

Ohio Rehabilitation and Correction

Prison Inmate Inventory

SUMMARY REPORT October 2006 – October 2007

This report summarizes Ohio Prison Inmate Inventory (PII) test data for **11,849** prison inmates. The Prison Inmate Inventory test data was gathered between October 2006 and October 2007. The PII is described on the Behavior Data Systems, Ltd. website at www.bdsltd.com. This report is provided by Behavior Data Systems, Ltd., P.O. Box 44256, Phoenix, AZ 85064-4256.

Ohio Prison Inmate Inventory

Introduction

The Prison Inmate Inventory was administered to 11,849 Ohio prison inmates between October 2006 and October 2007.

Summary Demographics

There were 6,461 male inmates (54.5%) and 1,317 female inmates (11.1%).

The inmate population consisted of a majority of Caucasian inmates (34.8%) and Black inmates (25.3%). Only 1.6 percent of inmates identified themselves as Hispanic, and less than 1 percent identified themselves as Asian or Native American.

The majority of inmates were between the ages of 21 through 40 years of age (61.8%). Only 1,097 (9.3%) inmates were under 21 years old.

Over 80% of inmates had a High School education or less (81.8%), and 12.3 percent were High School graduates or higher.

Only a small percent of inmates who took the Prison Inmate Inventory (PII) reported their marital status. 6.1 percent were single, 9.5 percent were married, and the remaining percent were divorced (6.6%), separated (1.4%), widowed (.6%) or did not respond (75.7%) to this item.

Summary Court History Information

All inmates that were given the Prison Inmate Inventory (PII) were asked a series of questions concerning their court history. A summary of the inmates' self-reported answers is presented below.

Total Arrests, Probation and Parole Statistics (Inmate self-report)

- The majority of inmates (62.7%) had been arrested more than 4 times. 1,760 (14.9%) inmates reported 1 or 2 arrests and 3,980 (34.9%) reported between 1 and 4 arrests.
- The average age of 1st arrest for all inmates was 18.5 years old. By the age of sixteen 40 percent of inmates had been arrested.
- More than half of all inmates (72.2%) had 2 or more felony arrests.
- Nearly half of all inmates (47.1%) had been on probation 2 or more times.
- Of those inmates that had been on probation, 51.7 percent had their probation revoked at least once, and 20.4% had their probations revoked 2 or more times.
- 29.2 percent of all inmates had been on parole at least once.
- Of the inmates that had been on parole, 15.9 percent had their parole revoked.

Many inmates have criminal histories with multiple arrests, and their first arrest beginning prior to their eighteenth birthday. Over eighty percent (81.5%) of the inmates had been arrested more than twice. Nearly eighty percent (72.2%) had been arrested for a felony two or more times. 40 percent of inmates were arrested for a crime by the age of 16.

Alcohol and Drug Arrests (Inmate self-report)

- 36.8% of the inmates had one or more alcohol-related arrests and 24.6% had two or more alcohol-related arrests.
- 59.3% of the inmates had at least one drug-related arrest and 37.5% had two or more drug-related arrests.

Over 30 percent of the inmates had one or more alcohol-related arrests and over 50 percent of the inmates had one or more drug-related arrests.

Incarceration History (Inmate self-report)

