DESCRIPTION AND PREDICTIVE CHARACTERISTICS OF PERPETRATORS AND VICTIMS OF SUBSTANTIATED PRISONER ON PRISONER SEXUAL ASSAULT, MICHIGAN DEPARTMENT OF CORRECTIONS, 1998-2006

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Introduction

The purpose of the data collection and analysis was to identify characteristics and unique predictors of being a perpetrator or a victim of a sexual assault by another prisoner in a Michigan Department of Corrections (MDOC) facility. Victims and perpetrators were identified from available records of the outcomes of Misconduct Hearings between the beginning of 1998 and the end of 2006.

Correctional staff can become aware of an allegation of prisoner on prisoner sexual assault from any source, including a report of the victim, another inmate, or through a correctional officer seeing an apparent assault. The protocol is for staff members to report allegations to supervisors, and a Major Misconduct report or a critical incident report may be written. A supervisory staff member reviews the Major Misconduct Report with the prisoner, and determines the accuracy of names and numbers and notes whether the prisoner requests a hearing, identifies witnesses, and the location of physical evidence. If the prisoner refuses to attend the review, a hearing investigator will investigate the charges at the request of the prisoner or the hearings officer, and will complete a Hearing Investigation Report. The Hearing Officer holds a specific job with the primary duty to conduct hearings. Currently, the Hearing Officer is employed by the State Office of Administrative Hearings and Rules, Department of Labor and Economic Growth. After gathering and considering relevant statements and other information, the Hearing Officer makes a determination based on a preponderance of evidence (guilty or not guilty) or dismisses the charge if timelines are not met or there are other technical issues. The Hearing Officer also notes what type of misconduct was committed, and sanctions perpetrators for guilty findings.

Outside the Major Misconduct hearing process, an allegation of prisoner on prisoner sexual assault may be investigated by the facility inspector and the Michigan State Police. The State Police can refer the case to the County Prosecutor are the State Attorney General's Office, though this last step is rarely taken in recent years.

The data for analysis to describe and to predict perpetrators and victims are based on individuals, not incidents. Two cases in which a male perpetrator in a low security setting grabbed a female inmate who was walking nearby were not considered in the analysis described below.

The Sample and Housing Type for Perpetrators

The sample of perpetrators included all cases of prisoner on prisoner sexual assault that were substantiated through a Misconduct Hearing, and that occurred from the beginning of 1998 through the end of 2006. For the analysis reported below, the sample was reduced through the removal of any perpetrator who was in the database multiple times. The reasons for appearing in the dataset multiple times were (1) the perpetrator victimized the same person on two separate occasions (1 case), (2) the perpetrator victimized two victims during the same incident (2 cases), (3) the perpetrator victimized two different victims on two (6 cases) or 3 (one case) separate occasions. Some of the perpetrators did act in concert with others. Note that the data for analysis are based on perpetrators, not incidents. Also eliminated from the analysis were two cases in which a male perpetrator in a camp setting grabbed a female inmate who was walking nearby.

Table 1: Male and Female Perpetrators by Type of Housing

	Perpetrator's Sex		
Security of Housing	female	male	Total
Acute Care Unit	0	3	3
	.0%	2.0%	1.8%
Administrative Segregation	0	2	2
	.0%	1.3%	1.2%
General Population-Level 1	4	36	40
	30.8%	23.5%	24.1%
General Population-Level 2	5	51	56
	38.5%	33.3%	33.7%
General Population-Level 3	0	4	4
	.0%	2.6%	2.4%
General Population-Level 4	2	34	36
	15.4%	22.2%	21.7%
General Population-Level 5	0	10	10
	.0%	6.5%	6.0%
Intake Housing	1	4	5
	7.7%	2.6%	3.0%
G.P. Transferred for Medical Reasons-Level5	0	3	3
	.0%	2.0%	1.8%
Protective Custody (Protective Segregation)	0	1	1
	.0%	.7%	.6%
Residential Treatment Program	1	5	6
	7.7%	3.3%	3.6%
Total	13	153	166
	100.0%	100.0%	100.0%

The vast majority of perpetrators were male (93%). Also, most perpetrators acted when they were housed in the general population at the security levels 1, 2 and 4. (Security level 1 provides the least security, and higher numbers reflect greater security.) Whether an incident occurs is a result of the opportunity provided within a security level

and the predisposition of the potential perpetrator. Thus, a prediction model was developed to differentiate the male perpetrators who were in the general population, security levels 1, 2, or 4 and a matched group of men with no history of sexual misconduct against prisoners, but housed at the same security levels on the day the incident occurred.

The Sample and Housing Type for Victims

The sample of victims included all cases of prisoner on prisoner sexual assault that were substantiated through the internal hearing, and that occurred from the beginning of 1998 through the end of 2006. The sample was reduced through the removal of any victims who were in the database multiple times. The reasons for appearing in the dataset multiple times were (1) victimization by two different perpetrators in separate incidents (1 case), and (2) victimization by the same perpetrator in two different incidents (2 cases). Like the analysis for perpetrators, the analysis for victims is based on individuals, not incidents.

