied sexual predation, consensual sex was associated with threatened violence, relational violence, and paternal drug addiction.

Among the female inmates, sexual orientation was the best predictor of consensual sex. Women who self-identified as homosexual or bisexual were two and one half times more likely to report consensual sex than women who self-identified as heterosexual. Among this group, having more symptoms of Schizotypal Personality Disorder and reporting having reached orgasm with a partner in prison were also associated with consensual sexual contact. For the women who described themselves as heterosexual, consensual sex was associated with physical victimization in prison, being under the age of 39 years, and

having had thoughts of harming others in the past two months as measured by the Schedule of Imagined Violence (SIV).

These differences empirically and based upon our interviews with the inmates consistently reinforced our impression of the profound gender differences that characterize the experience of sex in prison for male and female inmates. The female inmates were open about their sexual involvement with other women, referring to it rather lightly as “gay for the stay,” and at times sharing it with their heterosexual partners during visitation as part of their shared sexual conversation and interaction. The males were far more covert in their behavior and descriptions. While they would at times describe their move toward same sex encounters or their observations of aggressive and brutal rapes within their institution, it was clear that these experiences would remain hidden within the wall of the prison and never be a part of the formal narrative of the time they spent in prison and/or the friendships that they developed within this milieu.

We also found that male inmates reported more bartered contact sex (12.9%) than the female inmates (9.8%) although the rates of noncontact, bartered sexual activity was comparable across genders (12.5% versus 8.2%). The male inmates bartered more using both contact and noncontact sexual activity with correctional staff and visitors while the female inmates reported more noncontact sexual bartering with other inmates. When they were asked the commodities that were being sought, the male inmates identified wanting to obtain privileges from staff; followed by obtaining money, goods, or canteen items; and ending with the wish to obtain drugs or alcohol. Women attributed their sexual bartering to the wish to increase status and to obtain money, goods and canteen items. These findings motivated many discussions among the research team as to whether bartered sex was conceptually more like consensual sex or more like coerced sex. Our findings suggest that both the male and female inmates use bartered sex to obtain concrete and psychological benefits and that they self-describe themselves as obtaining a well defined benefit from the exchange. We further found that bartering correlated with psychopathy, a construct that reflects a callous and manipulative stance toward others. This finding was congruent with the CHAID analyses which found that sexual predation was the best predictor of sexual bartering for both the male and female inmates.

The CHAID analyses further revealed three distinct groups of individuals who engaged in bartered sex in prison, and these were very different for the male and female inmates. For males, sexual predation was the first predictor variable followed by low Novaco Anger Scale anger score and a belief that wardens would take sexual assault seriously. A second group of male inmates were characterized by threatening behavior in prison and anger as reflected in the diagnosis of Borderline Personality Disorder. The females who reported bartering sex were also more predatory and tended to more often be involved in

perpetrating relational aggression against other inmates. However one subgroup of women did not report any of these violent tendencies but did report experiencing neglect as children, suggesting that they had learned to survive on their own and that bartering might be another survival technique in a harsh environment where resources are scarce.

More generally, as observed by Kinsey et al. (1948) many years ago, we found that the inmates in both our male and female samples reported sexual interests that far exceed those of the general population. Almost 40 percent of the male inmates and 17 percent of the female inmates reported a level of sexual desire that is currently diagnosed as hyper-sexuality in the research and clinical literature. These individuals tended to experience over eight orgasms a week while living in the community and a small proportion of these individuals, primarily the males, continued this rate of orgasmic activity during incarceration. The presence of this high level of sexual interest was not associated with sexual predation among either the male or female inmates. As such, this finding argues against the deprivation theory of prison rape and suggests that sexual desire is not the primary factor that motivates aggressive sexual assault in a prison environment. However, these elevated levels of sexual desire were associated with higher rates of consensual sex during incarceration among the female inmates. Similarly, while impersonal and promiscuous sexuality as coded on the PCL-R2 was not associated with any of the indices of prison sexual behavior for the male inmates, it was associated with any-sex, predatory sex, and consensual sex for the female inmates.

The sexual orientation of the inmates also differed within and across the male and female samples. Homosexual males were under-represented among the male sample and they were more likely to be sexually victimized. They were also less likely to self report involvement in any type of bartered sex during their incarceration. In contrast, homosexual women were over-represented in the female sample and reported more predatory, bartered, and consensual sex during incarceration. This factor seemed to overshadow any of the physical characteristics of the women with height and weight being unrelated to these indices of sexual behavior. For the men, a slighter build associated with less weight and more height was associated with higher level of sexual victimization.

These findings concerning sexual orientation may help to explain the observation that more women become involved in same sex encounters while incarcerated, and as a gender, are more comfortable with bisexuality and the prison adaptation referred to as "gay for the stay." Only six male inmates (2 percent) described themselves as being bisexual in sexual orientation (despite 5.9 reporting sexual contact with other inmates) whereas 34 (19 percent) of the female inmates self-identified in this way (with 26.2 percent reporting sexual contact with other inmates). It is not clear if this difference reflects a self-identity

that existed prior to incarceration or evolved, at least for the women, as a result of their experiences while incarcerated. It may be that women tend more often to identify themselves as bisexual after a sexual encounter with a woman whereas men maintain a self identification of being heterosexual even amidst same sex physical contact. Alternatively more men did report consensual sexual encounters with female correctional staff suggesting that they may, in fact, creatively develop these boundary crossing relationships either to maintain their sexual identity as heterosexual men or because of a more innate disinterest in the sexual appeal of other men.

Hensley, Tewksbury and Wright (2001) provide some interesting data on the topic of changing sexual identity among inmates. Inmates were asked to identify their sexual orientation prior to coming to prison and then were asked their sexual identity after incarceration. Before prison, 79% of respondents considered themselves heterosexual, 6% homosexual and 15% bisexual. After incarceration, these same individuals self-identified as 69% heterosexual, 7% homosexual, and 23% bisexual. Throughout our study, we were struck by this observed fluidity in the sexual orientation of these individuals and the powerful nature of the intimacy seeking behavior of some inmates. While not suggesting that object choice and sexual orientation are purely social constructs determined by social expectation, these observations did underscore for us the malleability of the human being and the powerful nature of the drive for attachment and interpersonal connectedness.

What is the interplay of sexual coercion in the larger pattern of sexual behavior occurring in prison either between inmates or with correctional officers and staff?

Our decision to study not only the different types of sexual behavior but also the different dimensions of violent behavior in prison provided a rich context for understanding the relationship between these various types of institutional behaviors. As discussed above, male inmates who acted in a sexually predatory way toward others were also at elevated risk for being sexually victimized. These same individuals were more likely than other inmates to be involved in bartered sex and consensual sex with other individuals, as often with members of the prison staff as with other inmates. Moreover, these same inmates demonstrated a higher propensity for being involved in different types of physical and relational violent with other inmates. The female inmates were far less predatory in their sexual behavior but when they were, they were similarly involved in the full array of sexual behaviors often paired with relational aggression and threatened violence toward others. More often, the women reported being involved in consensual sexual relationships with other inmates and on occasion being sexually victimized by others.

It was this pronounced co-mingling of aggressive and sexual behavior in prison that led us to reinterpret its meaning and intent. While we began the study assuming that consensual sex reflected a mutual bond

of affection and personal affinity, we ended the study understanding that it was often tinged with aggression either through the choice of partner, the interpretation of the sexual act itself, or the introduction of violence as the relationship progresses from the start to its tumultuous end. The commonality of shared risk factors for sex and aggression further convinced us of the importance of articulating a more differentiated understanding of sex in prison. Rather than being a sexual experience altered in some instances by the single gendered nature of the participants, it seems to further represent an experience that is embedded in a more aggressive set of interactions manifest by a more aggressive subset of inmates. While this observation is not meant to dispute the possibility of a mutual, shared, and intimate sexual experience between inmates in prison, it does argue for a more nuanced assessment of the meaning and impact of the sexual behavior that is described by the inmates and the role that impulsivity and violence may bring to it. The significance of these distinctions are heightened by our data that clearly demonstrated that paired sexual behavior is not an inevitable outcome of incarceration. Approximately one half of the inmates in our sample adopted a relatively asexual lifestyle and remained unattached and uninvolved in the sexual forays that were unfolding around them. These individuals tended to be older, less antisocial, less violent, and more inclined to avoid all types of aggressive interactions with other inmates. They also tended to demonstrate less trauma and exposure to violence in their childhood, less involvement in the criminal justice system as adolescents, and less violent crime prior to their current incarceration. Less sexual experience prior to coming to prison, in particular less lifetime sexual partners and being over the age of eighteen at the time of first sexual experience, also lessened the likelihood that either the male or female inmates would be involved in sexual interactions during incarceration.

What is the role of contextual factors in ameliorating or aggravating the impact of these individual based violence risk markers and what is their relevance to programming and policy?

Within this larger social context, our study confirmed the significant rates of single gendered sex that is occurring across the nation in both our male and female prisons. This aspect of prison life is familiar to the inmates and staff working in these confines but represents an aspect of incarceration that often goes unrecognized by the larger community. Individually, these relationships often stand in stark contrast to the established sexual identity of the individuals who are involved in them. Institutionally, they create a chronic undercurrent of hidden intimacy and relatedness that cannot be eradicated and which is interpreted differently by wardens working with different genders at different levels of security. On the level of the wider community, same sex encounters and same sex romantic relationships contradict the social mores of most constituencies and call into question many of our implicit assumptions about gender identity and the nature of human sexual arousal. The hidden feature of this aspect of prison life also has long term effects on the inmates themselves and those with whom they reconnect when they return to

live in society. Because all sex is technically forbidden in prison, no protections are offered to inmates and the rates of disease transmittal remain unknown to the inmates and to the institutions. It is also our impression that the forbidden nature of these encounters can create turmoil in the adjustment of inmates as they return to live in the community after exposure to high rates of voyeuristic sex and burdened by a sexual secret that cannot be shared with others.

Furthermore, this large divide between policy and experience leaves all employees unprotected and unprepared for this important aspect of their working lives. With little training, they encounter a closed environment with young offenders who are by nature hypersexual, violent, and lacking in the ability to maintain strong, respectful interpersonal relationships, often motivated by racial tensions, and wanting in many ways to express interpersonal dominance. The nature of the laws and the implicit assumptions concerning the vulnerability of the imprisoned inmates further camouflages the seductive charms of the psychopathic male and the allure of the manipulative mercenary female. Laws which frame these encounters or relationships simply as an offense perpetrated by the prison employee fail to take into account this interactive aspect of the victimization that is occurring and the contribution that both individuals bring to it. The difficulty that prisons have in finding qualified and educated prison staff further diminishes the cultural divide between inmates and correctional officers and highlights the importance of training and supervision to help prison staff avoid these inappropriate and disruptive liaisons. The particular vulnerability of female correctional officers was illustrated in our study and paralleled the BJS's research which found that two thirds of the correctional officers involved in sexual relationships with inmates were female with the majority of these relationships being described as romantic in nature.

Over the course of our study, these observations inevitably prompted our interest in the issue of consent in prison and the idea of coercion that is implicit to the status of being a prison inmate. Unlike other contexts in which consent is assumed to be lacking, the majority of these inmates have no mental illness, no impaired cognitive abilities, and no necessary assumption of vulnerability. In fact, many of these individuals are considered dangerous and powerful on the outside but weak and vulnerable once they begin living in the controlled environment of prison. It is obvious that there are strict hierarchical relationships within the prison environment but these operate in many community settings and do not result in felony convictions for those who overstep common sense and good judgment. Ristroph (2006) offers an interesting perspective commenting that sex in the community is assumed to be consensual unless someone complains. This assumption is currently disputed in all prison settings although it is our impression that its application to the prison setting would do much to inform the investigation that are required and minimize some of the intrigue and manipulation that distorts many aspects of our understanding and programming. The sanctions that are being used with prison staff who become

sexually or romantically involved with prison inmates also appear tinged with gender biases that seem unfair and unwarranted. Our experience suggests that, women who become sexually involved with male inmates are simply terminated from their position at the institution. In contrast, male correctional officers who become sexually involved with female inmates are often subject to rigorous arrest and prosecution.

