

Adaptive Behavior Scales

CHAPTER QUESTIONS

- What is meant by the term *adaptive behavior*?
- What are the typical domains of adaptive behavior scales?
- How is adaptive behavior different from other constructs such as personality or intelligence?
- What are some of the most popular adaptive behavior scales?

HISTORY OF THE CONSTRUCT

The adaptive behavior construct traces its roots to early work in mental retardation, which, in turn, is linked to the roots of intellectual assessment (Kamphaus, 2001). Although intelligence tests contributed

mightily to the recognition of the mental retardation syndrome, Doll (1940) noted that intelligence measures lacked sufficient breadth for assessing all of the relevant domains of behavior that needed to be considered in treatment of individuals with mental retardation.

Doll drew on his experience as a psychologist at the Vineland State Training School in New Jersey, where he was charged with the assessment and rehabilitation of individuals with mental retardation. He noted that such individuals not only lacked intellectual abilities necessary for academic attainment, but they also often appeared to lack day-to-day living skills needed for independent functioning. In Doll's terminology, they lacked social maturity.

In order to intervene and improve a child's social maturity, Doll created a scale to assess specific behaviors that were

deemed necessary for successful living. The Vineland Social Maturity Scale (Doll, 1953) was the first of its genre. It included several sets of items that assessed various aspects of social maturity including locomotion, social skills, and grooming. The Vineland yielded a score that was roughly parallel to a composite score offered by many intelligence tests of the day. His total score was dubbed a “Social Quotient.” The Vineland became the premier measure of adaptive behavior up to the present day, and Doll’s pioneering work became the basis for all subsequent measures.

The AAIDD Criteria

The American Association on Intellectual and Developmental Disabilities (AAIDD), formerly the AAMR, bases its criteria for an intellectual disability, or mental retardation, on deficits in both intellectual functioning and adaptive behavior (see Luckasson et al., 2002), similar to previous criteria (e.g., AAMR, 1992). The current criteria that indicate that three broad areas of adaptive behavior should be assessed list ten domains of adaptive behavior that should be assessed for the purposes of mental retardation diagnosis and intervention planning. These domains are: conceptual skills (e.g., language, reading, writing, money skills), social skills (e.g., interpersonal, responsibility, avoiding victimization, obeying rules), and practical skills (e.g., maintaining a safe environment, self-care such as dressing, eating meals, hygiene).

It should be noted that competence in these areas of function may provide a basis of intervention for children with other problems such as autism, ADHD, learning problems, or anxiety. In fact, the assessment of adaptive behavior has been referred to as an essential part of assessments for autism (Ozonoff, Goodlin-Jones, & Solomon, 2005). Adaptive functioning has also been

described as one factor that can help differentiate mental retardation from learning disabilities, in that the former would be marked by broad deficits in adaptive functioning, and the latter would be marked by more specific deficits (Fletcher, Francis, Morris, & Lyon, 2005). The acquisition and demonstration of adaptive skills have also been identified as an important buffer against the development of psychopathology. For example, social competencies may allow a child to resist being overwhelmed by negative life stressors (Tanaka & Westerman, 1988). In this context, adaptive behavior scales may serve an important function in the assessment of all children referred for evaluation, not just those who are suspected of having an intellectual disability

Defining Adaptive Behavior

Adaptive behavior has been defined as “the performance of the daily activities that are required for social and personal sufficiency” (Sparrow, Cicchetti, & Balla, 2005, p. 6). Hence, adaptive behavior is the antithesis of most of the behavioral constructs discussed in this book in that it deals with behavioral competencies and their absence as opposed to assessing behavioral problems.

Most definitions of *adaptive behavior* have some core similarities including the premise that it is an age-related construct. Specifically, adaptive behavior increases with age in the absence of interfering circumstances, much as academic achievements accrue over time. Adaptive behaviors are identified by the standards of others and the social context in which the child functions (DeStefano & Thompson, 1990). Finally, adaptive behavior assessment focuses on typical behavior as opposed to ability. This assessment emphasis is also consistent with the assessment of other developmental accomplishments such as academic achievements.

Relationship to Intelligence

The choice of informant is apparently a moderator variable affecting the correlation of measures of adaptive behavior and intelligence (Kamphaus, 2001).

Correlations between intelligence and adaptive behavior measures are modest, .40 to .60 (DeStefano & Thompson, 1990) indicating some overlap but independence. This modest relation, however, is an oversimplification. The correspondence between the two constructs has been found to be higher in individuals with pervasive developmental disorders who also have deficits in intelligence than in individuals with pervasive developmental disorders who do not have intellectual deficits (Bolte & Poustka, 2002). In both groups, adaptive behavior across domains was below average. In addition, moderate correlations between adaptive behavior and intelligence have been found for juvenile offenders (Hayes, 2005). The informant and domain of adaptive behavior assessed also seem to affect the relation. Specifically, when teachers are used as informants, the correlation between intelligence and adaptive behavior increases, and domains that assess communication and functional academic skills tend to correlate higher with intelligence test results (Kamphaus, 1987).

Hence, if one sees a stronger relationship between intelligence and adaptive behavior as desirable, an emphasis on the assessment of functional academics rated by teachers will provide adaptive behavior results of desired value. If, however, one views the adaptive behavior construct as separate or complementary to intelligence assessment, parent ratings of less academically related skills (e.g., socialization) should be sought. In essence, where possible, an evaluator should seek information from both parents and teachers in a variety of adaptive behavior domains.