Table 2: Male and Female Victims by Type of Housing

Security of Housing	female	male	Total
Acute Care Unit	0	2	2
	.0%	1.4%	1.3%
Administrative Segregation	0	3	3
	.0%	2.1%	1.9%
General Population-Level 1	5	35	40
	38.5%	24.0%	25.2%
General Population-Level 2	4	49	53
	30.8%	33.6%	33.3%
General Population-Level 3	0	5	5
	.0%	3.4%	3.1%
General Population-Level 4	1	35	36
	7.7%	24.0%	22.6%
General Population-Level 5	0	6	6
	.0%	4.1%	3.8%
Intake Housing	1	4	5
	7.7%	2.7%	3.1%
Transferred for Medical Reasons-Level5	0	1	1
	.0%	.7%	.6%
Protective Custody (Protective Segregation)	0	1	1
	.0%	.7%	.6%
Residential Treatment Program	2	5	7
	15.4%	3.4%	4.4%
Total	13	146	159
	100.0%	100.0%	100.0%

Most victims were male (91.8%). Also, most victims were attacked when they were housed in the general population at the security levels 1, 2 and 3. Whether an incident occurs is a result of the opportunity provided within a security level and the predisposition of the potential perpetrator. Thus, a prediction model was developed to differentiate the male victims who were in the general population, security levels 1, 2, or 4 and a matched group of men with no history of victimization by another prisoner, but who were housed at the same security levels on the day the incident occurred. Logistic regression was used to compare the 116 male victims with 116 matched individuals.

Measurement

Nature and circumstances of the sexual assault incident. Information on the nature and circumstances of sexual assaults was determined by reading and coding the qualitative hearing reports. Specific variables were as follows: (1) threat or act of penetration occurred (0=no, 1=yes), year of the incident, hour of the incident, victim a cellmate (0=no, 1=yes). Indication of the following information in the hearing reports was also noted: fear expressed by the victim, use of a weapon, use of force other than the sexual assault itself, threats, multiple perpetrators acting together, multiple victims in same incident.

Victim Background and Characteristics. Presentence investigations were examined for information about childhood neglect, physical abuse, and sexual abuse. Both the corrections' department database and the paper records were examined to determine sex, amount of education completed, and date of birth. Education was coded as 8^{th} grade or less (1), 9^{th} through 11^{th} grade (2), high school or GED (3), or more than high school (4). Age at the time of the incident was calculated based on the date of birth. Marital status and race were determined from the department database and the online, public use database.

On-line public information was accessed to collect data on height, and weight. On-line photos were used to rate victims as muscular or slight. All but one victim was born in the United States.

Juvenile History was obtained from examination of presentence investigations. The number of juvenile robberies, assaults, and sexual assaults were noted. Since few men had more than one of these juvenile offenses, yes/no variables were created to reflect either no involvement, or one or more instances.

For both juvenile and adult histories, files were examined to determine *age at first offense*, *age of first incarceration*, and *history of offenses against vulnerable people*. Vulnerable people were defined as children, elderly individuals, and mentally or physically handicapped individuals. Many of these incidents took place over time, were planned, and/or were extremely violent. Examples for perpetrators include:

> Multiple instances of an adult robbing school children, for example taking valuable belongings while they were walking home from school, entering

children's homes when they were alone and threatening them with knives and taking valuable items.

At age 25, called an 11 year old girl several times, obtained her address, and went to her home and vaginally raped her.

As an adult, showed 9 and 11 year old boys x-rated movies and fondled them.

Brought mentally impaired relative to his room and after having sex with her, told her to tell nobody.

During a B & E, murdered a 93 year old blind woman.

Some perpetrators with a history of offenses against vulnerable people had official records of more than one such offense. The perpetrators had victimized people of differing ages, and there was considerable Physical violence and force involved. In several cases weapons like knives and guns were used. The perpetrators appeared to have picked targets of opportunity (as opposed to the "get to know you," persuasion method of the victim group) and then used violent force to commit the assault.

Examples of past illegal acts against vulnerable people for victims are:

Sexually assaulted a 14 year old with degenerative disease and the mental capacity of an 8 or 9 year old. He knew her through the victim's brothers.

Sexual intercourse with 9 and 14 year old sisters when he was 16.

Creating child pornography with his two daughters and two of their friends. Sexually assaulted nieces and daughters beginning when they were 5 or 6 years old. Served the girls alcohol as a precursor to watching pornography.

He engaged in oral sex with his 6 year old brother when he was 14 years old.

One of the sexual assault victims murdered his grandfather in the course of stealing money from him, but the remainder of the descriptions for victims' acts against vulnerable people involved primarily child molestation, often when the victims in the present research were themselves under 18. The dominant theme in these cases was "coercion over force", which means that in 90 percent of cases the perpetrator seemed to use some sort of coercion (alcohol, bribes, etc.) to get the victim to participate rather than physically forcing them. In addition, there were also many more cases of "touching" offenses, that did not involve penetration.

Number of prior convictions was coded from an online history of convictions as an adult available for public use. The number of prior convictions for seven types of offenses were counted. The types of offenses were *criminal sexual conduct*, *drug related offenses*, *property* (including fraud, forgery, larceny, destruction, embezzlement),

weapon related, *violence against persons* (assault, battery, murder, carjacking, robbery), and *other* (including refusing to obey a police order, taking liberties with a child, pandering, resisting an officer). These offenses were considered either because they were common or were particularly relevant to sexual assault in prison, for example, prior criminal sexual conduct.

Official Record of Behavior in Prison. Based on what is described in policy directive as "verified documentation (e.g., conviction, finding of guilt on a major misconduct, information in a jail report) that he or she used force or the threat of force to commit or attempt to commit a non-consensual sexual act involving a victim of the same sex" some inmates are officially recognized by the Department of Corrections as "sexual predators."" A Major Misconduct guilty finding for "Sexual Assault" against a person of the same sex is a reason for designation as a sexual predator. The sexual predator designation can be appealed. The designation must be considered in decision making about housing assignments and housing transfers.

