

## **II. Assessment of Adolescents With Complex Issues: Substance Abuse and Mental Illness**



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## About the Trainer

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# Assessment of Adolescents With Complex Issues: Substance Abuse and Mental Illness

This monograph provides a detailed discussion of adolescents who have substance use disorders and co-occurring psychiatric issues requiring treatment. The first section of the document examines the nature of substance use as it moves from the introduction of alcohol and drug use through to the development of a disorder. The second section describes the most common types of co-existing disorders, with practical information about assessment tools and effective ways to administer them.

At one time, most of the information used by the treatment field concerning adolescent substance use was anecdotal. In the past 10 years, a significant body of research has defined clear patterns of adolescent substance use and described standard approaches to assessment. A bibliography of relevant articles is included as Appendix A.

## Who Is At Risk?

Several key questions are asked by those working with adolescents. Who is at highest risk for developing a substance use disorder and/or a co-existing psychiatric problem? How are those interrelationships formed? What types of assessments and tools can be used to identify problems and increase the likelihood of effective treatment?

The group of individuals addressed here are in the adolescent development period, from about the ages of 11 or 12 to the mid-twenties. This period of time is well described as one of volatile change in the individual. It is critical to examine this period to understand why some individuals develop a propensity toward substance use that leads to abuse. An overwhelming majority of adolescents take alcohol or drugs in adolescence, but only a small minority develop problems. The vast majority walk away unscathed (Newcomb, 1995). What kinds of co-existing problems either add fuel to the fire or serve as a deterrent to future problems? And of those who develop disorders, why do some present with complex difficulties, while others have less severe problems?

Several problems commonly occur when adolescents are under the influence of a substance. Because of bad judgment or impairment, they may put themselves in harm's way. This can lead to injuries, accidents, or death; or less severe problems, such as poor performance in school. These types of complications affect the largest group of adolescents using substances.

However, it is unclear what path takes a pre-adolescent or child who starts to use substances through the journey that leads to a diagnosable disorder. There is no one well-described path that leads in that direction. Many avenues have been examined, such as genetic predisposition, familial influences, and peer influences. However, the same kinds of characteristics and influences may lead to a disorder in one person but not another.

If a group of adults all started smoking marijuana or drinking beer in the same amounts over the same period of time, there would be many differences within the group. Some could take it in stride, while some could not. Many would obtain DUIs and repeated DUIs, while others would not. Some people would develop serious family problems, or have problems at work, while others would not. There would be many variations. This also holds true for the adolescent population.

## Prevalence

Typically, 95 percent of the adolescent population uses alcohol or drugs by the time they reach the age of 18. This has been well documented in the Monitoring the Future survey, the National Household Survey on Drug Abuse, and the Youth Risk Behavior Survey (YRBS). Monitoring the Future studies have profiled adolescent substance use trends since 1977. This survey indicates the percentage of individuals using substances, and at what rates. Currently, the average percentage of use is not increasing. Nationally, there's a slight tendency toward a decrease in substance taking, with the exception of the club drug Ecstasy.

The three surveys mentioned provide information on prevalence, i.e., what substance is being taken by how many people and how often. The surveys do not give us information about the number of disorders. They mirror a national attitude, reflected in the current trends of alcohol and drug use in the population surveyed. Is a specific drug accepted or not accepted? How many adolescents perceive a particular substance as dangerous? How available is a specific drug?

A study by Warren et al. (1995) estimates the number of individuals with disorders at approximately 4.5 percent of males and 2.1 percent of females. This averages 3.4 percent of adolescents who develop abuse or dependency problems (the terminology depends on whether DSM III or DSM IV criteria are used).

## Individual Risk Characteristics

Three characteristics related to temperament have been identified that correlate with the development of a substance use disorder: *novelty-seeking*, *low-harm avoidance*, and *high reward dependence*. These factors give us an indication of those who tend to start and escalate drug use and then develop serious problems as a result.

Young individuals who like *novelty* (such as wild hair and trendy changes) look for experiences that are new, different, and unique. Second, individuals who show *low-harm avoidance* might be willing to set their hair on fire or rollerblade off the roof just for the experience. They don't seem to have a strong sense of self-protection. Third, there are individuals who *seek rewards*, who need stimulation or reinforcement on an ongoing basis. These three temperamental characteristics are critical in identifying those most receptive to the effects of alcohol or other drugs.

Other characteristics for risk are developmental and relate to high-level thinking functions. Youths who do not have well-developed abstract reasoning or who have trouble maintaining and focusing attention may not be able to understand future possibilities and the consequences of a specific decision. Lacking a mature inner feedback process that tells them they're out of control or making dangerous decisions, these individuals may engage in high levels of drug use. Higher-level abstract thinking involves the ability to remember and capture meaning from previous events, analyze them, reason through a situation, and apply this information to the future. This type of thinking is a late adolescent developmental characteristic and not one that is typically seen in 14- or 15-year olds. However, the national average age of adolescents in treatment is 14 or 15. Therein lies the difficulty in treatment. Most attempts to use abstract thinking processes to help the adolescent get meaning from treatment are likely to fail. Processes of self-monitoring are not well developed yet.

## Genetic Influences

There are different ways of looking at the genetic influences on individual characteristics. One body of research indicates that the biological child of a parent who is an alcoholic has a greatly increased tendency toward developing alcoholism. It doesn't assure the child's fate, but it increases the risk. There seem to be some inherited characteristics that move individuals toward developing a problem similar to that of the parent.

Another pathway of possible genetic risk is the inheritance of certain personality characteristics from the parent. If parents are under-socialized or antisocial (e.g., life-long rebels) they often have problems with authority. They then instill similar beliefs in their children. They pass on a tendency toward non-conformity, rebellion against authority, and, in some cases, aggressive behavior. Researchers now state that aggressive behavior is readily identifiable in elementary school. Research has shown that children identified in the fourth or fifth grade as consistently aggressive and acting out have an extremely high rate of substance use disorders in adulthood. An aggressive behavior pattern tends to be one of the strongest indicators of risk.

Mark Schuckit, a researcher in San Diego, has released a paper that attempts to make sense of these genetic issues in terms of individual characteristics. He states that approximately 40 to 50 percent of the risk for developing alcoholism comes from genetic influences. It is becoming clear that there is not going to be one identifiable genetic characteristic that can be found from a specific site in the DNA. There is, in all probability, a multitude of inheritable characteristics that build the risk toward the development of disorders. The strength of these factors helps comprise that 40 to 50 percent of the risk.