In closing, we would like to underscore the exploratory nature of our research and the preliminary nature of our findings. Our findings will surely require replication across states and types of institutions. We would recommend that this replication begin with the many significant bivariate risk makers that were identified across the eight domains of potential risk markers. These risk makers might well prove of predictive value in multivariate analyses that involve larger samples and we hope that the relevance of them will not be lost in a premature rush toward model testing given the complex nature of the behavior being studied. We also believe that the inclusion of personality data will be central to our understanding of the process by which early trauma is translated into turbulent sexual and aggressive behavior in prison. This type of data is very time consuming and expensive to collect and is mired in a discouraging attitude of therapeutic nihilism. Nonetheless, it is central to understanding not only the symptom level behaviors that need to be addressed and managed but also the individual propensities that unwittingly make some inmates particularly vulnerable to victimization or consistently prone to violence. Finally, we are convinced that time spent reviewing and reflecting upon the issues of consent, the applicability and viability of providing protections against sexually transmitted diseases to inmates who are likely to become sexually active, and the importance and content of boundary training for the correctional staff would benefit the integrity of all prison systems and contribute to an informed and wise approach to managing the sexual behavior of some inmates. This type of preventative approach might well tame some of the passions that disturb many of the daily functions of prison life and provide a less humiliating set of experiences for inmates to hide as they begin their process of reintegration in their families and life in the community.

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Appendix A

Assessing Generalizability

Table A1

Comparison of Participants and Randomly Selected Group of Non-Participants by Gender in Ohio

Variable	Participant Status ¹⁶	Males (n = 324)	Females (N = 298)	
Sample Size	Did not Participate	162	149	
	Did Participate	162	149	
Age	Did not Participate	33.88 yrs	35.86 yrs	
	Did Participate	35.90 yrs t = 1.79, n.s.	37.81 yrs t = 1.67, n.s.	
Minimum Aggregated Sentence¹⁷	Did not Participate	304.26 mo	41.32 mo	
	Did Participate	498.92 mo t = 1.14, n.s.	342.89 mo t = 2.14, p < .05	
Number of Prior Imprisonments	Did not Participate	2.31	.56	
	Did Participate	2.27 t = .09, n.s.	.52 t = .26, n.s.	
Race	Did not Participate	Black	96	65
		White	64	82
		Asian	1	2
		Other	1	0
	Did Participate	Black	85	85
		White	76	64
		Asian	0	0
		Other	1	0
		$\chi^2 (3) = 2.69, n.s.$	$\chi^2 (2) = 2.06, n.s.$	
Security Level¹⁸	Did not Participate	Level 1	2	111
		Level 2	26	38
		Level 3	61	0
		Level 4	72	0
	Did Participate	Level 1	1	123
		Level 2	28	26
		Level 3	62	0

			Level 4	71	0
				$\chi^2(4) = 1.42, n.s.$	$\chi^2(1) = 2.87, n.s.$
Security Threat Group Affiliation ¹⁹	Did not Participate	None		120	149
		Passive		19	0
		Active		6	0
		Disruptive		17	0
		None		130	148
	Did Participate	Passive		16	1
		Active		6	0
		Disruptive		10	0
				$\chi^2(3) = 2.47, n.s.$	$\chi^2(1) = 1.00, n.s.$
Most Serious Offense (Dichotomous) ²⁰	Did not Participate	Violent		128	64
		Nonviolent		34	85
		Violent		127	77
	Did Participate	Nonviolent		35	72
				$\chi^2(1) = .02, n.s.$	$\chi^2(1) = 2.28, n.s.$
Most Serious Offense (Using FEIS Categories) ²¹	Did not Participate	Violent		48	29
		Potentially		43	22
		Violent			
		Other		16	13
		Crimes			
		Against			
		Person			
	Did Participate	Sex		24	0
		Property		13	40
		Drug		11	38
		Minor		7	7
		Violent		57	37
		Potentially		38	25
		Violent			
Other		9	14		
Crimes					
Against					
Person					
Sex		31	1		

Property	7	39
Drug	11	29
Minor	9	4
	$\chi^2(6) = 5.98, n.s.$	$\chi^2(6) = 4.24, n.s.$

Appendix B

Training of Interviewers and Reliability of Interview Measures

University of Virginia Coding Team

To establish consistency in coding for interview measures, coders participated in a series of training experiences followed by independent coding of ten cases by all coders. Due to institutional and logistic constraints at the participating prisons, it was not possible to gain additional reliability estimates during the data collection. We therefore estimated our consistency by coding either in-person interviews with community volunteers or coding of videotaped interviews obtained from Robert Hare.

Structured Interview for Disorders of Personality (SIDP-IV)

Coders included a eleven-person cohort of interviewers. Members included a doctoral-level social worker, a Ph.D. licensed clinical psychologist, a post-master's level social worker, and eight post-masters level doctoral students in clinical psychology.

Coders participated in a two-day workshop regarding the proper administration and scoring of the SIDP-IV, conducted by an experienced clinical psychologist with extensive experience with the instrument. Members subsequently independently coded ten interviews of volunteers recruited from the local region.

Intra-class correlation coefficients evaluated the consistency among raters for the ten interviews for continuous personality disorder scores. Results for the continuous scale scores are summarized in Table B1 and ranged from minimally acceptable ($icc = .60$, histrionic personality disorder) to very good ($icc = .92$, antisocial personality disorder). Agreement regarding diagnostic category (Meets vs Does Not Meet Diagnostic Criteria) was generally low. Further examination of individual protocols revealed that the low reliability largely reflected a narrow range that was a consequence of a large number of "zero" responses.

We therefore sought another procedure to further examine our overall agreement. A "standard" was created representing a best estimate of correct diagnosis (presence vs. absence) for each of the personality disorders. This standard was created by examination of the final diagnostic decisions made by two members of the interview team with the most extensive history of conducting

diagnostic interviews. The two members mutually agreed on decisions regarding cases, and these decisions were compared to those of the remaining team members.

Table B1

Reliability Estimates SIDP-IV University of Virginia Coders: Intraclass Correlation Coefficient

PD	Reliability (icc)	
	Continuous Scale Score	Dichotomous Diagnostic Criterion
Paranoid	.67	.36
Schizoid	.69	.32
Schizotypal	.79	.33
Antisocial	.92	.68
Borderline	.69	.29
Histrionic	.60	.10
Narcissistic	.85	.84
Avoidant	.78	.63
Dependent	.60	.00
Obsessive Compulsive	.70	.85

This standard was then applied to the decisions of the remaining members of the team. Results, summarized in Table B2, reflect agreement between raters for diagnostic decisions ranging from a low of 88.8% agreement (antisocial personality disorder) to 100% (schizotypal personality disorder).

Table B2

Percent Agreement for Diagnostic Category SIDP-IV

PD	% Agreement
Paranoid	92.5
Schizoid	89.8
Schizotypal	100.0
Antisocial	88.8
Borderline	93.8
Histrionic	91.3
Narcissistic	97.5
Avoidant	96.3
Dependent	98.8
Obsessive Compulsive	96.3

Total	94.5
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Psychopathy Checklist - Revised 2 (PCL-R-2)

All members of the team participated in a two-day workshop regarding the Psychopathy Checklist - Revised 2 (PCL-R-2), conducted by an experienced clinical psychologist with extensive experience with the instrument. Team members independently evaluated ten cases. Cases included 8 videotaped cases created by Hare, and 2 cases of community volunteers.

Intraclass correlation coefficients evaluated the consistency among raters. Agreement for continuous scale scores for Factor 1, Factor 2, and Total PCL scale were .77, .82, and .84, respectively. Agreement for the dichotomous diagnostic score (30 points Total Score cutoff) was .74.

As was undertaken with the SID-P interviews, we also investigated the agreement of eight raters to two experienced raters for the PCL-R-2 total diagnostic score. Results indicated 90% agreement regarding the diagnostic category (Meets Criteria: At or above 30 points Total PCL-R-2 score vs Does Not Meet Criteria: Below PCL-R-2 cutoff score of 30 points).

Historical Clinical Risk– 20 (HCR:20)

The eleven members of the coding team participated in a day-long workshop conducted by Kevin Douglas, one of the originators of the instrument. In addition, team members met as a group on multiple occasions to further discuss coding procedures for the instrument, as based on the coding manual.

Due to time restraints, we were unable to conduct independent coding for volunteers or of videotapes prior to collecting data. We therefore devised a procedure post-interviewing to assess consistency. For each team member, one interview conducted during data collection was selected. Team members then met collectively. Each member of the team read transcribed responses of inmates and answered questions pertaining to session content. The remaining members of the team independently coded responses.

Intraclass coefficients indicated consistency among raters, as gauged in this procedure (historical composite *icc* = .82; clinical composite *icc* = .87; risk composite *icc* = .68). As the HCR:20 does not include specific cut-off criterion diagnostic scores, we were not able to calculate percent agreements as with previous interview measures.

Training of Interviewers and Reliability of Interview Measures - Texas Coding Team

Overall, the Texas site had a total of 10 coders (one Ph.D. licensed clinical psychologist, and nine doctoral students in clinical psychology), though not all coders collected data at every prison unit. To establish consistency in coding for interview measures, coders participated in a series of training experiences followed by independent coding of training cases. Due to institutional and logistic constraints at the participating prisons, it was not possible to gain additional reliability estimates during the data collection. Therefore, Texas coders estimated our consistency by coding videotaped interviews from the Virginia reliability training.

Structured Interview for Disorders of Personality (SIDP-IV). Coders participated in a two-day workshop regarding the proper administration and scoring of the SIDP-IV, conducted by an experienced clinical psychologist with extensive experience with the instrument. Members subsequently independently coded three videotaped interviews from the Virginia rater training sessions.

Intra-class correlation coefficients evaluated the consistency and absolute agreement among raters for the three interviews with respect to continuous personality disorder scores. In other words, ICC results reflect agreement for the continuous scores for each personality disorder scale on the SIDP-IV. Results for the continuous scale scores are summarized in Table B3. Overall, ICC values tended to be strong (i.e., ICC's $\geq .85$), with the exception of absolute agreement for Schizoid, Narcissistic, and Schizotypal personality disorder (ICCs of .70-.78).

Psychopathy Checklist - Revised 2 (PCL-R-2). All members of the team participated in a one-day workshop regarding the PCL-R-2, conducted by an experienced clinical psychologist with extensive experience with the instrument.

Intraclass correlation coefficients evaluated the consistency among raters. Agreement for continuous scale scores for Factor 1, Factor 2, and Total PCL scale were .60, .92, and .80, respectively. The ICC value for total score agreement is marginal, and poorer than values typically reported in the literature. However, raters demonstrated perfect agreement (i.e., 1.0) for the dichotomous diagnostic score (i.e., above/below the score of 30 conventionally used as cutoff score).

Historical Clinical Risk – 20 (HCR:20) and Violence Risk Appraisal Guide (VRAG). The coding team participated in a formal training conducted by a forensic psychologist who was experienced with the HCR:20. Team members met again as needed to further discuss coding procedures for the

instrument, as based on the coding manual. Due to scheduling problems, we conducted a reliability check on only one case, thus it was not possible to calculate meaningful IRR values. However, qualitatively, we can report that all raters scored within +/- one point on the historical scale, within +/- two points on the clinical scale, and within +/- 3 points on the risk scale.

Table B3

Reliability Estimates SIDP-IV Texas Coders: Intraclass Correlation Coefficients.

PD	Reliability (icc)	
	ICC-Consistency Agreement	ICC-Absolute Agreement
Schizoid	.96	.70
Avoidant	.99	.98
Dependant	.95	.95
Obsessive Compulsive	.90	.88
Narcissistic	.85	.76
Schizotypal	.88	.78
Borderline	.99	.98
Paranoid	.95	.85
Histrionic	.87	.90
Antisocial	*	*

Notes. ICC values can be reported as a single measure (usually lower) or an average measure (usually higher). In this table, we report single measure values because it was ultimately single rater values (not the averaged score from multiple raters) that was included in the study database for each participant. These single rater values (usually lower) therefore represent a more rigorous measure of interrater reliability. We also report Consistency agreement (which relates to covariance in scores, i.e., did all raters code participant A higher and participant B lower?) as well as Absolute agreement (in which differences *in the specific values* of scores are considered error, i.e., did all raters score participant A as 12 and participant B as 8?). It is important to examine *consistency* agreement in those situations when it only matters whether raters agree about the relative scores, whereas it is important to consider *absolute* agreement in those situations when specific scores have specific meaning (such as a diagnostic threshold).

*SPSS did not calculate ICC values for Antisocial because multiple score values of zero made for minimal variance (and an error message that reads “scale or part of scale has zero variance and will be bypassed”). Qualitatively, we can report that all rater scores on the Antisocial PD scale on practice cases were within one point (on a scale for which scores could range from 0 to 24) of one another.