Otherwise, Harrison (1990), who has made numerous contributions to the adaptive behavior assessment literature, favors the use of parents as informants. She observes:

“The third-party method of administration is particularly appropriate for the assessment of adaptive behavior. Because adaptive behavior is generally conceptualized as the daily activities in which a person engages to take care of himself or herself and get along with other people, the information supplied by a third party will be more valid than the direct administration of tasks. The third-party method also allows for the assessment of individuals who cannot participate in the administration of many tests, such as the severely handicapped and young children” (pp. 472–473).

The modest to small relation of adaptive behavior to intelligence is punctuated in a study by Szatmari et al. (1993). This study followed 129 children of extremely low birthweight (501–1,000 g) to the ages of 7 or 8 years and compared their performance to that of a control group. They found significant decrements in intelligence for the low birthweight group but no significant deficits for adaptive behavior. Such results indicate that different mechanisms affect the development of intelligence and adaptive behavior skills.

While the low to moderate relation between intelligence and adaptive behavior scales is well documented (Kamphaus, 2001), the relation between adaptive behavior and academic achievement is of considerable importance given that academic achievement is often the criterion variable of interest to child clinicians. di Sibio (1993) examined the relation of adaptive behavior to achievement after the variance attributable to intelligence was removed.

While intelligence scores were more highly correlated with achievement, the measure of adaptive behavior in that study added 11% of the variance to the prediction

of achievement beyond that predicted by intelligence. The results of this study support the importance of assessing adaptive behavior and intervening in order to enhance a child's behavioral competencies which, in turn, provide another approach to enhancing academic achievement.

Uses of Adaptive Behavior Scales

Traditionally, adaptive behavior scales have been considered central to the diagnosis of mental retardation (DeStefano & Thompson, 1990). Although this use is circumscribed, it is an important one given the epidemiology of mental retardation and the importance of accurate diagnosis that includes a comprehensive assessment of adaptive functioning. It has also been argued that assessment of adaptive behavior has been included in order to reduce the number of false positive diagnoses of mental retardation occurring based solely on IQ scores (see Greenspan, 2006).

Perhaps as importantly, as the counterpoint of behavior problem scales, adaptive behavior scales hold unique potential for intervention design based on assessment results. Adaptive behavior scales measure key skills that contribute to a child's successful functioning in a variety of environments. That is, adaptive behavior scales serve a valuable function for the clinician in that they pinpoint specific skills that a child has not acquired, which then may serve as the focus of treatment efforts.

Adaptive behavior scales are particularly useful in educational settings where their results can be integrated with the objectives of individualized educational plans (IEPs). For instance, adaptive behavior scales can be used to identify social skills and other target behaviors for classroom intervention planning.

CHARACTERISTICS OF ADAPTIVE BEHAVIOR SCALES

Domains Assessed

Adaptive behavior scales are analogous to measures of behavior problems in that the domains assessed vary somewhat from test to test. In Table 14.1 we illustrate the content for three measures of adaptive behavior. Domains assessing various aspects of independent functioning/daily living, social skills, and communication skills are common to many tests. These domains are reflective of those in the intellectual disability criteria described above. The domains of behavior that are assessed by a particular test are influenced by its age range. Children's tests, for example, may place less emphasis on occupational skills, independent living, and interpersonal relationships than measures that are more concerned with assessing adult adaptation. Measures of adult functioning require domains aimed at assessing occupational skills, whereas the child's analog is school functioning. The domains of an adaptive behavior scale, thus, become an important consideration in test selection. A client's age, the institution's treatment program, and other factors may also influence test selection.

In a 1993 study, Widaman, Stacy, and Borthwick-Duffy applied multitrait/multimethod matrix procedures to the identification of major domains of adaptive behavior. The participants for this study were 157 persons with moderate, severe, and profound mental retardation. The authors found clear evidence for the existence of four major domains: cognitive competence, social competence, social maladaptation, and personal maladaptation. These results suggest that, when assessing individuals with mental retardation, measures of at least these four domains would be desirable. Fortunately, the majority of adaptive

TABLE 14.1 Overview of Three Measures of Adaptive Behavior

Test Name	Age Range	Scales/Domains	Administration Time
Vineland Adaptive Behavior Scales, 2nd edition	Birth through 90 Parent/caretaker and classroom Rating forms; survey and expanded interview forms	Communication (receptive, expressive, written); daily living skills (personal, domestic, community); socialization (interpersonal relationships, play and leisure time, coping skills); motor (gross, fine); maladaptive behavior (internalizing, externalizing, other)	20–60 min
Scales of Independent Behavior: Revised	Infancy through adulthood	Motor skills (gross motor, fine motor); social interaction and communication skills (social interaction, language comprehension, language personal expression); personal living skills (eating and meal preparation, toileting, dressing, personal self-care, domestic skills); community living skills (time and punctuality, money and value, work skills, home/community orientation)	Broad independence scale, 45–60 min; short form scale, 10–15 min; early development scale, 10–15 min
Adaptive Behavior Assessment System-II	Birth to 89 years Separate forms for 0–5; 5–21; and 16–89	Communication, community use, functional academics, home living, health and safety, leisure, self-care, self-direction, social, work	15–20 min to administer

behavior scales measure these domains and, in many cases, additional areas as well.

Norm vs. Criterion Referencing

Prior to the publication of the revised Vineland in 1984, there were no nationally normed adaptive behavior scales. Several scales possessed local or regional norms, and many were created locally and interpreted informally. Unfortunately, many of these scales were used for making norm-referenced decisions such as determining whether or not a child had adaptive behavior deficits that were significant enough to warrant the diagnosis of mental retardation.

