

1st Offense Inventory

An Inventory of Scientific Findings

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1st Offense Inventory

The **1st Offense Inventory** is designed for first offender (male and female), non-violent assessment. This test is particularly useful in defendant (misdemeanor and felony), pretrial, presentence, and probation settings. Early detection of problem severity facilitates prompt interventions which contributes greatly to successful interventions and outcomes. By measuring problem severity evaluators are able to match severity with treatment or intervention intensity. We know this is a successful requirement to reduce recidivism and allocate limited staff resources effectively.

In 20 to 25 minutes staff can screen important behavioral, attitudinal, and self-awareness factors important in understanding offenders, their risks, problems, supervision levels, as well as intervention needs. The 1st Offense Inventory consists of 122 true-false and multiple choice items that comprise seven measures (scales):

1. **Truthfulness Scale:** measures how truthful the offender was while completing the test. It would be naïve to assume that respondents always tell the truth - particularly in court and probation settings. The Truthfulness Scale detects denial, problem minimization and attempts to “fake good.”
2. **Alcohol Scale:** measures alcohol use and when appropriate the severity of abuse. Alcohol refers to beer, wine and other liquors. This scale measures the severity of alcohol abuse so the assessor can match problem severity with treatment intensity.
3. **Drugs Scale:** measures the severity of drug (marijuana, crack, ice, ecstasy, LSD, cocaine, amphetamines, barbiturates, heroin, etc.) use and when appropriate abuse. The Drugs Scale measures the severity of drug abuse so the assessor can match problem severity with treatment intensity.
4. **Antisocial Scale:** measures antisocial attitudes and behaviors. It identifies offenders that are opposed to society and are aggressive, irresponsible and destructive. Antisocial people are opposed to existing social organization and moral codes. Antisocial behaviors are highly correlated with recidivism and repeat offending.
5. **Peer Pressure Scale:** measures a person’s susceptibility to peer pressure or the influence of others. By definition: pressure from one's peers to behave in a manner similar or acceptable to them.
6. **Entitlement Scale:** measures a person’s beliefs and entitlement related attitudes. Some people believe they “are entitled,” “deserve,” or “have a right to” more material goods, benefits or other services. Some people believe they are “entitled” to more than others.
7. **Self-Esteem Scale:** measures a person’s perception of self. Self-esteem incorporates an attitude of acceptance-approval versus rejection-disapproval of oneself. This scale describes the person one believes oneself to be.

The 1st Offense Inventory is an automated (computer scored with reports printed within 2 minutes of data entry) self-report test that is completed by defendants and/or offenders individually or in group testing settings.

TEST DEVELOPMENT

1st Offense Inventory scales were developed from large item pools. Initial item selection was a rational process based upon clearly understood definitions of each scale. Content validity for the test was established using subject matter experts from the field of psychology and corrections. Initial items and scales were analyzed for final test selection and only those with the best statistical properties were retained. **Final test and item selection was based on each item's statistical properties.** It is important that users of the 1st Offense Inventory familiarize themselves with the definition of each scale.

UNIQUE FEATURES

Truthfulness Scale

An important advancement in testing has been the development of the Truthfulness Scale, which measures how truthful the defendant was while completing the test. It would be very naive to believe that everybody taking tests always answers questions truthfully. **The Truthfulness Scale detects denial, minimizing problems and faking.** The Truthfulness Scale is particularly important in court-related settings. The Truthfulness Scale identifies attempts to "fake good" or underreport problems and concerns.

