

Screening for Alcohol and Other Drug Problems using the Adolescent Alcohol and Drug Involvement Scale (AADIS)

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1. Background:

The AADIS is a revised tool based on Mayer and Filstead's (1979; see also Moberg, 1983) Adolescent Alcohol Involvement Scale (AAIS) and Moberg's drug-specific adaptation of the AAIS, the ADIS (Moberg and Hahn, 1991). The tool has recently been validated with juveniles in state juvenile correctional institutions (JCI) in Wisconsin. The validation project used the Adolescent Diagnostic Interview-Light (ADI-L) which operationalizes DSM IV substance disorder criteria as the gold standard (Winters, Latimer and Stinchfield, 1999; Winters and Henly, 1993), and was conducted under the direction of Dr. Winters.

The information below covers the interview version of the tool tested in juvenile correctional settings where reading level, attention span and compliance rule out using the paper and pencil version of the tool. A self-administered paper and pencil version has also been developed for use where appropriate, such as in group survey situations or with compliant adolescents. The survey version has not been validated.

The original AAIS was developed and validated as "an operational definition of adolescent alcohol involvement" in the mid-1970's in the Chicago area (Mayer and Filstead, 1979). The tool reflected expert opinion on symptoms, problems and consequences of alcohol use, and on the appropriate weighting of the items. While it incorporated many of the DSM symptoms recognized at the time, the tool was not intended to be an operationalization of the diagnostic criteria. There are several problems with the tool, in particular the lack of age-specific norms, limited socio-economic and racial distributions in normative samples, and lack of a clear gold standard for validity assessment and cut-points.

In 1979-80, the AAIS was used in a large telephone screening study of youth in Dane County, WI and further validated as a useful screening tool for research applications (Moberg, 1983). During the mid-1980's, the ADIS (Adolescent Drug Involvement Scale) was developed for use in a two-county study of adolescents in substance abuse intervention and treatment programs in Wisconsin (Moberg and Hahn, 1991, Moberg, 1985). Independently, another research group developed a similar tool at about the same time (Wisniewski, Glenwick and Graham, 1985).

The ADIS was promulgated as a brief measure of the level of drug involvement in adolescents

for use as a research and evaluation tool. There is limited but promising data on validity, based on samples of midwestern white adolescents already referred to intervention and treatment programs; the “gold standard” in these studies was inadequate.

Since then, there has been little further development or testing of either tool, but both have been listed in a number of manuals and reviews of adolescent screening and assessment tools, and have been found useful in a number of settings. There has been widespread interest in both tools; the ADIS continues to be requested around the country.

During the 1980s, both tools (AAIS, ADIS) were implemented as the standard AODA screening tools in Wisconsin Juvenile Correctional Institutions (JCI), and were used until they were replaced by the AADIS in 2001. The screening is done during intake assessment, implemented in an interview format. The original tools were structured as paper and pencil surveys.

The AADIS, the next iteration of these tools, was tested in a 2001 study (Winters et al., 2001). It has several advantages over the existing tools:

- § It combines alcohol and drug questions to simplify administration and reduce repetition of item content.
- § Combining alcohol and drug items (“conjoint screening”) also overcomes the differential social and legal stigmatization of drugs relative to alcohol, potentially reducing the false negative rate of a drug only screen.
- § It incorporates an initial drug use grid to establish alcohol or drug use prior to the questions related to consequences of use. (The grid had been included as optional at the end of the old ADIS.) This grid is not scored.
- § It corrects and updates terminology (e.g., rock, weed) from prior versions.
- § It preserves the scoring structure of the original scales.

2. Purpose of AADIS

The Adolescent Alcohol and Drug Involvement Scale was designed to provide a short screen which determines the need for a full assessment of an adolescent’s use of alcohol and other drugs. Higher scale scores represent higher levels of alcohol and/or drug involvement. The AADIS is intended as a research instrument and/or a screening tool; it has not been validated as a *diagnostic* clinical measure. Positive results when used for screening should be followed with an independent clinical assessment process.

3. Administration of the AADIS as an Interview

Since the tool is being used as a screening interview, it should be introduced as a way to learn more about the youth’s history and concerns in order to assure that appropriate help and services are provided.

For Part A (Drug Use History), I have found the best data occurs when you first ask the youth if he or she has ever tried the substance in question, then probe about frequency for each substance ever used. This should be done in a matter of fact manner, without surprise based on positive

self reports of use. Categories of drugs should be expressed in terms of your knowledge of the youth's subcultural vernacular--e.g., talk about "rock", NOT "crack", with African American youth from the Midwest. Some of the terms are provided in parentheses, feel free to substitute other names as appropriate. If the use pattern is unclear, work with the youth to circle the category that is closest to his or her regular pattern. For drugs not listed that don't fit another category, write them in under "OTHER DRUG_____".

While tobacco is listed on the use grid, it is NOT to be considered as a drug of abuse when asking the questions under part B. However, if the young person admits to regular tobacco use, it is statistically highly likely that she or he also uses other drugs (at least alcohol, likely marijuana). Thus the tobacco use pattern should give the screener a clue as to how hard to probe if alcohol/other drug use is denied.

For Part B, ask each question as written and see what answers are volunteered before reading the answers as written. After hearing the responses from the youth, circle the answers that are closest to the response, and confirm that the answers meet the responses intended by the youth. **Probe and read the remaining answers to see if any of the other answers also apply.** For most of the items, circle ALL answers that are true for the youth. Items 1, 2, 6, and 9 can have only one answer; all others may have several answers circled.

If the youth denies any use in questions 1 and 2, and this is consistent with Part A, the screening is done. However, the screener should be satisfied that she/he has probed sufficiently and that there really is no use, or that the youth is steadfastly in a denial mode which is unlikely to change on this occasion. Screeners have indicated that they find it useful to ask all questions when there is a suspicious denial.

If inconsistencies between answers are apparent, ask the youth to clarify. You can say something like: *"On an earlier question you said you only tried alcohol once in your life, but now you are saying you drink 10 or more drinks when you do drink. This doesn't seem consistent."*

These instructions should be modified to fit the circumstances if using the **survey version** of the tool.

4. Scoring Procedures

After completing the screening interview, please score the AADIS by adding the weights on items B.1-14. Complete the face page and add any comments on the youth's responses. The screener may decide to recommend a full assessment in spite of the AADIS score; if so, indicate why in the comments section.

Add the weights to the highest positive answer to each item in section B.. Each item B.1 to 14 is given only one weight in the scoring. The interview version includes the weights *[numbers in square brackets]* on the instrument itself. Use these same weights for the survey (self completed) version. The drug use grid is not scored, but serves as an introductory section to establish the pattern of use before determining the consequences and problems related to use.

One purpose of the research project was to assess the validity of the scoring process. The cut point has been adjusted after early data analysis. We may also develop a weighting system for the drug use grid, currently not included in the scoring.

The results from the validation study indicate the cutoff score of 37 on the AADIS is best in terms of sensitivity and specificity for DSM-IV substance use disorders. Any youth scoring 37 or higher should be fully assessed for substance use disorders using a standard clinical assessment.

AADIS Score Interpretation:

- § 0 = No alcohol or other drug use
- § 1-36 = Alcohol and/or other drug use present, does not reach threshold for substance use disorder based on DSM-IV criteria. (Screener may find clinical cause to over-ride negative finding.)
- § 37 or higher = Alcohol and/or other drug use present which may reach DSM IV criteria; full assessment is indicated.

Contacts:

Feedback on the tool will be appreciated. Contact me by phone, letter or email:

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The original AAIS remains under copyright. Information is available from:

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