Appendix C

Consent Form

Informed Consent Agreement
Project Title: Risk Markers for Sexual Vulnerability and Violence in Prisons

Please read this consent agreement carefully before you decide to participate in the study.

Purpose of the research study: The purpose of the study is to explore factors that influence sexual behavior while in prison.

What you will do in the study: You will be asked to fill out a questionnaire that asks questions about your mood, about how you think, act, and feel, and your sexual behavior before and after coming to prison. You will be asked to participate in an interview that will ask you questions about your mood, about how you think, act, and feel; experiences that you had earlier in life; and your sexual behavior before and since coming to prison. *By consenting to this study, you will also be giving us permission to access information about your past and instant offense from the prison database. This data will be stored without any identifiers for use in future research.*

At a later time, you may be asked to participate in a further study once you return to the community.

Time required: You will spend about 3 to 3 and 1/4 hours total – you will spend 1 to 1 and 1/2 hours in filling out the questionnaire and about 2 hours being interviewed.

Risks: We do not anticipate any physical or psychological risks to you from our research. However, some of these questions are personal. You will not be forced or persuaded to answer them. There is a possibility that the survey will cause you to experience psychological distress. If you think you need to talk to someone about any psychological distress you may feel, please contact (kite) prison mental health services.

Benefits: There are no direct benefits to you for participating in our research study. The study may help us understand issues of sexual adjustment and coercion among prison inmates.

Confidentiality: The information that you give us will be handled confidentially. It will immediately be taken outside the prison. Your information will be assigned a code number. The list connecting your name to this number will be kept in a locked file. Your name will not be used in any report. *No information will be shared with any official, officer, or member of the medical staff in the prison.*

This research is protected by the US Department of Justice and no information can be subpoenaed by a third party.

Exceptions to Confidentiality: There are three exceptions to our promise of confidentiality. If you tell us: 1) that you are planning an escape, 2) that you are in immediate danger, or 3) that you intend to harm someone else, we may need to inform the appropriate authorities according to state and local law.

Voluntary participation: Taking part in our research is completely voluntary.

Right to withdraw from the study: You have the right to leave the study at any time without penalty.

How to withdraw from the study: If you want to leave, tell the experimenter quietly and leave the room. There is no penalty for withdrawing.

Payment: You will receive no payment for being in our study.

Who to contact if you have questions about the study: Janet Warren, Institute of Law, Psychiatry & Public Policy, PO Box 800660, UVA Health System, Charlottesville, Virginia, 22908-0660.

Who to contact about your rights in the study: Dr. Pryor Hale, Chair, Institutional Review Board for the Social and Behavioral Sciences, One Morton Dr Suite 500, University of Virginia, P.O. Box 800392, Charlottesville, VA 22908-0392, Telephone: (434) 924-5999, Email: irbsbshelp@virginia.edu, Website: www.virginia.edu/vprgs/irb

Agreement:
I agree to participate in the research study described above.

Signature: _____ **Date:** _____

Witness: _____ **Date:** _____

IRB Project # 2005-0190-00

3/2/06

Approved from: 1/27/06 to 7/26/07
JEB

Appendix D

Significant Risk Factors

Table D1

Significant Risk Factors for Sexual Experiences for Incarcerated Males

	Any-sex		Predatory		Victim		Bartered		Consensual	
	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)
Early Life Experiences										
Any Psychological Abuse	68 (48.2)	97 67.4)**	140 (55.8)	25(73.5)*	135 (55.8)	30 (69.8)	137 (55.2)	28 (75.7)*	79 (50.0)	86 67.7)**
Any Physical Abuse	58 (41.1)	83 57.6)**	117 (46.6)	24 70.6)**	115 (47.5)	26 (60.5)	115 (46.4)	26 70.3)**	67 (42.4)	74 58.3)**
Any Sexual Abuse	78 (55.3)	107 4.8)**	156 (62.4)	29 83.5)**	152 (62.8)	33 (78.6)*	154 (62.3)	31 (83.8)*	88 (56.1)	97 76.4)**
Any Neglect	75 (53.2)	77(53.5)**	130 (51.8)	22 (64.7)	124 (51.2)	28 (65.1)	129 (52.0)	23 (62.2)	85 (53.8)	67 (52.8)
Lived Away from Family <18	43 (30.7)	62 (42.8)*	87 (34.8)	18 (51.4)	83 (34.4)	22 (50.0)*	86 (34.7)	19 (51.4)	45 (28.7)	60 46.9)**
Head Injury with LOC	65 (46.1)	68 (46.9)*	111 (44.2)	22 (62.9)*	109 (45.0)	24 (54.5)	114 (45.8)	19 (51.4)	75 (47.5)	58 (45.3)
Maternal Incarceration	27 (19.3)	28 (20.0)*	51 (20.7)	4 (11.8)	46 (19.2)	9 (22.0)	47 (19.3)	8 (22.2)	29 (18.6)	26 (21.0)
Paternal Arrest	68 (51.9)	76 (58.0)4	124 (54.1)	20 (60.6)	128 (57.1)	16 (42.1)	118 (52.0)	26 (74.3)*	71 (48.6)	73 (62.9)*
Paternal Incarceration	54 (40.9)	62 (47.0)	100 (43.5)	16 (47.1)	100 (44.2)	16 (42.1)	92 (40.2)	24 68.6)**	57 (38.8)	59 (50.4)
Paternal Drug Addiction	27 (20.5)	43 (32.6)*	60 (26.0)	10 (30.3)	62 (27.6)	8 (20.5)	58 (25.3)	12 (34.3)	28 (18.9)	42 36.2)**
Paternal Pathology (PBSI)	83 (58.0)	98 (67.5)	156(61.7)	25 (71.4)	149 (61.1)	32 (72.7)	152(60.6)	29 (78.4)*	95 (59.4)	86 (67.2)
Educational Problems	86 (61.9)	98 (68.1)	160 (64.5)	24 (68.6)	160(66.9)	24 (54.5)	156 (63.4)	28 (75.7)	93(59.6)	91 (71.7)*
Early Maladjustment – Conduct Problems	80 (57.1)*	102(70.8)*	158 (63.5)	24 (68.6)	154(64.2)	28 (63.6)	154(62.3)	28 (75.7)	88 56.1)**	94 74.0)**
First Violent Act Prior to Age 18 (HCR_I)	90 (64.3)	106 (73.6)	166 (66.7)	30 (85.7)*	168(70.0)	28 (63.6)	165 (66.8)	31 (83.8)*	97(61.8)**	99 78.0)**
Juvenile Arrest History (JSRCH)	61 (42.7)	63 (43.4)	109 (43.1)	15 (42.9)	111(45.5)	13 (29.5)*	109 (43.4)	15 (45.0)	67 (41.9)	57 (44.5)
Violence and Criminality										
Any Fights Since Age 18	125 (87.4)	138 95.2)*	230 (90.9)	33 (94.3)	223 (91.4)	40 (90.9)	227 (90.4)	36 (97.3)	140(87.5)	123 96.1)**

CTS-By Self- Physical	0.8 (1.0)	0.8 (1.0)	0.8 (1.0)	1.1 (1.2)	0.9 (1.1)	0.6 (0.6)	0.8 (1.0)	1.4 (1.4)*	0.8 (1.0)	0.8 (1.0)
CTS-By Partner- Negotiation	4.0 (1.6)	4.5 (1.6)*	4.2 (1.6)	4.2 (2.0)	4.2 (1.6)	4.1 (1.6)	4.1 (1.6)	4.9 (1.6)*	4.0 (1.6)	4.5 (1.6)*
CTS-By Partner- Injury	0.3 (0.6)	0.3 (0.7)	0.3 (0.7)	0.5 (0.8)	0.3 (0.7)	0.2 (0.5)	0.3 (0.6)	0.7 (1.1)**	0.3 (0.6)	0.3 (0.7)
Self-Reported Violent Criminal Activity	77 (71.8)	81 (81.0)	138(74.2)	20 (90.9)	143(79.4)	15 53.6)**	139 (74.7)	19 (86.4)	83 (68.0)	75 87.2)**
Perpetration- Self Report- Threatened Prison Violence (PVI)	61 (43.0)	101 71.6)**	134(53.6)	28(84.8)**	13455.6)	28 (66.7)	129(52.2)	33 91.7)**	69 (43.4)	93(75.0)**
Perpetration- Self Report- Physical Prison Violence (PVI)	83 (58.5)	116 2.3)**	169(67.6)	30(90.9)**	167(69.3)	32 (76.2)	166 (67.2)	33(91.7)**	95 (59.7)	104(83.9)**
Perpetration- Self Report- Sexual Violence/Harassment in Prison (SAP)	--	--	--	--	20 (8.2)	15(34.1)**	19 (7.6)	16(43.2)**	3 (1.9)	32(25.0)**
Perpetration- Self Report- Relational Aggression in Prison (PVI)	59 (41.5)	92(65.7)**	128(51.2)	23(71.9)*	120(50.0)	31(73.8)**	124(50.4)	27(75.0)**	68 (42.8)	83(67.5)**
Victimization-Threatened Prison Violence (PVI)	77 (54.2)	110(78.0)**	156(62.4)	31(93.9)**	154(63.9)	33 (78.6)	152(61.5)	35(97.2)**	89 (56.0)	98(79.0)**
Victimization-Physical Prison Violence (PVI)	79 (55.6)	112**(79.4)	162(64.8)	29(87.9)**	158(65.65)	33 (78.6)	157(63.6)	34(94.4)**	91 (57.2)	100(80.6)**
Victimization-Sexual Violence/Harassment in Prison (SAP)	--	--	29 (11.5)	15(42.9)**	--	--	32 (12.7)	12(32.4)**	14 (8.8)	3(23.4)**
Victimization-Relational Aggression in Prison (PVI)	106(74.6)	132(94.3)**	206(82.4)	32(100.0)**	198(82.5)	40(95.2)*	202(82.1)	36(100.0)	121(76.1)	117(95.1)**

Gang Member	10 (7.0)	18 (12.7)	23 (9.2)	5 (14.7)	23 (9.5)	5 (11.6)	18 (7.3)	10(27.0)**	10 (6.3)	18 (14.4)*
Sexual Risk Markers										
Race-Black	46 (32.4)	65(45.1)*	94 (37.3)	17 (50.0)	99 (40.7)	12 (27.9)	91 (36.5)	20(54.1)*	49 (30.8)	62 (48.8)**
Age	38.7 (11.1)	35.3(9.6)**	37.2(10.7)	36.0(8.9)	36.8(10.8)	37.9(8.5)	37.6(10.7)	32.6(7.4)**	39.0(11.0)	34.5(9.2)**
Weight	189.3 (33.1)	184.1 (41.9)	188.1 (36.8)	177.3 (43.2)	189.2 (37.2)	172.1 (38.4)**	186.9 (37.5)	184.6 (40.0)	189.2 (32.9)	183.4 (43.0)
Height	66.4 (5.8)	67.9 (12.4)	66.8 (7.4)	69.4 (18.8)	66.6 (7.6)	70.1 (17.4)*	66.9 (7.4)	68.5 (19.4)	66.6 (5.7)	67.8 (13.1)
BMI	30.7 (7.1)	29.6 (8.1)	30.4 (7.5)	28.5 (8.3)	30.8 (7.6)	26.8 (7.0)**	30.1 (7.5)	30.8 (9.1)	30.6 (7.1)	29.7 (8.3)
Self-Reported Sexual Orientation- Homosexual	1 (0.7)	2 (1.5)	3 (1.2)	0 (0.0)**	1 (0.4)	2 (4.8)**	3 (1.3)	0 (0.0)**	2 (1.3)	1 (0.8)
Age of First Sexual Experience- >18 Years	9 (6.3)	8 (5.5)**	16 (6.3)	1 (2.9)	14 (5.7)	3 (6.8)	17 (6.8)	0 (0.0)*	12 (7.5)	5 (3.9)**
# of Orgasms Per Week on Inside- + 12	5 (3.6)	8 (5.6)**	9 (3.7)	4 (11.4)	11 (4.7)	2 (4.5)	10 (4.1)	3 (8.1)**	5 (3.2)	8 (6.4)**
Affective and Perceptual States										
NAS-Cognitive	27.5 (5.2)	30.2(5.1)**	28.5 (5.3)	30.6 (4.6)	28.6 (5.2)	30.0 (5.5)	28.6 (5.2)	30.6 (5.7)	27.5 (5.1)	30.5(5.1)**
NAS-Arousal	25.4 (5.7)	27.4(5.6)**	26.2 (5.8)	27.6 (5.2)	26.3 (5.7)	26.8 (6.1)	26.2 (5.7)	27.6(6.1)**	25.3 (5.6)	27.8(5.6)**
NAS-Behavioral Regulation	24.8 (5.2)	27.5(5.5)**	25.8 (5.5)	28.7(4.6)*	25.9 (5.3)	27.2(6.5)*	25.8 (5.3)	29.1 (6.6)	24.8 (5.0)	28.0(5.6)**
Anger Regulation	25.7 (4.2)	26.4 (3.3)	26.1 (3.9)	26.0 (2.9)	25.8 (3.8)	27.4(3.6)*	26.1 (3.9)	25.8 (2.9)	25.9 (4.1)	26.3 (3.3)
NAS Total	77.6 (15.0)	85.1(15.0)**	80.5 (15.6)	86.9(13.1)	80.8 (15.2)	83.9 (17.1)	80.5 (15.1)	87.3(17.6)	77.6 (14.8)	86.2(15.1)**
Borderline-Inappropriate	72 (52.2)	94(66.2)*	141 (57.6)	25 (71.4)	144(61.0)	22 (50.0)	138(56.6)	28 (77.8)*	80 (51.6)	86(68.8)**