Based on this research, Schuckit (2000) has identified four areas of genetic tendencies that profile this level of risk. Two areas involve the production of specific liver enzymes that help to metabolize alcohol. These enzymes are acetaldehyde hydrogenises (ADH) and acetaldehyde dehydrogenises (ALDH). When an individual is drinking, these enzymes break down the toxic poisons of alcohol and eliminate them. Individuals with high levels of these enzymes tend not to experience feelings of intoxication as easily as other individuals and can therefore drink more. Another way to describe this is natural-born tolerance. Adolescents with high levels of ADH don't experience short-term negative consequences of drinking and are able to put enough alcohol in their bodies to give a disorder an opportunity to bloom. These tolerance levels tend to be set from birth.

The other side of this phenomenon is the low response those with less ADH and ALDH. When these individuals put alcohol in their bodies, they have a reaction of quick intoxication. That intoxication seems to linger and form some type of negative response, such as a hangover. Although these individuals may enjoy the effects of alcohol initially, the overall experience is not pleasant, and as a result, they tend not to drink very much. It's difficult for these people to put enough alcohol in their bodies to develop a disorder.

The third area that Schuckit looks at is the manner in which these genetic characteristics tend to be expressed in the body. One study of P300 (P3) brain waves looks at different levels of feelings of well being transmitted in the brain. They're finding that adult male alcoholics have depressed levels of P3 waves. These men don't experience much satisfaction or comfort. However, as soon as alcohol is introduced, the P3 wave levels increase. Studies of the P3 waves of the sons of those same alcoholics indicate that, even when the sons have never used alcohol, their P3 waves are also naturally depressed. Researchers think this demonstrates some type of brain wave deficiency that creates a risk for high alcohol use. The fourth genetic tendency related to risk is alpha wave activity. Monitoring of brain activity through EEGs demonstrates lower levels of alpha wave activity in those at risk for a



substance use disorder.

This research provides a foundation for describing genetic tendencies relating to risk. To date, however, Schuckit does not provide thorough descriptions of personality traits. These concepts may be imbedded in the brain wave or alpha wave theories, but there is no detailed description.

For children and adolescents up to age 24 or 25, the brain is still forming and changing. When chemical substances are dumped into these volatile parts of the brain, it is very impressionable. There are impacts on development, higher-level thinking, and other aspects of physical and mental development. If children or adolescents use alcohol and other drugs, it may compromise how they grow. In addition, the substance becomes a replacement for the development of healthy mental and physiological states. Dependence on the substance can prevent natural growth from occurring. The tendencies toward later problems are much greater when there is early use. However, this is not universally true. Many adults used alcohol and drugs in adolescence and are fairly well adjusted now.

## **Aggressive and Antisocial Behavior**

Other studies continue to point out that aggressive, antisocial behavior in early childhood seems to be a strong predictor of those who will have difficulty, especially when coupled with personality traits that also lead toward an interest in substance taking. If, as a child, I think it's okay to be aggressive, to use alcohol and drugs, to be antisocial, and I can't monitor how well behaved I am, that opens the door for me to take the path of using alcohol and drugs repeatedly. The influence of society is not an influence for me. The presence of these traits seems critical with young individuals and they are often expressed in aggressive, acting out behavior. Characteristics such as conduct disorder, long-term mood disorders, and attention deficit hyperactivity disorder associated with conduct disorder continue to come up in studies about individual risk.

## **Early Exposure and Long-Term Use**

The average age of first use of alcohol and drugs in this country is 11 to 12. Averaged nationally, the age for putting any amount of alcohol in the body is 11.9 for males and 12.1 for females. This includes use with or without parental permission. Cigarettes are not included in that statistical data. However, research indicates that tobacco is an even earlier indicator of those who are headed down a problematic path; this is described as the gateway process. Interest in tobacco at an early age also is correlated with individuals who start to experience acting out behavior. One recent study found that when early adolescents used tobacco, it was around that same time as acting out behavior, and there was a strong association with peers who had acting out behavior as a norm. Within 6 months of tobacco use, there was a very strong tendency toward promiscuous sexual activity.

Prior to the age of 16, adolescents have twice the risk or tendency toward developing a substance use problem compared with those who initiate use at age 16 and beyond. A study by Anthony and Petronis (1995) found that it took approximately 5 to 7 years after early initiation for disorders to start to develop. There seems to be a period of incubation. It may be the period of time during which one has to put enough of a substance in the body to trigger these processes to start. The 8, 9, 10-year olds are often the 14, 15, and 16-year olds in treatment who are having early signs of disorders. They start to present around that period of time.

During the course of one generation, society has changed the interpretation of adolescence

so that it applies to a younger age group. During that same period of time, adolescents have also started using drugs at a younger age. If society continues to push its view of adolescence to an even younger age, we'll see the age of initiation get even younger. There is a strong sociological tie-in.

A study by Gfroerer and Epstein (1999) examines the age of first use of marijuana. The most prevalent diagnosis for adolescents with substance abuse problems is now marijuana. It has surpassed alcohol use for the first time. This study looked at the initiation age as the most important factor in determining those who are going to need treatment. Those who started use between the ages of 8 and 13 gave the strongest indicators of those who will need treatment, typically by age 15. There are more boys in treatment than girls and adolescent girls using marijuana are more likely than boys to need treatment. The peak initiation rates in this study were between 14 to 16.

## **Environmental Risk Factors**

**Peer Group.** The peer group has a tremendous influence on the adolescent. The ways in which this influence works is an area of great debate. Treatment providers see peer influences of different types, but there is also progression related to peer influence as part of a larger picture. Adolescents are influenced by their environment; by their own biological, familial, and individual characteristics; and through that process, especially in early adolescence a highly changeable transition time they start to form their own ideas. They tend to seek out peers who have similar values and idea systems. For example, in middle school, adolescents are exposed to different kids and "scan" or sample the people around them. They move in different social circles sampling the whole crowd, which often results in a dramatic change in friendships. These young people are seeking individuals who have common thoughts, feelings, and beliefs. If, for some reason, the child is undersocialized and acting out, he or she will find a similar group to associate with. More mature adolescents will find a group that's highly socialized, concerned about high achievement, and seeking positive reinforcement. Adolescents seek their own kind; those whose internal belief systems match their own.

