

A Guide

for Selecting Substance Abuse Screening and Assessment Instruments



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SUBSTANCE ABUSE SCREENING AND ASSESSMENT INSTRUMENTS

The speed with which the United States drug use epidemic grew in the 1980s was rivaled by the rapid development and marketing of tools to measure it. Although it is difficult to estimate how many of these instruments are currently available, it is safe to say that most treatment professionals lack the time, if not stamina, to carefully evaluate each one. The purpose of this guide is to help simplify the selection process by providing a list of some of the more popular instruments as well as brief review of the basic psychometric criteria they should meet.

The instruments on the attached list were selected on the basis of their popularity. In no way does inclusion on this list indicate endorsement by TCADA, nor is the converse true for instruments not included. This guide is intended to give treatment providers more information about substance abuse screening or assessment instruments for their specific treatment populations.

Because some instruments are oriented toward certain age levels, the instruments reviewed here have been grouped into adult and adolescent categories. Likewise, instruments have been classified in terms of their function: screening or assessment. A *screening* instrument is intended to provide a quick measure of whether or not a person has a substance problem, and if the need for treatment is indicated. An *assessment*, on the other hand, provides more elaborate measures of substance use and other life domains (e.g., psychological, physical, social, etc.) which may be associated with the respondent's substance use. It is incumbent upon the treatment provider to select the instrument which best suits the specific needs of their program and treatment population.

Two key properties to remember when evaluating an instrument are reliability and validity. Since most test publishers will send you information upon request regarding these properties, it may be useful to review the concepts and the different ways in which they can be measured.

Reliability simply refers to the consistency of the instrument. In other words, "Is it likely that a person's score on the test will be similar over time and across conditions?" Test-retest reliability is a measure of how well a test score given at a certain time correlates with that same person's score on the same test after a specified amount of time. Another way to measure reliability is to assess the extent to which the items on the same scale relate to each other. Presumably, if the items measure the same thing, they should be at least moderately correlated with each other. The level of consistency can be determined by randomly selecting half of the test items and correlating that score with that of the other half. This is called split-half reliability. Another measure of internal consistency is the extent to which all the items on a scale are correlated with each other, and with the overall scale. This type of reliability is reported in the form of a coefficient alpha, which ranges from 0 to 1. In general, higher alphas are more desirable.

In general, *validity* refers to the ability of a test to measure what it is supposed to measure. The validity of a test is usually reported in three ways: construct, content, and criterion-related. Construct validity refers to how well the test represents what it purports to measure. In other words, "How confident can we be that a substance-abuse scale is measuring substance abuse rather than general deviance?" Since there is no quantitative way to report this,

construct validity is usually justified theoretically. Content validity, like construct validity, must also be reported in a logical or at least theoretically intuitive fashion. It refers to how well the items in a scale represent the entire domain of the construct being measured. There is no numerical index by which content validity can be measured. Perhaps the most commonly reported type of validity, and one that lends itself to quantitative analysis, is criterion-related validity. Criterion-related validity is a measure of how well the test in question correlates with some related behavior which has already occurred or may occur in the future. In the case of measuring one's substance abuse, criterion-related validity can be established by correlating severity test scores with a criterion behavior such as the number of positive urinalyses obtained over a certain period of time.

An important point to remember is that good test reliability does not necessarily guarantee validity. Consistent scores on a test are meaningless if it is unclear what the test is actually measuring. Therefore, reliability is a requirement for, not a replacement of, validity, and the latter should be given more weight in evaluating the usefulness of a measure. Furthermore, any screening or assessment instrument should be used as only one tool in the decision-making process. The instrument should guide the process rather than determine it.

There are a number of excellent resources available to provide further information on the screening and assessment process, specific instruments, and/or the reliabilities and validities of select instruments. Three of these resources are listed in the Appendix.