Anger

Antisocial-Aggressiveness	90 (65.2)	97 (72.4)	162 (68.4)	25 (71.4)	165(71.7)	22(52.4)*	159(67.4)	28 (77.8)	96 (62.7)	91(76.5)*
Borderline-Impulsivity	114(82.0)	122(86.5)	203(82.9)	44 (94.3)	202(85.6)	34 (77.3)	205(83.7)	31 (88.6)	125(80.1)	111(89.5)*
Antisocial-Impulsivity	63 (45.0)	82(57.7)*	123(49.8)	22 (62.9)	124(51.9)	21 (48.8)	123(50.0)	22 (61.1)	71 (45.2)	74 (59.2)*
HCR- Instability- Yes	59 (42.8)	71 (49.3)	111(44.9)	19 (54.3)	113(47.5)	17 (38.6)	106(43.3)	24(64.9)*	65 (41.9)	65(51.2)*
How safe feel in prison? Unsafe	14 (9.9)	24 (17.0)	29(11.7)	9 (26.5)*	28 (11.7)	10 (23.8)	30 (12.22)	8 (21.6)	17 (10.8)	21 (16.9)
How much worry about attack/inmate? Minimally	133(94.3)	127(90.1)*	229(92.3)	31 (91.2)*	228(95.0)	32(76.2)**	228(93.1)	32(86.5)**	145(91.8)	115(92.7)*
How much worry about attack/prison staff? Minimally	102(72.9)	83(58.9)*	165(66.8)	20(58.8)	162(67.8)	23 (54.8)	166+(68.0)	19 (51.4)	113(72.0)	72(58.1)*
How much worry about sexual assault/inmate? Minimally	133(94.3)	127(90.1)*	229(92.3)	31(91.2)*	28 (95.0)	32(76.2)**	228(93.1)	32(86.5)**	145(91.8)	115(92.7)*
How much worry about sexual assault by prison staff? Minimally	136(96.5)	131(92.9)	235(94.8)	32 (94.1)	229(95.4)	38 (90.5)	232(94.7)	35 (94.6)	151(95.6)	115(93.5)*
How much do correctional officers monitor to keep you safe? Minimally	52 (37.4)	69 (49.2)	104(42.4)	17 (50.0)	95 (39.9)	26 (63.4)*	102(42.1)	19 (51.4)	64 (41.0)	57 (46.3)
How much does the warden take sexual assault seriously? Minimally	27 (19.6)	22 (15.7)	41 (16.8)	8 (23.5)	41 (17.3)	8 (19.5)	42 (17.2)	7 (18.9)*	31 (20.0)	18 (14.6)
Thoughts of Harming Others (SIV+)	35 (24.8)	54 (39.1)*	70 (28.5)	19(57.6)**	73 (30.5)	16 (40.0)	71 (29.2)	18 (50.0)*	40 (25.3)	49(40.5)**
Others Want to Hurt You	41 (29.1)	69(48.9)**	89 (36.0)	21(60.0)**	87 (36.4)	23(53.5)*	88 (35.9)	22(59.5)**	47 (29.7)	63(50.8)**

Any Threat-Control Override	47 (32.9)	75(51.7)**	99 (39.1)	23(65.7)**	98 (40.2)	24 (54.5)	99 (39.4)	37(62.2)**	54 (33.8)	68(53.1)**
Personality Risk Markers										
Conduct Disorder < Age 15	93 (66.5)	115(81.0)**	178(72.1)	30(88.2)*	176(73.9)	32 (74.4)	175(71.7)	33 (89.2)*	101(64,76)	107(85.6)**
Fail to Conform to Norms	95 (68.8)	112(82.4)**	180(74.7)	27 (81.8)	178(76.7)	29 (69.0)	180(74.7)	27 (81.8)	107(69.0)	100(84.0)**
Impulsivity	65 (45.0)	82(57.7)*	123(49.8)	22 (62.9)	124(51.9)	21 (48.8)	123(50.0)	22 (61.1)	71 (45.2)	74(59.2)*
Irritability/Aggressiveness	90 (65.2)	97 (72.4)	162(68.4)	25 (71.4)	165 (71.7)	22(52.4)*	159(67.4)	28 (77.8)	96 (62.7)	91(76.5)*
Recklessness	41 (29.5)	56 (40.0)	80 (32.8)	17 (48.6)	82 (34.9)	15 (34.1)	82 (33.6)	15 (42.9)	46 (29.5)	51(41.5)*
Lack of Remorse	71 (51.1)	89 (57.6)	129(52.7)	22 (66.7)	133(56.6)	18 (41.9)	126(51.9)	25(71.4)*	79 (50.6)	72(59.0)
PCL-R > 25	29 (20.7)	38 (26.2)	57 (22.8)	10 (28.6)	57 (23.7)	10 (22.7)	53 (21.4)	14(37.8)*	32(20.4)	35 (27.3)
Factor 3: Behavioral (3,9,13,14)	4.1 (2.1)	4.2 (2.1)	4.1 (2.1)	4.2 (2.0)	4.2 (2.1)	3.7 (1.9)	4.0 (2.1)	4.8 (2.0)*	4.0 (2.1)	4.3 (2.0)
Factor 4: Antisocial (10,12,18,19,20)	4.9 (2.6)	5.7(2.6)**	5.2 (2.7)	5.9 (2.5)	5.4 (2.6)	5.1 (2.9)	5.2 (2.6)	6.2 (2.6)*	4.8 (2.7)	6.0 (2.4)**
Total Score (all items)	18.2 (8.0)	19.6 (7.5)	18.7 (7.7)	20.4 (8.0)	19.1 (7.7)	18.1 (8.2)	18.6 (7.8)	21.4 (7.5)*	17.9 (8.0)	20.2 (7.3)
Diagnosis- Schizotypal	4 (2.8)	6 (4.1)	8 (3.2)	2 (5.7)	6 (2.5)	4 (9.1)*	10 (4.0)	0 (0.0)	5 (3.1)	5 (3.9)
Diagnosis- Antisocial	72 (51.4)	93(64.6)*	139(55.8)	26(74.3)*	142(59.2)	23 (52.3)	136(55.1)	29(78.4)**	77 (49.0)	88(69.3)**
Diagnosis- Histrionic	1 (0.7)	6 (4.1)	6 (2.4)	1 (2.9)	7 (2.9)	0 (0.0)	6 (2.4)	1 (2.7)	1 (0.6)	6 (4.7)*
Diagnosis- Avoidant	13 (9.2)	13 (9.0)	24 (9.5)	2 (5.7)	19 (7.8)	7 (15.9)	26 (10.4)	0 (0.0)*	18 (11.3)	8 (6.2)
Continuous Score- Schizoid	0.8 (1.2)	0.9 (1.1)	0.8 (1.1)	1.2 (1.3)*	0.8 (1.2)	1.0 (1.1)	0.9 (1.2)	0.7 (0.9)	0.9 (1.2)	0.9 (1.1)
Continuous Score- Antisocial	4.0 (2.2)	4.5 (1.9)*	4.1 (2.1)	5.0 (1.8)*	4.3 (2.1)	3.8 (2.0)	4.1 (2.1)	4.8 (2.0)	3.9 (2.2)	4.6 (1.9)**
Continuous Score-Histrionic	1.0 (1.1)	1.4 (1.4)*	1.2 (1.3)	1.3 (1.4)	1.2 (1.3)	1.2 (1.1)	1.2 (1.3)	1.5 (1.4)	1.0 (1.1)	1.5 (1.4)**
Continuous Score- Narcissistic	2.3 (2.2)	2.7 (2.3)	2.4 (2.2)	2.8 (2.5)	2.5 (2.2)	2.5 (2.4)	2.4 (2.2)	2.8 (2.4)	2.2 (2.2)	2.8 (2.3)*
Assessing Violence Risk										
Young Age at First Violent Act- < 20 Years	90 (64.3)	106(73.6)	166(66.7)	30 (85.7)	168(70.0)	28(63.6)**	165(66.8)	31 (82.8)	97 (61.8)	99 (78.0)

Impulsivity- Definite/Serious	59 (42.8)	71 (49.3)	111(44.9)	19 (54.3)	113(47.5)	17 (38.6)	106(43.3)	24 (64.9)*	65 (41.9)	65 (51.2)*
Plans Lack Feasibility- High Probability	32 (23.0)	37 (25.9)	62 (25.1)	7 (20.0)	58 (24.2)	11 (25.0)	55 (22.4)	14 (37.8)*	35 (22.5)	34 (27.0)*
Exposure to Destabilizers- Definite/Serious	29 (20.7)	42 (29.4)	59 (23.8)	12 (34.3)	57 (23.8)	14 (31.8)	56 (22.8)	15 (40.5)	32 (20.4)	39 (31.0)*
Early Maladjustment-Victim of Abuse- Definite/Serious	34 (24.3)	44 (30.6)	71 (28.5)	7 (20.0)	59 (24.6)	19 (43.2)*	68 (27.5)	10 (27.0)	39 (24.8)	39 (30.7)
Early Maladjustment- Conduct Problems- Definite/Serious	80 (57.1)	102 (70.8)*	158 (63.9)	24 (68.6)	154(16.2)	28 (63.6)	154(62.3)	28 (75.7)	88 (56.1)	94 (74.0)**
Adolescence- Failure to Establish and Maintain Relationships- Definite/Serious	38 (27.1)	49 (34.0)*	79 (31.7)	8 (22.9)	71 (29.6)	16 (36.4)	72 (29.1)	15 (40.5)	41 (26.1)	46 (36.2)*
Homicidal Ideation- Definite/Serious	27 (19.3)	47(32.6)*	62 (24.9)	12 (34.3)	65 (27.1)	9 (20.5)	61 (24.7)	13 (35.1)	27 (17.2)	47 (37.0)**
Suicidal Ideation- Definite/Serious	21 (15.0)	23 (16.0)*	40 (16.1)	4 (11.4)*	34 (14.2)	10(22.7)**	40 (16.2)	4 (10.8)*	24 (15.3)	20 (15.7)
HCR:20- Risk (Traditional)	4.1 (2.7)	4.8 (2.6)*	4.4 (2.7)	4.4 (2.7)	4.4 (2.7)	4.8 (2.7)	4.3 (2.6)	5.3 (2.8)*	4.1 (2.7)	4.8 (2.6)*
HCR:20 Total	20.1 (7.9)	21.8 (7.2)	20.8 (7.7)	22.2 (7.3)	20.8 (7.7)	21.6 (7.5)	20.6 (7.5)	23.4 (7.9)*	20.1 (7.7)	22.0 (7.4)*

Note. * p < .05, ** p < .01.