For additional indicators of behavior while incarcerated, records of misconduct charges that resulted in a guilty finding were used. Counts were made of several types of misconducts for which inmates were found guilty. The types of misconducts that were considered included those that occurred most frequently or that were of special relevance in a study of prediction of perpetration of sexual assault within a correctional setting. The types of misconducts were: *sexual misconduct other than sexual assault of a prisoner*, *other violence or threats (still omitting sexual assault of a prisoner)*, *disobeying an order*, *insolence*, *out of place*, *possession of illegal materials*, *substance abuse*, *misuse or destruction of property*, and *other*. Note that number of guilty findings for sexual assault against a prisoner was considered only in the prediction of being a victim of prisoner-on-prisoner sexual assault, because for perpetrators the matched comparison group was formed to eliminate people with prior charges of sexual assault against a prisoner. A factor analysis showed that *sexual misconduct other than sexual assault of a prisoner*, *other violence or threats (still omitting sexual assault of a prisoner)*, *disobeying an order*, *insolence*, and *misuse or destruction of property* reflected an underlying concept, which was called aggressive misconducts. A reliability analysis of the scale confirmed the interconnections of these acts (for perpetrators, alpha=.78; for victims, alpha=.71). The remaining counts of misconducts – for being *out of place*, *possession of illegal materials*, *substance abuse,* and *other acts,* were not connected to each other and were not included in the prediction model.

Timing of the incident. The date of the incident was used for both the perpetrator and the non-perpetrator match to derive indicators of: age at time of incident, time in the cell before the incident, time in the facility before the incident, and time from first incarceration in a MDOC facility to the incident.

Methods of Analysis

Depending on the type of variable (nominal or continuous), either percentages or means were compared for the victims and the matched group, and then for the

perpetrators and the group matched to them. An additional comparison was between the victims at each of the security levels, 1, 2, and 4. Similarly, the perpetrators at the different levels of security and the nature of their sexual assault incidents were compared.

Usually only variables that were significant at the .10 level were included in the prediction models. A few variables that neared this level of significance were included because they were of interest. Also, although not significant, time from first incarceration to the incident was included as a control variable, to ensure that the number of misconduct charges was not significant because a man had been involved with MDOC for a long time. Two alternative methods were used to determine the predictors of prisoner on prisoner sexual assaults in the matched groups. Logistic regression was used to compare 116 victims to a matched group of men, and then to compare 121 male perpetrators with 121 matched men. The alternative method, discriminant analysis, was also used to compare the victims and matches, and then the perpetrators and matches. The two methods provide different ways for addressing slightly different research questions. Logistic regression addresses the question, what predictors are significant in their own right, not because of being related to other predictors? Discriminant analysis addresses the question, which predictors in a set are most useful in explaining whether a man is a victim (or a perpetrator)? Both types of analysis answered the question, "How much better can we predict that a man will be a victim (or a perpetrator) with knowledge of some set of predictors?"

Comparison of Male Perpetrators and Men Matched by Security of Housing at the Time of the Incident

Table 3 shows that perpetrators were significantly different from the matched group by virtue of having less education, and a higher prevalence of sexual abuse as a child. The two groups were not different in physical size and appearance, race, and marital status. The perpetrators were younger than the matched group of men.

The perpetrators had a more violent juvenile and criminal background than the matched group. They were significantly more likely to have a record of at least one robbery and one sexual assault as a juvenile. They also had more adult convictions for criminal sexual conduct. In contrast, the matched group had more convictions for property and drug-related offenses.

Both the perpetrator and the matched group had a fairly high number of guilty misconduct findings for aggressive acts in the prison system. However, the average was significantly and substantially higher for the perpetrator group. Also, 40 percent of the perpetrators had been designated as sexual predators before the incident, but no men in the match group had been so designated.

Table 3: Comparison of Male Perpetrators with Men Matched by Security Level of Housing (Levels 1, 2, 4 Only)

	Categorical Variables				Continuous Variables				
	% of Perpetrators (121)	% Men in Same Security (121)	Chi-sq Df=1	p	Average for Perpetrators (121)	Average for men in Same Security (121)	F	df	p
Background									
Amount of education					2.52	2.81	8.5	1, 234	.004
Height in feet					5.83	5.82	.1	1, 240	.798
Weight in pounds					182.70	185.75	.5	1, 239	.475
Rating slight not muscular					41.07	42.31	.4	1, 240	.527
Sexual abused as child	7.4	.8	6.7	.010					
Physically abused as child	9.9	12.4	.4	.540					
Neglected as child	5.8	5.8	1.0	.605					
Married	11.8	18.4	2.0	.155					
Race (1=Black)	70.2	64.3	.9	.334					
Timing									
Age of First Arrest					17.61	17.28	.2	1, 227	.673
Age at time of incident					38.29	41.23	5.5	1, 240	.020
Time in the facility (years)					.83	.77	.3	1, 240	.603
Time in the cell (years)					.31	.36	.8	1, 240	.368
Years1st incar. to incident					13.49	14.44	.9	1, 240	.334
Illegal Behavior History									
Juvenile Robbery	11.6	2.5	7.7	.006					
Juvenile Assault	14.9	10.7	.9	.336					
Juvenile Sexual Assault	9.9	.0	12.6	.000					
Offense vs. vulnerable	38.8	20.7	9.6	.002					
# convictions property					.95	2.12	19.2	1, 240	.000
# convictions CSC					.67	.13	35.9	1, 240	.000
# convictions weapon					.89	1.03	.4	1, 240	.507
# convictions violence					.60	.78	.8	1, 240	.366
# convictions drugs					.14	.59	18.5	1, 240	.000
# convictions other					.17	.21	.3	1, 240	.565
Official Record in Prison									
# Aggressive misconducts					15.61	10.84	5.9	1,240	.016
Sexual Predator	40.0	.0	60.4	.000					

Comparison of Perpetrators and the Sexual Assaults they Commit at Security Levels 1, 2, and 4

Appendix A summarizes the comparison of the characteristics of the perpetrators and the sexual assaults they committed for security levels 1, 2 and 4. There were few difference. The higher the level of security, the more likely the perpetrator and the victim were cellmates. At Security Level 1, 25% were cellmates (9/36), at Level II, 49% were cellmates (25/51), and at Level IV, 52.9% were cellmates (18/34) (Chi-square=6.9, df=2, p=.032). There were differences by level in the number of several types of guilty

misconduct findings, including disobeying an order, insolence, being out of place, sexual misconducts other than prisoner-on-prisoner sexual assault, and misuse or destruction of property. The higher the number of each type of misconduct, the greater the security level.

