

ACDI-Corrections Version II

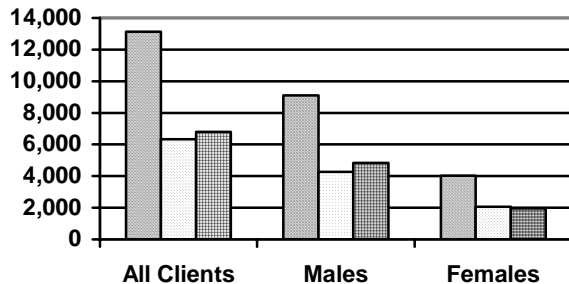
2002 Annual Summary Report

Abstract

This report summarizes ACDI-Corrections Version II test data for **13,134** juvenile offenders. The ACDI-Corrections Version II test data was gathered between January 1, 2002 and December 31, 2002. The ACDI-Corrections Version II is described on the Behavior Data Systems, Ltd. website at www.bdsltd.com.

Number of Juvenile Offenders Tested

■ All Clients □ First Offenders ■ Multiple Offenders



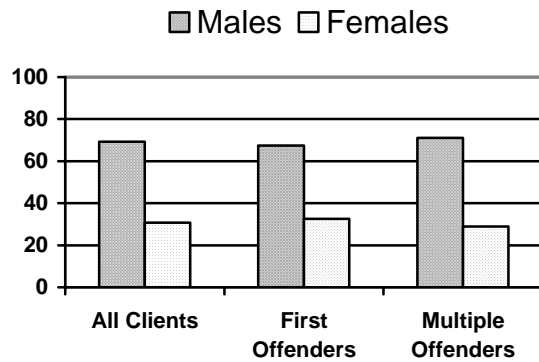
Report data collected in the year 2002.

- **13,134 offenders** were tested
- 9,099 offenders were male
- 4,035 offenders were female
- 6,334 or 48.2 percent were first offenders (1 or no arrest), 4,267 (67.4%) were male, 2,067 (32.6%) were female.
- 6,800 or 51.8 percent were multiple offenders (2 or more arrests), 4,832 (71.1%) were male, 1,968 (28.9%) were female.

Over half (51.8%) of the juvenile offenders tested (N=6,800) reported having two or more arrests. Having a second and subsequent arrest is indicative of a pattern of problematic behavior. Over 35 percent of the juveniles had more than two arrests. 53.1 percent of the males and 48.8 percent of the females were multiple offenders (2 or more arrests).

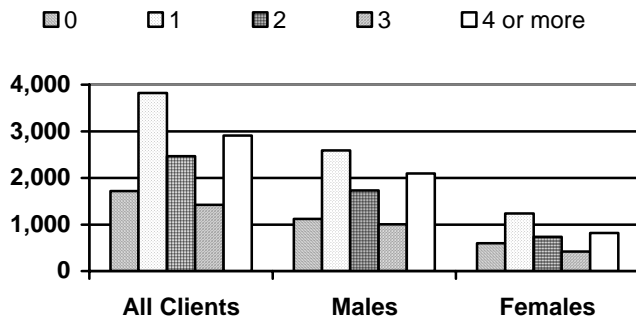
Percent of the Total Population

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



- 69.3 percent were male
- 30.7 percent were female
- 67.4 percent of first offenders were male
- 32.6 percent of first offenders were female
- 71.1 percent of multiple offenders were male
- 28.9 percent of multiple offenders were female

Number of Times Arrested

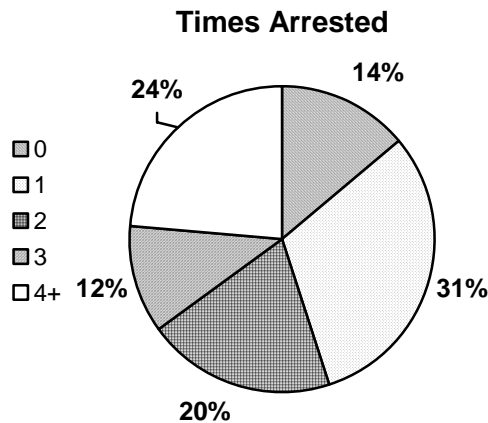


- 1,721 reported no arrest
- 3,824 reported 1 arrest
- 2,465 reported 2 arrests
- 1,425 reported 3 arrests
- 2,910 reported 4 or more arrests

Note: There were 789 tests with missing arrests information.

First offenders are defined as those juveniles tested who had 1 or no arrest and include any youths 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. Over half (51.8%) of the juvenile offenders tested were multiple offenders (2 or more arrests).