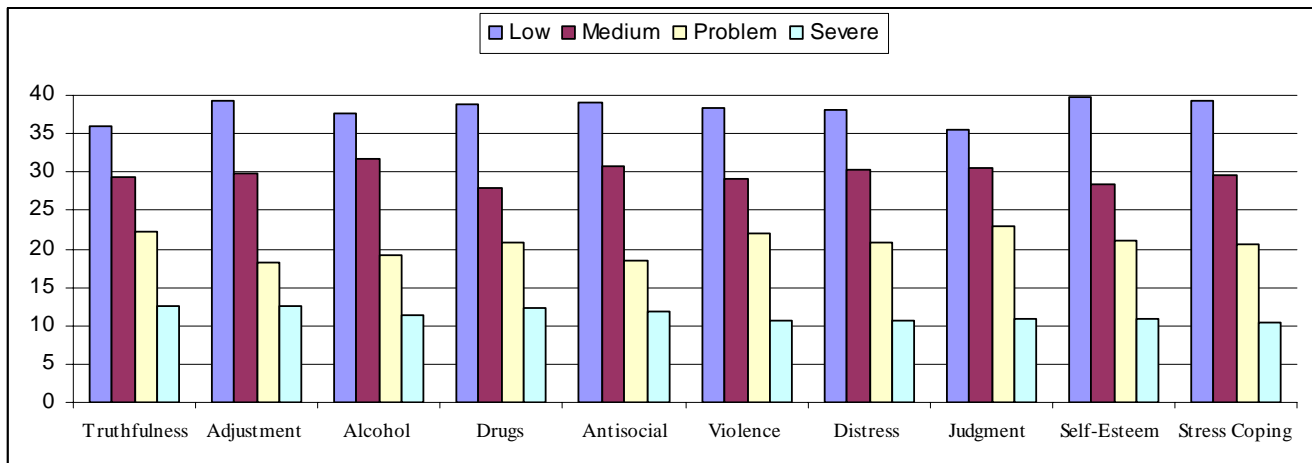
- 49.2% of the inmates have been incarcerated 2 years or more.
- 18.7% (2,210) of the inmates have been incarcerated 6 years or more.
- 7.5% of the inmates had attempted an escape from jail or prison.

Summary Test Statistics: Accuracy, Validity, and Reliability

This section of the report presents the results of statistical analyses of the Ohio Prison Inmate Inventory (PII). Specifically, the validity, reliability and accuracy of the Prison Inmate Inventory (PII) are discussed. **All analyses were performed using the 11,849 offender Ohio database for the time period October 2006 through October 2007.**

Accuracy

Table 1. Ohio Prison Inmate Inventory (PII) Accuracy (N = 11,849)



Scale	Low Risk (39%)		Medium Risk (30%)		Problem Risk (20%)		Severe Problem (11%)	
Truthfulness Scale	35.9	(3.1)	29.3	(0.7)	22.3	(2.3)	12.5	(1.5)
Adjustment Scale	39.3	(0.3)	29.9	(0.1)	18.3	(1.7)	12.5	(1.5)
Alcohol Scale	37.7	(1.3)	31.7	(1.7)	19.2	(0.8)	11.4	(0.4)
Drugs Scale	38.9	(0.1)	28.0	(2.0)	20.8	(0.8)	12.3	(1.3)
Antisocial Scale	39.1	(0.1)	30.7	(0.7)	18.4	(1.6)	11.8	(0.8)
Violence Scale	38.4	(0.6)	29.0	(1.0)	22.0	(2.0)	10.6	(0.4)
Distress Scale	38.2	(0.8)	30.4	(0.4)	20.8	(0.8)	10.6	(0.4)
Judgment Scale	35.5	(3.5)	30.6	(0.6)	22.9	(2.9)	11.0	(0.0)
Self-Esteem Scale	39.7	(0.7)	28.3	(1.7)	21.0	(1.0)	11.0	(0.0)
Stress Coping Abilities	39.3	(0.3)	29.7	(0.3)	20.5	(0.5)	10.5	(0.5)

The four risk ranges (low, medium, problem and severe) and the predicted percentages for each risk range category are shown in at the top row of Table 1. The percentages for each Prison Inmate Inventory scale and risk range category were obtained from the cumulative distribution of inmates scale scores.

The smallest difference between predicted percentages and obtained percentages (0.0) is in the Severe Problem risk range for the Judgment and Self-Esteem Scales. The largest difference between predicted percentages and obtained percentages (3.5) is in the Low Risk range for the judgment scale. The average difference between predicted percentages and obtained percentages for all scales and risk ranges is 1.0 percent. These findings strongly support the accuracy of the Prison Inmate Inventory (PII) scales (measures). Comparison of ten (10) scale's risk ranges (Low, Medium, Problem, and Severe Problem) involved 40 (10x4) comparisons and all 40 comparisons were within 3.5 percent of predicted scores. This is accurate assessment.

Reliability

Table 2. Reliability coefficient alphas for the Prison Inmate Inventory (PII).

All alphas are significant at $p < .001$.

