

## TEST REVIEW

Harrison, P.L., & Oakland, T. (2003), *Adaptive Behavior Assessment System – Second Edition*, San Antonio, TX: The Psychological Corporation.

## GENERAL DESCRIPTION

The Adaptive Behavior Assessment System – Second Edition (ABAS-II; 2003a) is a revision and downward extension of Harrison and Oakland's Adaptive Behavior Assessment System (2000). The purpose of the ABAS-II is to provide a reliable, valid, comprehensive, norm-based measure of adaptive behavior skills for children and adults from birth to age 89 years. In addition to including two new Infant/Preschool forms, the ABAS-II provides domain scores (Conceptual, Social, and Practical) consistent with current American Association of Mental Retardation recommendations (Harrison & Oakland, 2003b).

The ABAS-II manual states that adaptive behavior measurement ought to assess practical independent functioning and the effectiveness of interactions with others and include consideration of community and cultural contexts. The structure of the ABAS-II is based on American Association of Mental Retardation guidelines, state and federal special education classification systems, the *Diagnostic and Statistical Manual IV-TR* of the American Psychiatric Association (*DSM-IV-TR*), and recent research. Promotional material provided by the ABAS-II publisher states that it is the only instrument available that provides scores for all 10 adaptive behavior skills listed in the *DSM-IV-TR*.

## TEST CONSTRUCTION

### Test Materials

Five ABAS-II forms are used for different age groups by different raters. There are two separate teacher forms for ages 2 to 5 and 5 to 21. Additionally, there are two parent forms for ages 0 to 5 and 5 to 21 and a single adult form for clients aged 16 to 89. Clients may complete the adult form as a self-rating. Computerized scoring is available but was not provided with the review materials.

### Description of Scales

The ABAS-II includes 10 skill area scores (Communication, Community Use, Functional Academics, Health and Safety, Home or School Living, Leisure, Self-Care, Self-Direction, Social, and Work). Motor skill area scores are available on the two forms appropriate for children up to age 5 years. The ABAS-II has four domain composite scores (Conceptual, Social, Practical, and General Adaptive Composite or GAC). Adding the Conceptual, Social, and Practical domain scores was one of the chief reasons for publishing the ABAS-II. The four domains are consistent with the American Association

of Mental Retardation's recent guidelines (Harrison & Oakland, 2003b). The ABAS-II uses between 193 and 241 items to obtain GAC scores. The GAC compares a person's global adaptive skills to the adaptive skills of others in the same age group from the standardization sample. Most skill areas include over 20 items. However, the Teacher form for ages 5 to 21 is shorter and includes skill areas with 15, 16, and 17 items.

Sample items for each skill area are: Communication – speaks clearly; Community Use – finds the restroom in public places; Functional Academics – counts from 1 to 20; Health and Safety – carries scissors safely; Home or School Living – sweeps the floor; Leisure – invites others home for fun activity; Self-Care – washes hands with soap; Self-Direction – controls temper when disagreeing with friends; Social – says “please” when asking for something; Work – performs tasks at work neatly; and Motor – runs without falling.

Communication, Functional Academics, and Self-Direction skill areas comprise the Conceptual domain. Social and Leisure skill scores combine to make the Social domain. Self-Care, Home or School Living, Community Use, Health and Safety, and Work comprise the Practical domain. The Work skill area is optional for adults and for youth of working age. Also, there is a Motor skill area that is part of the GAC for young children, but it is not part of any of the domain scores.

#### Description of Scores Provided

Raters score each item using a 4-point Likert-type scale. The choices are: *is not able, never or almost never when needed, sometimes when needed, and always or almost always when needed*. Each item includes an opportunity to check a box if the respondent guessed. Respondents may comment about the items in space provided.

All scores are based on age-related norms. The General Adaptive Composite and domain composite scores have a mean of 100 and a standard deviation of 15. Skill area standard scores have a mean of 10 and a standard deviation of 3. Age-based percentile ranks and test-age equivalents are included up to the test age of 22 years.

The test manual includes norm tables for all five forms. In addition to tables for converting skill area raw scores to scaled scores and composite scaled scores, there are tables that display the average numbers of items guessed during standardization. Separate tables list Adult Form scores when the adults rated themselves and Adult Form scores when others rated the adults.

The ABAS-II was designed for clients from birth through age 89 years. The Parent/Primary Caregiver form allows for assessment of children in the birth to 8 months age range. The lowest possible GAC score is a standard score of 40 ( $M + 100, SD + 15$ ) for all forms and all age groups. Although the GAC ceiling for young children is a scaled score of 160, the ceiling drops to 120 for children at age 8 and for adults. In a recent edition of his popular assessment text, Sattler (2002) criticized the relatively low ceiling scores (120 for some forms and some ages) and the inconsistency of the highest scores available for the original ABAS (Harrison & Oakland, 2000). Both criticisms apply to the ABAS-II.