When the child is deviant and acting out, the role of the parents is critical. Are the parents monitoring closely and helping to extract him or her from those difficult situations? Or, on the other extreme, are they helping to supply their child with plenty of acting out friends and encouraging deviant behavior? Factors concerning parental supervisory influences, as well their availability to the child, come into play.

**Parental Use.** The parents' view of alcohol or drug use is critical. There is a strong distinction between parents who drink alcohol as part of dinner or a ceremony, and those who drink to "party" or get intoxicated. Children observe parental attitudes on this as they grow. The issue of illegal drug use is also subject to many societal views, including the concept of marijuana use for medicinal purposes. The family provides some information about alcohol and drug use, and when children are in school, they are also exposed to the ideas of various peer groups. This seems to be a crucial time in children's lives as they sort through their feelings about what alcohol and drugs mean to them.

**Socioeconomic Status.** Socioeconomic status is a combination of the factors of social class, economic class, and education. Overall, alcohol and drugs fall into the same pattern as any type of illness. Those in a lower socioeconomic class are exposed to more risks. This includes not only high-risk characteristics, but also a lack of resources to draw upon if a problem arises. For example, those who are poor tend to have less education. They have fewer options for work, and perhaps a job that is not secure. If an individual is fired and is

unable to get another job in the area, the family might move, perhaps into a place with other individuals who have few resources. A great deal of time is spent trying to survive. This scenario has a tremendous number of risk factors, versus an individual with a higher education, more options for work, and higher pay. The latter individual probably lives in an area where there is less risk, fewer environmental hazards, and fewer individual hazards. When a problem arises, there is more money available to correct the problem. That's not to say that well-to-do individuals can't have problems, but they tend not to suffer from these problems as much as those in a lower socioeconomic group.

***Family Relationships and Dynamics.*** Families have different characteristics and many have experienced divorce. The literature points to the idea that divorce is not as critical in terms of risk as family discord. High levels of negative, critical, and conflicted family interactions increase individual risk. A recent study stated that parents in such families have higher rates of substance abuse and dependency than do single parents. A key focus of the conflicted family is the father who is very detached and highly critical of the children. Those family structures also had much higher rates of substance abuse than single-parent families. Risk factors in families also include a lack of closeness, negative communication, and a lack of consistent discipline. At the other end of the discipline spectrum are ultra-rigid approaches that can lead to children's rebellion or use of substances to find relief from emotional pain.

## **Resiliency/Protective Factors**

Resiliency and protective factors act as mediators of risk, but the relationships are complex. There are a number of theories on risk and protective factors and resiliency. Inherent in the idea of resiliency is that there are buffers that can offset risk characteristics. Some studies indicate that intelligence works as a buffering factor. Other studies say intelligence doesn't buffer against substance use. Some key protective factors studied include the ability to modulate and control emotional states, good problem-solving skills, high self esteem, good role models, supportive relationships, and a commitment to school. Many prevention approaches have looked at the effectiveness of reaching young people from an early age. When children are invested in getting an education, we see that the parents are usually involved in the children's educational practices. The parents' participation in school activities reinforces the importance of the school. Another factor to consider is religion, which tends to bring moral value training to individuals and reinforce societal beliefs. However, religious practices that are extremely dogmatic create a risk factor. When children are exposed to such rigid systems, substance abuse starts to go up.

## **Juvenile Justice Population**

Inhalant use is far higher in juvenile justice populations than in general populations. There is often an association with conduct problems as well. Of juveniles in the justice system, 57 percent have a diagnosable mental illness and 83 percent exhibit problematic use of alcohol or other drugs. Nineteen percent have suicidal thoughts, 58 percent have anxiety, and 40 percent have disruptive behavior patterns.

A recent Maryland study looked at the prevalence of drug use in justice populations. Forty-two percent of the justice population was diagnosed with a marijuana-only disorder, 31 percent with both marijuana and alcohol, and smaller subgroups were found to use hallucinogens or other drugs. Only 4 percent used alcohol only.

## **Comorbidity**

Some psychiatric disorders are commonly associated with substance use disorders in adolescents. Research on causal relationships between substance abuse and mental health problems is mixed. One important question is: Which comes first, the chicken or the egg? Does substance use behavior give rise to psychiatric disorders, or do existing psychiatric disorders create high risk for taking substances to the point that a disorder occurs? The answer is both. Few natural history longitudinal studies have followed this phenomenon in children, as it's a complex issue.

If a researcher were to follow a group of 6-year-olds for the next 20 years, it would be interesting to see their paths from the age of six. Over time, one would see who starts taking substances in adolescence, the behaviors associated with taking substances, those who develop problems, and those who develop any type of disorder. However, it would be very difficult to do such a study. In some cases, there is enough data to show the relationship between substance use and psychiatric disorders. Also, the prevalence of co-occurring disorders in adolescents are found to be at similar levels as in the adult population. Our knowledge of this interrelationship will improve over time.

Not all co-existing conditions are well defined or well studied. Based on current research, with the co-existing disorders of substance abuse and psychiatric disorders, receptiveness to treatment, as well as retention in treatment, dramatically decline. It is difficult to identify these children and hard to get them into treatment. Many programs are poorly equipped to deal with these issues, so that even if treatment is started, it is difficult to continue. It is also a challenge to provide enough treatment, because systems are not equipped to deliver the ongoing, long-term, continuous forms of treatment needed by this population.

Depression and conduct disorders are often seen to co-exist. "Often" in this context is a minority of the cases, but with some prevalence. Another pattern commonly seen is conduct disorders identified in childhood with individuals who also have attention deficit hyperactivity disorders (ADHD). It is difficult to say why. School systems and other life experiences children are exposed to can result in punishment, chastisement, being singled out, and repeated criticism. Children with ADHD have difficulty with performance because they can't maintain attention, follow through on tasks, or sit still. They are then reprimanded for hyperactive behavior.

Over time, this situation takes its toll. These children see that they're not performing as well as other individuals, and in this country, performance is highly valued. It is a common path to see these children develop symptoms of depression. It is also common to see substance use start around the time of the onset of the depressive symptoms. Is the substance use a type of self-medication? Is it a co-occurring process? It's difficult to tell. However, this path is often seen in juvenile justice populations. The justice system is the net that's cast to catch and identify individuals with these types of problems.

***Depression.*** In the majority of adolescents with major depression, the depression is not related to substance use. However, there is an overlap between depression and substance abuse. This overlap is a significant risk factor in suicide. Eighty-one percent of suicide victims have substance abuse and co-existing depression (Zetilin, 1999).