Table D2

Significant Risk Factors for Sexual Experiences for Incarcerated Females

	Any-sex		Predatory		Victim		Bartered		Consensual	
	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes
	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)
Early Life Experiences										
Any Psychological Abuse	38 (49.4)	71(68.3)**	104 (59.1)	5 (100.0)	73 (55.3)	36 (73.5)*	96 (58.5)	13 (76.5)	53 (54.1)	56 (67.5)
Any Physical Abuse	31 (40.3)	58 (55.8)*	85 (48.2)	4 (80.0)	60 (45.5)	29 (59.2)	79 (48.2)	10 (58.8)	43 (43.9)	46 (55.4)
Any Sexual Abuse	37 (48.1)	72(69.9)**	104 (59.4)	5 (100.0)	75 (57.3)	34 (69.4)	95 (58.3)	14 (82.4)	50 (51.0)	59 72.0)**
Any Violence towards Mother	30 (39.5)	57 (55.9)*	84 (48.6)	3 (60.0)	62 (47.3)	25 (5.32)	77 (47.8)	10 (58.8)	40 (41.2)	47 (58.0)*
Any Violence towards Father	18 (23.7)	35 (34.3)	49 (28.3)	4 (80.0)*	34 (26.0)	19 (40.4)	45 (28.0)	8 (47.1)	23 (23.7)	30 (37.0)
Any Neglect	24 (31.2)	52 50.5)**	73 (41.7)	3 (60.0)	46 (35.1)	30 61.2)**	64 (39.3)	12 (70.6)*	36 (36.7)	40 (48.8)
Maternal Depression	16 (21.3)	41 40.6)**	56 (32.6)	1 (25.0)	36 (27.3)	21 (47.7)*	54 (34.2)	3 (16.7)	27 (28.1)	30 (37.5)
Maternal Arrest	10 (13.3)	27 (26.7)*	34 (19.9)	3 (60.0)*	27 (20.6)	10 (22.2)	32 (20.3)	5 (27.8)	12 (12.5)	25 31.2)**
Maternal Incarceration	8 (10.5)	21 (21.0)	29 (16.9)	0 (0.0)	20 (15.2)	9 (20.5)	2 (11.1)	2 (11.1)	10 (10.3)	19 (24.1)*
Maternal Drug Addiction	12 (15.6)	27 (26.7)	36 (20.8)	3 (60.0)*	27 (20.3)	12 (26.7)	34 (21.2)	5 (27.8)	13 (13.3)	26 32.5)**
Paternal Depression	10 (14.5)	13 (14.3)	21 (13.4)	2 (66.7)**	17 (14.3)	6 (14.6)	19 (13.2)	4 (25.0)	12 (13.5)	11 (15.5)
Paternal Drug Addiction	9 (12.3)	27 (29.0)	36 (22.1)	0 (0.0)	27 (21.6)	9 (22.0)	32 (21.3)	4 (25.0)	12 (12.9)	24 (32.9)**
Maternal Pathology (PBSI)	36 (46.8)	64 (60.4)	95 (53.5)	5(100.0)*	71 (53.0)	29 (59.2)	89 (53.9)	11 (61.1)	48 (49.0)	52 (61.2)
First Violent Act Prior to Age 18 (HCR_I)	22 (28.6)	48 (46.2)*	68 (38.6)	2 (40.0)	48 (36.1)	22 (45.8)	64 (38.7)	7 (38.9)	33 (33.7)	37 (44.6)
Self Report Juvenile Criminal History (JSRCH)	31 (40.3)	56 (52.8)	84 (47.2)	3 (60.0)	64 (47.8)	23 (46.9)	76 (46.1)	11 (61.1)	37 (37.8)	50(58.8)**
Juvenile Arrest History (JSRCH)	13 (16.9)	31 (29.2)	43 (24.2)	1 (20.0)	29 (21.6)	15 (30.6)	38 (230)	6 (33.3)	16 (16.3)	28 32.9)**
Violence and Criminality										

Any Fights Since Age 18	138 (95.2)*	78 (73.6)	33 (94.3)	4 (80.0)	40 (90.9)	38 (77.6)	36 (97.3)	13 (72.2)	123 (96.1)*	63 (74.1)
CTS- By Self- Negotiation	4.50 (1.8)	4.65 (1.5)	4.57 (1.6)	5.08 (1.1)	4.65 (1.6)	4.39 (1.4)	4.59 (1.6)	4.55 (1.1)	4.34 (1.7)*	4.86 (1.4)
CTS- By Self- Physical	.51 (.9)**	1.04 (1.3)	.79 (1.1)	1.81 (1.5)	.75 (1.1)	1.02 (1.3)	.81 (1.2)	.85 (.7)	.62 (1.1)*	1.03 (1.2)
CTS- By Self- Injury	.58 (1.1)	.98 (1.4)	.80 (1.3)	1.04 (1.3)	.73 (1.2)	1.02 (1.5)	.86 (1.3)*	.27 (.7)	.70 (1.2)	.93 (1.4)
CTS- By Partner - Psychological	2.00 (1.6)*	2.67 (2.1)	2.36 (1.9)	3.32 (2.4)	2.27 (1.8)	2.71 (2.1)	2.43 (1.9)	1.92 (2.0)	2.22 (1.8)	2.58 (2.0)
CTS- By Partner- Physical	.97 (1.6)*	1.70 (1.9)	1.38 (1.8)	1.85 (1.3)	1.27 (1.7)	1.73 (2.0)	1.43 (1.8)	.95 (.9)	1.17 (1.8)	1.63 (1.7)
Self-Reported Violent Criminal Activity	30 (42.3)	55(60.4)*	83 (52.9)	2 (40.0)	61 (50.8)	24 (57.1)	73 (50.3)	12 (70.6)	37 (41.6)	48(65.8)**
Nine or More Prior Incarcerations	13 (26.5)	15 (19.7)	25 (20.5)	3 (100.0)*	21 (23.6)	7 (19.4)	25 (22.7)	3 (20.0)	16 (25.0)	12 (19.7)
Current Most Serious Offense- Other	3 (3.9)	2 (1.9)*	5 (2.8)	0 (0.0)	3 (2.2)	2 (4.1)	5 (3.0)	0 (0.0)	4 (4.1)	1 (1.2)
Current Sentence Length - Life sentence	3 (4.1)	6 (5.7)**	9 (5.1)	0 (0.0)	4 (3.1)	5 (10.2)	8 (4.9)	1 (5.6)	4 (4.2)	5 (5.9)**
Perpetration—Self Report- Threatened Prison Violence (PVI)	5 (6.5)	34 (32.7)**	36 (20.5)	3 (60.0)*	22 (16.7)	17 (34.7)**	31 (18.9)	8(47.1)**	7 (7.1)	32(38.6)**
Perpetration—Self Report- Physical Prison Violence (PVI)	8 (10.4)	35(33.7)**	39 (22.2)	4 (80.0)**	28 (21.2)	15 (30.6)	33 (20.2)	10(58.8)**	9 (9.2)	34(41.0)**
Perpetration—Self Report- Sexual Violence/Harassment in Prison (SAP)	--	--	--	--	2 (1.5)	3 (6.1)	2 (1.2)	3 (16.7)**	0 (0.0)	5 (5.9)*
Perpetration—Self Report- Relational Aggression in Prison (PVI)	17 (22.1)	53 (51.0)**	65 (36.9)	5(100.0)**	40 (30.3)	30(61.2)**	56 (34.1)	14(82.4)**	28 (28.6)	42(50.6)**
Victimization- Threatened	13 (16.9)	52(51.0)**	61 (34.7)	5(100.0)**	34 (25.8)	32(65.3)**	55 (33.5)	11 (64.7)*	20 (20.4)	46(55.4)**

Prison Violence (PVI)										
Victimization- Physical	13 (16.9)	47(45.2)**	56 (31.8)	4 (80.0)*	34 (25.8)	26 53.1)**	49 (29.9)	11(64.7)**	17 (17.3)	43(51.8)**
Prison Violence (PVI)										
Victimization- Relational	48 (62.3)	87(83.7)**	130(73.9)	5 (100.0)	92 (69.7)	43 (87.8)*	119(72.6)	16 (94.1)	64 (65.3)	71(85.5)**
Aggression in Prison (PVI)										
Gang Member	0 (0.0)	5 (4.9)*	5 (2.9)	0 (0.0)	3 (2.3)	2 (4.1)	4 (2.5)	1 (5.9)	0 (0.0)	5 (6.1)*
Sexual Risk Markers										
Race- Black	29 (37.7)	36(34.0)*	63 (35.4)	2 (40.0)	50 (37.3)	15 (30.6)	58 (35.2)	7 (38.9)	33 (33.7)	32 (37.6)
Age	40.2 (11.3)	36.1(10.0)**	37.9(10.7)	36.2(12.9)	38.3(11.0)	36.6(10.1)	38.2 (10.8)	34.4 (9.9)	39.9(11.1)	35.5(9.8)**
Self-Reported- Sexual	3 (4.2)	12 (12.0)**	13 (7.8)	2 (40.0)*	13 (10.2)	11 (25.6)	11 (7.1)	4(23.5)**	3 (3.3)	12(15.2)**
Orientation- Homosexual										
Age of First Sexual	8 (10.4)	5 (4.7)	12 (6.7)	1 (20.0)	12 (9.0)	1 (2.0)	12 (7.3)	1 (5.6)	9 (9.2)	4 (4.7)*
Experience- >18 Years										
Promiscuity on PCL-R-2	16 (20.8)	39(37.1)*	51 (28.8)	4 (80.0)*	36 (26.9)	19 (39.6)	49 (29.7)	5 (35.3)	21 (21.4)	34(40.5)**
# Orgasms per Week on	5 (7.0)	12 (11.7)*	16 (9.5)	1 (20.0)	11 (8.7)	6 (12.8)	16 (10.3)	1 (5.6)*	7 (7.6)	10(12.2)**
Outside- + 12										
# Orgasms per Week on	0 (0.0)	0 (0.0)*	1 (0.6)	0 (0.0)**	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)**	0 (0.0)	0 (0.0)**
Inside- + 12										
# Partners- >35	14 (18.2)	23(22.1)*	35 (19.9)	2 (40.0)*	26 (19.7)	11 (22.4)	32 (19.6)	5 (27.8)	15 (15.3)	22 (26.2)*
Affective and Perceptual States										
NAS-Cognitive	26.2 (4.2)	28.1 (5.2)**	27.2 (4.9)	28.6 (5.2)	26.8 (4.8)	28.5 (4.9)	27.0 (4.9)	29.4 (3.5)	26.4 (4.4)	28.3 (5.3)*
NAS-Arousal	25.8 (5.4)	27.4 (5.5)	26.6 (5.5)	27.8 (5.8)	26.5 (5.6)	27.1 (5.3)	26.4 (5.5)	28.9 (4.6)	25.9 (5.4)	27.7(5.5)*
NAS-Behavioral Regulation	24.3 (4.5)	25.2 (5.4)	24.6 (4.9)	30.2 (6.9)*	24.8 (5.2)	25.0 (4.7)	24.6 (4.9)	26.8 (6.3)	24.2 (4.6)	25.6 (5.5)
Anger Regulation	26.7 (3.6)	26.5 (3.1)	26.7 (3.3)	25.6 (4.2)	26.6 (3.4)	26.7 (3.1)	26.8 (3.4)	25.1(1.7)**	26.6 (3.5)	26.7 (3.1)

NAS Total	76.2 (12.6)	80.9 (13.9)*	78.5 (13.3)	86.6 (16.9)	78.1 (13.7)	80.5 (12.8)	78.0 (13.4)	85.1(13.0)*	76.5 (12.7)	81.6(14.0)*
Antisocial-Aggressiveness	21 (27.3)	41 (40.6)	60 (34.5)	2 (50.0)	42 (32.6)	19 (41.3)	54 (33.3)	8 (50.0)	27 (27.8)	35(43.2)*
Borderline-Impulsivity	47 (61.)	86(81.9)**	128(72.3)	5 (100.0)	94 (70.1)	39 (81.2)	119(72.1)	14 (82.4)	64 (65.3)	69(82.1)*
HCR- Instability- Yes	29 (37.7)	54 (50.9)	79 (44.4)	4 (80.0)	60 (44.8)	23 (46.9)	71 (43.0)	12 (66.7)*	38 (38.8)	45 (52.9)
How safe feel in prison? Unsafe	4 (5.3)	9 (8.7)	13 (7.5)	0 (0.0)*	8 (6.2)	5 (10.2)	12 (7.4)	1 (5.9)	6 (6.2)	7 (8.5)
How much worry about attack/inmate? Minimally	74 (96.1)	88 (87.1)	157(90.8)	5 (100.)	125(95.4)	37(78.7)**	145(90.1)	17 (100.0)	87 (88.8)	75 (93.8)
How much worry about attack/prison staff? Minimally	74 (96.1)	88 (87.1)	157(90.8)	5 (100.0)	124(94.7)	8 (80.9)*	145(90.1)	17(100.0)	90 (91.8)	72 (90.0)
How much worry about sexual assault/inmate? Minimally	74 (96.1)	88 (87.1)	157(90.8)	5 (100.0)	125(95.4)	37 78.7)**	145(90.1)	1(100.0)	87 (88.8)	75 (93.8)
How much worry about sexual assault by prison staff? Minimally	74 (96.1)	91 (90.1)	160(92.5)	5 (100.0)	126(96.2)	39(83.0)**	148(91.9)	17(100.0)	90 (91.8)	75 (93.8)
How much do correctional officers monitor to keep you safe? Minimally	15 (19.5)	40 (40.0)*	52 (30.2)	4 (60.0)	34 (26.0)	21(45.7)*	50 (31.2)	5 (29.4)	26 (26.5)	29 (36.7)
Thoughts of Harming Others (SIV+)	4 (5.3)	16 (16.0)*	19 (11.0)	1 (20.0)	13 (9.9)	7 (15.2)	16 (10.0)	4 (23.5)	5 (5.1)	15(19.0)**
Others Want to Hurt You	20 (26.3)	47(45.2)*	64 (36.6)	3 (60.0)	41 (31.3)	26(53.1)**	58 (35.8)	9 (50.0)	31 (32.0)	36 (43.4)
Any Threat-Control Override	23 (29.9)	50 (47.2)*	69 (38.8)	4 (80.0)	46 (34.3)	27 (55.1)*	63 (38.2)	10 (55.6)	34 (34.7)	39 (45.9)
Personality Risk Markers										
Conduct Disorder < Age 15	31 (40.3)	60 (58.3)*	88 (50.3)	3 (60.0)	69 (51.9)	22 (46.8)	85 (52.1)	6 (35.3)	39 (39.8)	52(63.4)**