Among the adaptive behavior assessment questions most frequently posed by psychologists are the following:

1. Does the child have adaptive behavior deficits that are significant enough to warrant the diagnosis of mental retardation?
2. What are the adaptive behavior deficits that most influence the child's adjustment and therefore, require intervention?
3. What are the adaptive behavior strengths displayed by the child?

Questions 2 and 3 are less likely to require norm referencing, although it may still be of some benefit. In order to answer these questions, the clinician could make intraindividual comparisons and/or gauge deficits on the basis of how the deficits impair adaptation to particular environments (e.g., failure to follow rules in games).

Choice of Informant

The Vineland Social Maturity Scale represents one of the first scales in psychology to place a premium on parents as infor-

nants. This approach stood in stark contrast to the popularity at the time of using direct measures of child behavior, such as intelligence tests.

Modern adaptive behavior scales such as the Vineland-2 (Sparrow, Cicchetti, & Balla, 2005) and Scales of Independent Behavior-Revised (Bruininks, Woodcock, Weatherman, & Hill, 1996) still emphasize the use of parents as informants. For most scales in which parents serve as informants, maternal reports are used nearly exclusively for item development, scaling, and norming. Although fathers are used less frequently, there are no systematic data currently available that clarify the differences between mothers and fathers as informants regarding adaptive behavior.

Secondarily, teachers often serve as raters of adaptive behavior. However, teachers have different views of a child's adaptive behavior because of the varied demands of school and home settings. Domains that are commonly included on parent scales of adaptive behavior, such as toileting, bathing, dressing, budgeting, and health care are impractical for teachers. Likewise, parents have difficulty reporting on functional academics in reading, writing, calculation, and some vocational skills. The differing demands of school and home environments virtually ensure that a clinician will have an incomplete understanding of a child's adaptive behavior if either teacher or parent adaptive behavior ratings are not used.

Other caregivers also serve as important informants regarding a child's adaptive behavior. Caregivers may include psychiatric aides in hospitals, nurses, mental health assistants, nannies, grandparents, teacher aides, work supervisors, or others who have sustained nearly daily contact with a child or adolescent. These individuals may, in some circumstances, fulfill parent or teacher roles and therefore may be competent primary or secondary informants for such scales. Even when parents or teachers

complete an adaptive behavior scale, other caregiver information may be of value. An adolescent's work supervisor is one example of an informant who may contribute unique and important information to the pool of assessment data gathered on adaptive functioning.

Finally, the child as an informant should not be overlooked. In other words, the child may be tested directly in order to assess adaptive behavior, although this is a less popular option with many clinicians. Perhaps one reason for its lack of popularity is a dearth of available instruments. The Children's Adaptive Behavior Scale (CABS; Richmond & Kicklighter, 1979) is one of the few direct measures of adaptive behavior available. The CABS uses an individual testing format to assess Language Development, Independent Functioning, Family Role Performance, Economic/Vocational Activity, and Socialization. Obviously, these domains are common to many types of adaptive behavior measures.

As is the case with behavior rating scales, there is often a high level of disagreement between the informants who give information or adaptive behavior scales. Parents and teachers have been found to generally agree on overall adaptive behavior estimates (e.g., Harrison & Oakland, 2003). However, they may disagree considerably at the scale or domain levels (Shaw, Hammer, & Leland, 1991). Self- and caregiver reports have been found to sometimes agree on adaptive behavior ratings but to disagree considerably on ratings of maladaptive behavior (Voelker et al., 1990). Factors such as child age and length of involvement in a treatment program may also affect agreement between informants (see Shaw et al., 1991).

Administration Format

Adaptive behavior scales are commonly administered using a checklist or semi-

structured interview technique, except, of course, in the case of direct assessment of the child. The checklist format is equivalent to the approach used for parent or teacher ratings of behavior problems discussed in previous chapters. The semi-structured interview method espoused by Doll (1953) and popularized by Sparrow, Balla, and Cicchetti (1984) differs substantially from rating scale methods.

The semi-structured interview technique, however, requires a high level of clinical skill. The clinician has to make the interview conversation-like, topical, and empathic, while at the same time collecting the necessary information to allow for accurate rating (scoring) of individual items. In addition, younger children could have a difficult time articulating their skills in various adaptive behavior domains. Therefore, when using self-report procedures for adaptive behavior, a semi-structured interview format is not recommended. The rating scale method is more time-efficient and practical in that the clinician does not even need to be present for the administration of the scale.

However, the semi-structured interview technique has many virtues, including the following:

- Allowing the examiner to clarify questions for the informant by providing examples, and so forth
- Contributing to the establishment of rapport between clinician and parent because of the conversation-like nature of the interaction
- Mitigating against response sets such as fake good or fake bad
- Permitting the assessment of adaptive behavior, despite poor English-language reading skills

The semi-structured interview technique can be easily mastered with practice. Some techniques for mastering the technique follow.

1. Begin by asking general questions and then proceed to the specific information needed to score items. If one started with the Communication domain of the Vineland-2, for example, a good starting question for a parent of a toddler might be something like, "Tell me about some of the things that Tom is saying these days."
2. Ask for examples of day-to-day behavior because adaptive behavior scales are designed to assess typical behavior rather than ability (see Sparrow et al., 2005). A follow-up expressive language question might be, "Tell me the words that you can remember Tom saying today."
3. Become very familiar with the interview items and scoring criteria for specific items in order to ensure that adequate clarification is sought.
4. Conduct the interview topically. For example, ask all of the items regarding telephone skills (answering appropriately, states telephone number, uses pay phone, etc.) before proceeding to the next topic.
5. Pursue questioning until you have a clear picture of the child's day-to-day behavior. Once you have achieved this portrait, you can confidently rate the child's behavior on individual items.