<u>PII SCALES</u>	<u>Coefficient Alphas</u>
Truthfulness Scale	.89
Adjustment Scale	.93
Alcohol Scale	.95
Drugs Scale	.96
Antisocial Scale	.84
Violence Scale	.89
Distress Scale	.91
Judgment Scale	.92
Self-Esteem Scale	.88
Stress Coping Abilities	.92

As shown in Table 2, **all Prison Inmate Inventory (PII) scales have alpha coefficients higher than .80**. These are high reliability coefficients and support the Prison Inmate Inventory scales reliability. The professionally accepted reliability standard for tests is .75 or greater. PII scale scores exceed this standard.

Validity

Test validation procedures typically involve correlations between the test and another test or the criterion. The criterion (concurrent validity) is typically another test that measures the same thing. This type of validation has been conducted on the PII scales in earlier research. These Prison Inmate Inventory (PII) research studies are presented in the document titled, “Prison Inmate Inventory: An Inventory of Scientific Findings,” which can be downloaded from the Behavior Data Systems, Ltd. website www.bdsltd.com.

In addition, ongoing validity analyses are conducted on the cumulative Prison Inmate Inventory (PII) database. The first, **discriminate validity study** involved determining how well test scores account for known offender characteristics like court history and treatment history.

Prison Inmate Inventory (PII) validity results demonstrate that the Violence Scale accurately identified **99.6** percent of the inmates who admitted they were prone to violence. Nearly all (**95.7%**) of the inmates who admitted having antisocial tendencies scored in the problem range on the Antisocial Scale. The Alcohol and Drugs scales correctly identified 100 percent and **99.5** percent, respectively, of the inmates that had been in treatment for alcohol and drug problems. These findings support the discriminate validity of Prison Inmate Inventory (PII) scales.

Court History and Prison Inmate Inventory (PII) Scale Scores

Correlation coefficients between court history such as, age at first arrest, number of arrests, etc., and Prison Inmate Inventory (PII) scales are presented in Table 3 below (N=11,849). These results demonstrate that court history is significantly correlated with all PII scales. These correlations demonstrate a positive relationship between number of total arrests and Prison Inmate Inventory (PII) scale scores. In other words, as the number of total arrests increase, inmates’ scale scores increase. These findings support the predictive validity of PII scales.

However, some inmates with few total arrests do score highly on Prison Inmate Inventory (PII) scales. These inmates would have been “missed” if court records were the only criteria used to determine inmate risk. In other words, court records alone are not adequate for predicting inmate risk.

Age at first arrest correlations demonstrate that the younger a person is at the time of their first arrest, the higher their scores will be on the Prison Inmate Inventory scales. Age of first arrest correlations are highest for the antisocial and adjustment scales. The earlier offenders begin their arrest records, the more likely they are to be at risk for continued antisocial behavior and adjustment problems. Yet, court history alone is not an adequate predictor.

Table 3. Correlation Coefficients: Offender Court Histories with PII Scales. (N=11,849)

	Truthfulness	Adjustment	Alcohol	Drugs	Antisocial	Violence
Age at 1 st Arrest	-.026*	-.386**	-.118**	-.123**	-.352**	-.295**
Total Number of Arrests	-.168**	.505**	.298**	.280**	.518**	.232**
Felony Arrests	-.104**	.307**	.103**	.299**	.503**	.216**
Times on Probation	-.131**	.433**	.225**	.245**	.275**	.144**
Times on Parole	-.023	.229**	.093**	.111**	.339**	.180**
Alcohol Arrests	-.165**	.177**	.576**	.149**	.199**	.132**
Drug Arrests	-.109**	.217**	.151**	.407**	.300**	.136**

* Significant at p<.01. **Significant at p<.001. Note: Times on Parole correlated with Truthfulness has a significance of .011.

Court history correlates highest with the adjustment and antisocial scales. All but the number of alcohol and drug arrests have the highest correlation with the adjustment or antisocial scales. These findings suggest that when determining an offenders risk for adjustment and antisocial problems, their criminal history is an important factor but should be augmented with Prison Inmate Inventory (PII) scale scores.

Number of alcohol arrests correlates highest with the alcohol scale. Number drug arrests correlates highest with the drugs scale. These findings support the predictive validity of the alcohol and drug scales.