A Model to Predict Being a Perpetrator for Men at Security Levels 1, 2 and 4 (Logistic Regression)

Because no men in the matched group had a record for a juvenile sexual assault noted in the case materials, and no men in the matched group were designated as a sexual predator by the correctional department, these two variables could not be included in the prediction model. In practice, they would be indicators that a man is likely to be a perpetrator.

The following table presents the findings from the logistic regression analysis.

Table 4: Predictors of Being a Perpetrator

Predictors of being a Perpetrator	**Increased odds and percent changes**
Case file information indicating childhood sexual abuse	The odds of a man with a history of childhood sexual victimization being a perpetrator are 5.5 times the odds of a man without such a record. Put another way, this is a 452.7% increase in the chances a man will be a perpetrator.
Case file information that the person committed one or more juvenile robberies	The odds of a man with a juvenile robbery record being a perpetrator are 4.2 times the odds of a man without such a record. This is a 320.5% increase in the chances a man will be a perpetrator.
Each prior CSC conviction in OTIS	Increases the odds of being a perpetrator about 2.8 times, or 183%.
Predictors of not being a Perpetrator	
Each prior drug related conviction in OTIS	Decreases the odds of being a perpetrator by 59.6%
Each shift up on a 4-point scale for education	Decreases the odds of being a perpetrator by 32.7%
Each prior property offense conviction in OTIS	Decreases the odds of being a perpetrator by 27.8%
Each year older	Decreases the odds of being a perpetrator by 2.9%

The statistics to support this conclusion are presented in the next table (Table 5).

Table 5: Results of the Logistic Regression to Predict Men Being a Perpetrator of Prisoner on Prisoner Sexual Assault.

Variable	B	Standard Error	Exp(B)	Sig.	95% Confidence Interval	
					Lower	Upper
Amount of Education	-.396	.211	.673	.060	.445	1.017
Sexual abuse as child	1.710	1.173	5.527	.145	.555	55.088
Offense vs. vulnerable people	-.261	.398	.771	.513	.353	1.682
Age at time of incident	-.030	.020	.971	.126	.934	1.008
Juvenile Robbery	1.436	.782	4.205	.066	.907	19.488
Number of conviction property	-.326	.097	.722	.001	.597	.872
Number of conviction CSC	1.040	.313	2.830	.001	1.533	5.225
Number of conviction drugs	-.907	.285	.404	.001	.231	.706
Aggressive Misconduct	.008	.010	1.008	.461	.987	1.028
Yrs. 1st incarceration to incident	.033	.026	1.033	.214	.981	1.088

For "sexual abuse as a child" the upper level of the Confidence Interval is high , so the result should be interpreted with caution.

Since the men in the analysis were divided equally in half between the matched group and the perpetrators, just by guessing, about half of them (50%) would be categorized correctly if they were randomly assigned to the two groups. The predictors, however, increase the percent correctly classified to 74.4% for the matched group, and to 76.2% for the perpetrators, or by about 25% for both groups (Table 6).

Table 6: Accuracy of Prediction for Perpetrators, Logistic Regression Model

		Predicted Status		
Observed		Non-perpetrator	Perpetrator	Percentage Correct
Status	Non-perpetrator	90	31	74.4
	Perpetrator	29	92	76.2
Overall Percentage				75.2

Not just the individual characteristics of the men, but also the security level, could contribute to whether a man acts as a perpetrator. If higher security stops perpetration, there would be more men predicted to be a perpetrator at Level 4, but who actually were not perpetrators. The data support that this is the case. In the second row of Table 7, the highest proportion of men (22.1%) who would be predicted to be perpetrators, but who are not, are at Level 4 Security, the highest security level studied. This suggests that the high security level constrains some potential perpetrators from acting against victims.

Table 7: Accuracy of Prediction of Being a Perpetrator of Sexual Assault Against a Male prisoner for Men Housed at Three Security Levels

Accuracy of prediction	Security Level			Total
	1	2	4	
Correctly predicted to not be a perpetrator	28	43	19	90
	38.9%	42.2%	27.9%	37.2%
Predict to be a perpetrator, but is not	8	8	15	31
	11.1%	7.8%	22.1%	12.8%
Predicted to not be a perpetrator, but is	9	14	6	29
	12.5%	13.7%	8.8%	12.0%
Correctly predicted to be a perpetrator	27	37	28	92
	37.5%	36.3%	41.2%	38.0%
Total	72	102	68	242
	100.0%	100.0%	100.0%	100.0%

Chi square = 10.1, df=6, p=.122

A Closer Look at Prior CSC Convictions and Offenses Against Vulnerable People

Because the simple comparison of groups showed a strong connection of a history of illegal acts against vulnerable people, and the logistic regression analysis did not, additional analysis was done to investigate the influence of a past history of acts against vulnerable people. The results are in Table 8.

In the row labeled "both," 6.6% of the matched group but the much higher 30.6% of perpetrators had prior convictions for CSC, plus those or other offenses had been against vulnerable people. Although the combined effect of both of these pieces of information does not increase the ability to predict, it is still the case that the perpetrators are especially likely to have prior CSC convictions and for either some of those convictions or other prior offenses to be against vulnerable people.

