

# Early Childhood Measurement and Evaluation Tool Review

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## Adaptive Behaviour Assessment System System - Second Edition (ABAS-II)

### Measurement Areas:

The Adaptive Behavior Assessment System - Second Edition (ABAS-II) is a norm referenced tool designed to assess **adaptive skills** in individuals from **birth to 89 years of age**.

The tool measures 10 skill areas:

- 1) Communication
- 2) Community Use
- 3) Functional Academics
- 4) Home Living
- 5) Health and Safety
- 6) Leisure
- 7) Self-Care
- 8) Self-Direction
- 9) Social
- 10) Work (Optional)

### Purpose:

The ABAS-II can be used to assess an **individual's** adaptive skills:

- to assist in the diagnosis and classification of disabilities and medical/clinical disorders;
- for the identification of adaptive skill strengths and difficulties in a person's daily living environment;
- for the identification of service needs in treatment or intervention programs;
- for research related to adaptive skill progression (i.e., intervention program evaluations).

### Length and Structure:

The ABAS-II consists of a series of 5 record forms: Parent/Primary Caregiver (for children ages 0-5), Teacher/Daycare Provider (for children ages 2-5), Parent (for children ages 5-21), Teacher (for children ages 5-21), and Adult (ages 16-89). The examiner gives selected forms to respondents such as parents, primary caregivers, teachers, daycare workers, counselors, who are familiar with the daily living circumstances of the individual. Each of the respondents fills out a questionnaire that assesses their knowledge of the person's adaptive skills. Each item can be answered "0" (is

not able to perform the task), “1” (never or almost never performs the task), “2” (performs the task sometimes), or “3” (always or almost always performs the task); the respondent also indicates for each item whether her/his response was a guess or an estimate.

Raw scores are calculated by tabulating totals from the items answered in each skill area. The raw scores can be converted into composite scores, a skill profile, scaled scores, percentile ranks, domain-specific scores, descriptive classifications, and test-age equivalents. According to the manual, each respondent form in the ABAS-II should take between 20-30 minutes to complete. The examiner is responsible for scoring the ABAS-II not the responder and this takes approximately 10 minutes per form.

### **Materials:**

The publisher classifies the ABAS-II as a “B-level” qualification. The publisher requires the purchaser to fit into one of the following categories: (a) trained and certified by a recognized institution in a relevant area of assessment (with or without a Master’s degree), (b) a member of a Speech-Language-Hearing Association or an Occupational Therapy Association, or (c) possess a Master’s (or Doctorate) degree in psychology, education, or relevant field with training in assessment.

The ABAS-II is available in a variety of packages from the publisher. The complete Examination Kit consists of the manual, 5 parent/primary caregiver forms (for ages 0-5), 5 parent forms (for ages 5-21), and 5 adult forms (ages 16-89), for CDN \$280. The publisher also supplies kits targeted to specific groups, such as teachers, adults, and infants/preschool children for CDN \$290; each of these kits contain additional scoring forms. Extra scoring forms are also available through the publisher in packages of 25 or 100. The ABAS-II Scoring Assistant software (Windows-only) is available for CDN \$225.

### **Accessibility:**

The complete ABAS-II is available in the English language; Spanish respondent forms are also available. While the ABAS-II is most frequently used to measure adaptive skills in individuals with cognitive and developmental delays, the manual notes that the tool is useful for individuals diagnosed with many other kinds of disabilities, clinical disorders, and medical or neurological disorders.

### **Administration, Scoring, and Interpretation:**

According to the manual, the tool can be administered and scored by professionals or para-professionals who have received extensive training in ABAS-II administration and scoring. A professional with formal coursework in educational assessment must interpret the scores. The test is easy to administer, easy to score, and moderately difficult to interpret based on the interpretation guide in the manual.

### **Subscales:**

The ABAS-II consists of 9 or 10 skill areas (see Measurement Areas section for list) that are combined to create the “General Adaptive Composite” (GAC) score that represents a norm referenced score for the individual. Each of the skill areas are also grouped into 3 adaptive domains: Conceptual (Communication + Functional Academics + Self-Direction), Social (Leisure + Social), and Practical (Community Use + Home Living + Health and Safety + Self-Care). The “Work” skill area is considered to be a separate, optional domain. Since several skill areas do not apply to certain age groups (i.e. Work and Home Living Skills are not relevant to a toddler), the GAC score is calculated based on only applicable scales.

### **Documentation:**

The manual included in the ABAS-II kit contains specific procedures for administration, scoring, and a very comprehensive section on interpretation. The manual also includes extensive sections describing test standardization, norm development, and many kinds of reliability and validity.

### **Norming Sample:**

The ABAS-II was normed and standardized based on a representative sample of the English-speaking U.S. population ages 0 – 89 years of age using 1999-2000 census data.

- Infant-preschool norms consisted of 750 teacher/daycare provider and 1,350 parent/primary caregiver completed forms.
- School-age norms consisted of 1,690 teacher and 1,670 parent completed forms.
- Adult norms consisted of 990 self report and 920 rated by others completed forms.

The sample was stratified by sex, race/ethnicity, geographic region, clinical cases, and education level. The examiner’s manual discusses the demographic characteristics of the sample in detail, including information on the respondent sample. Since the ABAS-II is the newest version of the Adaptive Behavior Assessment System, academic reviews or studies of the test are not yet available.

### **Reliability:**

The ABAS-II manual discusses four kinds of reliability measures:

**Internal Consistency:** Reliability scores ranged from .97 to .99 for the GAC (General Adaptive Composite) scores, .91 to .98 for the adaptive domains (i.e., Conceptual, Social), and .80 to .97 for the 10 individual skill areas. The authors note that the correlation coefficients were also high for individuals with clinical diagnoses and all age groups, indicating that the test shows a high degree of consistency for examinees with a wide range of adaptive functioning.