When reviewing a 1st Offense Inventory report you should check the Truthfulness Scale score. **A Truthfulness Scale score at or below the 89th percentile is indicative of accurate, truthful and valid results. In contrast, a Truthfulness Scale score at or above the 90th percentile reflects inaccurate and invalid 1st Offense Inventory results.** Reasons for inaccurate results are many and include reading impairments, reading things into questions that are not there, emotional turmoil, denial and faking. **Regardless of the reason, a Truthfulness Scale score at or above the 90th percentile means scale scores are inaccurate and likely distorted.**

Truth-Corrected Scores

The Truthfulness Scale establishes how truthful the defendant was while completing the 1st Offense Inventory. The amount of error variance associated with untruthfulness is determined and then applied to each scale resulting in Truth-Corrected scores. **Truth-Corrected scores are more accurate than raw scores because they account for the measured amount of untruthfulness while the defendant completed the 1st Offense Inventory.** Raw scores may only reflect what the defendant wants you to know. Truth-Corrected scores reveal what the defendant is trying to hide. Truth-Corrected scores are more accurate than raw scores.

Risk Level Classification

Each 1st Offense Inventory scale score is classified in terms of the risk range it represents. These risk level classifications are calculated individually for each of the empirically based scales as follows:

PERCENTILE RANGE	RISK RANGE
0 to 39th percentile	Low Risk
40 to 69th percentile	Medium Risk
70 to 89th percentile	Problem Risk
90 to 100th percentile	Severe Problem Risk

A person who does not presently engage in alcohol or other drug abuse may score above zero, but would score in the low risk range. In addition, an elevated score (above the 70th percentile) on the Alcohol or Drugs Scale could be obtained by a recovering alcoholic or recovering drug abuser, consequently the client should be asked if he or she is recovering, and if recovering, "how long have they been abstaining" from alcohol or other drug use.

Risk ranges represent degree of severity. Risk ranges were established by converting raw scores to percentile scores by using cumulative percentage distributions (Behavior Data Systems, 2012). This is similar to the way in which students are assigned grades or scores for grading purposes in school. The 70th percentile is often used for passing grades and this same percentile initially began as a working criterion. Similarly, the 90th percentile is a benchmark for identifying severe problems. Early instrument development included the use of content experts to confirm the proposed risk ranges. Data analyses, in combination with field reports from experienced evaluators have confirmed that these percentile categories provide accurate identification of problem behavior (Behavior Data Systems, 2012).

In addition to establishing risk thresholds, the risk ranges serve an important role when interpreting Truthfulness Scale scores. A truthfulness concern is identified when a Truthfulness Scale score is at or above the Problem Risk range (70th percentile). These respondents are typically cautious, guarded or may be defensive in their answers. Scores in the Problem Risk range should be interpreted cautiously. Severe problem scores on the Truthfulness Scale (90th percentile and above) invalidates all scale scores. Classifying offenders according to pre-defined risk ranges provides an efficient and reliable solution for determining risk (Behavior Data Systems, 2012).

1ST Offense Inventory Database

Every time a 1st Offense Inventory is scored the data is automatically stored on the disc/flash drive for later inclusion in the a 1st Offense Inventory database. When the preset number of tests are administered the disc is returned for replacement, and the test data contained on these used discs is transferred, using confidential (no names) procedures, to the 1st Offense Inventory database for later analysis. This database is statistically analyzed annually, at which time a 1st Offense Inventory test items are adjusted to reflect demographic changes or trends that might have occurred. This unique and proprietary database also enables the formulation of annual summary reports that are descriptive of the populations that are tested. Summary reports provide important information

which may inform budgeting, resource allocation, recruitment, training, and program development.

Test Data Input Verification

This procedure allows the person that is inputting the test data from the answer sheet into their computer to verify the accuracy of their data input. **In brief, the test data is input twice and any inconsistencies between that first and second data entries are highlighted until corrected.** When the first and second data entry match (or are the same) you may continue. This data input verification procedure is optional.

You may enter client test data and print reports until the diskette is filled, or if you wish, you may check to verify that data entries from the answer sheet were accurate. You have the option of verifying any data that you enter, whether you wish to verify all tests or randomly pick a few tests to verify. The choice is yours.

When you enter a test you may choose to perform the test data input verification procedure after all the test data has been entered. A message is displayed asking if you want to “verify” data input. **Type “y” for “yes” if you want to perform test data input verification, or type “n” for “no” and you will return to the main menu.**

Delete Client Names – Confidentiality

You have the option to delete client names. This is optional. If you want to use this option, remember that once you delete client names -- they are gone and cannot be retrieved. We recommend you use this option. Deleting client names does not delete demographic or test data. When you use this option it only deletes defendant names. **This option is provided to protect client confidentiality.** Once the names have been deleted, there is no way for you to retrieve them.

