

## Consulting and Support Services

The following Consulting and Support Services are available upon request.

### Intervention and Support Counselling Program Development

The ADSI-E is designed to provide critical information about student adjustment in specific domains. This information is then used to design targeted interventions for developing domain specific resiliency in the student. Forming alliances and partnerships with public health and mental health service providers allows schools and school districts to effectively provide access to, and coordination of, services to support identified students. A Comprehensive School Health Model and process to develop community partnerships for planning and implementing intervention and support programs are available. Community partnerships form the critical foundation upon which to build sustainable support for students identified by the inventory.

### Pre-assessment Preparation and Implementation Planning

For the individual profiles option Informed Parental Consent is required for student participation in the assessment and research. Parental Consent is also critical to the success of the intervention and support programs provided for identified students. Consent Form Templates, Parent Information Brochure, and support for Parent Information Sessions are available. In addition, support for developing an implementation strategy that meets the school and district needs can be provided.

### Database Management, Individual Profiles and Reports, Intervention Effectiveness Measures

Support for managing user account access is included in the Set up Fees & License agreement. Support for database management, interpreting individual results profiles, and statistical analysis of results by school, region, and district are available. Intervention effectiveness can be measured, along with on-going assessment of identified students who participate in interventions and support programs to monitor changes.

## Additional Readings

Tarter, R. & Hegedus, A. (1991). The Drug Use Screening Inventory: Its application in the evaluation and treatment of alcohol and drug abuse.

*Alcohol, Health and Research World*, 15, 65 - 75.

Tarter, R., Ott, P., & Mezzich, A. (1991). Psychometric assessment in drug abuse.

In R. Frances & S. Miller (Eds.),

*The Clinical Textbook of Addictive Disorders*. New York: Guilford Press.

Tarter, R. (1990). Evaluation and treatment of adolescent substance abuse: A decision tree method.

*American Journal of Drug and Alcohol Abuse*, 16, 1 - 46.

A complete list of references and readings is available upon request.



## Contact Information

For more information about the ADSI-E, or to utilize the ADSI-E within your community or school district:

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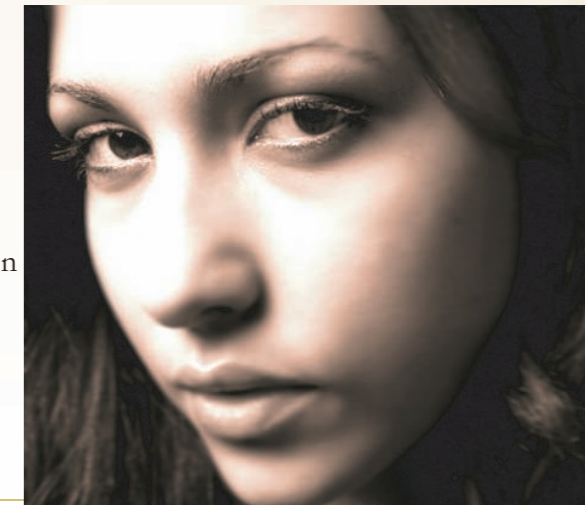
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The ADSI-E™ (Adolescent Development Screening Inventory for Education©) is a 154 - item questionnaire adapted from the DUSI-R © (Drug Use Screening Inventory -Revised). It can be administered by computerized web based self-report and scoring is automatic. Administration of the Inventory to individuals whose literacy is below the fifth grade level is possible using computer audio files. The ADSI-E takes approximately 25 minutes to complete.



## Measurement Domains

The ADSI-E evaluates adjustment in 9 domains, measures the student's contemplative vs pre-contemplative state within each domain of risk, and their preferred mode of intervention or treatment.

This practical information can be used:

- ✓ To assess the student's current and on-going level of adjustment in Social, Emotional, and Physical Health.
- ✓ To develop targeted interventions to build resilience and help reduce the risk life dysfunction that may interfere with school success.
- ✓ To assess the student's current level of receptivity to intervention as well as the most appropriate mode for intervention or treatment.

