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# **Domestic Violence Inventory: Annual Summary Report**

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February 15, 2003

## **Abstract**

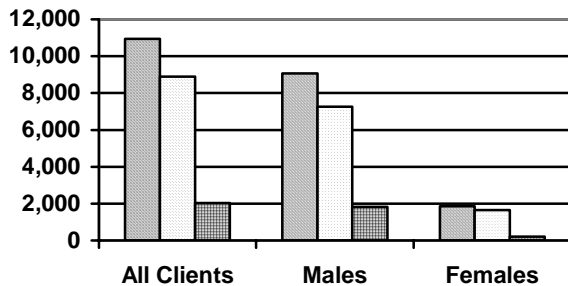
This research study summarizes Domestic Violence Inventory (DVI) test data for 10,933 domestic violence offenders. Of these 10,933 offenders 9,073 were male and 1,860 were female. First offenders consisted of 8,898 or 81.4 percent of these offenders while 2,035 or 18.6 percent were multiple (2 or more arrests) offenders. Total number of domestic violence arrests is significantly correlated with all DVI scale scores. Domestic violence arrests correlated highest with the DVI Violence Scale. Alcohol arrests correlated most significantly with Alcohol Scale scores. Similarly, drug arrests correlated highest with the Drugs Scale. Many of these domestic violence arrests were alcohol, drugs and violence related. DVI scale accuracy is demonstrated by the small differences between obtained and predicted scores. All attained risk range percentage scores were within 2.3 percentage points of the predicted. All DVI scales had very high reliability coefficients between .86 and .94. These reliability coefficients greatly exceed the professional standard of .80. Validity analysis demonstrated that DVI Alcohol, Drugs, Violence and Control Scales identified nearly all of the offenders who were problem drinkers, drug abusers, violent and controlling.

## **Domestic Violence Inventory: A Research Study**

The present study investigated the validity, reliability and accuracy of the Domestic Violence Inventory (DVI). The DVI is a multidimensional test that was developed to assess domestic violence offenders. The DVI has six measures (scales): 1. Truthfulness Scale, 2. violence (Lethality) Scale, 3. control Scale, 4. alcohol Scale, 5. Drugs Scale and 6. Stress coping Abilities Scale. This study incorporates 10,933 domestic violence offenders DVI test data. More DVI information is available on [www.bdsLtd.com](http://www.bdsLtd.com)

## Number of Domestic Violence Offenders Tested

All Clients
  First Offenders
  Multiple Offenders



Report data collected in the year 2003.

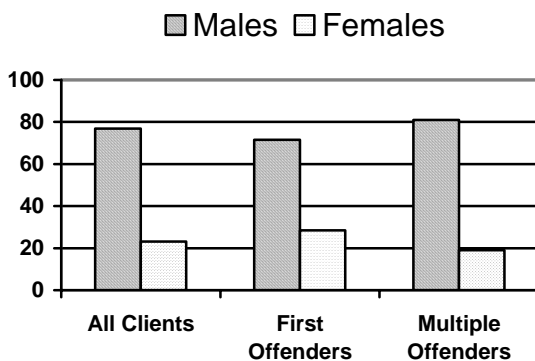
- **10,933 offenders** were tested
- 9,073 offenders were male
- 1,860 offenders were female

- 8,898 or 81.4 percent were first offenders (1 or no arrest), 7,255 (81.5%) were male, 1,643 (18.5%) were female.
- 2,035 or 18.6 percent were multiple offenders (2 or more arrests), 1,818 (89.3%) were male, 217 (10.7%) were female.

Over 18 percent of the offenders tested (N=2,035) reported having two or more domestic violence arrests. Having a second and subsequent arrest is indicative of a pattern of problematic behavior. Six percent of the offenders have more than two arrests. 20.0 percent of the males and 11.7 percent of the females were multiple offenders (2 or more domestic violence arrests).