Fail to Conform to Norms	38 (49.4)	77(74.0)**	111(63.1)	4 (80.0)	82 (61.2)	33 (70.2)	101(61.6)	14 (82.4)	50 (51.5)	65(77.4)**
Irritability/Aggressiveness	21 (27.3)	41 (40.6)	60 (34.5)	2 (50.0)	43 (32.6)	19 (41.3)	54 (33.3)	8 (50.0)	27 (27.8)	35 (43.2)*
Recklessness	12 (15.6)	32(30.5)*	41 (23.2)	3 (60.0)	28 (20.9)	16 (33.3)	38 (23.0)	6 (35.3)	17 (17.3)	27(32.1)*
PCL-R > 30	2 (2.6)	4 (3.8)	5 (2.8)	1 (20.0)*	6 (4.5)	0 (0.0)	4 (2.4)	2 (11.8)*	2 (2.0)	4 (4.8)
Factor 2: Affective (6,7,8,16)	3.1 (2.3)	2.6 (2.2)	2.8 (2.2)	4.8 (2.9)*	2.8 (2.3)	2.8 (2.2)	2.8 (2.2)	3.2 (2.7)	3.0 (2.3)	2.6 (2.2)
Factor 3: Behavioral (3,9,13,14)	3.7 (2.0)	4.3 (2.0)	4.0 (2.0)	5.8 (2.9)*	4.0 (2.1)	4.3 (1.9)	4.0 (2.0)	4.6 (2.5)	3.8 (2.0)	4.3 (2.1)
Factor 4: Antisocial (10,12,18,19,20)	3.0 (2.4)	3.7 (2.4)*	3.4 (2.4)	4.4 (2.3)	3.4 (2.4)	3.4 (2.4)	3.4 (2.4)	3.5 (2.5)	2.9 (2.4)	4.0 (2.4)*
Total Score (all items)	14.6 (7.4)	16.2 (7.0)	15.3 (7.0)	22.9 (10.0)*	15.4 (7.2)	15.9 (7.2)	15.4 (7.1)	16.5 (8.7)	14.5 (7.1)	16.7(7.2)*
Diagnosis- Antisocial	24 (31.2)	41 (39.0)	63 (35.6)	2 (40.0)	51 (38.1)	14 (29.2)	60 (36.4)	5 (29.4)	27 (27.6)	38 (45.2)*
Diagnosis - Narcissistic	9 (11.7)	29 (27.4)*	35 (18.7)	3 (60.0)*	25 (18.7)	13 (26.5)	31 (18.8)	7 (38.9)*	14 (14.3)	24 (28.2)*
Diagnosis - Dependent	3 (3.9)	10 (9.4)	12 (6.7)	1 (20.0)	6 (4.5)	7 (14.3)*	12 (7.3)	1 (5.6)	8 (8.2)	5 (5.9)
Continuous Score- Paranoid	2.6 (2.1)	2.8 (1.9)	2.7 (2.0)	2.8 (1.9)	2.5 (2.0)	3.3 (1.9)*	2.7 (2.0)	3.4 (2.1)	2.8 (2.1)	2.7 (1.9)
Continuous Score- Schizotypal	1.4 (1.4)	1.1 (1.3)	1.3 (1.4)	0.6 (0.5)	1.2 (1.3)	1.4 (1.5)	1.3 (1.4)	1.0 (1.0)	1.5 (1.4)	0.9(1.2)**
Continuous Score- Antisocial	2.8 (2.0)	3.6 (2.0)*	3.2 (2.0)	4.8 (2.4)	3.2 (2.0)	3.3 (2.1)	3.2 (2.0)	3.7 (2.1)	2.8 (2.0)	3.7(2.0)**
Continuous Score- Histrionic	1.2 (1.4)	2.0 (1.8)**	1.7 (1.7)	2.4 (2.2)	1.5 (1.7)	2.1 (1.7)*	1.6 (1.7)	1.9 (1.6)	1.4 (1.6)	2.0 (1.8)*
Continuous Score- Narcissistic	2.2 (2.0)	3.0 (2.4)*	2.6 (2.3)	4.6 (2.1)*	2.5 (2.3)	3.0 2.2)	2.5 (2.2)	4.0 (2.6)**	2.2 (2.1)	3.1 (2.4)**
Assessing Violence Risk										
Previous Violence- >2 or Any Severe	34 (44.2)	59 (55.7)	90 (50.6)	3 (60.0)	68 (50.7)	25 (51.0)	81 (49.1)	12 (66.7)	43 (43.9)	50(58.8)*
Young Age at First Violent Act- < 20 Years	22 (28.6)	48 (46.2)**	68 (38.6)	2 (40.0)	48 (36.1)	22 (45.8)	63 (38.7)	7 (38.9)	33 (33.7)	37(44.6)**
Psychopathy- PCL-R 30-40	2 (2.6)	4 (3.8)	5 (2.8)	1 (20.0)*	6 (4.5)	0 (0.0)	4 (2.4)	2 (11.8)	2 (2.0)	4 (4.8)

Impulsivity- Definite/Serious	29 (37.7)	54 (50.9)	79 (44.4)	4 (80.0)	60 (44.8)	23 (46.9)	71 (43.0)	12 (66.7)*	38 (38.8)	45 (52.9)
Unresponsive to Treatment- Definite/Serious	7 (9.2)	9 (8.6)	13 (7.4)	3 (60.0)**	11 (8.3)	5 (10.4)	12 (7.3)	4 (23.5)	7 (7.2)	9 (10.7)
Plans Lack Feasibility- High Probability	15 (19.5)	16 (15.1)	28 (15.7)	3 (60.0)*	25 (18.1)	6 (12.2)	28 (17.0)	3 (16.7)	16 (16.3)	15 (17.6)
Noncompliance with Remediation- High Probability	8 (10.4)	13 (12.3)	18 (10.1)	3 (60.0)**	16 (11.9)	5 (10.2)	18 (10.9)	3 (16.7)	8 (8.2)	13 (15.3)
Stress- High Probability	23 (29.9)	33 (31.1)	52 (29.2)	4 (80.0)*	41 (30.6)	15 (30.6)	49 (29.7)	7 (38.9)	29 (29.6)	27 (31.8)
Early Maladjustment- Conduct Problems- Definite/Serious	33 (43.4)	53 (50.0)	82 (46.3)	4 (80.0)	64 (48.1)	22 (44.9)	80 (48.8)	6 (33.3)	40 (41.2)	46 (54.1)*
Homicidal Ideation- Definite/Serious	6 (7.9)	13 (12.3)	19 (10.7)	0 (0.0)	14 (10.5)	5 (10.2)	17 (10.4)	2 (11.1)	7 (7.2)	12 (14.1)*
Suicidal Ideation- Definite/Serious	11 (14.5)	30 (28.3)**	39 (22.0)	2 (40.0)*	27 (20.3)	14 (28.6)**	38 (23.2)	3 (16.7)**	19 (19.6)	22 (25.9)*
History of Mental Illness- Definite/Serious	32 (41.6)	44 (41.9)	73 (41.2)	3 (60.0)	52 (38.8)	24 (50.0)	72 (43.9)	4 (22.2)*	44 (44.9)	32 (38.1)
HCR:20- Historical (Traditional)	11.1 (4.3)	12.2 (4.1)	11.6 (4.2)	16.4(1.8)*	11.6 (4.2)	12.1 (4.3)	11.7 (4.1)	12.1 (5.4)	11.2 (4.3)	4.0 (4.0)
HCR:20- Clinical (Traditional)	4.0 (2.3)	3.9 (2.4)	3.9 (2.3)	6.4 (2.4)*	3.9 (2.3)	4.2 (2.4)	3.9 (2.3)	4.1 (2.9)	4.0 (2.2)	3.9 (2.5)
HCR:20- Risk (Traditional)	3.9 (2.4)	3.9 (2.3)	3.8 (2.3)	7.2(3.6)**	3.9 (2.4)	3.9 (2.5)	3.9 (2.3)	4.2 (2.9)	3.8 (2.3)	4.0 (2.4)
HCR:20- Total	18.9 (7.6)	20.1 (7.1)	19.3 (7.1)	30.0 (7.0)**	19.4 (7.3)	20.1 (7.4)	19.5 (7.0)	20.3 (10.0)	19.0 (7.2)	20.3 (7.5)

Note. * $p < .05$, ** $p < .01$.

Appendix E

Footnotes

¹Fleisher and Krienert (2006) report that not all inmates share a similar definition of rape. “Some inmates may interpret sexual violence as rape while others interpret a similar act as sexual violence other than rape” (p. 12).

²Our study design ensured that we would collect data that included the various types of sexual behavior in prison as it occurred between inmates or with correctional officers and staff.

³ Ristroph observes that issues of coercion and consent are also embedded in controversies surrounding date rape, prostitution, and unwanted sex but that we draw the line by having victims of coerced sex self-identify (p. 157).

⁴ Ristroph references the work of Eigenberg but argues that all bartered sex need not be coerced adding that “[w]hether or not prostitution should be understood as consensual sex, it is not clear that it is in the inmates interests to prohibit such acts.”

⁵ Fleisher and Krienert (2006) report that not all inmates share a similar definition of rape. “Some inmates may interpret sexual violence as rape while others interpret a similar act as sexual violence other than rape” (p. 12). They also found that prison staff “tortured” inmates with tales of prison rape, and inmates were aware of gossip about prison rape, however, those tales did not comport with their own experience (p. 16), generally reporting low levels of fear of sexual violence, particularly among female inmates.

⁶ Fleisher reports, “[t]he irony of deprivation is that when inmates are released they feel deprived of the social life they had on the outside... our data shows that homosexual relationships formed inside carry to the street and that men and women inmates report committing offenses to return to prison to be with their friends and lovers. . .”

⁷ Most substantiated incidents of staff sexual misconduct involved correctional officers but 16 percent also involved other prison staff including janitors, cooks and drivers, and 10 percent health care staff including counselors, doctors, dentists and nurses.

⁸ Our study design ensured that we would collect data that included the various types of sexual behavior in prison as it occurred between inmates or with correctional officers and staff.

⁹ Prison F was our first prison and we experienced some logistical difficulties. We had agreed with ODRC to randomly select 200 women from each of the women’s institutions. Although we did randomly select women at these institutions, there was some question as to whether the random selection procedures were adhered to. Indeed, when we examined this issue, we found that 40 women who participated in our research at Prison F were not on the random selection list. However, we conducted several tests to determine whether these women were in any way different from our participants who had initially been randomly selected. We conducted additional analyses at Prison F, comparing randomly selected women who participated (N = 34) with women who were not in the randomly selected group but participated in the research (N = 40). The women who were not randomly selected but participated in the research were significantly younger ($M = 33.48$ years) than the women randomly selected and participating in our research ($M = 39.18$ years) ($t = 2.53, p < .05$).

¹⁰ A similar situation arose at Prison G. Although women had been randomly selected, the list was not adhered to and women not on the random selection list were invited to participate or

volunteered to participate. To determine whether these women were somehow different from the women on our randomly selected list who agreed to participate, several analyses were conducted. There were no significant differences between these two groups.