Screening Instruments: ADULTS

<i>Title</i>	Alcohol Dependence Scale (ADS)
<i>Overview</i>	The ADS is a 25-item questionnaire which can be administered in either a self-report or interview format. It provides measures of alcohol dependence syndrome, severity of withdrawal symptoms, obsessive-compulsive drinking style, as well as providing a diagnosis and prognosis. It can be completed in approximately 10 minutes and can be hand-scored.
<i>Cost</i>	\$15.00 for 25 questionnaires and instruction manual
<i>Inquiries</i>	Addiction Research Foundation 33 Russell Street Toronto, Ontario, Canada M5S2S1 (800) 661-1111

<i>Title</i>	COMPASS
<i>Overview</i>	The COMPASS is a 98-item self-report questionnaire measuring the severity and frequency of substance abuse. It provides several scale scores relating to different aspects of the respondent's level of substance use, personal adjustment, and the quality of his/her responses. The substance use scale consist of four subscales: Psychological Dependence, Abusive, Secretive, and Irresponsible use, and Signs of Withdrawal. The Personal Adjustment Scale consists of three subscales: Frustration Problems, Interpersonal Problems, and Self-Image Problems. Finally, the COMPASS has two measures of response quality: the Defensiveness Scale (measuring denial) and the Inconsistency Scale (which checks for dubious response patterns). The COMPASS takes approximately 20–25 minutes to complete and can be computer- or hand-scored.
<i>Cost</i>	\$22.00 per package of 50 hand scored tests; \$60.00 per package of 50 computer-scored administrations. Discounts are available for orders of 5 or more packages.
<i>Inquiries</i>	John R. Craig, Ed.S. Diagnostic Counseling Services P.O. Box 6178 Kokomo, Indiana 46904 (800) 292-4968

<i>Title</i>	Drug Abuse Screening Test-20 (DAST-20)
<i>Overview</i>	The DAST-20 is a 20-item “yes-no” self-administered questionnaire which assesses the extent of problems related to drug abuse based on the various consequences of drug use the respondent reports. Items in this instrument are patterned after those in the MAST. The total DAST-20 score is based on the total number of negative consequence items endorsed (range 0–20). This instrument is hand-scored.
<i>Cost</i>	\$5.50 per 100 evaluation forms
<i>Inquiries</i>	Addiction Research Foundation 33 Russell Street Toronto, Ontario, Canada M5S2S1 (800) 661-1111

<i>Title</i>	Michigan Alcoholism Screening Test (MAST)
<i>Overview</i>	The MAST is a widely used 24-item questionnaire used to detect alcoholism. It can be self-administered or administered by a clinician and takes approximately 15 minutes to complete. This instrument can be hand-scored.
<i>Cost</i>	Public domain
<i>Inquiries</i>	Melvin L. Selzer, Ph.D. 4016 3rd Ave. San Diego, California 92103 (619) 299-4043

<i>Title</i>	Substance Abuse/Life Circumstance Evaluation (SALCE)
<i>Overview</i>	The SALCE is a 98-item self-administered questionnaire designed to assess alcohol and drug use/abuse behavior. It results in four measures: Alcohol Use, Drug Use, Test-Taking Attitude, and Life Stress Issues. It also provides treatment recommendations based on individual profiles. The SALCE can be completed in approximately 20–25 minutes, and can be computer-scored.
<i>Cost</i>	\$4.50 per evaluation
<i>Inquiries</i>	MiMi F. Mino, Marketing Coordinator A.D.E., Incorporated P.O. Box 660 Clarkston, Michigan 48347 (800) 334-1918

<i>Title</i>	Substance Abuse Subtle Screening Inventory (SASSI)
<i>Overview</i>	The SASSI is a self-administered 52-item true/false instrument developed to detect chemical dependency regardless of dishonesty or faking on the part of the respondent. It results in five scale scores: Obvious Attributes of Substance Abuse, Subtle Attributes of Substance Abuse, Denial (test-taking defensiveness), Substance Use in the Family, and Alcohol/Drug Preference. The SASSI can usually be completed in 10–15 minutes, and can be computer- or hand-scored.
<i>Cost</i>	\$150.00 per 100 evaluations
<i>Inquiries</i>	SASSI Institute 4403 Trail Ridge Road Bloomington, Indiana 47408 (800) 726-0526