Nearly two-thirds (62.7%) of the inmates tested had 5 or more arrests. Many multiple offenders (having multiple arrests) have adjustment, antisocial and violence problems. Total number of arrests has the highest correlation with the antisocial scale. The more times an offender has been arrested, the more at risk they are for antisocial problems. Conversely, the more antisocial an offender is, the more at risk they are for multiple arrests. Repeating the earlier caveat, number of arrests alone does not suffice as an adequate predictor. Court history should be used in conjunction with PII scale scores for optimum predictive value.

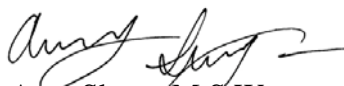
Prison Inmate Inventory (PII) Reliability and Validity Summary

- Prison Inmate Inventory (PII) scale scores are accurate. Scales suggest 98 percent accuracy.
- All Prison Inmate Inventory (PII) scales reliability coefficients were significantly higher than the professionally accepted reliability standard of .75.
- Prison Inmate Inventory (PII) scales identified nearly all inmates (95 percent or more) who had been in treatment or admitted having serious problems with alcohol, drugs, violence, and/or antisocial tendencies.
- Correlation analysis between offender court history and PII scale scores supports the predictive validity of PII scales.

The Prison Inmate Inventory (PII) is an accurate, reliable and valid assessment instrument or test for prison inmate assessment.



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Appendix

Inmate data contained on Prison Inmate Inventory (PII) diskettes returned to Behavior Data Systems, Ltd. Data for the time period October 2006 – October 2007 are summarized.

Inmate Demographics and Self-reported Court History (N=11,849)

Population				
Males		Females		Total
N	%	N	%	N
6,461	54.5	1,317	11.1	7,778

Note: 4,071 (34.4%) cases had no gender information.

Race/Ethnicity				
Race	Males	Females	Total	
	N	N	N	%
Caucasian	3,341	778	4,119	34.8
Black	2,649	336	2,985	25.3
Hispanic	157	27	184	1.6
Asian	6	9	15	.1
Native Amer.	89	8	97	.8
Other	135	50	185	1.6

Note: 4,247 cases (35.8%) had no race/ethnicity information.

Age Group				
Age	Males	Females	Total	
	N	N	N	%
20 & Under	735	52	787	9.3
21 – 25	1,512	195	1,707	21.1
26 – 30	1,281	221	1,502	17.7
31 – 35	834	194	1,028	12.3
36 – 40	717	140	857	10.7
41 – 45	567	161	728	9.3
46 – 50	402	104	506	6.3
51 – 55	172	31	203	2.4
56 & Over	96	15	111	1.4

Note: 1,128 cases (9.5%) had no age information.

Education				
Education	Males	Females	Total	
	N	N	N	%
8 th grade or less	348	75	423	4.9
High School	5,214	864	6,078	76.9
College	668	206	874	11.5
Graduate School	47	11	58	.8

Note: 689 cases (5.8%) had no education information.

Marital Status				
Status	Males	Females	Total	
	N	N	N	%
Single	466	251	717	6.1
Married	910	209	1,119	9.5
Divorced	569	217	786	6.6
Separated	133	38	171	1.4
Widowed	34	41	75	.6

Note: 8,971 cases (75.7%) had no marital information.

Inmate-Reported Court-Related History, continued

Age	Age at First Arrest			
	Males	Females	Total	
	N	N	N	(%)
10 & Under	223	10	233	2.7
11 - 12	475	51	526	6.4
13 - 14	1,022	134	1,156	14.4
15 - 16	1,178	132	1,310	16.6
17 - 18	1,446	181	1,627	21.9
19 - 20	730	126	856	10.8
21 - 22	374	105	479	6.2
23 - 24	193	88	281	3.5
25 - 29	292	182	474	5.8
30 - 34	166	114	280	3.4
35 & Over	276	162	438	5.2

Note: 366 cases (3.1%) had no age at first arrest information.

Number	Total Number of Times Arrested			
	Males	Females	Total	
	N	N	N	(%)
0	73	19	92	1.2
1 - 2	895	323	1,218	14.9
3 - 4	1,136	326	1,462	18.7
5 - 6	1,085	199	1,284	16.8
7 - 8	668	108	776	10.0
9 or more	2,549	328	2,877	35.9

Note: 286 cases (2.4%) had no arrest information.