#### Administering the ABAS-II

Individuals trained in standardized psychological and educational assessment are appropriate administrators of the ABAS-II. The manual refers to the 1999 Standards for Educational and Psychological Testing when describing who should administer the test. Although paraprofessionals may be trained to administer and score the ABAS-II, professional users are ultimately responsible for appropriate administration and accurate scoring.

There is more involved in correctly using the ABAS-II than properly distributing, scoring, and interpreting the forms. Effective use requires that the examiner select respondents who are knowledgeable about the clients and motivated and able to complete the forms.

Administering the ABAS-II involves explaining the instructions to the respondent. The directions are printed on the inside cover of the test record forms. When informants such as teachers or care providers complete several forms at once, the manual suggests that they take a break between ratings.

### Technical Adequacy

Items were selected to be sensitive to growth in adaptive behavior. Of the initial 1,500 items generated for the ABAS-II, about one third (460) for the Infant/Preschool form and about one half (789) for the School Age and Adult forms were included as part of the standardization edition. During item development an independent consultant edited items to ensure an average fifth-grade reading level. Sattler (2002) criticized the ABAS (Harrison & Oakland, 2000) because of the high level of comprehension required for some items and because he determined that the test required a seventh-grade reading level.

After field testing, item analysis, and focus group scrutiny, final items were selected for inclusion in one or more of the five forms of the ABAS-II. For an item to be included, it had to be deemed relevant to the construct of adaptive behavior, observable, and psychometrically sound. The resulting test was checked to be sure that it was long enough to be reliable but not so long as to be impractical. Nearly all of the items (95%) are listed in more than one form. Any similarities of the ABAS-II items to the items from the original ABAS are not discussed in the item generation sections of the manual.

Although item gradients are not mentioned in the manual, Sattler (2002) criticized the gradients of the Teacher form of the original ABAS as being inconsistent. The manual of the ABAS-II provides indirect evidence that items are sensitive to maturation by mentioning that success on the items of the four forms of the ABAS-II increases throughout childhood.

### Standardization

Test development and standardization are thoroughly described in the ABAS-II manual. The standardization sample was based on United States census data from 1999 (School and Adult forms) and 2000 (Infant and Preschool forms). There were 31 separate age groups assessed using the Infant-Preschool, School Age, and Adult forms. There were at least 100 participants in each group. The largest sample was for the 13- to 14-

year-old children using the Teacher form. There were 250 participants in that group. Maps and tables are included in the manual describing the standardization sample.

The ABAS-II was standardized between December 1998 and October 2002. There is no mention of using normative information from the original ABAS. In addition to the typically developing participants, the standardization included 20 clinical samples (e.g., ADHD, autistic disorder, and visual impairment).

## Reliability

Reliability studies conducted as part of the standardization process provide evidence of a high degree of internal consistency. Most of the skill area internal consistency coefficients are .90 or greater. The average internal consistency coefficient for the standardization sample's GAC ranges from .98 to .99.

As well as presenting internal consistency data, the ABAS-II manual lists correlations among the 11 skill areas. Consistent with the theoretical structure of the ABAS-II, average correlations among the skill areas are in the moderate range (.40 to .70s), suggesting related, yet independent skills.

Three separate studies evaluated test-retest reliability from teachers and parents. Typical test-retest intervals were about 2 weeks. Tables list test-retest reliabilities by age group for each of the ABAS-II forms as well as for the various scores. Sample sizes were from 30 to 207. GAC correlations were mostly above or near .90 for teacher, parent, and adult forms.

## Validity

Theory and constructs derived from the American Association of Mental Retardation's (AAMR) 1992 and 2002 standards as well as state and federal mandates and the DSM-IV-TR descriptions provide the framework for the content on the ABAS-II. In particular, the three new composite scores of the ABAS-II (Conceptual, Social, and Practical) show the influence of the AAMR's 2002 recommendations. Relevant literature, expert suggestions, and reviews conducted through field trials informed the item selection process and provide evidence of face validity.

Factor analysis is provided in the ABAS-II manual. The General Adaptive Composite (GAC) is described as a latent variable. There is factor analytical support for a global GAC factor as well as for the three-factor model (Conceptual, Social, and Practical) proposed by the American Association of Mental Retardation in 2002.

The construct validity of the ABAS-II is also supported by intercorrelational data among the skill areas, domains, and the GAC. The theoretical structure of the ABAS-II gains support from the average correlations found on the different rating forms among the 10 skill areas. These correlations are in the moderate range (.40s to .70s). Correlations between the skill areas and their adaptive domains (.55 to .78), the skill areas and the GAC (.64 to .82), and the adaptive domains and the GAC (.78 to .93) are consistent with the model of adaptive behavior presented in the ABAS-II.

Confirmatory factor analytic evidence shows that unidimensional and multidimensional models accurately describe ABAS-II standardization results. All five forms were checked using a host of factor analytic techniques. Although the single-factor,

GAC model provided the closest fit with these data, there was some evidence supporting the three-factor model (Conceptual, Social, Practical) as well. The one-factor model is consistent with the construct of overall adaptive functioning, whereas the fit with the fit with a three-factor model provides support for the AAMR's premise of the three functional domains. No factor analytic evidence is provided for the 10 skill areas that made up the ABAS-II.