Assessment Instruments: ADULTS

<i>Title</i>	Addiction Severity Index (ASI)
<i>Overview</i>	The ASI is a structured interview consisting of 161 questions and is arguably the most popular instrument of its kind. These questions cover seven areas commonly affected by drug and alcohol dependence: medical, employment, alcohol, drug, legal, family/social, and psychiatric problems. The interviews take approximately 45–60 minutes to complete. Training is strongly emphasized for ASI users and usually takes 1–2 days. Computer scoring programs are available.
<i>Cost</i>	Public domain, although there is a \$1.00 charge for the initial copy of the instrument and an \$8.00 charge for the manual
<i>Inquiries</i>	Treatment Research Institute Attn: ASI Materials 3600 Market Street, Suite 846 Philadelphia, PA 19104-2648 (215) 349-8982

<i>Title</i>	Drug Abuse Treatment and AIDS-risk Reduction (DATAR)
<i>Overview</i>	The DATAR intake also follows a structured interview format. It takes approximately 60–90 minutes to administer, and provides detailed information regarding clients' demographics, family/peer relations, physical health, psychological health, criminal involvement, and substance use history. In addition, this intake has an entire section devoted to AIDS risk assessment. For clinical use, the DATAR intake does not require formal training. Programs are available for computer scoring.
<i>Cost</i>	Public domain
<i>Inquiries</i>	Lois Chatham, Ph.D. Institute of Behavioral Research Texas Christian University Fort Worth, Texas 76129 (817) 921-7226

<i>Title</i>	Individual Assessment Profile (IAP)
<i>Overview</i>	This is a structured clinical interview that provides measures of eight life areas: demographic characteristics, admission source information, living arrangements (family and social relationships), tobacco/alcohol/drug use, illegal activities, source of support/employment, medical health, and psychological health. The items in this instrument were drawn from 75 similar drug and alcohol treatment intakes, expert recommendations, and substance abuse literature. The IAP interview takes approximately 50 minutes to conduct and can be computer-scored on site. Formal training for this instrument usually requires 2–3 days.
<i>Cost</i>	Public domain
<i>Inquiries</i>	Ms. M. Gail Woods Research Triangle Institute P.O. Box 12194 Research Triangle Park, North Carolina 27709 (800)334-8571

Screening Instruments: ADOLESCENTS

<i>Title</i>	Assessment of Chemical Health Inventory (ACHI)
<i>Overview</i>	This is a 128-item self-administered questionnaire which can be taken and scored on a computer or in pencil-and-paper format. Although it does not provide information as to the frequency, type, or amount of substances used, the ACHI provides measures of family estrangement, chemical use involvement, personal consequences, alienation, depression, family support, social impact, family chemical use, self-regard/abuse and physical/sexual abuse. It also provides a measure of test taking behavior (e.g., randomness, inconsistency, defensiveness). The ACHI takes about 15–25 minutes to complete.
<i>Cost</i>	A “Starter Set,” comprised of an instruction manual and a floppy disk containing 25 test administrations, is available for \$179.00. Fifty tests can be purchased for \$287.50.
<i>Inquiries</i>	Recovery Software, Inc. 7401 Metro Blvd., Suite 445 Minneapolis, Minnesota 55439 (612) 831-5835

<i>Title</i>	COMPASS
<i>Overview</i>	The COMPASS is a 98-item self-report questionnaire measuring the severity and frequency of substance abuse. Although this instrument was included in the adult section above, it has also been normed on samples of high school and college students. It provides several scale scores relating to different aspects of the respondent’s level of substance use, personal adjustment, and the quality of his/her responses. The substance use scale consist of four subscales: Psychological Dependence, Abusive, Secretive, and Irresponsible use, and Signs of Withdrawal. The Personal Adjustment Scale consists of three subscales: Frustration Problems, Interpersonal Problems, and Self-Image Problems. Finally, the COMPASS has two measures of response quality: the Defensiveness Scale (measuring denial) and the Inconsistency Scale (which checks for dubious response patterns). The COMPASS takes approximately 20–25 minutes to complete and can be computer- or hand-scored.
<i>Cost</i>	\$22.00 per package of 50 hand-scored tests; \$60.00 per package of 50 computer-scored administrations. Discounts are available for orders of 5 or more packages.
<i>Inquiries</i>	John R. Craig, Ed.S. Diagnostic Counseling Services P.O. Box 6178 Kokomo, Indiana 46904 (800) 292-4968