Number of Times Arrested as a Percentage



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

- 13.9 percent reported no arrest
- 31.0 percent reported 1 arrest
- 20.0 percent reported 2 arrests
- 11.5 percent reported 3 arrests
- 23.6 percent reported 4 or more arrests

The percentage of multiple offenders in this population was 51.8 percent. Over one-third (35.1%) of the juveniles reported having 3 or more arrests. These percentages do not include the 789 cases with missing number of arrests information.

Court History and ACDI-Corrections Version II Scale Scores

Correlation coefficients between court history such as, number of arrests, age at first arrest, etc., and ACDI-Correction Version II scale scores are presented in the table below (N=13,134). These results demonstrate that **total number of arrests is significantly correlated with all ACDI-Corrections Version II scale scores**. These findings support the validity of ACDI-Corrections Version II scales. These correlations demonstrate that there is a positive relationship between number of arrests and ACDI-Corrections Version II scale scores. As the number of arrests increase juveniles' scale scores increase. However, some first offenders do score high on ACDI-Corrections Version II scales and these juveniles would be "missed" if only court records were used to determine offender risk. In other words, court records alone are not sufficient to predict juvenile offender risk. ACDI-Corrections Version II scale scores are needed for accurate prediction.

The correlation between age at 1st arrest and ACDI-Corrections Version II scale scores indicate that there is a significant "negative" relationship with the Alcohol, Drugs, Violence, Distress and Adjustment scales. This means that the younger an offender is at the time of first arrest the higher ACDI-Corrections Version II scale scores are. Age of 1st arrest correlations are highest for the Violence Scale.

	Truthfulness	Alcohol	Drugs	Violence	Distress	Adjustment
Number of Arrests	-.022**	.218*	.259*	.545*	.245	.257*
Age at 1 st Arrest	.055*	-.089*	-.131*	-.397*	-.254*	-.303*
Probation	.124*	.148*	.192*	.322*	.227*	.216*
Juvenile Court Hearings	-.012	.176*	.235*	.412*	.278*	.270*
Alcohol Arrests	.015	.362*	.115*	.103*	.022**	.018
Drug Arrests	-.002	.193*	.405*	.232*	.127*	.147*

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

Number of arrests is 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 and Adjustment scales. Many arrests and other court history are violence and adjustment related. These results support the **discriminant validity** of the Alcohol, Drugs, Violence and Adjustment scales.

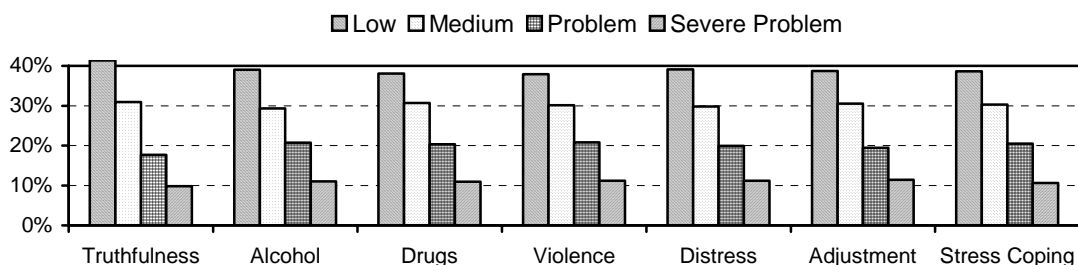
In summary, over 51 percent of the juveniles tested had previous arrests. Number of arrests is correlated with ACIDI-Corrections Version II scores. Many multiple offenders (having multiple arrests) have established drinking, drugs, violence and adjustment problems. Court history correlates most with violence-related problems and to a lesser degree with adjustment problems.

The following pages present test statistics for the ACIDI-Corrections Version II. Statistics support the ACIDI-Corrections Version II as a reliable, valid and accurate juvenile offender test. A test cannot be valid without being reliable, and test accuracy is required for accurate referrals for intervention and treatment.

ACDI-Corrections Version II

Accuracy

ACDI-Corrections Version II Accuracy (N = 13,134)



Scale	Low Risk (39%)	Medium Risk (30%)	Problem Risk (20%)	Severe Problem (11%)
Truthfulness	41.4 (2.4)	30.9 (0.9)	17.7 (2.3)	9.8 (1.2)
Alcohol	39.0 (0.0)	29.3 (0.7)	20.7 (0.7)	11.0 (0.0)
Drugs	38.1 (0.9)	30.7 (0.7)	20.3 (0.3)	10.9 (0.1)
Violence	37.9 (1.1)	30.1 (0.1)	20.8 (0.8)	11.2 (0.2)
Distress	39.1 (0.1)	29.8 (0.2)	19.9 (0.1)	11.2 (0.2)
Adjustment	38.7 (0.3)	30.5 (0.5)	19.4 (0.6)	11.4 (0.4)
Stress Coping	38.6 (0.4)	30.3 (0.3)	20.5 (0.5)	10.6 (0.4)

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 ACIDI-Corrections Version II scale and risk range category were obtained from the cumulative distribution of juveniles scale scores. **All juvenile offender obtained risk range percentages were within 2.4 percentage points of the predicted percentages. Accuracy of the ACIDI-Corrections Version II is shown by the small differences between obtained risk range percentages and predicted percentages. Offenders' scores can be considered 98% accurate. The ACIDI-Corrections Version II is an accurate juvenile offender assessment test.**

Reliability

Reliability coefficient alphas for the ACIDI-Corrections Version II. All alphas are significant at $p < .001$.