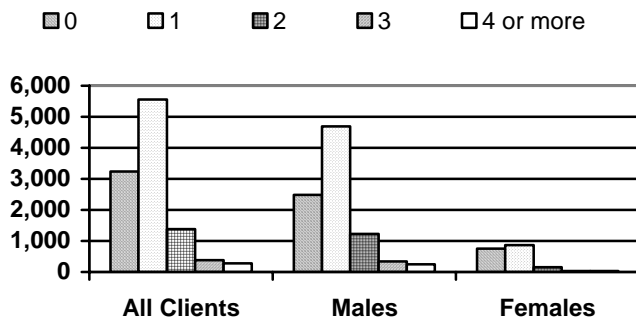
## Percent of the Total Population

When number of offenders tested is analyzed as percentages, it was found that:



- 83.0 percent were male
- 17.0 percent were female
- 81.5 percent of first offenders were male
- 18.5 percent of first offenders were female
- 89.3 percent of multiple offenders were male
- 10.7 percent of multiple offenders were female

## Number of Domestic Violence Arrests

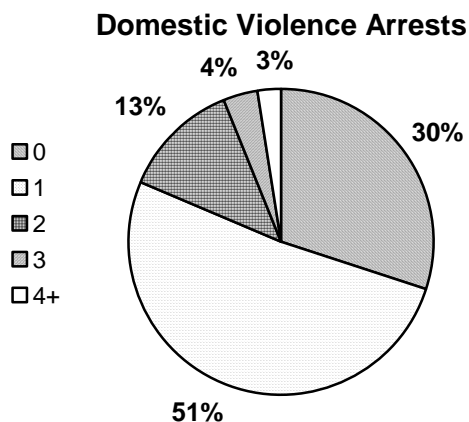


- 3,234 reported no arrest
- 5,552 reported 1 arrest
- 1,379 reported 2 arrests
- 379 reported 3 arrests
- 279 reported 4 or more arrests

Note: There were 112 tests with missing domestic violence arrests information.

First offenders are defined as those people tested who had 1 or no domestic violence arrest and include any person who had missing information for number of arrests. This was only done so that the count of first and multiple offenders would equal the total number of offenders tested. None of the statistical analyses presented herein contain missing information. The majority (81.4%) of the offenders tested were first time offenders (1 or no arrests).

## Domestic Violence Arrests as a Percentage



When number of arrests is converted to percentages, it was found that:

- 29.9 percent reported no arrest
- 51.3 percent reported 1 arrest
- 12.7 percent reported 2 arrests
- 3.5 percent reported 3 arrests
- 2.5 percent reported 4 or more arrests

The percentage of multiple offenders in this population was 18.6 percent. Six percent of the offenders reported having 3 or more domestic violence arrests. These percentages do not include the 112 cases with missing number of arrests information.

## Court History and DVI Scale Scores

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Correlation coefficients between court history such as, number of domestic violence arrests, assault arrests, etc., and DVI scale scores are presented in the table below (N=10,933). These results demonstrate that **total number of domestic violence arrests is significantly correlated with all DVI scale scores**. These findings support the validity of DVI scales. These correlations demonstrate that there is a positive relationship between number of domestic violence arrests and DVI scale scores. As the number of domestic violence arrests increase offenders' scale scores increase. However, some first offenders do score high on DVI scales and these offenders would be "missed" if only court records were used to determine offender risk. In other words, court records alone are not sufficient to predict offender risk. DVI scale scores are needed for accurate prediction.

The correlation between age at 1<sup>st</sup> conviction and DVI scale scores indicate that there is a significant "negative" relationship with the Drugs, Control and Violence scales. This means that the younger an offender is at the time of first conviction the higher DVI scale scores are. Age of 1<sup>st</sup> conviction correlations are highest for the Drugs Scale.

	Truthfulness	Alcohol	Drugs	Control	Violence
Domestic Violence Arrests	-.087*	.159*	.121*	.131*	.376*
Assault Arrests	.062*	.157*	.235*	.208*	.317*
Age at 1 <sup>st</sup> Conviction	.005	.010	-.115*	-.060*	-.067*
Felonies	-.029**	.116*	.201*	.081*	.334*
Probation	-.109*	.229*	.199*	.082*	.442*
Total Number of Arrests	-.110*	.297*	.251*	.129*	.506*
Alcohol Arrests	-.090*	.436*	.183*	.097*	.321*
Drug Arrests	-.061*	.138*	.383*	.085*	.256*

Significant at \* p<.001, \*\* p<.01.

**Domestic violence arrests** are correlated highest with the Violence Scale. **Alcohol arrests** are correlated highest with Alcohol Scale scores. **Drug arrests** are correlated highest with the Drugs Scale. Some of the highest correlations are with the Violence, Alcohol and Drugs scales. Many arrests and other court history are violence, alcohol and drug related. These results support the **discriminant validity** of the Alcohol, Drugs, Control and Violence scales.