Depression is more prevalent in females than in males. As a general rule of thumb, the gender differences concerning how males and females interact with their environment is also reflected in their substance taking patterns. Males tend to be more outward-action oriented, while females tend to be more internally oriented. Females have a prevalence of depression and males have a higher prevalence of conduct disorders. Also, females with conduct disorders tend to express them differently than males. Females exhibit more acting out behaviors toward themselves. Females with depression, conduct disorder, and substance use

are at very high risk for suicide (Zetilin, 1999).

In addition to depression, other significant comorbid disorders and conditions seen in adolescents include post-traumatic stress disorder (PTSD), sexual abuse, eating disorders, anxiety, conduct disorders, learning disabilities, ADHD, and psychosis.

**PTSD.** Substance use is sometimes used to medicate symptoms of PTSD, which include:

- Phobic avoidance of similar situations
- Hyper vigilance to threats
- Over reactivity or outbursts
- Somatic complaints
- Feeling permanently damaged
- Self-destructive behavior/risk taking
- Painful guilt
- Concentration difficulty
- Nightmares

Substance abuse can "numb" these painful symptoms but can also increase risk-taking behaviors and sexual acting out. There is a strong association between PTSD and obsessive compulsive and social disorders.

**Sexual abuse** can also lead to a comorbid substance use condition. Misuse is related to negative affect, behavioral lack of control, childhood victimization, or adult boyfriends. Childhood sexual abuse, suicidal behavior, and substance use disorders are often linked.

**Eating disorders** are another commonly seen comorbid condition. There is a strong association between substance misuse and eating disorders. For example, 19 percent of a sample in treatment had both eating disorders and substance abuse (Zetilin, 1999). Hallmarks of an eating disorder are:

- Obsession with image
- Unrealistic image of physical self
- Common incidence with sexual abuse and substance abuse
- Stimulant use for weight loss (binge use or use as an appetite suppressant)

**Anxiety** is another possible co-existing psychiatric condition. However, the relationship to substance abuse is unclear. But it is known that post-trauma anxiety can give rise to higher rates of substance abuse (Clark et. al, 1997).

**Conduct disorders** have a complicated relationship with substance abuse in adolescence. Seen more commonly in males, a conduct disorder often pre-dates the substance abuse and can be a direct result of intoxication. It can also be the result of association with an antisocial group (Zetilin, 1999). There may be different categories of conduct disorders, depending on the comorbid association. Conduct disorder is also related to early sexual abuse and aggression (Zetilin, 1999). Often there is drug abuse in the child's home. Information used to diagnose conduct disorder includes:

- Repetitive and persistent pattern of violation of other's rights and rules
- Clinically significant impairment in social, academic, or occupational functioning
- The behavior patterns are present in school, home, or community
- The clinician must rely on informant's reports of behavior
- Childhood onset of behaviors is pre age 10

- Adolescent onset of behaviors is post age 10

There are four major categories of conduct disorder, including aggressive conduct, nonaggressive conduct/property loss or damage, deceitfulness or theft, and a serious violation of rules.

**Learning disabilities** affect approximately 5 percent of public school children. In such cases, an individual's achievement on standardized tests is below expected levels. There are problems with intelligence and information processing. Communication and sensory disorders fall within this category of comorbid disorders. Learning disabilities are associated with conduct disorders, ADHD, developmental disorders, and major depressive disorders.

**ADHD**, when co-existing with a conduct disorder, shows a greater incidence of a substance use disorder. There is no greater incidence of substance use disorder when not associated with conduct disorder in adolescent populations. There is, however, a greater incidence in adult years. Symptoms of ADHD include:

- Inattention and/or hyperactivity/impulsivity
- Clear interference with developmentally appropriate social, academic, or occupational functioning
- Failure to give close attention to details
- Difficulty in sustaining attention (frequent shifts in attention)
- Lack of follow through
- Difficulty organizing tasks

**Psychosis** is not commonly caused by substance abuse, although drug use may predate its onset. It is often seen as ADHD or conduct disorder in children or adolescents. Psychosis in adolescents is more common with the use of hallucinogens, stimulants, solvents, and phencyclidine. It usually emerges in the mid-20s for men and in the late 20's for women. Prolonged abstinence with psychosis is an indication that the condition is independent of drug use.

## **Adolescent Assessments: Types and Focus**

An *assessment* is a snapshot in time reflecting the status of a client. It includes a range of evaluation procedures and techniques and is a process best done over time. However, an assessment is not the final word on a client's condition. The focus of the assessment is the function of alcohol and drug other drug (AOD) use for the client, the motivations for taking alcohol and other drugs, the severity of the problem, and the determination of any functional impairments from AOD use and/or co-existing disorders. If there are co-existing disorders, their relationships to substance abuse are explored. The context of AOD use and the client's environment are examined, as well as the developmental abilities and stage. Safety and security issues are also addressed. A description of commonly used screening and assessment instruments is found in Appendix B.

## **Risk Assessment**

Risk assessments are commonly done in large populations and should be based on risk studies. They are used to direct "indicated prevention" services. Indicated prevention strategies are designed to prevent the onset of substance abuse in individuals who do not meet the medical criteria for addiction, but who are showing early danger signs, such as falling grades and some use of alcohol and/or marijuana. The mission of indicated prevention is to identify these individuals and involve them in special programs.

## Initial Screens

An initial screen looks for red flags that can indicate the need for a comprehensive assessment. It is short in duration and can be used by multiple disciplines. The focus is on the severity of substance abuse. Interrelated core factors are examined, including legal issues, mental health status, education, and environmental issues. Screening can take place in schools, health care systems, justice systems, vocational rehabilitation systems, by outreach workers, and by social service agencies. Adolescents who should be screened include:

- Detained juveniles
- Status offenders
- Mental health clients
- Child welfare juveniles
- School dropouts
- Emergency room trauma patients
- Students with risk symptoms

Within an initial screening group, there are two different levels of screening that might be used: comprehensive and initial. If a very global assessment is needed, the Teen Health Advisor (Paperny et al., 1990) and the Problem Oriented Screening Instrument for Teenagers (POSIT) (Rahdert, 1991) are two good tools that look at the global functioning of an individual. The Substance Abuse Subtle Screening Inventory- Adolescent (SASSI-A) (Miller, 1990) and the Personal Experience Screening Questionnaire (PESQ) (Winters, 1991) look at more detailed information on the severity of substance abuse problems, as well as co-existing disorder symptoms.