In addition, the ADSI-E has a 9 - item lie scale.

|                    |                            |  |
|--------------------|----------------------------|--|
| <b>Domain I</b>    | <i>Physical Health</i>     | Accidents, Injuries, Illnesses                           |
| <b>Domain II</b>   | <i>Leisure/ Recreation</i> | Quality of Activities, Degree of Involvement             |
| <b>Domain III</b>  | <i>School Adjustment</i>   | Commitment to Academic Performance, Sense of Belonging   |
| <b>Domain IV</b>   | <i>Family System</i>       | Adjustment, Conflict, Parental Supervision               |
| <b>Domain V</b>    | <i>Behaviour Patterns</i>  | Social Isolation, Anger, Acting Out, Self-control        |
| <b>Domain VI</b>   | <i>Social Competence</i>   | Social Interactions, Social Skills, Refusal Skills       |
| <b>Domain VII</b>  | <i>Peer Relationships</i>  | Social Network, Gang Involvement, Quality of Friendships |
| <b>Domain VIII</b> | <i>Emotional Health</i>    | Anxiety, Depression, Antisociality                       |
| <b>Domain IX</b>   | <i>Substance Use</i>       | Degree of Involvement, Severity of Consequences          |

## Scoring of the ADSI-E

Two profiles are obtained: (1) Absolute Problem Density Profile, and, (2) Relative Problem Density Profile.

### Absolute Problem Density Profile



*Scoring Procedure:* Each Domain yields an Absolute Problem Density score. The score for each domain is calculated by counting the number of endorsements ("yes" responses) and dividing this value by the number of items in the domain. The resulting quotient is then multiplied by 100 to obtain the Absolute Problem Density score for the domain. The Lie Score and Contemplative State items in each domain are not included when computing these scores. The range of scores that could be obtained is between 0-100%.

*Example:* There are 26 items in Domain III (School Adjustment). The number of "yes" responses by the student for items 23 - 49 is "X". The following formula is used to compute the absolute problem density score:

$$\frac{X}{26} \times 100 = \text{_____}\%$$

**Overall Problem Density Index** - This index reflects the general severity of adjustment over all domains.

Divide the total number of "yes" responses obtained in the whole inventory by 154, and multiply the quotient by 100. The Lie Scale and Contemplative State items in each domain are not included when calculating this score. This score can range from 0 - 100%.

### Relative Problem Density Profile

After calculating the Absolute Problem Density scores, the following procedure is used to calculate the Relative Problem Density score for each domain. The resulting profile reflects the proportional severity of adjustment. It describes each student's unique configuration of adjustment.

*Scoring Procedure:* Count the total number of "yes" responses (with the exception of the Lie Scale and Contemplative State items) for the whole inventory. This number is the denominator in all subsequent calculations. The numerator is the number of "yes" responses (not counting Lie Scale and Contemplative State items) in each domain. Obtain the quotient for the domain and multiply it by 100. The same procedure is performed for all domains. The sum of all 9 Relative Problem Density scores is 100%.

### Pre-contemplative - Contemplative Score

There are two measures of Contemplative State. Where the Absolute Problem Density in a domain exceeds 15% and the Student reports no problems experienced in that domain they are considered to be Pre-contemplative. Where the Absolute Problem Density in a domain exceeds 15% and the student acknowledges experiencing problems in that domain a Contemplative score between 1 (minimally contemplative) and 10 (fully contemplative) is provided. These items are not used in calculating the Absolute and Relative Problem Density scores.

### Lie Score

The score on the Lie Scale is determined by counting the number of "no" responses to the lie scale items in the inventory. The range of scores on this scale is between 0 and 10. A score of 5 or higher should alert the examiner to possible invalidity of results due to deliberate deception by the student. These 10 items are not used in calculating the Absolute and Relative Problem Density scores.

## Interpreting the ADSI-E

ADSI-E scores reflect gradations of severity. Consequently, cut-off scores for evaluation are not provided. Consideration for intervention should be made in the context of all available assessment information and characteristics of the student in relation to the identified preferences for intervention mode and to the type and accessibility of intervention resources. The decision to implement an intervention should be made in consultation with the student and the parent. As a general guide, an Overall Problem Density index exceeding 15% is considered significant.