<u>Scale</u>	<u>Alpha</u>
Truthfulness Scale	.87
Alcohol Scale	.92
Drugs Scale	.92
Violence Scale	.88
Distress Scale	.91
Adjustment Scale	.85
Stress Coping Abilities Scale	.92

All ACIDI-Corrections Version II scales have very high reliability coefficients and are statistically reliable. The professionally accepted reliability standard is .75 and higher.

Validity

ACIDI-Corrections Version II validity results demonstrate that the Alcohol Scale accurately identified **100 percent** of the juvenile offenders who had been treated for drinking problems. All of the juveniles who had alcohol treatment scored in the problem range on the Alcohol Scale. Similarly, the Drugs Scale identified **97.5 percent** of juveniles who had been treated for drug problems. The Violence Scale accurately identified **99.9 percent** of offenders who admitted being violent. The Distress Scale correctly identified **95 percent** of youths who felt they were distressed, discouraged and alone. The Adjustment Scale identified **91.5 percent** of the juveniles who admitted being unfriendly and uncooperative. 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 ACIDI-Corrections Version II research did use other tests for criterion validity.

Summary

Data for this report was obtained from diskettes that were returned in the year 2002. The ACIDI-Corrections Version II was administered to **13,134 juvenile offenders**. There were 9,099 males (69.3%) and 4,035 females (30.7%). The offender population is broadly defined as Caucasian (58.7%), 14 through 17 years of age (82.7%), 8th through 11th Grade (67.9%).

ACIDI-Corrections Version II Accuracy, Reliability and Validity

- ACIDI-Corrections Version II scale risk range percentile scores are **98 percent accurate**.
- All ACIDI-Corrections Version II scales reliability coefficients were .85 or higher. This compares favorably with the professionally accepted reliability standard of .75 or better.
- Validity analyses demonstrate that ACIDI-Corrections Version II Alcohol, Drugs, Violence, Distress and Adjustment Scales identified nearly all juveniles who were problem drinkers, drug abusers, violent, distressed and had adjustment problems.

Juvenile offenders' measured "risk" is shown to be **98 percent** accurate. Juveniles with low risk range (0 to 39th percentile) or even medium risk (40 to 69th percentile) scores on the Alcohol Scale do not represent drinking problems, whereas, offenders who scored in the problem risk range (70th percentile

and above) have identifiable drinking problems. Correct identification of alcohol, drugs, violence, distress and adjustment problems corroborates these findings. The ACIDI-Corrections Version II is a reliable, valid and accurate test for juvenile offender assessment.

Number of Arrests (Juvenile self-report)

- There were 6,334 (48.2%) First Offenders (1 or no arrest) and 6,800 (51.8%) Multiple Offenders (2 or more arrests).
- 53.1% (4,832) of the males and 48.8% (1,968) of the females were Multiple Offenders.

Over half of the juvenile offenders tested had previous arrests. A higher percentage of males (71.1%) than females (28.9%) were multiple offenders.

Appendix

Offender data contained on ACIDI-Corrections Version II diskettes returned to Risk and Needs in 2002 are summarized.

Juvenile Demographics and Self-reported Court History

Population				
Males		Females		Total
N	%	N	%	N
9,099	69.3	4,035	30.7	13,134

Race/Ethnicity				
Race	Males	Females	Total	
	N	N	N	%
Caucasian	5,290	2,293	7,583	58.7
Black	2,424	1,199	3,623	28.1
Hispanic	887	357	1,244	9.6
Asian	85	43	128	1.0
Other	216	114	330	2.6

Age Group				
Age	Males	Females	Total	
	N	N	N	%
Under 13	269	123	392	3.0
13	540	389	929	7.1
14	1,165	754	1,919	14.7
15	2,017	1,130	3,147	24.1
16	2,760	1,058	3,818	29.2
17	1,514	411	1,925	14.7
18	386	76	462	3.5
Over 18	382	88	470	3.6