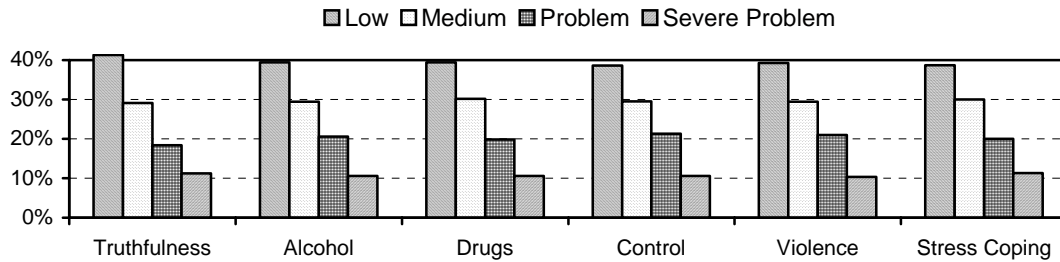
In summary, over 18.6 percent of the offenders tested had previous domestic violence arrests. Number of domestic violence arrests is correlated with DVI scores. Many multiple offenders (having multiple arrests) have established drinking, drugs, control and violence problems. Court history correlates most with violence-related problems and to a lesser degree with alcohol and drug problems.

The following pages present test statistics for the DVI. Statistics support the DVI as a reliable, valid and accurate domestic violence offender test. A test cannot be valid without being reliable, and test accuracy is required for accurate referrals for intervention and treatment.

# Domestic Violence Inventory

## Accuracy

**DVI Accuracy (N = 10,933)**



Scale	Low Risk (39%)	Medium Risk (30%)	Problem Risk (20%)	Severe Problem (11%)
Truthfulness	41.3 (2.3)	29.1 (0.9)	18.4 (1.6)	11.2 (0.2)
Alcohol	39.4 (0.4)	29.4 (0.6)	20.6 (0.6)	10.6 (0.4)
Drugs	39.4 (0.4)	30.2 (0.2)	19.8 (0.2)	10.6 (0.4)
Control	38.6 (0.4)	29.5 (0.5)	21.3 (1.3)	10.6 (0.4)
Violence	39.3 (0.3)	29.4 (0.6)	21.0 (1.0)	10.3 (0.7)
Stress Coping	38.7 (0.3)	30.0 (0.0)	20.0 (0.0)	11.3 (0.3)

The four risk ranges (low, medium, problem and severe) and the predicted percentages for each risk range category are shown in bold print in the top row of the above table. The percentages for each DVI scale and risk range category were obtained from the cumulative distribution of offenders scale scores. **All offender obtained risk range percentages were within 2.3 percentage points of the predicted percentages. Accuracy of the DVI is shown by the small differences between obtained risk range percentages and predicted percentages. Offenders' scores can be considered 98% accurate. The DVI is an accurate domestic violence offender assessment test.**

## Reliability

**Reliability coefficient alphas for the DVI. All alphas are significant at  $p < .001$ .**

<u>Scale</u>	<u>DVI</u>
Truthfulness Scale	.88
Alcohol Scale	.94
Drugs Scale	.91
Control Scale	.86
Violence Scale	.90
Stress Coping Abilities Scale	.93

All DVI scales have very high reliability coefficients and are statistically reliable. The professionally accepted reliability standard is .75 and higher.

## Validity

DVI validity results demonstrate that the Alcohol Scale accurately identified **100 percent** of the offenders who had been treated for drinking problems. All of the offenders who had alcohol

treatment scored in the problem range on the Alcohol Scale. Similarly, the Drugs Scale identified **100 percent** of offenders who had been treated for drug problems. The Violence Scale accurately identified **98.7 percent** of offenders who admitted being violent, and the Control Scale correctly identified **100 percent** of offenders who admitted they were dominating and controlling. These criteria of problematic behavior were used because database analysis in real time settings does not lend itself to administering more than one test. Earlier DVI research did use other tests for criterion validity.

## Summary

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Data for this report was obtained from diskettes that were returned in the year 2003. The DVI was administered to **10,933 domestic violence offenders**. There were 9,073 males (83.0%) and 1,860 females (17.0%). The offender population is broadly defined as Caucasian (71.4%), 21 through 40 years of age (69.1%), High School Graduate or better (63.2%) and single (38.4%) or married (35.9%).

### DVI Accuracy, Reliability and Validity

- DVI scale risk range percentile scores are **98 percent accurate**.
- All DVI scales reliability coefficients were .86 or higher. This compares favorably with the professionally accepted reliability standard of .75 or better.
- Validity analyses demonstrate that DVI Alcohol, Drugs, Violence and Control Scales identified nearly all offenders who were problem drinkers, drug abusers, violent and dominating or controlling.