<i>Title</i>	Juvenile Automated Substance Abuse Evaluation (JASAE)
<i>Overview</i>	An “offspring” of the SALCE, the JASAE is a 102-item self-administered questionnaire which results in measures of alcohol use, drug use, substance use attitudes, and life stress issues. Based on individual profiles, the JASAE makes recommendations for appropriate levels of intervention. The JASAE takes approximately 20 minutes to complete and can be computer-scored.
<i>Cost</i>	\$4.50 per evaluation
<i>Inquiries</i>	MiMi F. Mino, Marketing Coordinator A.D.E., Incorporated P.O. Box 660 Clarkston, Michigan 48347 (800) 334-1918

<i>Title</i>	Personal Experience Screening Questionnaire (PESQ)
<i>Overview</i>	The PESQ is a 40-item self-administered questionnaire measuring substance use problem severity, substance use frequency and onset, other mental/behavioral problems, response defensiveness (faking-good), and response infrequency (faking-bad, inattention). This instrument can be administered in approximately 10 minutes.
<i>Cost</i>	\$70.00 for 25 carbonized automatically scored test forms and a manual
<i>Inquiries</i>	Western Psychological Services 12031 Wilshire Blvd. Los Angeles, California 90025 (310) 478-2061

<i>Title</i>	Problem Oriented Screening Instrument for Teenagers (POSIT)
<i>Overview</i>	The POSIT is a 139-item self-administered “yes-no” questionnaire. Although the instrument is intended for adolescents between the ages of 12-19, some questions are only scored for respondents over 16 years of age. Points are given for responses in each area and cutoff scores are provided to determine areas needing further assessment. The test’s authors recommend using the instrument in conjunction with supplementary assessments known as the Comprehensive Assessment Battery (CAB). Copies of the POSIT and accompanying instruments can be found in the AARS manual (see page 15).
<i>Cost</i>	Public domain
<i>Inquiries</i>	Elizabeth Rahdert, Ph.D. National Institute on Drug Abuse 5600 Fishers Lane, Rm. 10A-30 Rockville, Maryland 20857 (301) 443-4060

<i>Title</i>	Substance Abuse Subtle Screening Inventory (SASSI)
<i>Overview</i>	The SASSI is a self-administered 52-item true/false instrument developed to detect chemical dependency regardless of dishonesty or faking on the part of the respondent. It results in five scale scores: Obvious Attributes of Substance Abuse, Subtle Attributes of Substance Abuse, Denial (test-taking defensiveness), Substance Use in the Family, and Alcohol/Drug Preference. The SASSI can usually be completed in 10–15 minutes and can be either computer- or hand-scored.
<i>Cost</i>	\$150.00 per 100 evaluations
<i>Inquiries</i>	SASSI Institute 4403 Trail Ridge Road Bloomington, Indiana 47408 (800) 726-0526

Assessment Instruments: ADOLESCENTS

<i>Title</i>	Adolescent Diagnostic Interview (ADI)
<i>Overview</i>	The ADI is a structured interview designed to assess the presence of substance abuse disorders according to the DSM-III-R criteria. In addition to basic demographic information, the ADI collects information regarding psychosocial stressors, substance abuse history and diagnostic symptoms, level of functioning in nine domains (e.g., peer involvement, school performance, delinquency, etc.), and memory/orientation. The length and course of the interview varies according to the frequency and diversity of substance use. For an adolescent using both marijuana and alcohol, the interview takes about 45 minutes and is hand-scored. No formal training with the instrument is required.
<i>Cost</i>	\$75.00 for 5 test booklets and a manual
<i>Inquiries</i>	Western Psychological Services 12031 Wilshire Blvd. Los Angeles, California 90025 (310) 478-2061