OMNIBUS ADAPTIVE BEHAVIOR SCALES

Vineland Adaptive Behavior Scales, 2nd edition (The Vineland-2; Sparrow, Cicchetti, & Balla, 2005)

The Vineland-2 (Sparrow et al., 2005) is the latest version of an assessment tool for adaptive behavior that traces its roots to the originator of the adaptive behavior

construct, Edgar Doll. Doll created the first widely used scale of adaptive behavior, the Vineland Social Maturity Scale. The Vineland-2 and its predecessor (Sparrow, Balla, & Cicchetti, 1984) represent a substantial revision, adaptation, and extension of Doll's original scale.

The Vineland-2 consists of a family of scales each of which possesses characteristics that make it well-suited for particular purposes. The Vineland components include the following: The Teacher Rating Form assesses adaptive functioning in the classroom for children ages 3½ through 18. The Survey Interview Form is administered to parent/caretakers of individual from birth to age 90 in semi-structured interview format (an Expanded Interview Form is also available). New to the Vineland-2 is a Parent/Caregiver Rating Form that allows parents to rate adaptive behavior items in a rating scale format.

The Vineland-2 has many uses in addition to its popularity as a tool in assessments and diagnoses of mental retardation. The Vineland-2 provides a rather comprehensive assessment of an individual's behavioral competencies and can be used to assess treatment progress, as well as to determine treatment goals.

Content

Aside from re-standardization, the most substantial change in the Vineland-2 from the previous Vineland is in the expansion of the number of items in each domain and the inclusion of the Parent/Caretaker Rating Form (Sparrow et al., 2005). The Vineland-2 includes the same domains as its predecessor: Communication, Daily Living Skills, Socialization, Motor Skills, and Maladaptive Behavior. The Motor Skills domain is designed for ages from birth through 6 years and for older individuals with motor handicaps. The Maladaptive Behavior domain is essentially a behavior problems checklist that assesses

very severe difficulties such as problems in public, sexual misbehavior, self-injurious behavior, bedwetting, and truancy. Each of the domains consists of following content:

- Communication
 - Receptive
 - Expressive
 - Written
- Daily Living Skills
 - Personal
 - Domestic
 - Community
- Socialization
 - Interpersonal Relationships
 - Play and Leisure Time
 - Coping Skills
- Motor Skills
 - Gross
 - Fine
- Maladaptive Behavior
 - Internalizing
 - Externalizing
 - Other (e.g., wets bed)

Administration and Scoring

The Vineland Survey form uses Doll's well-known semi-structured interview technique, a method that is often not followed loyally by Vineland users. The technique has many advantages; unfortunately, its disadvantages are more salient. Said simply, mastering the semi-structured interview technique is not easy.

A central problem with the method is the necessity of organizing the interview topically, while the items are placed on the response form by difficulty order. For example, several items of the Daily Living Skills domain of the Survey Form have to do with telephone skills – answering, dialing, and so on. The semi-structured interview technique involves obtaining adequate information to score these items, even though they are scattered throughout the record form. This central contradic-

tion of simultaneously interviewing topically as well as having items ordered by increasing difficulty undoubtedly leads to routine usage of the Vineland as a rating scale despite the fact that this is a violation of standardized procedure. Two aspects of the Vineland-2 speak to the tendency for clinicians to have difficulty with the semi-structured interview approach: (a) icons are now shown on the record form such that interviewers can more easily spot items that go together (e.g., a book icon signals items that have to do with reading skills); and (b) the Parent/Caretaker Rating Form and the Teacher Rating Form now make it possible for the clinician to obtain Vineland ratings without the use of an interview. Nevertheless, given the many advantages of the semi-structured interview technique cited earlier, it behooves clinicians to acquire this unique skill.

Vineland interpretation features standard scores based on a mean of 100 and standard deviation of 15 for the Adaptive Behavior Composite and for each of the Domain scores. A new feature is the use of “v-scale” scores for subdomains. These scores have a mean of 15 and standard deviation of 3.

Norming

The Survey Form norming sample of the Vineland was collected on the basis of 2001 US Census Bureau statistics (Current Population Survey, 2001). The sample was made up of 3,687 subjects from birth through 90 years. The sample appears to be representative of the larger population in terms of ethnicity, SES, geographic region, and disability status. Clinical samples of individuals with ADHD, autism (both with and without language), hearing impairment, and “emotional or behavioral disturbance” were included in the standardization and subsequent studies (Sparrow et al., 2005, p. 91).

Reliability

Reliability analyses indicate good internal consistency for the Adaptive Behavior Composite and the domain scores, with coefficients generally .90 and higher for the former and .80 and higher for the latter. Subdomain internal consistency coefficients likewise tended to be .80 and higher, with the exception of the Receptive (communication), Personal (daily living skills), and Play and Leisure time (socialization) which were somewhat lower (see Sparrow et al., 2005).

Test-retest reliability (approximately 2–5-week interval) coefficients were also good, and the parent forms of the Vineland-2 demonstrated adequate interviewer agreement on the Survey Interview Form and adequate interrater reliability across parents on the Parent/Caregiver Form (Sparrow et al.).