Number	Times on Probation				Probation Revocations			
	Males	Females	Total		Males	Females	Total	
	N	N	N	(%)	N	N	N	(%)
0	1,134	307	1,441	17.9	3,012	579	3,591	44.8
1	2,086	493	2,579	32.8	1,985	475	2,460	31.3
2	1,677	294	1,971	24.8	747	148	895	11.4
3	813	117	930	11.9	293	58	351	4.3
4	331	48	379	4.9	103	20	123	1.8
5	188	20	208	2.6	73	3	76	1.0
6 +	188	28	216	2.9	129	18	147	1.9

Note: 254 cases (2.1%) had no probation information.

Note: 409 cases (3.5%) had no probation revocation information.

Inmate-Reported Court-Related History, continued

Number	Times on Parole				Parole Revocations			
	Males	Females	Total		Males	Females	Total	
	N	N	N	(%)	N	N	N	(%)
0	4,386	1,090	5,476	68.2	5,265	1,209	6,474	80.5
1	1,306	160	1,466	18.9	596	53	649	8.8
2	376	27	403	5.5	211	12	223	3.2
3	164	10	174	2.4	121	8	129	1.7
4	70	11	81	1.2	49	9	58	.9
5	33	2	35	.6	38	3	41	.7
6 +	39	1	40	.6	42	1	43	.7

Note: 300 cases (2.5%) had no parole information.

Note: 417 cases (3.5%) had no parole revocation information.

Number	Number of Years in Jail and Prison				Jail/Prison Escape Attempts			
	Males	Females	Total		Males	Females	Total	
	N	N	N	(%)	N	N	N	(%)
0	2,329	698	3,027	34.9	6,096	1,127	7,223	86.3
1	759	214	973	13.3	268	102	370	5.2
2	673	103	776	10.5	44	38	82	1.2
3	590	92	682	8.8	10	15	25	.4
4	396	60	456	5.9	1	11	12	.2
5	357	36	393	5.3	1	4	5	.1
6 +	1,320	102	1,422	18.7	2	15	17	.4

Note: 310 cases (2.6%) had no years in jail information.

Note: 735 cases (6.2%) had no escape information.

Number	Felony Arrests				Drug Arrests			
	Males	Females	Total		Males	Females	Total	
	N	N	N	(%)	N	N	N	(%)
0	74	18	92	1.1	2,535	508	3,043	33.8
1	1,551	501	2,052	24.6	1,488	356	1,844	21.8
2	1,524	344	1,868	22.9	999	172	1,171	14.4
3	1,078	173	1,251	16.1	569	95	664	8.5
4	714	103	817	10.7	290	56	346	4.7
5	521	64	585	7.6	189	30	219	3.2
6 +	979	110	1,089	14.9	348	95	443	6.7

Note: 247 cases (2.1%) had no felony arrest information.

Note: 809 cases (6.8%) had no drug information.

Inmate-Reported Court-Related History, continued

Number	Alcohol Arrests				DUI/DWI Arrests			
	Males	Females	Total		Males	Females	Total	
	N	N	N	(%)	N	N	N	(%)
0	3,910	952	4,862	58.1	4,316	966	5,282	64.7
1	830	146	976	12.2	956	183	1,139	14.1
2	499	84	583	7.2	484	69	553	6.6
3	297	39	336	4.4	238	39	277	3.9
4	194	22	216	2.8	148	20	168	2.2
5	156	17	173	2.4	99	7	106	1.3
6 +	532	48	580	7.8	183	17	200	2.9

Note: 607 cases (5.1%) had no alcohol arrest information.

Note: 503 cases (4.2%) had no DUI/DWI information.

Months	Number of Months Left to Serve in Prison/Jail			
	Males	Females	Total	
	N	N	N	(%)
0	10	1	11	.4
1 – 12	2,812	735	3,547	47.3
13 – 24	1,382	287	1,669	19.0
25 - 36	749	107	856	9.4
37 – 48	486	67	553	5.8
49 - 60	252	25	277	2.9
61 months or more	683	61	744	8.3

Note: 828 cases (7.0%) had no months left to serve information.

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