A number of studies reported in the manual support concurrent validity, and studies show correlations between the Adaptive Behavior Composite on the Vineland Adaptive Behavior Scale and the GAC for three different non-clinical samples ( $n = 44, 59, 45$ ). The studies that used the ABAS-II rating forms found correlations ranging from a low of .70 to a high of .84. Lower correlations (e.g., .59 on the Teacher/Daycare Provider form between the GAC and the Scales of Independent Behavior-Revised: Short Form) were found between the ABAS-II and the SIB-R. The correlation between the GAC and the Behavior Assessment Scale for Children (BASC) Adaptive Behavior Composite was .80 for a sample of 37 preschool-aged children. Additionally, the ABAS-II manual lists three negative correlations between the personality dimensions assessed by the BASC and the ABAS-II scores. It is not surprising that as behavior problems increased, adaptive behavior scores decreased. The correlation between the GAC and the BASC scales for Externalizing Problems was -.49. The correlation was -.39 for Internalizing Problems and -.66 for the Behavior Symptoms Index.

A number of different studies with sample sizes ranging from 19 to 306 revealed correlations in the .40s and .50s between the ABAS-II and various measures of intelligence (e.g., WPPSI-III, WAIS-III, WISC-IV) and achievement (e.g., WASI, WIAT). The moderate correlations between intelligence or achievement and adaptive behavior are consistent with previous research that suggests that adaptive behavior and cognitive functioning are separate but related constructs.

Although no predictive validity studies are presented in the ABAS-II manual, additional evidence of validity is provided through a number of studies using clinical samples. Sattler (2002) suggested the need for such studies in his critique of the ABAS. Scores on the ABAS-II from participants with learning disabilities, ADHD, hearing impairments, mental retardation, and developmental delay were matched based on demographic characteristics with members of the standardization sample. The manual cautions to interpret these findings in light of the fact that the clinical samples were small and not randomly selected. Additionally, diagnoses may have been based on inconsistent criteria. Overall, results showed that the mean scores of the clinical samples were significantly lower than most of their matched control groups on the GAC. Further, a higher percentage of persons in the clinical samples showed scores two standard deviations lower than the mean in specific skill areas. For example, the mean GAC of the children with Learning Disabilities ranged from 84 to 91, whereas the mean GAC of the matched control group ranged from 94 to 103. Additionally, there were many more children with Learning Disabilities (11% to 29%) who had scores in skill areas that were lower than 2 *SDs* below the mean as compared to the presence (3% to 11%) of low scores in the control groups. The lowest scores were in Communication, Functional Academics, and Self-Direction. In addition, detailed information is presented about the clinical sample with mental retardation. For example, the ABAS-II was shown to have good

specificity in differentiating between different levels of mental retardation for school-aged and older persons.

## Conclusions and Recommendations

The ABAS-II is theoretically and technically sound. It is unique because it covers the life span from birth to age 89 years and groups the 10 skill areas into AAMR-recommended adaptive domains (Conceptual, Social, and Practical). It was revised just 3 years after the original ABAS was published to conform to the 2002 AAMR guidelines. By adding the Conceptual, Social, and Practical domain scores, the authors dealt with one of the criticisms of the ABAS (Sattler, 2002): that it is a one-factor test. Still, the ABAS-II provides no factor analytic support for the skill areas.

Ample reliability and validity data are included in the ABAS-II manual. Although the ABAS-II manual addresses subtest specificity only indirectly, internal consistency measures are listed for the 10 skill areas, the 4 domains, and all 5 forms of the ABAS-II. The internal consistency correlations are high, providing evidence of strong internal consistency for the skill areas and the domains. Correlational data show that the ABAS-II does fit the theoretical model described by AAMR in 2002. Thus, the ABAS-II is reliable enough to be appropriate for screening, placement, diagnostics, group use, and research.

The clinical trials mentioned in the manual show that the ABAS-II is useful for the wide range of populations intended. However, the authors caution that the sample sizes used in the clinical studies are small and selected for convenience rather than for scientific rigor.

Finally, the ABAS-II is user-friendly. Although the review materials did not include the computer-scoring package, the manual, protocol forms, and tables are easy to follow and attractively printed.

## SUMMARY

The Adaptive Behavior Assessment System – Second Edition (ABAS-II) is clearly an important addition to the field of assessment of adaptive behavior. It has five forms that allow a variety of informants to provide information about a single client. The items, manual, and record forms are well written and easy to use. The authors and publisher went to a great deal of effort to update a 3-year-old test to expand the age range covered and to conform to revised AAMR domain guidelines. Although evidence is provided regarding internal consistency, no information is provided in the manual or the Technical Report (Harrison & Oakland, 2003b) regarding subtest specificity for the 10 skill areas or the domain scores. Regardless of this minor shortcoming, we would have no trouble recommending this test or using it ourselves.

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