¹¹ It is important to note that BJS has two different definitions for inmate-on-inmate sexual violence and staff-on-inmate sexual violence. Inmate-on-inmate sexual violence is defined as either 1) nonconsensual sexual acts or 2) abusive sexual contacts. Staff-on-inmate sexual violence is defined as either 1) staff sexual misconduct or 2) staff sexual harassment (see Beck and Hughes, 2005).

¹² The data were gathered through a review of administrative records of incidents of inmate and staff sexual violence against inmates reported to correctional authorities (Beck, Harrison, & Adams, 2007).

¹³ Struckman-Johnson et al. (1996) found that the rates varied tremendously from institution to institution, in large part because of differences in institutional characteristics.

¹⁴ A significant number of inmates appear to carry weapons. In a southern male prison, McCorkle (1992) found as many as a quarter of the inmates reported carrying protection such as a shank (i.e., a weapon).

¹⁵ Kerbs and Jolley (2007) describe the pushing behavior of offenders as resembling bullying behavior, i.e., using pushing to assert one's dominance over the elder inmate. This bullying behavior was more common than serious assaults among an elderly population of inmates.

¹⁶ To obtain our comparison sample (i.e., Did not Participate), a random sample of inmates was selected from each institution to match the number of inmates that agreed to participate (i.e., Did Participate). For example, if we had 25 participants at Institution X, then 25 inmates from that institution were randomly selected and placed together in the comparison group. Then analyses were conducted to compare our sample of participants with the randomly selected group of nonparticipants, separately for males and females.

¹⁷ Inmates have both a minimum and a maximum aggregated sentence in Ohio. We chose to use the minimum aggregated sentence as a proxy for sentence length.

¹⁸ The ODRC has five security levels. Level 1 is minimum security, Level 2 is medium security, Level 3 is close security, Level 4 is maximum security, and Level 5 is high maximum security (Level 5 inmates were prohibited from participating in our study due to their level of dangerousness).

¹⁹ According to the ODRC, an inmate is classified into one of four categories of security threat group (STG) affiliation. An inmate is identified as a *passive* security threat group participant when any one of the following criteria are documented: a) tattoos, brands or scars that are identified as symbols of a security threat group; b) inmate at time of reception has STG material in his possession; c) inmate self-proclaims he/she is a member of a security threat group; d) information received from other law enforcement agencies or pre-sentence investigation reports that substantiate that the inmate is a member of a security threat group or convicted of "participating in a criminal gang". An inmate is identified as an *active* security threat group participant when any of the following criteria have been documented: a) documented staff identification of active security threat group activity, specifically group photos, associating with known STG members, documented information from a reliable confidential informant; b) when documentation of a legitimate group conducting STG activities is found; c) inmate has developed leadership in an STG; d) the inmate is actively recruiting other inmates into an STG; e) an inmate is using STG affiliation for extortion to gain food, sex, money, positions of favor, contraband, items of value, etc.; f) when an offender is participating in any STG confrontations; h) an offender violates institutional rules and the act or action(s) found to be based on security threat group affiliation or the offender was guilty of violating AR 5120-9-06 Class II, Rule

31. An offender is identified as a *disruptive* security threat group participant when the offender has demonstrated a serious or continuing threat to the security of the institution or community due to his/her STG participation, including: a) offender has threatened or assaulted a staff member or another inmate, and the act is found to have security threat group associations; b) inmate has threatened a security threat group uprising or participates in confrontational activities; c) drug smuggling/trafficking; d) inmate is a documented STG participant and is involved in criminal activity (i.e., assault on a staff or offender, drug smuggling, extortion, etc).

²⁰ There are seven FEIS codes that include: violent, potentially violent, other crimes against person, sex, property, drug, minor. These seven variables were recoded to create two variables: violent (violent, potentially violent, other crimes against person, violent sex) and nonviolent (property, nonviolent sex, drug, minor).

²¹ There are seven FEIS codes and they include: **Violent** (capital murder, murder, deliberate homicide, manslaughter, attempted murder/attempted manslaughter, aggravated assault, assault and battery/other assault, other or unspecified violent crimes (other than capital murder, murder, deliberate homicide, manslaughter, aggravated assault, assault and battery/other assault)); **Potentially Violent** (robbery, kidnapping, arson, other or unspecified potentially violent (other than robbery, kidnapping, arson)); **Other Crimes Against Person** (criminally negligent homicide, vehicular homicide, families and children (contributing to the delinquency of a minor), hit and run, coercion, unlawful imprisonment/unlawful restraint, harassment, verbal assault (e.g., simple assault, terroristic threat, intimidation, criminal possession of a weapon, menacing, reckless endangerment, other or unspecified crime against person (conspiracy, mutiny in a penal institution, accessory to violent crime)); **Sex** (forcible rape, forcible sodomy, statutory rape (consensual), misdemeanor rape, consensual sodomy, sexual abuse/sexual assault, sexual misconduct, incest, lewd and lascivious conduct, other and unspecified sex crime (other than forcible rape, forcible sodomy, statutory rape (consensual), misdemeanor rape, consensual sodomy, sexual abuse, sexual assault, sexual misconduct, incest, lewd and lascivious conduct)); **Property** (burglary, breaking and entering, criminal mischief, tampering, criminal trespassing, unlawful entry, larceny (grand and petit), auto theft, theft, shoplifting, pickpocketing (except auto theft), possession of stolen property, criminal receiving, forgery and counterfeiting, fraud (deceptive practices), falsifying records, embezzlement, forged check, bad check, theft of service, bribery, conspiracy, other or unspecified property crime (e.g., possession of a forged instrument)); **Drug** (drug, selling dangerous, drug, possession dangerous, (e.g., possession of a forged instrument)); **Drug** (drug, selling dangerous, drug, possession dangerous, other or unspecified drug crime (possession of a forged drug document, illegal prescription)); **Minor** (parole violation, probation violation, DWI, DUI, public intoxication, drunkenness, court related offenses (warrants, failure to appear, escape, bail jumping), gambling, criminal nuisance, disorderly conduct, breach of peace, resisting arrest, loitering, vagrancy, indecent exposure, obscenity, public lewdness, traffic violations, prostitution, pandering, other or unspecified minor offense, no crime, no information.

Appendix F

Bivariate Variables for CHAID Analyses

Table F1

Bivariate Risk Factors Used in CHAID Analyses for Male Inmates

Men Any Sex	Men Predation	Men Victimization	Men Trade	Men Consensual
PBIS 1. Gender	PBIS 1. Gender	PBIS 1. Gender	ACE Yes/NO any Psych abuse	ACE Yes/NO any Psych abuse
from Texas Data or Ohio Data	from Texas Data or Ohio Data	from Texas Data or Ohio Data	ACE Yes/NO any Physical abuse	ACE Yes/NO any Physical abuse
ACE Yes/NO any Psych abuse	ACE Yes/NO any Psych abuse	ACE Yes/NO any Sexual abuse	ACE Yes/NO any Sexual abuse	ACE Yes/NO any Sexual abuse
ACE Yes/NO any Physical abuse	ACE Yes/NO any Physical abuse	PBIS: LOC	PBIS-Father arrested	PBIS Lived away from home
ACE Yes/NO any Sexual abuse	ACE Yes/NO any Sexual abuse	SAP: Any Sexual Perpetration	PBIS-Father sent to jail/prison	PBIS-Father arrested
ACE Yes/NO any Neglect	PBIS: LOC	PV: Any Perpetration of Relational Aggression	PBIS-Father Psychopathology	PBIS-Father addicted to drugs
PBIS Lived away from home	HCR: young age first violence	PV: Any victimization by Relational Agg	HCR: Early maladjustment - conduct problems	HCR: Early maladjustment - conduct problems
PBIS: LOC	PV: Any Perpetration of Threatened Violence	Weight in lbs	PV: Any Perpetration of Threatened Violence	HCR: young age first violence
PBIS-Mother sent to jail/prison	PV: Any Perpetration of Physical Violence	Height in inches	PV: Any Perpetration of Physical Violence	PVRI: Any Fights since 18
PBIS-Father addicted to drugs	PV: Any Perpetration of Relational Aggression	Body Mass Index	SAP: Any Sexual Perpetration	PV: Any Perpetration of Threatened Violence
HCR: Early maladjustment - conduct problems	PV: Any Victimization by Threats	PBIS: Sexual orientation Recode	PV: Any Perpetration of Relational Aggression	PV: Any Perpetration of Physical Violence

HCR: young age first violence	PV: Any Victimization by Physical Violence	PBIS: Number of sexual partners, categorical coding	PV: Any Victimization by Threats	SAP: Any Sexual Perpetration
PVRI: Any Fights since 18	SAP: Any Non-Consensual Sex	NAS Behavior Regulation	PV: Any Victimization by Physical Violence	PV: Any Perpetration of Relational Aggression
PV: Any Perpetration of Threatened Violence PV: Any Perpetration of Physical Violence	PV: Any victimization by Relational Agg PBIS: Sexual orientation Recode	NAS Anger Regulation - Summary score SIDP, ANTX4 irritability and aggressiveness, as indicated by repeated physical fights or assaults	SAP: Any Non-Consensual Sex PV: Any victimization by Relational Agg	PV: Any Victimization by Threats PV: Any Victimization by Physical Violence
PV: Any Perpetration of Relational Aggression	NAS Behavior Regulation	IFV 11. How much do you worry that you will be attacked by another prisoner during this sentence?	PBIS: Ethnicity Category	SAP: Any Non-Consensual Sex
PV: Any Victimization by Threats	IFV 10. How safe do you feel in prison? (check one)	IFV 13. How much do you worry that you will be sexually assaulted by another inmate during this sentence?	PBIS: Sexual orientation Recode	PV: Any victimization by Relational Agg
PV: Any Victimization by Physical Violence	IFV 11. How much do you worry that you will be attacked by another prisoner during this sentence?	IFV 16. How much do you think the correctional officers monitor your living area sufficiently to keep you safe from sexual violence?	PBIS: Age at first sexual experience categorical coding	IFV 5. Do you belong to a prison gang?
PV: Any victimization by Relational Agg	IFV 13. How much do you worry that you will be sexually assaulted by another inmate during this sentence?	PBIS 25b. Others following you or wanting to hurt you physically?	PBIS 35. Since coming to prison, how many orgasms do you have in a normal week?	PBIS: Ethnicity Category

PBIS: Ethnicity Category	SIV1. Did you ever think about physically hurting some other person?	SIDP Diagnose Schizotypal	NAS Arousal mean	PBIS: Age at first sexual experience categorical coding
PBIS: Age at first sexual experience categorical coding	PBIS 25b. Others following you or wanting to hurt you physically?	HCR H2. Young Age at First Violence Incident	SIDP, BORX8 inappropriate, intense anger or difficulty controlling anger	PBIS 35. Since coming to prison, how many orgasms do you have in a normal week?
PBIS 35. Since coming to prison, how many orgasms do you have in a normal week?	PBIS: ANY Threat/Control Delusions	HCR HD. Early Maladjustment: Victim of Child Abuse	HCR C4. Impulsivity	NAS Cognitive mean
NAS Cognitive mean	SIDP, CANX evidence of conduct disorder before 15 years	HCR CB. Suicidal Ideation	IFV 11. How much do you worry that you will be attacked by another prisoner during this sentence?	NAS Arousal mean
NAS Arousal mean	SIDP Diagnose Antisocial	HCR c3: Active mental illness, combined c3a c3b	IFV 13. How much do you worry that you will be sexually assaulted by another inmate during this sentence?	NAS Behavior Regulation
NAS Behavior Regulation	SIDP Schizoid continuous		IFV 18. How much do you think the Warden would take your claim seriously if you were sexually assaulted?	NAS Total Score: Cog + Arous + Beh
NAS Total Score: Cog + Arous + Beh	SIDP continuous antisocial - includes criterion C		SIV1. Did you ever think about physically hurting some other person?	SIDP, BORX8 inappropriate, intense anger or difficulty controlling anger

SIDP, BORX8 inappropriate, intense anger or difficulty controlling anger	HCR HC. Substance Use Problems Associated with Criminality	PBIS 25b. Others following you or wanting to hurt you physically?	SIDP, ANTX4 irritability and aggressiveness, as indicated by repeated physical fights or assaults
SIDP, ANTX4 irritability and aggressiveness, as indicated by repeated physical fights or assaults	HCR CB. Suicidal Ideation	PBIS: ANY Threat/Control Delusions	SIDP, BORX4 impulsivity in at least two areas that are potentially self-damaging
IFV 11. How much do you worry that you will be attacked by another prisoner during this sentence?	VRAG 9. Any female victim (for index offense)	SIDP, CANX evidence of conduct disorder before 15 years	HCR C4. Impulsivity
IFV 12. How much do you worry that you'll be attacked by a prison guard or staff member during this sentence?		SIDP, ANTX7 lack of remorse, as indicated by being indifferent to or rationalizing having hurt, mistreated, or stolen from another PCL DX - 25 cutoff	IFV 11. How much do you worry that you will be attacked by another prisoner during this sentence?
IFV 13. How much do you worry that you will be sexually assaulted by another inmate during this sentence?			IFV 12. How much do you worry that you'll be attacked by a prison guard or staff member during this sentence?
SIV1. Did you ever think about physically hurting some other person?		PCL: Antisocial Factor	IFV 13. How much do you worry that you will be sexually assaulted by another inmate during this sentence?