Table 8: The Combined Effect of Prior CSC Convictions and Offenses Against Vulnerable People on Being a Perpetrator

CSC Convictions and History of Offenses against Vulnerable People	Matched Group	Perpetrators	Total
Neither	93	56	149
	76.9%	46.3%	61.6%
Only CSC Convictions	17	10	27
	14.0%	8.3%	11.2%
Just Offenses Vs. Vulnerable	3	18	21
	2.5%	14.9%	8.7%
Both	8	37	45
	6.6%	30.6%	18.6%
Total	121	121	242
	100.0%	100.0%	100.0%

Chi Square=40.4, df=3, p=.000.

An Alternative Model to Predict Being a Perpetrator for Men at Security Levels 1, 2 and 4 (Discriminant Analysis)

The discriminant analysis provided a different but parallel picture of the predictors of being a perpetrator. The most important predictors were prior convictions for CSC, low numbers of convictions for property and drug-related offenses, and a history of offenses against vulnerable people. Other predictors were low level of education, history of juvenile robbery, sexual abuse as a child, findings of guilty for aggressive misconducts, and young age. The statistics supporting these conclusions, and the correctness of prediction from these variables are included in tables 9 and 10.

Table 9: Discriminant Analysis Results to Predict Being a Perpetrator for Men at Security Levels 1, 2, and 4.

Discriminating Variables	Correlation Coefficients	Standardized Function Coefficients
Number of conviction CSC	.36	.64
Number of conviction property	-.27	-.47
Number of conviction drugs	-.27	-46
Offense against vulnerable people	.20	.34
Amount of Education	-.19	-.32
Juvenile Robbery	.18	.30
Sexual abused as child	.17	.28
Aggressive Misconduct	.15	.26
Age at time of incident	-.15	.25
Discriminant function statistics		
Eigenvalue	.37	
Canonical *R*	.52	
Chi-square	73.60	
df	9.00	
p	.00	
Group centroids		
Group 1: Not Perpetrator	-.60	
Group 2: Perpetrator	.60	

Table 10: Accuracy of Prediction for Perpetrators, Discriminant Analysis Model

		Predicted Status		
	Observed	Non-perpetrator	Perpetrator	Percentage Correct
Status	Non-perpetrator	92	29	76.0
	Perpetrator	31	90	74.4
Overall Percentage				75.2

Comparison of Male Victims with Men Matched by Security Housing at the Time of the Incident

Table 11 shows that victims were significantly different from the matched group by virtue of having less education, being lighter and of slighter build, having a history of child sexual abuse, being unmarried, and less often being black. The two groups were not different in childhood history of physical abuse and neglect.

The victims were younger at age of first arrest, younger than the matched group at the time of the incident, and had more recently been incarcerated for the first time, moved into the correctional facility, and moved into their cell or room.

Compared to men at the same security levels, victims more often had a history of juvenile assault and sexual assault, and more often had committed offenses against vulnerable people. They had more prior convictions for CSC, and fewer for weapons offenses and violence other than CSC. They were similar in guilty findings for aggressive misconducts in the prison. No men in either the victim group or the matched group had been designated by the correctional department as a sexual predator.

Table 11: Comparison of Male Victims with Men Matched by Security Level of Housing (Levels 1, 2, 4 Only)

	Categorical Variables				Continuous Variables				
	% of Victims	% Men in Same Security	Chi-sq Df=1	p	Average for Victims	Average for men in Same Security	F	df	p
Background									
Amount of education					2.38	2.70	9.7	1,230	.002
Height in feet					5.75	5.78	.8	1,230	.367
Weight					164.84	178.47	10.7	1,230	.001
Slight and not muscular					33.79	41.29	14.5	1,230	.000
Sexual abused as child	14.8	1.7	13.0	.000					
Physically abused as child	14.8	10.3	1.0	.309					
Neglected as child	3.5	5.2	.4	.527					
Married	.9	14.7	15.4	.000					
Race (1=Black)	15.5	52.6	35.5	.000					
Timing									
Age of First Arrest					17.38	19.59	4.6	1,221	.033
Age at time of incident					27.62	37.19	53.7	1,230	.000
Time in the facility					.63	1.00	5.0	1,231	.026
Time in the cell					.22	.51	12.8	1,231	.000
Yrs. 1st MDOC to incident					3.25	7.64	26.6	1,229	.000
Illegal Behavior History									
Juvenile Robbery	3.4	3.4	.0	1.00					
Juvenile Assault	19.8	7.8	7.1	.008					
Juvenile Sexual Assault	11.2	3.4	5.1	.023					
Offense vs. vulnerable	37.8	20.7	8.1	.004					
# convictions property					.99	1.36	2.5	1,230	.112
# convictions CSC					.59	.34	5.7	1,230	.018
# convictions weapon					.17	.47	7.5	1,230	.007
# convictions other					.25	.16	1.6	1,230	.201
# convictions violence					.24	.50	6.3	1,230	.013
# convictions drugs					.13	.32	3.9	1,230	.049
Official Record in Prison									
# Aggressive misconducts					5.5	6.8	.95	1,231	.330
Sexual Predator	0	0							

Comparison of Victims and the Sexual Assault Against Them at Security Levels 1, 2, and 4

Appendix B summarizes the comparison of the characteristics of the victims and the sexual assaults against them for security levels 1, 2 and 4. There were few difference. There was a tendency for victims at level 2 of security to be slightly more likely to have committed a juvenile robbery, and those at levels 1 and to a lesser extent level 3 were most likely to have a history of offenses against vulnerable people. There were

differences by level in the number of several types of guilty misconduct findings, including violence and threats (other than those involving sexual attacks), disobeying an order, insolence, being out of place, having illegal materials, sexual misconducts other than prisoner-on-prisoner sexual assault, and misuse or destruction of property. The higher the number of each type of misconduct, the greater the security level.