Validity

Many aspects of validity are addressed by the authors of the Vineland-2 (Sparrow et al., 2005). The content of the Vineland-2 was designed to be reflective of AAIDD and *DSM-IV-TR* criteria for adaptive functioning, as outlined for diagnoses of intellectual disabilities or mental retardation. In addition, the raw scores increase lawfully from age to age lending credence to the argument that the Vineland measures adaptive behavior as a developmental phenomenon. In other words, with development, an individual should acquire more adaptive skills, and this phenomenon is reflected in the Vineland-2 raw score data.

Differential validity studies described by the authors note that the Vineland-2 Adaptive Behavior Composite and domain scores differentiated among individuals with mild, moderate, or severe mental retardation. Similarly, the scores for individuals with autism who also had verbal

skills were higher than those for individuals with autism without verbal skills (Sparrow et al.).

Convergent validity was examined by the associations between Vineland-2 domains and analogous scales on the BASC-2. In general, parent reported Vineland-2 domains were moderately correlated with similar parent report BASC-2 scales (e.g., Communication with Functional Communication). These coefficients were generally higher for individuals ages 12–18 than for younger subjects. Similar results were found for analyses of the Vineland-2 and the Adaptive Behavior Assessment System-II (ABAS-II; see below), with moderate correlations found across age groups for analogous domains and subdomains.

Strengths and Weaknesses

The Vineland-2 and its predecessors benefit from a long history of successful use and numerous research investigations. The Vineland's noteworthy strengths include the following:

1. Multiple components that are useful for a variety of diagnostic and intervention planning purposes
2. A supportive research base that suggests that the Vineland-2 possesses expected correlations with measures of similar (convergent validity) constructs
3. An exhaustive item pool which allows for the ready identification of treatment goals and objectives
4. A large national normative sample and several local norm samples, which make it particularly well suited for diagnostic decision making
5. Modifications of the new version which eases administration in either semi-structured interview or rating scale formats

Among the Vineland's weaknesses are the following:

1. The considerable training that is required to properly use the semi-structured interview technique
2. Relatively little research on the Vineland-2 which is offset to some extent by research on its predecessors and its familiarity to many clinicians.
3. More limited research on the classroom version, particularly regarding its utility for educational interventions.

In Box 14.1 we provide a case example illustrating the use of the Vineland-2.

Reason for Referral

Joan, a 12-year-old girl, was referred for evaluation by her father to determine if she is receiving the education services that she needs in school. Joan is a sixth-grade special education student who is currently in a fifth-grade inclusion classroom where

she reportedly is receiving extra help from her teacher and an aide throughout the day. Her reading skills are reportedly well below what would be expected for her grade level. According to Joan's mother, her school has recommended retaining Joan in the sixth grade next year, and Joan's father would like a second opinion.

Background Information

According to her mother, Joan has lived with her biological parents and paternal grandparents for the last 10 years. Joan's mother is a legal secretary, and her father works at a lumberyard. Joan reportedly has no other siblings. At birth, Joan weighed 7 lb, 11 oz and was described as a healthy baby. Joan's development during infancy was reportedly normal, and she did not have any serious diseases or other difficulties.

Mrs. Jordan indicated that Joan is involved with her church youth group and the local 4H Club. She enjoys caring for her pets which include a rabbit, goat, and two dogs. Joan also reportedly enjoys making crafts with her grandmother.

Joan's teacher and aide were interviewed. Both stated that they are impressed and pleased with Joan's progress, since the beginning of the school year. She was described as a nice kid who works hard. Reading reportedly continues to be Joan's weakest area, and math is a relative strength. According to her teacher, Joan is easily frustrated with reading assignments. She is described as a sight reader. Joan's socialization skills in the classroom and the community have reportedly improved. Her teachers and mother noted that she gets along well with her peers and adults in her environment.

According to her mother, the school team has recommended placing Joan in a sixth-grade inclusion class next year in order to give her another year to develop before starting middle school. Although her socialization skills have improved, they

Box 14.1

A Case Example Use in the Vineland-2

Name: Joan

Age: 12 years

Grade: 6

Evaluation Procedures

Differential Abilities Scale (DAS)

Woodcock Johnson Tests of Achievement, 3rd edition (WJ-III)

Behavior Assessment System for Children (BASC-2): Parent Rating Scales (PRS), Teacher Rating Scales (TRS), and Self-Report of Personality (SRP)

Vineland Adaptive Behavior Scales, 2nd edition (Vineland-2): Classroom Rating Scale, Parent/Caretaker Rating Scale

reportedly believe that she needs the additional year to mature. Joan's father reports that Joan would prefer to go to the middle school next year with her friends.

Previous Evaluation

Joan was reportedly in a speech program until third grade for fluency and articulation difficulties. She continues to have problems with expressive speech, but her teachers report that this is not a significant problem. Joan is described as speaking relatively clearly in class. Joan was recently prescribed glasses, but reportedly she fails to wear them in class, and she did not wear them during this evaluation.

Joan was initially evaluated when she was in the first grade. From that evaluation, she was diagnosed as mildly intellectually delayed and placed in a self-contained classroom. Joan's Mental Processing Composite on the Kaufman Assessment Battery for Children, 2nd edition (KABC-2) at that time was in the Borderline range (MPC = 70). She was re-evaluated three years later, and her Full Scale score on the Wechsler Intelligence Scale for Children-Fourth Edition (WISC-IV) was also in the Borderline range (FSIQ = 74). Her Adaptive Behavior Composite on the Vineland Adaptive Behavior Scale was also in the Below Average range (ABC = 72).