## Versions of the ADSI-E

The Youth (12 - 19 years) version is available to provide information within two time frames.

**Version 1**      **Past Year**                      **Version 2**      **Past Month**

## Applications of the ADSI-E

Utilizing the school setting for measuring the student's health adjustment provides the opportunity for early identification and targeted intervention. The school is a safe and familiar learning environment where screening students can begin as early as grade six and enables determination of current levels of adjustment within a school or school district. The prevalence of risk can be used to assess the need for prevention, intervention, and support programming. In addition, it can provide critical individual profiles for developing targeted intervention strategies to meet individual student needs to build resilience and help reduce the risk of life dysfunction that may interfere with school success.

The ADSI-E is designed to yield practical information by quantifying severity of problems in multiple domains of health, behaviour, psychosocial, and school adjustment. Areas that require intervention are efficiently identified. By documenting severity of problems across 9 different domains using a common scale, you can determine the type and intensity of resources needed to maximize success of intervention.

The ADSI-E is designed to evaluate adjustment within a one-year time frame and should be administered annually in the same time period.

Some recommended uses of the ADSI-E:

- ✓ Examining school and school district profiles to assess needs for prevention, intervention, and support programs
- ✓ Screening individual students to examine levels of domain specific adjustment for determining the target problem(s) & intensity of intervention needed to build resilience
- ✓ Evaluating intervention and treatment program effectiveness, and outcome assessment
- ✓ On-going monitoring of student adjustment

Data collection options include anonymous population based measures for school/district or region profiles or individual student profiles.

## Web Accessible Computer Administration

The ADSI-E can be administered from any web accessible computer and scoring is automatic. In addition, each student's profile is stored to allow monitoring of changes across repeated assessments or to characterize the population profile within a school or region. The profile results can be printed for easy reference. The anonymous results option for yielding school and district profiles is achieved through a secure ID coding system where access to matching ID codes to individual student names is restricted to the assigned district administrator.

The data is hosted by eCenter Research Inc. through a state-of-the-art, class "A", ultra-secure server facility with multiple redundancies and backups. eCenter Research specializes in secure Online Assessment and Research Management Systems designed to protect personal data.

## Research Project and Psychometric Properties

The current research project incorporates a multi-phase approach to:

1. Examine the Concurrent Validity of the ADSI-E Domains of adjustment between students who leave school early and those who stay in mainstream school.
2. Examine the Concurrent Validity between the ADSI-E Domains of adjustment and traditional academic predictors of school drop out.
3. Establish the ADSI-E as a Psychometrically sound instrument for profiling multiple spheres of functioning of school drop outs.
4. Establish the ADSI-E Predictive Validity for school drop out.
5. Establish the Concurrent Validity of Discrete Subsets within each domain.
6. Evaluate the effectiveness of Intervention and/or Treatment Programs & quantify changes in adjustment during intervention/treatment.

The ADSI-E is an adaptation of the DUSI-R with minor variations to ensure the following Psychometric Properties have been maintained:

### Reliability

In a sample of 191 youths using the DUSI-R, the average internal reliability coefficient was .74 for males and .78 for females across the domains. The mean split-half correlations were .70 for males and .67 for females. The mean test-retest (one week) coefficients were .95 and .88 for males and females respectively.

### Validity

Construct Validity has been well established through research and corresponding literature since 1991, affirming that the questions measure what they are intended to measure within each domain. The concurrent validity of the Substance Use and Emotional Adjustment domains was established in relation to the K-SADS, a semi-structured clinical interview. Correlations between the scores in these two domains with the number of symptoms elicited by direct interview for drug abuse and total emotional disturbance were .72 and .65 respectively. The Social Competence scale has been found to correlate -.51 with the Adolescent Assertiveness Expression Scale. A correlation of .53 was observed between the Physical Health score and the score from a standard health-rating checklist.