A Model to Predict Being a Victim for Men at Security Levels 1, 2 and 4 (Logistic Regression)

After controlling for other variables, the strongest predictor of victimization for the men at security levels 1, 2, and 4 was history of childhood sexual victimization. The statistics suggest that this finding should be viewed with caution, since relatively few men in the sample had such a background. A history of juvenile assaults increased the odds of being a victim. Being black, being married, and being in the cell for more days decreased the risk.

Table 12: Predictors of Being a Victim

Predictors of being a Victim	**Increased odds and percent changes**
Case file information indicating childhood sexual abuse	The odds of a man with a history of childhood sexual victimization being a victim are 28.3 times the odds of a man without such a record.
Case file information that the person committed one or more juvenile assaults	The odds of a man with a juvenile assault record being a victim are 3.0 times the odds of a man without such a record. This is a 200% increase in the chances a man will be a victim.
Predictors of not being a Victim	
Being black	Decreases the odds of being a victim by 87%
Being married	Decreases the odds of being a victim by 86%
Each week longer in the cell	Decreases the odds of being a victim by 2.7%
Each year older	Decreases the odds of being a victim by 9.1%
Each increment in rating a person as not slight but muscular	Decreases the odds of being a victim by 2.3%

The statistics to support these conclusions are presented in the next table.

Table 13: Results of the Logistic Regression to Predict Men Being a Victim of Prisoner on Prisoner Sexual Assault.

Variable	B	Standard Error	Exp(B)	Sig.	95% Confidence Interval	
					Lower	Upper
Amount of Education						
Slight build	-.024	.012	.977	.044	.954	.999
Sexual abused as child	3.340	1.144	28.224	.003	3.000	265.455
Married	-1.970	1.108	.140	.076	.016	1.225
Black	-.2038	.409	.130	.000	.058	.291
Age at time of incident	-.091	.023	.913	.000	.874	.955
Years in the facility	.090	.178	1.094	.613	.772	1.552
Days in the cell	-.003	.001	.997	.034	.994	1.000
Yrs. 1st incarceration to incident	-.001	.037	.999	.975	.929	1.073
Juvenile assaults	1.104	.583	3.017	.058	.962	9.463

Since the men in the analysis were divided equally in half between the matched group and the victims, just by guessing, about half of them (50%) would be categorized correctly if they were randomly assigned to the two groups. The predictors, however, increase the percent correctly classified to 80.2% for the matched group, and to 81.0% for the victims.

Table 14: Accuracy of Prediction for Victims, Logistic Regression Model

		Predicted Status		
Observed		Non-victim	Victim	Percentage Correct
Status	Non-perpetrator	93	23	80.2
	Perpetrator	22	94	81.0
Overall Percentage				80.6

Not just the individual characteristics of the men, but also the security level, could contribute to whether a man is victimized. If higher security stops victimization, there would be more men predicted to be a victim at Level 4, but who actually are not victims. The data did not, however, support this conclusion.

Table 15: Accuracy of Prediction of Being a Victim of Sexual Assault Against a Male prisoner for Men Housed at Three Security Levels

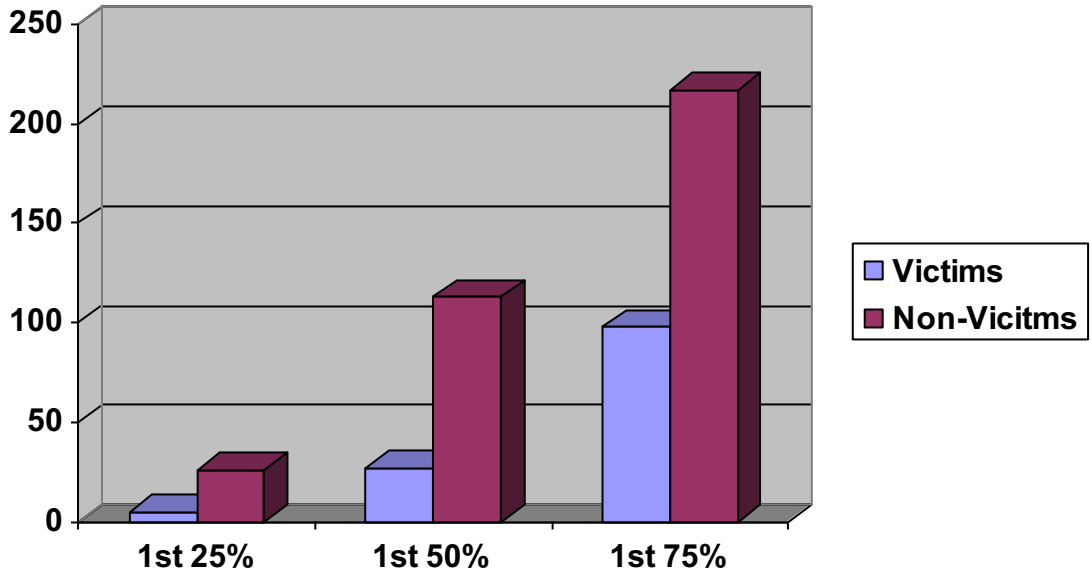
	Security Level of Housing			Total
Accuracy of Prediction	1	2	4	
correctly predicted in the no victim group	29	35	25	89
	44.6%	35.4%	36.8%	38.4%
predicted as a victim but was not	3	15	9	27
	4.6%	15.2%	13.2%	11.6%
predicted a non-victim but was a victim	6	7	7	20
	9.2%	7.1%	10.3%	8.6%
correctly predicted is a victim	27	42	27	96
	41.5%	42.4%	39.7%	41.4%
Total	65	99	68	232
	100.0%	100.0%	100.0%	100.0%

Chi-square=5.5, df=6, p=.482

A Closer Look at the Time in Cell Findings for Victims

The logistic regression results led to an examination of the number of days victims and the matched group had been in their cells before the date of the incident. One quarter of the victims had been in their cells for under 5 ½ days when the incident occurred. The quarter of the non-victims who had been in their cells for the shortest time had been there for 26 days or less. An additional quarter of the victims had been in their cells more than 5 ½ days but less than 28 days. An additional one quarter of victims had been in their cells from more than 27 days but less than 100 days.