EMPIRICAL SUPPORT FOR TRUTHFULNESS SCALE

1st Offense Inventory validation studies on the Truthfulness Scale were conducted with established Minnesota Multiphasic Personality Inventory (MMPI) scales as well as Polygraph examinations and other reports. Reliability and validity studies have been conducted on substance abuse inpatients, outpatients, college students, job applicants, defendants, diversion program attendees, probationers, inmates and counseling patients.

1. Validation of the Truthfulness Scale (1985, N = 78)

The Truthfulness Scale in the ACDI is an important psychometric scale as these scores establish how truthful the respondent was while completing the ACDI. Truthfulness Scale scores determine whether or not ACDI profiles are accurate and are essential to the calculation of Truth-Corrected ACDI scale scores.

The Truthfulness Scale identifies respondents who are self-protective, recalcitrant and guarded, as well as those who minimized or even concealed information while completing the test.

Truthfulness Scale items are designed to detect respondents who try to fake good or put themselves into a favorable light. These scale items are statements about oneself that most people would agree to. The following statement is an example of a Truthfulness Scale item, "Sometimes I worry about what others think or say about me."

This preliminary study used the 21 Truthfulness Scale items in the ACDI to determine if these Truthfulness Scale items could differentiate between respondents who were honest from those trying to fake good. It was hypothesized that the group trying to fake good would score higher on the Truthfulness Scale than the group instructed to be honest.

Method

Seventy-eight Arizona State University College students (1985) enrolled in an introductory psychology class were randomly assigned to one of two groups. Group 1 comprised the "Honest" group and Group 2 comprised the "Fakers" group. Group 1 was instructed to be honest and truthful while completing the test. Group 2 was instructed to "fake good" while completing the test, but to respond "in such a manner that their faking good would not be detected." The test, which included the ACDI Truthfulness Scale, was administered to the subjects and the Truthfulness Scale was embedded in the test as one of the five scales. Truthfulness Scale scores were calculated based on the number of deviant answers given to the 21 Truthfulness Scale items.

Results

The mean Truthfulness Scale score for the Honest group was 2.71 and the mean Truthfulness Scale score for Fakers was 15.77. The results of the correlation (product-moment correlation coefficient) between the Honest group and the Fakers showed that the Fakers scored significantly higher on the Truthfulness Scale than the Honest group ($r = 0.27, p < .05$).

The Truthfulness Scale successfully measured how truthful the respondents were while completing the test. The results of this study reveal that the Truthfulness Scale accurately detects "Fakers" from those students that took the test honestly.

2. Validation of the ACDI Truthfulness Scale using Criterion Measures (1989, N = 33)

The findings reported here are part of a larger examine of the ACDI, a juvenile chemical dependency assessment. The Truthfulness Scale results are reported here to demonstrate evidence of criterion validity.

In general terms, a test is valid if it measures what it is supposed to measure. The process of confirming this statement is called validating a test. A common practice when validating a test is to compute a correlation between it and another (criterion) test that purports to measure the same thing and that has been previously validated. For the purpose of this study (1989), the ACDI Truthfulness Scale was validated with comparable scales on the Minnesota Multiphasic Personality Inventory (MMPI). The MMPI was selected for this validity study because it is the most researched, validated and widely used objective personality test in the United States. The ACDI Truthfulness Scale was validated with the MMPI F Scale and L Scale. High scores on the F scale indicate lack of cooperation, desire to fake bad, haphazard approach to testing or failure to understand the items. High L Scale scores indicate attempts to fake good, deceptiveness or a need

to appear in a good light. High scores on the ACIDI Truthfulness Scale reflect guardedness, evasiveness, recalcitrance or impaired reading abilities.