Behavioral Observations During Testing

Joan was appropriately dressed and well-groomed during the evaluation. No auditory or motor abnormalities were noted. She also did not appear to have any visual difficulties, but she was not wearing her prescribed corrective lenses. Rapport was easily established; however, Joan was not talkative during the evaluation, and she did not initiate conversation. At times, she was difficult to understand because she mumbled. However, she willingly answered the

examiner's questions and smiled frequently. She appeared to be nervous in the beginning, but she became more relaxed, as suggested by more frequent smiling and relaxed body posture, as testing progressed. Joan was cooperative and polite. Although Joan worked hard during testing, she became frustrated easily, especially during reading exercises. When frustrated, Joan tended to respond more impulsively, shift often in her seat, rub her face, avoid eye contact, and adopt a flat affect.

Observations during testing suggest that Joan's self-report personality test results are somewhat suspect. Her limited reading abilities and verbal expression skills, as well as her impulsivity on tasks requiring reading limits the potential value of those findings.

Test Results and Interpretation

Psychoeducational Assessment: Cognitive functioning was assessed using the DAS. She obtained a General Conceptual Ability score on the DAS of 59. There is a 90% probability that Joan's DAS General Conceptual Ability score falls between 54 and 64, indicating that her performance meets or exceeds less than 1% of her peers. Both her Verbal and Nonverbal scores were also in the Significantly Below Average range, but her Spatial score was somewhat higher, falling in the Significantly Below Average to Moderately Below Average range. These results indicate that her intellectual functioning is below that of her same-aged peers.

These results are also highly consistent with Joan's performance on academic achievement measures. Standard scores on the Kaufman Tests of Educational Achievement (KTEA) ranged from 48 (Reading Comprehension) to 64 (Math Applications), which correspond to percentile ranks of less than 1. All of the academic skill areas assessed were significantly below average. In general, these results are supported by

Joan's prior evaluations, curriculum-based measures taken at her school, and teacher reports.

Adaptive Behavior: The Vineland-2 was completed by Joan's mother, who indicated that Joan's overall adaptive behavior is significantly below average for her age. Her Socialization and Daily Living Skills domain scores were in the Below Average range, suggesting that Joan has some difficulty communicating her needs and ideas and caring for herself relative to her same-aged peers. Her rating for the Communication Domain, which was well below average, suggests that Joan has substantial difficulty expressing her ideas verbally or in written form and in understanding what she reads or hears from others. Her teacher's ratings on the Vineland-2 were higher in each domain, indicating that her overall adaptive behavior in the classroom is slightly below that of her same-aged peers. Joan's teacher rated her in the Average range in Daily Living Skills and Socialization. Her rating in the Communication Domain was in the Below Average range.

The results of the Vineland-2 suggest that the following behaviors should be considered as objectives for intervention:

Communication: Reading simple stories, printing three- and four-word sentences, reading vocabulary of at least ten words, and writing vocabulary of at least ten words

Daily Living Skills: Dressing appropriately for the weather, avoiding individuals with contagious diseases, telling time by 5-min segments, caring for her hair and fingernails, and using household cleaning products

Socialization: Controlling anger when denied own way and attending after school or evening activities with same age/grade peers

The results suggest that Joan's adaptive functioning may be better at school than at home. However, her overall adaptive functioning is still below what would

be expected for her age, particularly in the area of Communication. Her intellectual functioning and academic achievement are substantially below what is expected for her age. The results indicate that Joan meets criteria for a diagnosis of Mild Mental Retardation.

Reports by Joan's mother and teacher on the BASC-2 of poor functional communication, poor adaptability to change, and difficulties with self-care (parent report) are consistent with their reports of Joan's adaptive functioning on the Vineland-2 and with her diagnosis of Mild Mental Retardation. Joan's teacher reported on a moderate level of concerns on the Learning Problems scale of the TRS, which is consistent with Joan's history of academic difficulties.

GENERAL RECOMMENDATIONS

1. From the results of the current evaluation, it is apparent that Joan should receive resource educational services through her school. Joan should not be expected to make one year of academic progress for each year of attendance in school. Therefore, slow academic attainment by itself may not warrant retention in grade. Joan's parents and school officials should communicate regularly as to the appropriate placement and accommodations for Joan.
2. Joan's parents are advised to read some literature on other children functioning at Joan's intellectual level to understand how she learns, what expectations are reasonable for her, what her needs are, and how to meet those needs.
3. The focus of academics for Joan should be to help her develop minimal competency in independent living skills, including vocational skills.
4. Joan should receive vocational counseling to guide her educational program.

5. Joan may need to be reevaluated for the speech program at school given her continued difficulties with communication and the difficulty of understanding her at times during the present evaluation.
6. If a computer is available, Joan could use software designed to increase her reading, math, and spelling skills. She could work on the computer alone or with a teacher. Computer usage would increase her independence, give her the attention that she needs, and provide individualized instruction.
7. Joan should be allowed as much as possible to be around her regular classroom peers (i.e., education in the least restrictive environment possible), so that she can learn socialization, coping, and behavioral skills by observing and interacting with them.

Scales of Independent Behavior: Revised (SIB- R; Bruininks, Woodcock, Weatherman, & Hill, 1996)

The SIB-R in many ways resembles the Vineland. It is a broad-based assessment of adaptive behavior spanning an age range of infancy through adulthood.