## Drug Recognition

Another form of screening is drug recognition, which is used primarily by law enforcement. This allows the identification of symptomology in an individual who is still under the influence. These screens show the presence of classes of substances within the body, including depressants and stimulants. Field sobriety tests (being asked to stand on one leg or walk a straight line) are a well known example of a drug recognition screen. These methods work because under the influence of alcohol, areas of the brain are limited in the way they function when tested. The symptoms displayed in response to the test indicate whether there is some degree of impairment.

Law enforcement has developed other specialized, medically based processes that accurately identify classes of drugs in the body. A pencil moving across a field in front of the eye can detect marijuana use. As the eyes cross a mid-line point, at least one eye will involuntarily be unable to track the pencil. Another process tests for reactivity. A light shining on one pupil can register reaction time, which will indicate the class of drug used. Marijuana users have a green cast inside the mouth. Most tests don't indicate the specific substance used, how much, or how long ago it was taken. They merely indicate the presence of a drug. These tests, used by law enforcement, require highly specialized training.

Other techniques include chemical testing, urinalysis, blood analysis, breathalyzer use, and tests of hair and saliva. There are now transdermal patches on the market. They are very useful in the justice setting, as well for long-term monitoring. One patch adheres to the skin and stays in place for a week. At the end of that week, a drug court worker can peel the patch off and analyze it because it tests for absorption of any residue expelled through the

skin from drug metabolites. Probation officials need reliable methods because they have to use the results as evidence in court. Urine has the best track record for accuracy, followed by tests on hair.

Chemical screening is one of the biggest growth industries in the last 10 years, and the tests have improved tremendously. Social service agencies sometimes test parents who've been through family courts or drug courts. Treatment programs have also increased the use of chemical screening. An important test that's somewhat under-appreciated is the specimen collection. All too often people hand an adolescent a cup and send them in the bathroom, which invites opportunities for adolescents to experiment with resisting authority. After one test, an adolescent can think of a way to beat the test. Therefore, care must be taken with collection techniques. There are countless stories of adolescents tainting their urine by dipping a finger in liquid soap and then dipping that finger in the urine. It changes the PH level of any substance of abuse in the urine. If the sample is sent to a laboratory that takes 3 days to get the results back, it takes several days to find out the sample was invalid.

Another common way to beat the test is simply to hydrate. If an adolescent has been smoking marijuana for 3 days, there is a certain concentration of marijuana metabolites in the urine. If the concentration is high enough, the test will indicate it. Increasing the level of liquid in the body decreases the proportion of marijuana and gives a negative test. This is why adolescents may drink lots of water when the time comes for a urine test. Diuretics are often used to make the body spill extra water and dilute the sample. Some herbal remedies are used as masking agents to change PH levels in the body. However, as these methods become more sophisticated, so too, do the urine labs. It's wise to do surprise urine tests, witness them, and make sure the sample is warm. Another common trick is the use of vinegar or detergent to "beat the test," and these have odors. Therefore, the smell of the urine sample is important to note.

With every test that comes back positive, a lab process should be used that automatically sends the sample to the next most advanced level of testing. The sample should be split, and if the test is positive, it should go through gas chromatography mass spectrometry (GCMS). The ultimate test is GCMS, which looks at the molecular structure and will rule out whether the sample contained poppy seeds, Percocet taken for pain, or heroin. Most labs will do this advanced testing automatically for no additional charge, as they already build the cost into the basic lab fees.

## **Who Should Test?**

Testing in schools is becoming far more common. The Supreme Court has repeatedly ruled that a public school system has the right to perform urine testing on individuals involved in extracurricular activities, usually sports. Some schools are now extending testing to include debate and drama clubs. This testing is based on the idea that extracurricular activities are a privilege. Comprehensive education is a right, but clubs and sports are considered a privilege. The tests are done with parental or guardian permission.

School districts have varying policies. Some will expel a student from an activity for one positive test, while others will put a student on suspension for 2 weeks, with the provision that a negative test at that time will restore privileges.

Other appropriate places for drug testing include:

- Juvenile justice system
- Treatment programs



- Employers
- Social service systems.

## Comprehensive Assessments

Comprehensive assessments are very detailed and are used to document the presence, nature, and complexity of substance abuse problems. They determine specific treatment needs, such as the need for outpatient versus inpatient treatment. This type of testing illuminates the correlation between substance use and their mental states. It starts to answer some of the questions about the motivations for or functions of drug use by the individual. Comprehensive assessments explore in greater detail the red flags, such as repeated arrests. They can help determine whether there is a behavioral problem and the nature of that problem. They also look at environmental issues, such as the extent to which the family is involved. The specific strengths of the adolescent family and other supports and reinforcers are identified. These assessments also provide a detailed written report that explains how the problem appears.

These assessments require a well-trained and experienced assessor, with graduate-level training. However, in practice, and particularly in the substance abuse treatment field, programs often use new staff to do comprehensive assessments, particularly with adolescents. Since these staff members are not yet trusted to handle case loads, they are given screenings, assessments, and initial workups when adolescents are admitted to treatment. Often, these new staff members are young and are the least experienced. This is a serious mismatch for the requirements of the job. These assessments should be conducted by the best trained, most experienced, and naturally gifted staff in the entire organization. This work requires significant training, sophistication, and a high degree of art. That experience doesn't come quickly or easily. Only individuals who understand the nature of adolescents, their behavior, their developmental sequences, the nature of substance taking, and the interplay of co-existing conditions, are capable of performing a good assessment.

Concerning marijuana, the assessor should look closely at the function of its use. Also, is there functional impairment as a result of use? Has the adolescent been arrested? Are they having problems with parents or friends because they are smoking? Are there motivational problems or learning problems? It is important to examine the functional problem, because that will provide information on the adolescent's relationship with substance taking and co-existing issues. A child may be depressed and using marijuana to numb psychically. What is that numbness and state of low energy and low action and how does it to the depression and marijuana use?

Multiple assessment techniques are preferred. There should be more than one interview with an individual. The use of multiple tools is necessary for a comprehensive approach. Psychosocial assessments, psychological evaluations, psychiatric workups, standardized assessments, chemical testing, and school records are all are extremely valuable in providing a broad perspective on the problem. Diagnostic criteria are valuable. However, it's very difficult to use hard and fast criteria for abuse or dependence with this transitional age group. Many of the criteria for psychiatric co-existing conditions are more accurate than the DSM's criteria concerning the use of psychoactive substances. Severity indexes are also helpful, as they indicate how serious or intense a problem is.