Method

Thirty-three (33) adjudicated delinquent adolescents (1989) were administered both the ACIDI and the MMPI. Tests were counterbalanced for order effects -- half were given the ACIDI first and half the MMPI first. There were 29 males and 4 females and they ranged in age from 15 to 18 years (average age 16.1). All participants had at least a 6th grade equivalent reading level.

Results and Discussion

Product-moment correlation coefficients were calculated between ACIDI scales and MMPI scales. These results are summarized in Table 1. Correlation results presented in Table 1 show that the ACIDI Truthfulness Scale significantly correlated (.01 level of significance) with all represented MMPI scales. In addition, the correlations were in predicted directions.

Table 1. MMPI scales and ACIDI Truthfulness Scale (1989, N = 33)

<u>MMPI SCALES</u>	<u>ACIDI Scale (Measure)</u>	
	Truthfulness	Significance Level
F Scale	0.687	0.01
L (Lie) Scale	0.590	0.01

These findings strongly support the validity of the ACIDI Truthfulness Scale. The ACIDI Truthfulness Scale was highly correlated with the MMPI criterion scales it was tested against. The large correlation coefficients support the validity of the ACIDI Truthfulness Scale. The product-moment correlation coefficients testing the relation between ACIDI Truthfulness Scale and MMPI scales were significant at the $p < .01$ level.

3. Validation of the Truthfulness Scale in a Sample of Substance Abuse Inpatients

The findings reported here are part of a larger examine of the SAQ, chemical dependency assessment. The Truthfulness Scale results are reported here to demonstrate evidence of criterion validity.

Selected scales in the Minnesota Multiphasic Personality Inventory (MMPI) were used as criterion measures for the different SAQ scales. The Truthfulness Scale was validated with MMPI L Scale, F Scale and K Scale. The Alcohol Scale was validated with MMPI MacAndrew Scale (MAC) and Psychopathic Deviate-Obvious (PD-O). The Drug Scale was validated with MMPI MacAndrew Scale and Psychopathic Deviate-Obvious. The Aggressiveness Scale was validated with MMPI Authority Problems (PD2), Psychopathic Deviate (PD), Manifest Hostility (HOS) and Resentment/Aggression (TSC-V). The Resistance Scale was validated with MMPI Ego Strength (ES), Social Responsibility (RE), Social Maladjustment (SOC), Social Alienation (PD4), Social Alienation (SCIA), Authority Conflict (AUT) and Suspiciousness (TSC-III). The Stress Coping

Abilities Scale was validated with MMPI Psychasthenia (PT), Anxiety (A), Taylor Manifest Anxiety (MAS) and Tension/Worry (TSC-VII). The MMPI scales were chosen to compare to the SAQ scales because they measure similar attributes.

Method

The subjects used in the study were 212 substance (alcohol and other drugs) abuse inpatients in chemical dependency facilities. The SAQ and MMPI were administered in counterbalanced order.

Results and Discussion

The **Truthfulness Scale** correlates significantly in predicted directions with selected MMPI criterion scales, L Scale (lie, $p < .001$), F Scale (validity, $p < .001$) and K Scale (validity correction, $p < .001$). Other significant correlations with traditional MMPI scales include: PD (Psychopathic deviate, $p < .001$), ES (Ego Strength, $p < .001$), and RE (Social responsibility, $p < .001$); Harris MMPI subscales: PD2 (Authority Problems, $p < .001$), PD4 (Social Alienation, $p < .001$), SCIA (Social Alienation, $p < .001$); Wiggins MMPI content scales: SOC (Social Maladjustment, $p < .001$), HOS (Manifest Hostility, $p < .001$); Wiener-Harmon MMPI subscales: PDO (Psychopathic Deviant-Obvious, $p < .001$); Tryon, Stein & Chu MMPI cluster scales: TSC-V (Resentment/Aggressive, $p < .001$).

1ST OFFENSE INVENTORY RESEARCH

4. Interval Reliability of 1st Offense Inventory (N = 195, 2014)

This analysis of item reliability was conducted using online data submitted to the 1st Offense Inventory research databased.