PBIS 25b. Others following you or wanting to hurt you physically?

PBIS: ANY Threat/Control Delusions

SIDP, CANX evidence of conduct disorder before 15 years

SIDP, ANTX1 failure to conform to social norms w/ respect to lawful behaviors as indicated by repeatedly performing acts that are grounds for arrest

SIDP, ANTX3 impulsivity or failure to plan ahead

PCL: Antisocial Factor

SIDP Diagnose Antisocial

PCL Hare Total Score

SIDP Diagnose Antisocial

SIDP Diagnose Avoidant

HCR R1. Plans lack Feasibility

HCR CB. Suicidal Ideation

HCR Risk Factor Traditional

HCR Total Score

IFV 14. How much do you worry that you will be sexually assaulted by a prison guard or staff member during this sentence?

SIV1. Did you ever think about physically hurting some other person?

PBIS 25b. Others following you or wanting to hurt you physically?

PBIS: ANY Threat/Control Delusions

SIDP, CANX evidence of conduct disorder before 15 years

SIDP, ANTX1 failure to conform to social norms w/ respect to lawful behaviors as indicated by repeatedly performing acts that are grounds for arrest

SIDP, ANTX3 impulsivity or failure to plan ahead

SIDP continuous antisocial -
includes criterion C

SIDP continuous histrionic

HCR HE. Early
Maladjustment: Conduct
Problems

HCR HF. Adolescence:
Failure to Establish and
Maintain Stable
Relationships

HCR CA. Homicidal Ideation-
Evidence of Serious
Problems

HCR CB. Suicidal Ideation

HCR Risk Factor Traditional

HCR Total Score

VRAG 2. Elementary school
maladjustment

VRAG 7. Age at index
offense (at most recent
birthday)

VRAG 11. Meets DSM-III
criteria for schizophrenia

VRAG 2. Elementary school
maladjustment

VRAG 7. Age at index
offense (at most recent
birthday)

VRAG total score

AGE at time to interview-
computed in SPSS

SIDP, ANTX5 reckless
disregard for the safety of
self or others

PCL: Antisocial Factor

PCL Hare Total Score

SIDP Diagnose Antisocial

SIDP Diagnose Histrionic

SIDP continuous antisocial -
includes criterion C

SIDP continuous histrionic

HCR H2. Young Age at First
Violence Incident

HCR R1. Plans lack Feasibility

HCR R2. Exposure to
Destabilizers

HCR HE. Early
Maladjustment: Conduct
Problems

VRAG total score

AGE at time to interview-
computed in SPSS

HCR HF. Adolescence:
Failure to Establish and
Maintain Stable
Relationships
HCR CA. Homicidal Ideation-
Evidence of Serious
Problems
HCR Risk Factor Traditional
HCR Total Score
VRAG 2. Elementary school
maladjustment
VRAG 4. Marital status
VRAG 5. Criminal history
score for nonviolent
offenses
VRAG 7. Age at index
offense (at most recent
birthday)
VRAG total score
AGE at time to interview-
computed in SPSS

Table F2

Bivariate Risk Factors Used in CHAID Analyses for Female Inmates

Women Any Sex	Women Predation	Women Victimization	Women Trade	Women Consensual
ACE Yes/NO any Psych abuse	ACE Yes/NO any Psych abuse	ACE Yes/NO any Physical abuse	ACE Yes/NO any Neglect	ACE Yes/NO any Sexual abuse
ACE Yes/NO any Physical abuse	ACE Yes/NO any Physical abuse	ACE Yes/NO any Neglect	PV: Any Perpetration of Threatened Violence	ACE Yes/NO any Mothers violence
ACE Yes/NO any Sexual abuse	ACE Yes/NO any Sexual abuse	PV: Any Perpetration of Threatened Violence	PV: Any Perpetration of Physical Violence	PBIS-Mother arrested
ACE Yes/NO any Mothers violence	ACE Yes/NO any Mothers violence	PV: Any Perpetration of Relational Aggression	SAP: Any Sexual Perpetration	PBIS-Mother sent to jail/prison
ACE Yes/NO any Neglect	ACE Yes/NO any Neglect	PV: Any Victimization by Threats	PV: Any Perpetration of Relational Aggression	PBIS-Mother addicted to drugs
PBIS-Mother arrested	PBIS-Mother arrested	PV: Any Victimization by Physical Violence	PV: Any Victimization by Threats	PBIS-Father addicted to drugs
PVRI: Any Fights since 18	PVRI: Any Fights since 18	PV: Any victimization by Relational Agg	PV: Any Victimization by Physical Violence	PVRI: Any Fights since 18
PV: Any Perpetration of Threatened Violence	PV: Any Perpetration of Threatened Violence	HCR C4. Impulsivity	PBIS: Sexual orientation Recode	PV: Any Perpetration of Threatened Violence
PV: Any Perpetration of Physical Violence	PV: Any Perpetration of Physical Violence	IFV 11. How much do you worry that you will be attacked by another prisoner during this sentence?	PBIS 34. Before coming to prison, how many orgasms did you have in a normal week?	PV: Any Perpetration of Physical Violence
PV: Any Perpetration of Relational Aggression	PV: Any Perpetration of Relational Aggression	IFV 12. How much do you worry that you'll be attacked by a prison guard or staff member during this sentence?	PBIS 35. Since coming to prison, how many orgasms do you have in a normal week?	SAP: Any Sexual Perpetration

PV: Any Victimization by Threats	PV: Any Victimization by Threats	IFV 13. How much do you worry that you will be sexually assaulted by another inmate during this sentence?	NAS Anger Regulation - Summary score	PV: Any Perpetration of Relational Aggression
PV: Any Victimization by Physical Violence	PV: Any Victimization by Physical Violence	IFV 14. How much do you worry that you will be sexually assaulted by a prison guard or staff member during this sentence?	NAS Total Score: Cog + Arous + Beh	PV: Any Victimization by Threats
PV: Any victimization by Relational Agg	PV: Any victimization by Relational Agg	IFV 16. How much do you think the correctional officers monitor your living area sufficiently to keep you safe from sexual violence?	HCR C4. Impulsivity	PV: Any Victimization by Physical Violence
IFV 5. Do you belong to a prison gang?	IFV 5. Do you belong to a prison gang?	PBIS 25b. Others following you or wanting to hurt you physically?	PCL DX - 30 cutoff	PV: Any victimization by Relational Agg
PBIS: Ethnicity Category	PBIS: Ethnicity Category	PBIS: ANY Threat/Control Delusions	SIDP Diagnose Narcissistic	IFV 5. Do you belong to a prison gang?
PBIS: Sexual orientation Recode	PBIS: Sexual orientation Recode	SIDP Diagnose Dependent	SIDP continuous narcissistic	PBIS: Sexual orientation Recode
PCL-R:Promiscuity (Yes/No)	PCL-R:Promiscuity (Yes/No)	SIDP continuous histrionic	HCR H7. Psychopathy *coded from PCL	PBIS: Age at first sexual experience categorical coding
PBIS 34. Before coming to prison, how many orgasms did you have in a normal week?	PBIS 34. Before coming to prison, how many orgasms did you have in a normal week?	SIDP continuous paranoid	HCR CB. Suicidal Ideation	PCL-R:Promiscuity (Yes/No)
PBIS 35. Since coming to prison, how many orgasms do you have in a normal	PBIS 35. Since coming to prison, how many orgasms do you have in a normal	HCR CB. Suicidal Ideation	HCR h6 History of mental illness, combined 6a and 6b	PBIS 34. Before coming to prison, how many orgasms did you have in a normal

week?

PBIS: Number of sexual partners, categorical coding

NAS Cognitive mean

NAS Total Score: Cog + Arous + Beh

SIDP, BORX4 impulsivity in at least two areas that are potentially self-damaging
IFV 16. How much do you think the correctional officers monitor your living area sufficiently to keep you safe from sexual violence?

SIV1. Did you ever think about physically hurting some other person?

PBIS 25b. Others following you or wanting to hurt you physically?

PBIS: ANY Threat/Control Delusions

SIDP, CANX evidence of conduct disorder before 15 years

week?

PBIS: Number of sexual partners, categorical coding

NAS Cognitive mean

NAS Total Score: Cog + Arous + Beh

SIDP, BORX4 impulsivity in at least two areas that are potentially self-damaging
IFV 16. How much do you think the correctional officers monitor your living area sufficiently to keep you safe from sexual violence?

SIV1. Did you ever think about physically hurting some other person?

PBIS 25b. Others following you or wanting to hurt you physically?

PBIS: ANY Threat/Control Delusions

SIDP, CANX evidence of conduct disorder before 15 years

week?

PBIS 35. Since coming to prison, how many orgasms do you have in a normal week?

PBIS: Number of sexual partners, categorical coding
NAS Cognitive mean

NAS Arousal mean

NAS Total Score: Cog + Arous + Beh

SIDP, ANTX4 irritability and aggressiveness, as indicated by repeated physical fights or assaults

SIDP, BORX4 impulsivity in at least two areas that are potentially self-damaging
HCR C4. Impulsivity

IFV 11. How much do you worry that you will be attacked by another prisoner during this sentence?

SIDP, ANTX1 failure to conform to social norms w/ respect to lawful behaviors as indicated by repeatedly performing acts that are grounds for arrest
SIDP, ANTX5 reckless disregard for the safety of self or others

SIDP, ANTX1 failure to conform to social norms w/ respect to lawful behaviors as indicated by repeatedly performing acts that are grounds for arrest
SIDP, ANTX5 reckless disregard for the safety of self or others

PCL: Antisocial Factor

PCL: Antisocial Factor

SIDP Diagnose Antisocial

SIDP Diagnose Antisocial

SIDP Diagnose Narcissistic

SIDP Diagnose Narcissistic

SIDP continuous histrionic

SIDP continuous histrionic

SIDP continuous antisocial - includes criterion C

SIDP continuous antisocial - includes criterion C

IFV 12. How much do you worry that you'll be attacked by a prison guard or staff member during this sentence?

IFV 13. How much do you worry that you will be sexually assaulted by another inmate during this sentence?

IFV 14. How much do you worry that you will be sexually assaulted by a prison guard or staff member during this sentence?

IFV 16. How much do you think the correctional officers monitor your living area sufficiently to keep you safe from sexual violence?

SIV1. Did you ever think about physically hurting some other person?

SIDP, CANX evidence of conduct disorder before 15 years

SIDP, ANTX1 failure to conform to social norms w/ respect to lawful behaviors as indicated by repeatedly performing acts that are

grounds for arrest

SIDP continuous narcissistic	SIDP continuous narcissistic
HCR H2. Young Age at First Violence Incident	HCR H2. Young Age at First Violence Incident
HCR CB. Suicidal Ideation	HCR CB. Suicidal Ideation
VRAG 7. Age at index offense (at most recent birthday)	VRAG 7. Age at index offense (at most recent birthday)
VRAG total score	VRAG total score
AGE at time to interview-computed in SPSS	AGE at time to interview-computed in SPSS

SIDP, ANTX5 reckless disregard for the safety of self or others
PCL: Antisocial Factor

PCL Hare Total Score
SIDP Diagnose Antisocial

SIDP Diagnose Narcissistic
SIDP Schizoid continuous

SIDP Schizotypal continuous
SIDP continuous antisocial - includes criterion C
SIDP continuous narcissistic
HCR H1. Previous Violence
HCR H2. Young Age at First Violence Incident
HCR HE. Early Maladjustment: Conduct Problems
HCR CA. Homicidal Ideation-Evidence of Serious Problems
HCR CB. Suicidal Ideation

VRAG 7. Age at index
offense (at most recent
birthday)
VRAG total score
AGE at time to interview-
computed in SPSS