Standardized tools are another important resource. One example is the Adolescent Diagnostic Interview (ADI) (Winters and Henly, 1993). In addition, the Adolescent Drug Abuse Diagnosis (ADAD) (Friedman and Utada, 1989), the Adolescent Problem Severity Index (ASPI) (Metzger, Krushner, and McLellan, 1991), the Personal Experience Inventory

(PEI) (Winters and Henly, 1989), and the Teen Addiction Severity Index (T-ASI) (Kaminer, Burkstein, and Tarter, 1991) are beneficial. Some of these instruments have been extensively evaluated.

It takes substantial time to administer these instruments, and a great deal of questioning takes place. There are two basic types. One is paper-and-pencil or computer oriented instrument. The other is a structured interview that gathers psychosocial information, including:

- Family history
- Social history
- Educational history/Learning problems
- Legal history
- AOD abuse history
- History of psychological/behavioral problems
- Peer relationship history
- Vocational history/Leisure history
- Medical history
- Adolescent developmental issues.

Psychosocial information is gathered in a standard format, and some tools provide very specific ranges within which to classify responses. The results are then tabulated. These instruments have been developed over time after administration in thousands and thousands of cases. They accurately report psychosocial conditions. A standardized tool in an interview format for a comprehensive assessment can also be used for pre-and post-measurements. If the standardized tool is used on admission, and the individual case worker administers it in the course of treatment, there will be three measures at discharge that use the same standardized measurement process for comparison. However, if an assessor does a non-standardized assessment by asking questions in the areas listed above, and a standardized instrument is used later by someone else, these results can't be compared.

These standardized tests are based on construct validity. The questions are worded so that the interviewee can't discern what they are being asked. One question might ask about a preference for days full of sunshine over days that are cloudy and gray. Such vague questions are used throughout these tests. They're indirect. Researchers have found that if certain psychological or substance-using conditions are severe enough, the individual will answer questions in a similar pattern. Because the tests are standardized and have been done with 10,000 to 15,000 people, they have found there is an answering pattern that's descriptive.

## **Assessment of Developmental Abilities**

Assessors should look at the individual's abilities concerning concrete versus formal operational thinking. Most adolescents think very concretely. The ability for abstract thinking must be assessed so treatment providers can determine whether clients can understand certain concepts. Can they project current experience to future events and find importance and relevance in those experiences? Many of the therapies used in treatment rely upon insight. Does the adolescent client have the abstract thinking ability to do that?

Elkind describes an adolescent way of thinking called the "personal fable." They tend to believe they are indestructible because many adolescents don't have the ability to conceptualize abstract ideas. They believe that bad things don't happen to them, only to other people. Death and liver problems are not possible in their lives. This is very much a

process of concrete versus abstract thinking.

It is also important to determine the importance of the peers. Are clients extremely influenced by what their peers say, think, and do? Can they individuate or distance themselves from the peer culture? If not, the peer group will be an important area to focus on. For example, in subcultures such as gangs, it's difficult for gang members to reveal what they're doing, to cross lines. There are also sexuality issues. These are high-anxiety producing issues that adolescents wrestle with. It is important to assess all of these pieces to get a full picture of the client's ability to function.

## **Characteristics of Standardized Assessment Instruments**

**Research-based.** Assessment instruments should be standardized and based on client data. Prior to using an instrument, the assessor should find out what kind of client base it's been developed for. That will be the only appropriate population with which to use that instrument. Other questions that should be answered include: What qualifications do you need to use this tool? What is your purpose in conducting assessments? Will this tool meet those needs? These are important considerations, but it also should be understood that these tools are not perfect. They have bias, just as the assessor has bias. Tests can be interpreted in different ways, so assessors must be careful in the way they read and handle information.

**Culturally Sensitive.** Construct validity questions (such as "I prefer sunny days vs. cloudy days") are based on culturally based views, perceptions, and values. Merely translating them into another language will not make them appropriate for another population. The assessor should look to see what group a standardized test is normed to be successful with, whether Native American, African American, Hispanic, or Caucasian. Finding an accurate tool for a Hispanic population is one of the most difficult areas because there are more than 26 different Hispanic subcultures in the Western Hemisphere. Each attributes different meanings in terms of construct validities. To develop effective tools, the starting place is to translate them to another language, then give them to another person, who then translates them back. If the first version matches the last version, there is some accuracy (Kurtines and Scapocznik, 1994).

Secondly, there are specific traits in a culture. These must be identified so that construct validity types of questions can be developed. Questions must be able to measure similarly across different cultures. There are also different degrees of assimilation. Will the same questionnaire work for a recent El Salvadorian immigrant and also for a first generation El Salvadorian child who is more assimilated?

Several examples of questionnaires that are available are the Adolescent Drug Abuse Diagnostic (ADAD), for a structured interview (Friedman and Utada, 1989), and the Personal Experience Inventory (PEI) (Winters and Henley, 1989), which is one of the best research tools. The cost is approximately \$19 per tool. Depending upon the tests, time and cost are important considerations.

## **Legal Issues and Assessment**

**Reporting Child Abuse and Neglect.** The assessor must be prepared to hear upsetting information about abuse from some adolescents. The procedures used in conducting the assessment will largely determine whether information on child abuse and neglect will come

forth. How the assessor handles that information is absolutely critical.

To obtain quality information, the client must participate and cooperate. Creating a "willing customer" is one of the key functions of the assessor. An interview component should take place as part of any assessment specifically for this purpose. Otherwise, the results will be less reliable. Customer relations training sheds light on the way children should be treated in interviews. Some systems view the adolescent with substance use problems as "disgusting juvenile punks." Some see them as chronic offenders. Some see them as kids who have been discarded in life and have lived in a different class of citizenry. The assessor **MUST** treat these children as customers. The setting should be comfortable. They should be invited to sit down. If possible, offer something to drink or a stick of gum. The key is to make the setting reflect a cooperative, participatory environment. The manner in which adolescents are spoken to should also reflect these goals.

***Informed Consent.*** Also, the approach to obtaining informed consent should be done meticulously. It is a legally defined process. In brief, informed consent law states that in most areas of mental health and substance abuse treatment, willing participation is necessary. The patient has to clearly understand and appreciate the danger of what they are about to do and understand and comprehend the benefits, risks and detriments of consent. Informed consent law says the assessor has the burden of conveying this information. That entails a great deal of explanation. Children who are oppositional, or who are in conflict about growing up, may create a power struggle.