Figure 1. Comparison of Number of Days in the Cell for Three Quartiles of Victims and Non-victims*



*The first quartile of victims bad been in their cells the shortest period compared to other victims, the second quartile the next shortest, and so on. The first quartile of the non-victims had been in their cells the shortest period compared to other non-victims, the second quartile the next shortest, and so on.

A Closer Look at the Findings About Childhood Sexual Victimization, Offenses Against Vulnerable People, and Prior Convictions for CSC for Victims

When predictors are closely interconnected, they may not be strong predictors in a multivariate model (like logistic regression or discriminant analysis), but they still may characterize some groups much more than others. There are connections between sexual victimization as a child and history of offenses against vulnerable people. Of men without offenses against vulnerable people, 4.3 percent had a history childhood sexual abuse. In contrast, 17.6 percent of men with offenses against vulnerable people had a history of childhood sexual abuse.

Table 16: The Relationship Between Childhood Sexual Victimization and Offenses Against Vulnerable People for Victims of Prisoner on Prisoner Sexual Assault.

Childhood sexual victimization	Offenses against vulnerable		Total
	no	yes	
no	157	56	213
	95.7%	82.4%	91.8%
yes	7	12	19
	4.3%	17.6%	8.2%
Total	164	68	232
	100.0%	100.0%	100.0%

Chi-square= 11.4 df=1 p=.001

Additionally, victims were most likely to have a history of both offenses against vulnerable people and CSC convictions.

Table 17: The Combined Effect of Prior CSC Convictions and Offenses Against Vulnerable People on Being a Victim

Prior adult CSC convictions and history of offenses against vulnerable people			Total
	Non-victim	Victim	
neither	84	60	144
	72.4%	51.7%	62.1%
only csc	8	12	20
	6.9%	10.3%	8.6%
only vulnerable	7	10	17
	6.0%	8.6%	7.3%
both	17	34	51
	14.7%	29.3%	22.0%
Total	116	116	232
	100.0%	100.0%	100.0%

Chi-square = 11.0, df= 3, p= .012

Because the variables are interconnected, they all may not be significant in a prediction model that introduces controls for the other variables. But, in reality victims of prisoner-on-prisoner sexual assault with a history of sexual abuse also are likely to have a history of offenses against vulnerable people and prior CSC charges.

An Alternative Model to Predict Being a Victim for Men at Security Levels 1, 2 and 4 (Discriminant Analysis)

The discriminant analysis provided a different but parallel picture of the predictors of being a victim. The most important predictors were being young, not black,

recently first incarcerated in an MDOC facility, unmarried, abused as a child, and slight of build. Other predictors included recently moving into the cell, and limited education. The statistics supporting these conclusions, and the correctness of prediction from these variables are included in tables 18 and 19.

Table 18: Discriminant Analysis Results to Predict Being a Victim for Men at Security Levels 1, 2, and 4.

Discriminating Variables	Correlation Coefficients	Standardized Function Coefficients
Age	-.44	-.57
Black	-.39	-.50
Time since first stay in MDOC	-.32	-.40
Married	-.26	-.31
Slight build	-.24	.29
Childhood sexual abuse	.24	.28
Time in cell	-.23	-.27
Education	-.20	-.24
History Offenses against vulnerable	.19	.23
Number weapons convictions	-.18	-.21
Juvenile assaults	.18	.21
Number violence convictions	-.16	-.19
Number CSC convictions	.16	.18
Age at first arrest	-.15	-.18
Juvenile sexual assaults	.15	.18
Time in the facility	-.14	-.16
Discriminant function statistics		
Eigenvalue	.73	
Canonical *R*	.65	
Chi-square	121.70	
df	17.00	
p	.00	
Group centroids		
Group 1: Not Victim	-.85	
Group 2: Victim	.85	

Table 19: Accuracy of Prediction for Victims, Discriminant Analysis Model

		Predicted Status		
Observed		Not a Victim	Victim	Percentage Correct
Status	Not a Victim	89	27	76.7
	Victim	20	96	82.8
Overall Percentage				78.4