<i>Title</i>	Adolescent Drug Abuse Diagnosis (ADAD)
<i>Overview</i>	This is a 150-item structured interview modeled after the Addiction Severity Index. In addition to basic sociodemographic information, the ADAD assesses problem severity in nine life areas: medical, school, employment, social relations, family relations, psychological functioning, legal involvement, alcohol use, and drug use. One day of formal training with this instrument is strongly recommended. Programs are available for calculating the composite scores.
<i>Cost</i>	There is no charge for the instrument, but there are charges for the recommended training tape (\$25.00), the instruction manual (\$15.00), and the composite scoring manual (\$15.00).
<i>Inquiries</i>	Alfred S. Friedman, Ph.D., and Arlene Utada, M.Ed. Belmont Center for Comprehensive Treatment 4200 Monument Road Philadelphia, Pennsylvania 19131 (215) 877-6408

<i>Title</i>	Adolescent Problem Severity Index (APSI)
<i>Overview</i>	Modeled after the ASI, the APSI is a structured interview which provides measures of seven problem areas: delinquency, family relationships, school and work, health, psychosocial adjustment, substance use, and personal relationships. Also like the ASI, the APSI results in composite measures and severity ratings for each area. The interview normally takes about 45–60 minutes. Although the APSI can be hand scored, software for computer scoring is also available. Formal training is strongly recommended.
<i>Cost</i>	Public domain, although there is a \$5.00 charge for the initial copy of the instrument and the manual
<i>Inquiries</i>	Treatment Research Institute Attn: ASI Materials 3600 Market Street, Suite 846 Philadelphia, PA 19104-2648 (215) 349-8982

<i>Title</i>	Personal Experience Inventory (PEI)
<i>Overview</i>	The PEI is a comprehensive self-report instrument which identifies not only the onset, type, and extent of substance abuse, but personal risk factors which may contribute to the problem as well. It covers five content areas: substance use problem severity, substance use frequency/onset, personal risk factors, environmental risk factors, and problem screens (e.g., eating disorder, sexual abuse, suicide potential). The PEI also tests for dubious response patterns and test-taking defensiveness. This instrument can be administered in pencil-and-paper or computer format, and takes approximately 45–60 minutes to complete. The PEI must be computer-scored.
<i>Cost</i>	\$285.00 for 1 disk with 25 administrations; 2 disks or more are \$260.00 each.
<i>Inquiries</i>	Western Psychological Services 12031 Wilshire Blvd. Los Angeles, California 90025 (310) 478-2061

Appendix: Additional Resources

Screening and Assessment of Alcohol- and Other Drug (AOD)-Abusing Adolescents: The Recommendations of a Consensus Panel

This publication is part of the Treatment Improvement Protocol (TIP) Series developed by the Center for Substance Abuse Treatment. It provides an overview of the strategies, procedures, and instruments appropriate for screening and assessing alcohol and other drug abuse in youth. The emphasis is on practical clinical procedures. This TIP includes chapters on screening, assessment, legal issues, and screening and assessment of youth in juvenile justice systems (1993, 200pp.). It will soon be available at no cost from:

National Clearinghouse for Alcohol and Drug Information (NCADI)
P.O. Box 2345
Rockville, MD 20852
(800) 729-6686

The stock number for this publication is BKD-108.

The Adolescent Assessment/Referral System (AARS) Manual

The AARS is a system that includes the following: a problem screening tool, the Problem Oriented Screening Instrument for Teenagers (POSIT) and scoring templates; a Client Personal History Questionnaire for use in gathering client background information; a list of instruments that comprise a diagnostic battery, the Comprehensive Assessment Battery, and information on how to obtain those instruments; and a guide to the development of a Directory of Adolescent Services, which represents a structured, step-by-step procedure to identify and catalog existing local treatment services for adolescents (1991, 110pp.).

The AARS Manual is also available at no cost from NCADI (see above).

Request the AARS Manual, DHHS Publication No. (ADM) 91-1735.

Evaluation Instruments for Drug Abuse: Adolescents and Adults

This is an excellent reference guide that provides information about diagnostic screening and assessment tools. The handbook provides information on both brief and comprehensive screening and assessment tools for adults and adolescents. While the focus is on substance abuse, instruments to assess other life domains are described, including physical health, mental health, social and peer relationships, family relationships, and delinquency. Each instrument is described in terms of its purpose, limitations, psychometric properties, training requirements, cost, and where and how it can be obtained. The handbook is soon to be published by the National Institute on Drug Abuse (NIDA).