These clients must be told that they have the right to refuse to talk. When doing substance abuse assessment in particular, they don't have to talk even if the judge orders it. It's their right. During an assessment for psychiatric conditions, unless there are grounds that conservatorship is needed, or if they are suicidal, they don't have to talk. Assessors must explain the right to refuse and respect that. If the child decides not to talk, they can be given the option of coming back to talk in the future. By respecting that refusal and working toward understanding them, they may decide they want to talk. The assessor should not give up immediately, but work toward obtaining consent by asking about their concerns. The case law is clear. Unless their rights are explained so that they can repeat them back, the assessor has not gotten informed consent.

***Duty to Warn and Consent to Release Information.*** The client must also be informed of consent to release issues and tell them who has access to the information obtained. What does it mean to release information? Who can information be released to? If somebody violates that consent, what recourse is there for the client? Adolescents must be told how the assessor will handle information about situations in which they were molested, struck, beaten, or not given food. Civil cases have clearly outlined the responsibility of professionals concerning duty to report in cases of abuse and neglect and duty to warn.

Research indicates that if an interviewer builds up to asking about abuse, waiting to address it until there is rapport, it communicates that the issue is a "big deal" and makes it harder for the child to disclose. It's better to just talk about it sincerely, honestly, and in a straightforward manner throughout the interview. It should not come up as one small section at the end.

The assessor should have a policy on the "don't ask, don't tell" issue and make it clear from the outset of the interview. This is a better approach than telling the child the policy two-thirds of the way through when they are asked if their parents will find out what they said. Examples of what the assessor can say are: "It's my job to try to understand your world and figure out what might be helpful to you. I can't be expected to do that if you tell me not to tell your parents anything. But you can tell me only what you would be comfortable with

your parents knowing. Sometimes the law says I have to tell, and I don't want to betray you, so please talk with me only about what you feel comfortable with."

When the assessor can build a trusting, confident relationship they get better data and the child doesn't feel betrayed. By the time adolescents are in assessment, they're feeling some pain and most have hope that they can get help. The assessor should make it clear that they are there to provide that help. However, the assessor should avoid doing therapy. The adolescent may need to hear an explanation of the role of the assessor versus the role of a counselor, whom the client will meet with at a later time. The assessor could get caught in the trap of spending hours doing assessment and also going in and out of providing therapy, counseling, intervention, and crisis management.

## **The Presenting Problem**

Most adolescents don't come to an assessment and state that they have a serious problem. It is important to try to understand the presenting problem from their perspective. An open-ended question can help get things started, followed by careful listening, and then reflecting back to the client what they have said. The client can then clarify if the assessor has misunderstood something. This process allows the assessor to find out more about the child's motivations and their perception of the problem, as well as providing insight into the level of their developmental abilities.

Questions should be asked in a very precise manner. When hard, factual data is needed, the questions should be very specific. When attempting to assess levels of insight, emotional states, degree of comprehension, and perspective, questions should be open-ended. The assessor's pace should match the client's. If the adolescent is very slow and methodical, the assessor should be very slow and methodical. The use of clinical jargon should be avoided.

There will be resistance at times, but it can be dealt with by addressing how difficult the client's issues are. The assessor should understand that when the client is angry and upset, they are upset with the history relating to the questions asked, not upset with the assessor personally. The assessor must maintain the structure of the interaction and have a certain degree of flexibility.

## **Interviewing Informants**

It is critical to interview and collect data from informants, such as the parents, social service workers, and corrections officials. Adolescents are not able to provide a full perspective because of a limited ability to see things abstractly and apply them to their own lives. They also are not good historians and may not report major events, such as health issues, even when asked. If it didn't happen yesterday, it may not be important to them anymore. Informants bring a larger perspective. However, in some cases, adolescents have done an effective job of concealing their real lives from their parents, who are unaware of critical information.

Adolescents may not report behavior problems because they are seen by them as problems. If a child is defying the rules, that's the parent's problem, not his. This is true particularly with any conduct or behavioral problems. Other people, such as school or probation officials can provide that data.

Some groups of behaviors are difficult for adolescents to talk about because they are not comfortable discussing repeated failures, particularly kids who have had ongoing problems with performance. Those with attention deficit hyperactive disorders, learning difficulties, or

victims of incest don't feel good about their lives and usually aren't interested in repeating their histories to a perfect stranger. These are areas in which good data will be hard to obtain unless informants are interviewed.

The approach to interviewing informants is different than with the adolescent. The same information does not need to be gathered from these individuals that was obtained from the adolescent, but the data can be considered from another point of view. Since adolescents are poor at providing historical information, get historical information from the informants. Ask "Are there any things about that adolescent's behavior that has been troubling to you?" Again, the behavior might not bother the adolescent, but it might bother others. Ask if there are things that have happened in this person's life that have been horrible or would make them feel bad. The adolescent might not talk about certain things because they are ashamed.

## **Concluding the Assessment Process**

It is very difficult to close the interview in a way that makes sense of the assessment information for the adolescent. Clinical terms will not be understood. Communication should be relative to how that person is able to perceive their issues. Since adolescents have a difficult time being objective, a good way to talk with them is in terms of their own pain, as they can relate to that. For example: "It seems like you've had periods of time where you drink and trouble comes after that. And from what you've said, it seems like you are getting kind of tired and down on yourself about being in trouble, and I hear you say many times you promise you're going to do better, and you feel bad about how you're doing in school. And I imagine there are many things you've attempted to do to change that situation, but it seems from what you've told me and what the standardized tests say, you feel kind of hopeless about how things are going. And you haven't been able to find your way out of this problem. Mom and Dad say this, too. Other people blame you for this. And you haven't figured out how to solve this problem or to make things better for yourself." That's different than saying, "You sure drink a lot. Everybody's screaming and yelling at each other. You've blown it at school. You're falling behind. It looks like you give up and you do things to try to fight against folks." These are two different types of descriptions.

The assessor should also explain the areas of concern, including those that need further assessment. If the child has fallen behind at school, they should be told that someone else may want to look into how well they do with learning, hearing, making sense of information, and even reading. That way they'll be aware of any followup assessments. The way this information is worded can prevent defensiveness. Most kids are very sensitive about an authority figure saying, "I think you've got a problem." It's better to talk about the pain of future consequences if things continue the way they are. It's difficult for them to hear another perspective.