APPENDIX A: COMPARISON OF PERPETRATORS WHO ACTED AT SECURITY LEVELS 1, 2, AND 4

Comparison of Male Perpetrators at Different Security Levels

	Categorical Variables					Continuous Variables					
	% Level 1*	% Level 2	% Level 4	Chi-sq Df= 2	p	Average Level 1	Average Level 2	Average Level 4	F	df	p
Background											
Amount of education						2.6	2.6	2.4	1.2	2,118	.291
Height in feet						5.9	5.8	5.9	1.0	2,118	.366
Weight						185.1	176.7	189.0	1.9	2,117	.161
not slight, is muscular						42.8	37.7	44.4	2.4	2,118	.094
Sexual abuse as child	11.1	5.9	5.9	1.0	.605						
Child physical abuse	5.6	9.8	14.7	1.6	.440						
Neglected as child	11.1	.0	8.8	5.6	.061						
Married	13.9	12.2	8.8	.5	.798						
Race (1=Black)	61.1	68.6	82.4	3.9	.143						
Offense History											
Age of First Arrest						19.7	16.87	16.6	2.0	2,106	.138
Years MDOC to incident						12.6	14.6	12.7	.9	2,118	.405
Juvenile Robbery	8.3	15.7	8.8	1.5	.481						
Juvenile Assault	11.1	19.6	11.8	1.6	.457						
Juvenile Sexual Assault	5.6	7.8	17.6	3.3	.193						
Offense vs. vulnerable	47.2	31.4	41.2	2.3	.310						
Sexual Predator	31.4	39.2	50.0	2.5	.286						
Prior Offense											
# convictions property						1.08	.98	.76	.4	2,118	.690
# convictions CSC						.75	.55	.76	.8	2,118	.440
# convictions weapon						.83	.73	1.21	1.3	2,118	.271
# convictions other						.17	.18	.15	.1	2,118	.972
# convictions violence						.31	.88	.50	4.0	2,118	.021
# convictions drugs						.28	.10	.06	2.5	2,118	.087
Misconduct Charges											
# violence/threat						2.03	2.92	4.44	3.9	2,118	.023
# disobey order						3.36	6.04	11.44	12.3	2,118	.000
# insolence						2.33	3.12	4.79	3.7	2,118	.028
# out of place						4.42	5.94	8.88	3.6	2,118	.031
# illegal material						1.92	2.96	2.50	1.2	2,118	.312
# sex misconduct**						.92	.98	2.29	5.6	2,118	.005
# substance abuse						1.22	2.16	2.26	1.1	2,118	.339
# property						.81	.71	1.94	4.3	2,118	.016
# other						.39	.41	1.21	8.1	2,118	.000
Sexual Predator	31.4	39.2	50.0	2.5	.286						

*Perpetrators at levels 1, 2, and 4 were in the General Population.

**sexual misconducts other than sexual assault of a prisoner

Comparison of Actions of Male Perpetrators at Different Security Levels

	Categorical Variables					
	% Level 1*	% Level 2	% Level 4	Chi-sq	df	p
Nature of the Incident						
Multiple Offender	19.4	9.8	5.9	3.4	2	.182
Multiple Victim	2.8	2.0	2.9	.1	2	.951
Penetration or threat involved	36.1	47.1	55.9	2.8	2	.250
Cellmate	25.0	49.0	52.9	6.9	2	.032
Fear involved	11.1	15.7	11.8	.5	2	.790
Force involved	36.1	21.6	17.6	3.7	2	.158
Weapon involved	2.8	15.7	8.8	4.0	2	.135
Violence involved	19.4	19.6	32.4	2.3	2	.324
Threat involved	36.1	37.3	44.1	.6	2	.754

APPENDIX B: COMPARISON OF MALE VICTIMS AND ATTACKS AGAINST THEM AT THREE LEVELS OF SECURITY*

	Categorical Variables					Continuous Variables					
	% Level 1	% Level 2	% Level 4	Chi-sq Df=2	p	Average Level 1	Average Level 2	Average Level 4	F	df	p
Background											
Amount of education						2.36	2.47	2.26	.7	2,113	.517
Height in feet						5.71	5.78	5.75	.7	2,113	.514
Weight						158.06	168.92	165.53	1.4	2,113	.245
Not slight is muscular						31.52	35.71	33.24	.9	2,113	.428
Sexual abuse as child	15.2	10.4	20.6	1.6	.441						
Child Physical abuse	15.2	16.7	11.8	.4	.825						
Neglected as child	3.0	4.2	2.9	.1	.943						
Married	.0	2.0	.0	1.4	.502						
Race (1=Black)	12.1	16.3	17.6	.4	.806						
Offense History											
Age of First Arrest						17.84	17.36	16.97	.2	2,105	.819
Yrs. MDOC to incident						3.56	2.48	4.07	1.2	2,112	.319
Juvenile Robbery	.0	8.2	.0	5.7	.059						
Juvenile Assault	12.1	24.5	20.6	1.9	.384						
Juvenile Sexual Assault	9.1	14.3	8.8	.8	.667						
Offense vs. vulnerable	53.1	27.7	37.5	5.3	.072						
Prior Offense											
# convictions property						.82	.92	1.26	.9	2,113	.423
# convictions CSC						.58	.59	.59	.1	2,113	.996
# convictions weapon						.03	.18	.29	2.3	2,113	.109
# convictions escape						.03	.04	.12	1.4	2,113	.248
# convictions violence						.18	.16	.41	1.7	2,113	.195
# convictions drugs						.18	.10	.12	.3	2,113	.773
Misconduct Charges											
# violence/threat						.33	.55	2.50	7.7	2,113	.001
# sex assault prisoner						.00	.02	.03	.4	2,113	.642
#. disobey order						1.30	1.96	6.24	11.6	2,113	.000
# insolence						.18	.37	1.15	4.8	2,113	.010
# out of place						3.94	3.98	7.38	4.6	2,113	.012
# illegal material						.33	.82	1.62	8.2	2,113	.000
# sex misconduct						.12	.20	.32	1.4	2,113	.261
# substance abuse						.33	.65	.79	1.2	2,113	.294
#. property						.09	.29	1.74	11.5	2,113	.000
Sexual Predator	.0	.0	.0								

*Victims at levels 1, 2, and 4 were in the General Population.

Comparison of Actions Against Victims at Different Security Levels

	% Level 1	% Level 2	% Level 4	Chi-sq Df=2	p
Incident					
Multiple Offender	6.1	4.1	0	2.0	.377
Multiple Victim	6.1	6.1	5.9	.1	.999
Penetration or threat involved	33.3	40.8	55.9	3.7	.161
Cellmate	30.3	46.9	52.9	3.8	.150
Fear involved	12.1	16.3	11.8	.5	.795
Force involved	30.3	20.4	17.6	1.7	.419
Weapon involved	3.0	14.3	8.8	2.9	.231
Violence involved	29.0	16.7	32.4	3.0	.218
Threat involved	45.5	28.6	47.1	3.8	.153