Participants: 68% were male; 32% were female. Race/Ethnicity: 63% were Caucasian, 15% were African-American, 15% were Hispanic, 2% were Asian, and 2% reported Other. Marital Status: 50% were single; 29% were married, 15% were divorced, 3% were separated and 2% were widowed. Education: 1% had less than an 8th grade education, 7% completed some high school, 65% graduated high school or completed GED requirements, and 24% completed some college. 3%-4% of responses were missing for many of the demographic characteristics. Arrests: 3% had more than 1 alcohol-related arrest; <1% had more than 1 drug-related arrest.

Reliability: Test reliability refers to a scale's consistency of measurement. Cronbach's Alpha, a measure of reliability, measured the internal consistency of the items in each scale of the 1st Offense Inventory. Perfect reliability is 1.00. The professionally accepted reliability standard for this type of instrument is .70- .80 (Murphy & Davidshofer, 2001).

Table 2. Internal Reliability (N =195)

<u>Scales</u>	<u>Cronbach's Alpha</u>
Truthfulness	.89
Alcohol	.90
Drug	.91
Antisocial	.84
Peer Pressure	.84
Entitlement	.82
Self-Esteem	.92

Reliability coefficients exceeded professionally accepted standards for use in criminal and corrections related tests. Reliability is an important elements in establishing the consistency of offender scores.

5. Psychometric Properties of 1st Offense Inventory (N = 131, 2014)

This analysis of item reliability was conducted using online data submitted to the 1st Offense Inventory research databased.

Participants: 62% were male; 38% were female. Race/Ethnicity: 63% were Caucasian, 13% were African-American, 21% were Hispanic, and 3% were Asian. Marital Status: 49% were single; 31% were married, 16% were divorced, 3% were separated and <1% were widowed. Education: 2% completed some high school, 71% graduated high school or completed GED requirements, and 26% completed some college. Arrests: 3% had more than 1 alcohol-related arrest; <1% had more than 1 drug-related arrest.

Validity: In testing, the term *validity* refers to the extent that a test measures what it was designed to measure. A test cannot be accurate without being valid. When individuals known to have more severe problems attain higher (more severe) scale scores than individuals known to have fewer or no problems, this supports test validity.

Two separate analyses were conducted: 1) Using self-reported alcohol arrests, first-time offenders' and repeat offenders' Alcohol Scale mean scale scores were compared, 2) using self-reported drug arrests offenders Drug Scale mean scores were compared, and finally using DUI arrests, offenders scores on the Alcohol Scale were compared.

Alcohol Scale by Offender Status Using Alcohol Arrests

	Offender Status	N	Mean	t	sig
Alcohol Scale	FIRST TIME	127	5.92	1.06	NS
	REPEAT	4	15.50		

Drug Scale by Offender Status Using Drug Arrests

	Offender Status	N	Mean	t	Sig.
Drug Scale	FIRST TIME	130	2.24	3.33	.001
	REPEAT	1	20.00		

Adjustments were made to account for unequal variance. Results found higher mean scale scores for repeat offenders on the Alcohol, and Drug Scales. *T*-test analyses were conducted and results were not statistically significant for the Alcohol Scale; results were statistically significant for the Drug Scale. We would expect a different outcome with a larger sample—as more tests are administered the difference between offenders’ scores will likely become more pronounced.

These findings underscore the evidence of construct validity present in the 1st Offense Inventory and its ability to identify offenders who pose greater risk (repeat offenders) and consequently have greater needs.

Reliability: a test of reliability was also conducted using a small sample of Texas probationers. Test reliability refers to a scale’s consistency of measurement. Cronbach’s Alpha, a measure of reliability, measured the internal consistency of the items in each scale of the 1st Offense Inventory. Perfect reliability is 1.00. The professionally accepted reliability standard for this type of instrument is .70- 80 (Murphy & Davidshofer, 2001).

