Attention-Deficit Disorders Evaluation Scale–Home Version (ADDES-HV)

The Attention-Deficit Disorder Evaluation Scale–Home Version (J. McCarney, 1995a) is a counterpart of the Attention-Deficit Disorders Evaluation Scale–Second Edition, School Version. Large portions of the manual, the scale format, and many items are virtually identical to the school version. Intended uses of the device are the same as those for the ADDES-2, SV, except that the home is the target environment for intervention planning. Like items on the school version, items on the ADDES-HV are rated on a 5-point scale:

0  Does not engage in the behavior
1  One to several times per month
2  One to several times per week
3  One to several times per day
4  One to several times per hour

The 46-item scale is divided into two subscales: Inattentive (22 items) and Hyperactive–Impulsive (24 items). Although the ADDES-HV contains fewer items than the school version, item content is similar and is designed to reflect The Diagnostic and Statistical Manual of Mental Disorders–Third Edition definition of attention deficit hyperactivity disorder.

Scores
Raw scores are obtained for each subscale by summing the ratings assigned to each item. Subscale raw scores are converted to standard scores (mean = 10; standard deviation = 3) by using gender- and age-specific norm tables. Percentile ranks are available only for the total score (that is, the sum of subscale standard scores).

**Norms**

The ADDES-HV was normed on 2,415 students who ranged from 3–0 to 20 years of age. In all, 30 states are represented in the norms. The author provides no information about his sampling plan or how students and parents were recruited. When compared with 1992 U.S. demographic data, the sample as a whole is generally representative in terms of gender, race, urban/rural and regional residence, and mother's and father's occupation. However, no information is provided about specific age groups—critical information for judging the adequacy of the scale's norms for the particular student being evaluated.

Because males earn "significantly" higher scores on both subscales than females, separate norms were provided for each gender. For reasons that are not entirely clear, norms are provided in multiyear age ranges (except for 6-year-old boys). For females, the age groups are 3 through 6, 7 through 8, 9 through 10, 11 through 13, and 14 through 18. For males, the age groups are 3 through 5, 6, 7 through 10, 11 through 12, and 13 through 18. Although an unknown number of 19- and 20-year-olds were apparently included in the norm sample, the norm tables for men and women stop at 18 years of age.

**Reliability**
Stability was estimated using either 86 or 148 individuals randomly selected from the normative sample, who were rerated within 30 days of their initial rating. Stability coefficients are provided by gender and age, although the age groups are not the same as those used in tables to convert raw scores to standard scores. For subscales, 5 stability coefficients are either .88 or .89, and the remaining 15 equal or exceed .90.

Interrater agreement was estimated by examining the total ratings of 86 students by both of their parents. Four groups were formed: children from 4 through 7 years, from 8 through 10 years, from 11 through 13 years, and from 14 through 20 years. The correlations of interparent ratings ranged from .80 to .84.

Coefficient alpha was used to estimate the internal consistency of each subscale and the total score, based on the performance of the total normative sample. One coefficient alpha (.96) is reported for each subscale and for the total score (.96). However, because this coefficient was calculated across a wide range of ages, internal consistency may be overestimated to the extent that age and ADDES-HV scores are correlated.

Validity

1 Table 3 of the technical manual reports different numbers from the text (p.11).
2 Although in the text, the author says that KR-20 was used to estimate internal consistency, the table containing the values reports coefficient “alpha.” Because KR-20 can be used only with dichotomously scored data and the items in this scale are scored on a 5-point scale, we assume that “KR-20” is a typographical error.
Content validity is based on literature reviews, input from diagnosticians and parents of children with ADHD, and systematic field testing. In addition, item-response distributions and item–total correlations were examined.

Construct validity was investigated in two ways. First, although incompletely reported, factor analyses suggest that the ADDES-HV comprises as many as four factors. The first factor (inattention) is very strong, and the second factor (hyperactive–impulsive) is relatively weak. In a two-factor solution, two thirds of the items correlate with both factors, and the correlation between subscales exceeds .7. Some evidence of construct validity is provided by a study comparing 72 male and 30 female students previously identified as having ADHD with 72 male and 30 female students drawn at random from the standardization sample. On average, both male and female students with ADHD earned substantially lower scores than the nondisabled students.

To investigate the criterion-related validity, ADDES-HV ratings of students previously identified as having ADHD were compared with their ratings on four other scales: the Conners Parent Rating Scale–48, the Conners Parent Rating Scale–93, the Children's Attention and Adjustment Survey (home form), and the Child Behavior Checklist. Although incompletely reported, the results of these studies appear to provide good support for concurrent validity. The ADDES-HV is highly correlated with subtests measuring inattention, impulsivity, hyperactivity, and so on, but is less correlated with other characteristics (such as withdrawal or somatic complaints).

Summary
The ADDES-HV is a 46-item rating scale designed for use with children and students 3 to 18 years of age. The instrument consists of two subscales: Inattentive and Impulsive–Hyperactive, each of which is supposed to assess ADD characteristics.

Like the ADDES-HV, this instrument was standardized using sufficient numbers of subjects in the norm samples. However, the procedures used to recruit subjects and the characteristics of resulting age–gender norm groups are inadequately described. Scores tend to be stable, but interrater agreement is sufficient only for screening purposes. Data on internal consistency are incompletely reported. Content and criterion-related validity appear to be relatively strong. Evidence of construct validity is quite limited.