Offenders' measured "risk" is shown to be **98 percent** accurate. Offenders with low risk range (0 to 39<sup>th</sup> percentile) or even medium risk (40 to 69<sup>th</sup> percentile) scores on the Alcohol Scale do not represent drinking problems, whereas, offenders who scored in the problem risk range (70<sup>th</sup> percentile and above) have identifiable drinking problems. Correct identification of alcohol, drugs, control and violence problems corroborates these findings. The DVI is a reliable, valid and accurate test for domestic violence offender assessment.

### Domestic Violence Arrests (Offender self-report)

- There were 8,898 (81.4%) First Offenders (1 or no arrest) and 2,035 (18.6%) Multiple Offenders (2 or more arrests).
- 20.0% (1,818) of the males and 11.7% (217) of the females were Multiple Offenders.
- 24.9% (2,686) of the offenders had one or more assault arrest.

Twenty percent of the offenders tested had previous domestic violence arrests. More males than females were multiple offenders. If the cases with missing domestic violence arrests information were removed, there are 8,786 (81.2%) first offenders. One-fourth of the offenders had one or more assault arrests.

## Appendix

Offender data contained on DVI diskettes returned to Risk and Needs in 2003 are summarized.

### Offender Demographics and Self-reported Court History

Population				
Males		Females		Total
N	%	N	%	N
9,073	83.0	1,860	17.0	10,933

Race/Ethnicity				
Race	Males	Females	Total	
	N	N	N	%
Caucasian	6,339	1,353	7,692	71.4
Black	1,293	217	1,510	14.0
Hispanic	783	139	922	8.6
Asian	68	11	79	0.7
Native American	192	84	276	2.6
Other	249	42	291	2.7

Education				
Grade	Males	Females	Total	
	N	N	N	%
8 <sup>th</sup> grade or Less	820	187	1,007	9.3
Some High School	2,474	500	2,974	27.5
HS Graduate/GED	3,921	789	4,710	43.6
Some College	1,261	275	1,536	14.2
College Grad	475	94	569	5.3

Age Group				
Age	Males	Females	Total	
	N	N	N	%
20 & Under	702	231	933	8.5
21 - 25	1,608	399	2,007	18.4
26 - 30	1,571	288	1,859	17.0
31 - 35	1,551	299	1,850	17.0
36 - 40	1,515	311	1,826	16.7
41 - 45	1,053	185	1,238	11.3
46 - 50	566	91	657	6.0
51 - 55	264	32	296	2.7
56 - 60	129	12	141	1.3
61 & Over	94	10	104	1.0

Marital Status				
Status	Males	Females	Total	
	N	N	N	%
Single	3,498	633	4,131	38.4
Married	3,200	660	3,860	35.9
Divorced	938	274	1,212	11.3
Separated	1,005	205	1,210	11.2
Widowed	174	67	241	2.2

### Offender Reported Court-Related History

Age	Age at First Conviction			
	Males	Females	Total	
	N	N	N	(%)
12 & Under	338	53	391	4.3
13-14	322	43	365	4.0
15-16	701	66	767	8.3
17-18	1,431	170	1,601	17.4
19-20	933	171	1,104	12.0
21-22	727	146	873	9.5
23-24	491	109	570	6.2
25-29	899	190	1,089	11.9
30-39	1,184	292	1,476	16.1
40-49	559	154	713	7.8
50 & Over	207	32	239	2.6

## Offender Reported Court-Related History, continued

Number	Misdemeanor Convictions				Felony Convictions			
	Males	Females	Total		Males	Females	Total	
	N	N	N	(%)	N	N	N	(%)
0	2,183	695	2,878	26.9	6,414	1,569	7,983	74.1
1	2,245	557	2,802	26.2	1,458	190	1,648	15.3
2	1,455	262	1,717	16.0	578	36	614	5.7
3	1,003	127	1,130	10.6	221	19	240	2.2
4	560	55	615	5.7	102	9	111	1.0
5 +	1,438	124	1,562	14.6	177	7	184	1.7