Table 3. Internal Reliability (N =131, 2014)

<u>Scales</u>	<u>Cronbach's Alpha</u>
Truthfulness	.87
Alcohol	.90
Drug	.86
Antisocial	.68
Peer Pressure	.71
Entitlement	.80
Self-Esteem	.77

Three 1st Offense Inventory scales exceeded expectations; three scales were within the acceptable range for this type of test, and one scale was below expectations. The low reliability score for Antisocial may be related to the small sample size, however it is more likely the related characteristics of the offenders in the sample.

6. Validity and Reliability of the 1st Offense Inventory (N=128, 2024)

This analysis of item reliability and validity was conducted using online data submitted to the 1st Offense Inventory research databased.

Participants: 81.3% were male; 18.8% were female. Race/Ethnicity: 61.7% were Caucasian, 17.2% were African American, 12.5% were Hispanic, 2.3% were Asian, <1% were Native American, and 3.1% responded other. Marital Status: 50.8% were single, 33.6% were married, 6.3% were divorced, and 7.0% were separated. Education: 5.5% completed 8th grade or less, 14.1% completed some high school, 6.3% obtained a GED, 25.0% graduated high school, 18.8% completed trade/technical school, 18.8% graduated college, and 4.7% attended graduate school.

Validity: In testing, the term *validity* refers to the extent that a test measures what it was designed to measure. A test cannot be accurate without being valid. When individuals known to have more severe problems attain higher (more severe) scale scores than individuals known to have fewer or no problems, this supports test validity.

Two separate analyses were conducted: 1) Using self-reported alcohol arrests, first-time offenders' and repeat offenders' Alcohol Scale mean scale scores were compared, 2) using self-reported drug arrests, offenders Drug Scale mean scores were compared, and finally using DUI arrests, offenders scores on the Alcohol Scale were compared.

Alcohol Scale by Offender Status Using Alcohol Arrests

	Offender Status	N	Mean	t	sig
Alcohol Scale	FIRST TIME	118	5.44	-3.32	.001
	REPEAT	9	17.56		

Drug Scale by Offender Status Using Drug Arrests

	Offender Status	N	Mean	T	Sig.
Drug Scale	FIRST TIME	120	5.60	-4.00	.000
	REPEAT	7	22.71		

Adjustments were made to account for unequal variance, Results found higher mean scale scores for repeat offenders on the Alcohol and Drugs Scales. *T*-test analyses were conducted and results were statistically significant for the Alcohol and Drugs Scales.

These findings underscore the evidence of construct validity present in the 1st Offense Inventory and its ability to identify offenders who pose greater risk (repeat offenders) and consequently have greater needs.

Reliability: a test of reliability was also conducted using a small sample of online data submitted to the 1st Offense Inventory research database. Test reliability refers to a scale’s consistency of measurement. Cronbach’s Alpha, a measure of reliability, measures the internal consistency of the items in each scale on the 1st Offense Inventory. Perfect reliability is 1.00. The professionally accepted reliability standard for this type of instrument is .70-.80 (Murphy & Davidshofer, 2001).

Table 4. Internal Reliability (N =128, 2024)

<u>Scales</u>	<u>Cronbach’s Alpha</u>
Truthfulness	.89
Alcohol	.94
Drug	.93
Antisocial	.85
Peer Pressure	.88
Entitlement	.83
Self-Esteem	.90

All 1st Offense Inventory scales exceeded expectations. These scores support the strong validity found throughout the catalog of Behavior Data Systems' instruments.

SUMMARY

The 1ST Offense Inventory has exceptional reliability and validity scores; essential elements in any assessment tool are in to order correctly identify individuals who demonstrate higher severity (or more severe problems) and consequently likely have more complex treatment needs. As a dynamic factor, amendable to change, self-esteem can be addressed in the treatment process and treatment that is matched to problem severity has been shown to be more effective than treatment that is not (Andrews & Bonta, 2010).

The 1st Offense Inventory provides staff with information critical for treatment recommendations. Research has demonstrated that treatment that is matched to problem severity is more effective than treatment that is not (Andrews & Bonta, 2010).

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