Content

The SIB-R includes 14 subscales that are subsumed under four clusters (i.e., Motor Skills, Social Interaction and Communication Skills, Personal Living Skills, and Community Living Skills). These clusters are summarized by a Broad Independence scale composite score. The clusters and their subscales are the following:

Motor Skills
Gross Motor
Fine Motor

Social Interaction and Communication Skills
Social Interaction
Language Comprehension
Language Expression
Personal Living Skills
Eating and Meal Preparation
Toileting
Dressing
Personal Self-Care
Domestic Skills
Community Living Skills
Time and Punctuality
Money and Value
Work Skills
Home/Community Orientation

An Early Development scale is provided on the SIB-R for assessing the adaptive skills of infants and young children. This scale may also be of benefit for the assessment of significantly impaired individuals with developmental ages of 8 or lower.

Flexible use of the SIB-R is further enhanced by the availability of an Individual Plan Recommendation form. This form aids the process of intervention planning through needs identification and progress monitoring.

Another valuable feature of the SIB-R is the provision of a short form that can be administered in 10–15 min. The short form consists of items from the longer scale that give a quick indication of the overall presence or absence of adaptive behavior deficits. A low score on this scale would trigger the administration of the complete form or another adaptive behavior scale.

A Problem Behaviors scale is also included. This scale measures eight areas of problem behavior:

Hurtful to Self
Hurtful to Others
Destructive to Property
Disruptive Behavior
Unusual or Repetitive Habits
Socially Offensive Behavior

Withdrawal or Inattentive Behavior; Uncooperative Behavior

An additional advantage of this scale is that problem behaviors are not only rated according to frequency but also by severity. The severity ratings provide the clinician with more guidance to follow in a problem-solving assessment paradigm (Bruininks et al., 1996).

Administration and Scoring

The SIB-R is administered via structured interview or checklist in approximately 45–60 min. The questions are merely posed to a parent, teacher, or other caregiver as they are written. Respondents are given four response options for each item:

1. Never or rarely, even if asked
2. Does, but not well, or about 1/4 of the time; may need to be asked
3. Does fairly well, or about 3/4 of the time; may need to be asked
4. Does very well, or always or almost always; without being asked

The items are worded as precise behavioral objectives that require little comprehension on the part of the informant.

The SIB-R offers a large and useful variety of derived scores including standard scores, percentile ranks, and age equivalents. The more novel scores include training implication ranges, a relative mastery index, and a support score, although more traditional scores of different adaptive behavior domains are also available.

Norming

A sample of 2,182 subjects was used for norming the SIB-R (Bruininks et al., 1996). The age range of the sample extended from infancy through adulthood.

Reliability

Split-half coefficients for the clusters are reported in the test manual to be in the .80s to low .90s (Bruininks et al., 1996). The Broad Independence scale reliability estimates were commonly in the mid to high .90s. Test–retest reliabilities for the clusters and the Broad Independence scale were similarly high.

Validity

DeStefano and Thompson (1990) lauded the original SIB for its evidence of content validity by the observation: “The SIB shows good content validity, in that its structure and content cover a broad range of skills and traits included in current models of adaptive and maladaptive behavior” (p. 461).

Roberts et al. (1993) conducted a correlational study of the previous SIB and Vineland Survey Form that demonstrates considerable criterion related validity for both instruments. This study involved 128 4-year olds to 7-year olds with developmental disabilities. Both tests were found to produce one large factor. Similarly, McGrew, Bruininks, and Thurlow (1992) found the SIB to correlate significantly with community adjustment for 239 adults with mild to severe levels of mental retardation. While the SIB-R is not as well-researched as its predecessor or the Vineland, the few studies available show good evidence of criterion-related validity.

Interpretation

As with the other adaptive behavior scales reviewed in this chapter, we recommend interpretation of the SIB-R first at the composite level and then at the cluster level. In most cases, the composite will give an accurate overall picture of the individual’s adaptive functioning. However, there may

be relative strengths or weaknesses across clusters (and perhaps on specific items/skills) that would inform intervention in a meaningful way. It is good practice for clinicians to consider what specific sets of skills led to particular strengths or weaknesses in areas of adaptive functioning to illustrate the skills that the client has acquired or struggled to acquire.

Strengths and Weaknesses

The SIB-R possesses many admirable traits that make it a very practical tool. Its strengths include the following:

1. Flexibility of administration with the availability of both short and long forms
2. An objective item-scoring scheme that eases scoring
3. Its link to other Woodcock-Johnson tests, which foster transfer of training to the SIB-R.
4. Broad item coverage (i.e., content validity)

The weaknesses of the SIB-R include the following:

1. Relatively complex scoring algorithms (which are eased considerably by the use of its accompanying Compuscore software program)
2. A lack of factor-analytic and criterion-related validity studies conducted by those other than the test developers

Adaptive Behavior Assessment System, 2nd edition (ABAS-II; Harrison & Oakland, 2003)

The ABAS-II, a newer adaptive behavior scale, is organized in a manner that is closely related to *DSM* and *AAIDD* criteria. It is a comprehensive system that is designed to assess individuals from 5 to 89 years of age (Harrison & Oakland).

Content

The ABAS assesses ten constructs including:

- Communication
- Community Use
- Functional Academics
- Home/School Living (denoted as “Home” on the Parent Form and “School” on the Teacher Form)
- Health and Safety
- Leisure
- Self-Care
- Self-Direction
- Social Work (only completed if the individual has a full or part-time job)

The ABAS-II includes various forms that assess the ten skill areas. Specifically the ABAS-II consists of a parent and a teacher/daycare provider form for ages 0–5, separate parent and teacher forms for ages 5–21, and an adult form, completed by a caregiver, for ages 16 through 89 years.