**Test-retest Reliability:** A sub-sample of examinees (569 children; 118 adults) was retested with the same form of the ABAS-II two days to six weeks after the first administration. Correlations between both test scores were calculated, and yielded reliability coefficients in the .90s (excellent) for GAC scores, .80s to .90s for adaptive scores, and .70s to .90s for the skill areas.

**Inter-rater Reliability:** The authors performed an analysis of inter-rater consistency on a stratified sub-sample of examinees (257 children; 52 adults) and their respondents (2 teachers/daycare providers, 2 parents/primary caregivers, 2 teachers, and 2 adults). Interrater

reliabilities varied across each of the forms used. In general, inter-rater reliabilities across all respondent forms were good, between .82 and .91 for the GAC, .78 and .84 for adaptive domains, and .70 to .82 for the skill areas.

**Cross-Form Reliability:** The authors performed correlative analyses to determine the consistency of ratings between teachers/daycare providers and parents/primary caregivers (of the same child), and also between adults as rated by others and adults who rated themselves. According to the authors, correlations between teacher/daycare provider and parent/primary caregiver scores averaged between .68 and .70 for the GAC, .62 and .70 for adaptive domain scores, and .51 and .66 for skill areas – all moderate to good reliabilities. The correlations between self-reporting adults and adults-as-reported-by-others averaged at .95 for the GAC, .91 for adaptive domain scores, and .88 for skill areas.

### **Validity:**

The ABAS-II manual has an extensive discussion of test validity. According to the authors, the ABAS-II is based on a theoretical foundation derived from the American Association of Intellectual and Developmental Disabilities that includes the 10 skill areas and domain groupings discussed earlier. The manual contains a description of the specific item- and content-selection processes, as well as detailed discussions of several validation studies.

**Age Group Differences:** According to the authors, the ABAS-II shows strong sensitivity to age group; thus demonstrating that the tool matches the typical adaptive skill acquisition process that we would expect in an individual's developmental lifespan.

**Construct and Convergent Validity:** According to the authors, the ABAS-II was founded upon the theoretical basis that each of its skill areas should be minimally related to each other, highly related to their respective adaptive domains, and strongly correlated with the GAC. Across all forms the intercorrelations between skill areas were .40s to .70s, the averaged intercorrelations between skill areas and adaptive domains were .60s to .70s, and the intercorrelations between skill areas and the GAC were .60s to .80s. This profile of results suggests that the ABAS-II fits the theoretical basis that it was designed with.

**Factor Structure:** The authors performed a factor analysis on the entire standardization sample data set, yielding a single-factor structure. According to the authors this would support the notion that the ABAS-II assesses a single factor related to general adaptive skill.

**Concurrent Validity:** The ABAS-II manual contains specific validation studies that were performed by the authors, demonstrating the concurrency between the tool and other related scales. For the adaptive behavior-related scales, small samples (< 60 children in each sample) were used to compare scores on the ABAS-II with the Vineland Adaptive Behavior Scale (VABS-CE), VABS Interview Edition (VABS-IE), Scales of Independent Behavior-Revised (SIB-R), and the Behavior Assessment Scale for Children (BASC).

- The correlation between the General Adaptive Composite (GAC) on the ABAS-II and the VABS-CE "Adaptive Behavior Composite" was .75 for the Teacher/Daycare Provider form, and .84 for the Teacher Form.
- The correlation between the GAC and the VABS-IE Adaptive Behavior composite was .70.

- The ABAS-II GAC was correlated (.57) with the SIB-R “Broad Independence standard score.”
- The ABAS-II was compared to the BASC – a tool designed to measure clinical dimensions of behavior such as emotional and behavior disorders in children. The correlation between the GAC and the BASC “Adaptive Skills Composite” was .80.
- ABAS-II scores were also compared to intelligence and achievement scale scores on the WPPSI-III, WISC-III, WISC-IV, WAIS-III and WASI. While these validation studies are not discussed in detail in this review, measures of intelligence were generally correlated in the .40s and .50s, and measures of achievement were generally correlated in the .60s.

**Sensitivity and Specificity:** Clinical populations of adults and children were tested to determine if the ABAS-II could correctly discriminate between positive and negative clinical cases.

- In general, children with clinical diagnoses (e.g., developmental delays, motor impairments, receptive/expressive language deficits) typically showed performance at least 2 standard deviations below the mean of a control group.
- Similarly, adults with diagnoses (e.g., neuropsychological disorders, Alzheimer’s disease) typically performed at least 2 standard deviations below the mean compared to control groups.
- According to the authors, this would suggest that the ABAS-II demonstrates good **sensitivity** for clinical populations, as it can correctly distinguish people diagnosed with clinical disorders from a control group that was not diagnosed with clinical disorders.
- According to the authors, the ABAS-II also demonstrates good **specificity**, as it was able to discriminate between differing levels of disability in children and adults. For example, children and adults who were diagnosed with a mild intellectual disability often scored 2-3 standard deviations higher in several skill areas, than children and adults who were diagnosed with a moderate intellectual disability.

It should be noted that since the ABAS-II is a newly revised test, no outside academic reviews or analyses of this scale are available and this review is based on information provided by the authors in the manual.

### Publication Information:

The Adaptive Behavior Assessment Scale - Second Edition, was developed by Patti L. Harrison and Thomas Oakland. This review is based on the 2nd edition published in 2003 by Harcourt Assessment.

### References:

Publisher’s website: [www.harcourtassessment.com](http://www.harcourtassessment.com)

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