After giving them the conclusions about a functional impairment, their motivations, how they behave, and what other problem areas might exist, the assessor should ask if they've described it appropriately. The response from the adolescent is additional information that will add to the assessment. Finally, the adolescent should be informed of specific recommendations, so they know concretely what is going to happen next.

## **Making Sense of Assessment Information**

Historical behavior is the best predictor of future behavior. This holds true regardless of what they say they will do, or what they're now motivated to do. Recent history is better than past history. How the adolescent has been acting in the last 6 months is more telling than

how they acted 2 years ago. Informant history may be better, but it may not be reliable if the client is good at concealing behavior. Finally, objective assessments are better than subjective ones.

James Morrison (1995) provides an interesting protocol for making sense of all the information obtained. After gathering all the data, follow this sequence in analyzing it:

- Information on how well the coordination of brain and body functioning is working. Common problems to look for include metabolic problems, hypothyroidism, epilepsy, or head injuries. If the brain and body are not equipped to operate appropriately, no approach will work until these issues are addressed.
- Psychological problems should be identified next. Is there depression, trauma, a conduct or personality disorder, anxiety, or an eating disorder?
- The next step is identifying any long-term medical problems. If they have persisted over time, they have probably become more significant and may be at the root of many other problems.

After gathering data on each of these areas, the assessor must be able to explain how this information is interconnected. How does one problem exist in relationship to another? How do these problems relate to the adolescent's environment? How does it impact the family? How does the family encourage or discourage expression? What resources do they have to address the problem? What are the strengths? In all cases, people usually react from their points of strength to change behavior. Are they good thinkers? Are they bright kids? Are they resilient? Do they stick it out? Are they tough? Are they willing to try different things? Have they had good experiences with education in the past? Are they strong?

An increasing body of information examines theories about the process people go through when they change. William Miller has researched and written about motivational interviewing based on specific stages of change. This is good information for assessors to become familiar with. This theory helps people understand how their choices are causing functional problems and helps them to take responsibility for change. They can decide whether it makes sense to change their lives or to continue living with a problem. If making a change is worthwhile, the individual can make a plan for change and execute it.

## **Written Reports**

Assessment information should be released only on a need-to-know basis. Once sensitive information is disclosed, it is no longer under your control and may very likely be re-released by someone who doesn't have the same confidentiality obligations. Therefore, assessment conclusions should be worded cautiously. One way to do this is to describe behavior, rather than to make sweeping diagnostic conclusions. Raw data should never be reported. Full psychosocial assessments with detailed information should not be released; release only the conclusions. If insurance companies receive raw data they often reinterpret it according to their criteria to avoid paying for treatment. Standardized test scores should not be released. This information is raw data that's subject to interpretation. The assessor is the professional who understands how to interpret the data and only the conclusions of the assessor should be released.

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## Appendix B

### Characteristics of Screening Instruments

Name of Instrument	# of items	Time	Psychometrics	Administration	Information Provided
Drug and Alcohol Problem Quick Screen <b>DAP:</b> (Schwartz & Wirtz, 1990)	30	10	Limited validity data	Pencil and paper	Indicates "high risk" for AOD problems and need for further assessment
Drug Use Screening Inventory <b>DUS</b>	149	20	Adequate content validity	Pencil & paper or computer	Functioning indices in 10 domains, absolute problem density, overall problem index, and relative problem density
<b>Perceived Benefit of Drinking Scale</b> (Petchers & Singer, 1987)	5	1	Adequate internal consistency and divergent validity	Pencil and paper self	Scale scores are related to frequency, intoxication, and problems related to substance use
Personal Experience Screening Questionnaire <b>PESQ;</b> (Winters, 1992)	40	10	High internal consistency, adequate discriminate and predictive validity	Pencil and paper self	Indicates the need for further assessment
Problem Oriented Screening Instrument for Teenagers <b>POSIT</b> (Rahdert, 1991)	139	30-45	None Reported	Pencil and paper self	Functioning measured in 10 domains, "red flag" items signal the need for further assessment
Substance Abuse Subtle Screening	81	20	Limited validity data, no reported	Pencil and paper self	Face valid alcohol, face valid other drug, obvious attributes, subtle attributes, defensiveness (two scales), and two experimental scales
<b>Teen Health Advisor</b> (Paperny, Aono, Lehman, Hammer & Rlusser, 1990)	32-62	10	None Reported	Computerized interview	High-risk behavior evaluation and advice or referral information in several domains

## Appendix B

### Comprehensive Adolescent Assessment Instruments

Name of Instrument	# of Items	Time	Psychometrics	Administration	Training	Information Provided
Adolescent Diagnostic Interview <b>ADI</b> (Winters & Henly, 1993)	Varies	45-60	Adequate inter-rater agreement, test-retest reliability, and criterion related validity	Structured or computerized interview	Available but not required	DSM-III-R substance use disorders, multinomial functioning indices, psychosocial stressors, and screens for memory and orientation
Adolescent Drug Abuse Diagnostic <b>ADAD</b> (Fruedna & Ytadam 1989)	150	45-60	High inter-rater and test-retest reliability, adequate concurrent, convergent and discriminate validity	Structured interview	One day session recommended	Problem severity ratings and need for treatment across nine domains
Adolescent Problem Severity Index <b>APSI</b> (Metzger, Krushner & McLellan, 1991)	Varies	45-60	None reported	Semi-structured or computerized interview	Six hr recommended	Composite score (number of risk factors) and severity rating (need for treatment) across 7 domains
Adolescent Self Assessment Profile <b>ASP</b> (Wanberg, 1991)	203	45-60	Adequate internal consistency	Pencil and paper questionnaire	Not reported	Profile of adjustment, functioning, and substance use across multiple domains
Personal Experience Inventory <b>PEI</b> (Winters & Henly, 1989)	276	45-60	Adequate internal consistency, test retest reliability, concurrent, discriminate, and predictive validity	Pencil and paper or computerized self-report	Available but not required	Substance use frequency and severity, personal and environmental risk factors, problem screening, and faking
Teen-Addiction Severity Index <b>T-ASI</b> (Kaminer, Burkstein & Tarter, 1991)	134	30-45	Adequate inter-rater reliability	Semi-structured interview	Training required, amount not specified	Problem severity and need for treatment across seven domains related by both client and interviewer

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