Number	Times on Probation				Probation Revocations			
	Males	Females	Total		Males	Females	Total	
	N	N	N	(%)	N	N	N	(%)
0	3,290	949	4,239	39.3	7,606	1,689	9,295	86.3
1	3,027	610	3,637	33.7	923	100	1,023	9.5
2	1,605	208	1,813	16.8	235	18	253	2.3
3	607	43	650	6.0	84	9	93	0.9
4	195	14	209	1.9	40	4	44	0.4
5 +	242	9	251	2.3	52	9	61	0.6

Number	Times on Parole				Parole Revocations			
	Males	Females	Total		Males	Females	Total	
	N	N	N	(%)	N	N	N	(%)
0	8,107	1,775	9,882	91.5	8,541	1,790	10,331	95.8
1	668	49	717	6.6	191	22	213	2.0
2	130	6	136	1.3	85	4	89	0.8
3	36	2	38	0.4	38	8	46	0.4
4	18	0	18	0.2	22	3	25	0.2
5 +	7	2	9	0.1	72	5	77	0.7

Number	Total Number of Arrests				Times Sentenced to Jail			
	Males	Females	Total		Males	Females	Total	
	N	N	N	(%)	N	N	N	(%)
0	871	366	1,237	11.5	4,269	1,203	5,472	50.8
1	1,951	661	2,612	24.3	1,972	385	2,357	21.9
2	1,663	336	1,999	18.6	1,000	128	1,128	10.5
3	1,239	184	1,423	13.2	607	44	651	6.0
4	783	87	870	8.1	332	28	360	3.3
5 +	2,421	199	2,620	24.3	755	43	798	7.4

Number	Times Sentenced to Prison				Number of Years in Jail or Prison			
	Males	Females	Total		Males	Females	Total	
	N	N	N	(%)	N	N	N	(%)
0	7,898	1,773	9,671	89.5	7,383	1,729	9,112	84.5
1	728	50	778	7.2	632	55	687	6.4
2	203	9	212	2.0	297	21	318	3.0
3	69	0	69	0.6	181	9	190	1.8
4	30	1	31	0.3	90	4	94	0.9
5 +	38	2	40	0.4	364	14	378	3.5



## Offender Reported Court-Related History, continued

Number	Domestic Violence Arrests				Assault Arrests			
	Males	Females	Total		Males	Females	Total	
	N	N	N	(%)	N	N	N	(%)
0	2,482	752	3,234	29.9	6,633	1,466	8,099	75.1
1	4,686	866	5,552	51.3	1,478	271	1,749	16.2
2	1,224	155	1,379	12.7	361	37	398	3.7
3	344	35	379	3.5	151	17	168	1.6
4	132	13	145	1.3	68	10	78	0.7
5 +	118	14	132	1.2	262	31	293	2.7

Number	Alcohol Arrests				Drug Arrests			
	Males	Females	Total		Males	Females	Total	
	N	N	N	(%)	N	N	N	(%)
0	5,111	1,359	6,470	59.9	7,272	1,665	8,936	82.7
1	1,734	241	1,975	18.3	1,187	124	1,311	12.1
2	895	110	1,005	9.3	320	27	347	3.2
3	425	62	487	4.5	76	6	82	0.8
4	250	25	275	2.5	32	4	36	0.3
5 +	554	38	592	5.5	85	7	92	0.9

The information presented in the above tables is what was reported by offenders on their DVI answer sheets. Many domestic violence offenders have histories of criminal behavior. Over one-fourth (25.9%) of the offenders have been convicted of a felony. Nearly two-thirds (60.7%) have been placed on probation. Over 40 percent of the offenders have one or more alcohol-related arrests. These statistics show that domestic violence offenders have multiple problems. DVI scales identify these offenders' problems.

Data on the percentages of first offenders and multiple offenders shows that there were over 80 percent first offenders. Nearly 20 percent of the offenders had been arrested for domestic violence two or more times. Over one-third (34.0%) of the offenders had their first arrest by the age of 18 and nearly half (46.0%) had been arrested before the age of 21. Over one-third (35.8%) of the offenders had two or more lifetime arrests.

DVI scale score risk ranges are stable and show that the DVI continues to accurately assess offender risk. High statistical reliability is maintained in the DVI. Discriminant validity is supported by correlations between court history variables and DVI scale scores. Number of domestic violence arrests is correlated with DVI scale scores. Alcohol arrests correlate best with Alcohol Scale scores. Drug arrests correlate best with Drugs Scale scores. Many arrests and other court history are correlated with violence-related problems and to a lesser degree with alcohol and drug problems. These statistics support the scientifically sound methodologies of the DVI. The DVI is a reliable, valid and accurate test.

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