Education				
Grade	Males	Females	Total	
	N	N	N	%
6th Grade or Less	477	222	699	5.5
7th Grade	770	542	1,312	10.3
8th Grade	1,820	1,035	2,855	22.5
9th Grade	2,336	1,055	3,391	26.7
10th Grade	1,724	650	2,374	18.7
11th Grade	1,129	307	1,436	11.3
H.S. Graduate/GED	422	124	546	4.3
Some College	66	29	95	0.7

Age at First Arrest						
Age	Males		Females		Total	
	N	%	N	%	N	%
10 & Under	388	4.9	64	1.9	452	4.0
11	362	4.6	116	3.4	478	4.2
12	710	9.0	378	11.0	1,088	9.6
13	1,209	15.3	683	19.8	1,892	16.6
14	1,483	18.7	785	22.8	2,268	19.9
15	1,672	21.1	718	20.8	2,390	21.0
16	1,247	15.7	489	14.2	1,736	15.3
17	463	5.8	125	3.6	588	5.2
18 & Over	390	4.9	92	2.6	482	4.2

Number	Times on Probation				Probation Revocations			
	Males	Females	Total		Males	Females	Total	
	N	N	N	%	N	N	N	%
0	2,615	1,057	3,672	30.0	5,816	2,144	7,960	66.4
1	3,893	2,002	5,895	48.1	1,329	710	2,039	17.0
2	1,394	552	1,946	15.9	502	366	868	7.2
3	371	109	480	3.9	225	198	423	3.5
4	95	49	144	1.2	143	111	254	2.1
5 +	92	30	122	1.0	248	199	447	3.7

Number of Times Arrested						
Number of Times Arrested	Males		Females		Total	
	N	%	N	%	N	%
0	1,121	13.1	600	15.8	1,721	13.9
1	2,589	30.3	1,235	32.5	3,824	31.0
2	1,733	20.3	732	19.2	2,465	20.0
3	1,006	11.8	419	11.0	1,425	11.5
4	614	7.2	246	6.5	860	7.0
5	426	5.0	160	4.2	586	4.7
6 – 9	612	7.2	236	6.2	848	6.9
10 or More	441	5.2	175	4.6	616	5.0

Number	Times in Juvenile Detention				Juvenile Court Hearings			
	Males	Females	Total		Males	Females	Total	
	N	N	N	%	N	N	N	%
0	3,378	1,253	4,631	37.7	1,740	637	2,377	19.4
1	2,098	1,032	3,130	25.4	2,098	881	2,979	24.3
2	1,259	597	1,856	15.1	1,602	828	2,430	19.8
3	673	380	1,053	8.6	944	487	1,431	11.7
4	375	181	556	4.5	675	320	995	8.1
5	243	119	362	2.9	410	225	635	5.2
6 +	474	238	712	5.8	992	421	1,413	11.5

Number	Alcohol-Related Arrests				Drug-Related Arrests			
	Males	Females	Total		Males	Females	Total	
	N	N	N	%	N	N	N	%
0	6,662	3,225	9,887	80.8	5,644	3,056	8,700	70.8
1	1,315	414	1,729	14.1	1,996	529	2,525	20.6
2	292	83	375	3.1	477	121	598	4.9
3	95	30	125	1.0	194	35	229	1.9
4	33	13	46	0.4	72	16	88	0.7
5	25	5	30	0.2	34	19	53	0.4
6 +	39	11	50	0.4	74	15	89	0.7

The information presented in the above tables is what was reported by juveniles on their ACIDI-Corrections Version II answer sheets. Many of these juvenile offenders had histories of criminal behavior. Over two-thirds (70.0%) had been placed on probation. Nearly 20 percent of the juveniles had one or more alcohol-related arrests and nearly 30 percent had one or more drug-related arrests. These statistics show that juvenile offenders have multiple problems. ACIDI-Corrections Version II scales identify these juveniles' problems.

Data on the percentages of first offenders and multiple offenders shows that there were over 48 percent first offenders. Nearly 52 percent of the juveniles had been arrested two or more times. Over one-third (34.4%) of the juveniles had their first arrest by the age of 13 and over half (54.3%) had been arrested before the age of 15. Over three-fourths (76.4%) of the juveniles had three or more arrests and 80 percent reported having had one or more juvenile court hearings.

ACDI-Corrections Version II scale score risk ranges show that the ACDI-Corrections Version II accurately assesses juvenile offender risk. High statistical reliability is maintained in the ACDI-Corrections Version II. Discriminant validity is supported by correlations between court history variables and ACDI-Corrections Version II scale scores. Number of arrests is correlated with ACDI-Corrections Version II 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 adjustment problems. These statistics support the scientifically sound methodologies of the ACDI-Corrections Version II. The ACDI-Corrections Version II is a reliable, valid and accurate test.

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