Administration and Scoring

The ABAS-II is a rating scale that appears to be straightforward to use. According to the manual (Harrison & Oakland, 2003), an informant can rate the child in 15–20 min. Items are organized by skill area in order of difficulty, which probably reduces administration time. The work area is skipped for most children, for example, and many skills listed are so far beyond the competencies of most children that they can quickly be answered with zero.

The item response scale is 0 = is not able; 1 = never when needed; 2 = sometimes when needed; 3 = always or “almost always” when needed; and a last category is “check if you guessed.” This latter category may help examiners determine the amount of confidence to place in a rater’s responses.

Item scores merely need to be summed to produce raw scores by skill area. The raw scores are then transferred to the back of the record form to conduct table conver-

sions to standard scores for each scale ($M = 10$, $SD = 3$) and a “General Adaptive Composite” ($M = 100$, $SD = 15$). Percentile ranks and confidence intervals are also offered.

Norming

The ABAS was normed on a total sample of 7,370 individuals with demographic sampling based on 1999 US Census estimates. General national norms are offered as well as numerous validity studies of individuals with disabilities. Stratification variables for the sample included geographic region, parental educational attainment, sex, and race/ethnicity. The norming sample may have included a slight under-representation of children with disabilities (see Richardson & Burns, 2005).

Reliability

Reliability of the ABAS-II was evaluated via internal consistency, test–retest, and inter-rater reliability. Reliability coefficients were generally quite high with the internal consistency coefficients for the General Adaptive Composite and the skill areas being all around .90 and the inter-rater reliability coefficients were generally in the .80s. In addition, cross-informant coefficients across forms and skill areas were good (i.e., approximately .70; Harrison & Oakland, 2003).

Validity

The ABAS-II has been described as having good content validity on the basis of its theoretical foundation in diagnostic criteria for mental retardation (Richardson & Burns, 2005). Confirmatory factor analyses support the factor structure of the ABAS-II, and the manual presents good evidence of both convergent and divergent validity (Harrison and Oakland, 2003). In addition, the differential validity of the ABAS-II was demonstrated for children

in a variety of diagnostic categories compared to matched controls. Richardson and Burns (2005) suggest that more research is needed concerning the applicability of various items of the ABAS-II cross-culturally. The same could be said for other measures of adaptive functioning.

Interpretation

ABAS-II interpretive guidelines are offered in the manual along with a few case studies. The interpretive suggestions are basic, clear, and sensible. We again recommend a top-down approach to interpretation (i.e., composite to items) with skill examples being provided to illustrate the client’s relative strengths and weaknesses. In addition, corroborating evidence is needed on adaptive functioning such that clinicians do not hastily use a profile of scores to make a diagnostic decision (Harrison & Oakland, 2003).

Strengths and Weaknesses

The ABAS-II is a viable alternative to the Vineland and SIB-R given its ease of use and linkage to the AAIDD and *DSM-IV* criteria. Noteworthy strengths include the following:

1. A close link to diagnostic criteria
2. Ease of administration and hand scoring
3. Inclusion of numerous validity studies in the manual

Some potential weaknesses of the ABAS-II may include the following:

1. Inability to gather unsolicited clinical information as it is often available in a semi-structured interview
2. Lack of validation research by others than the test developers
3. Slight underrepresentation of children with disabilities in the norming sample.

MEASURING SOCIAL SKILLS

A universally accepted definition of adaptive behavior remains elusive resulting in scales that may have a variety of domains (Merrell & Poppinga, 1994). The development and revision of adaptive behavior instruments of late have resulted in measures that reflect AAIDD criteria for mental retardation. However, any one of those domains (e.g., daily living skills, social skills) can be assessed in a more detailed fashion than is typically the case with adaptive behavior scales. One aspect of adaptive behavior, social competence, or social skills is of such importance for a variety of child outcomes that scales which measure this construct exclusively are available.

Social Skills Rating System

The SSRS (Gresham & Elliott, 1990) is a comprehensive measure of social skills that incorporates multiple domains and raters. Teacher, parent, and student forms are provided for measuring a variety of social skills across settings. Although the SSRS also measures externalizing, internalizing, and hyperactivity problem behaviors, social skills are the focus of the system. The

teacher form of the SSRS also includes a rating of academic competence.

Content

The SSRS differs from other crude assessments of social skills or omnibus rating scales (e.g., BASC-2) by assessing multiple domains of social skills. The domains corresponding to each form are shown in Table 14.2. A total score is also available for each form.

Administration and Scoring

Each of the SSRS forms is straightforward to use. The parent and teacher forms are somewhat unique rating scales in comparison to many of the measures reviewed thus far. In addition to requiring the rater to assess the frequency of a behavior, the rater is also asked to indicate the importance of the behavior for a child's development. The availability of these importance ratings allows the clinician to better prioritize behaviors for intervention.

A full range of scores are offered by the SSRS, including standard scores, percentile ranks, and a behavior level. Behavior levels are somewhat like stanines in that they divide up portions of the distribution of scores into three levels where $> +1\ sd$ = more, $< -1\ sd$ = fewer, and the middle of the distribution =

TABLE 14.2 Domains Assessed by SSRS Forms

	Cooperation	Assertion	Responsibility	Empathy	Self-Control
<i>Teacher Form</i>					
Preschool	x	x			x
Elementary	x	x			x
Secondary	x	x			x
<i>Parent Form</i>					
Preschool	x	x	x		x
Elementary	x	x	x		x
Secondary	x	x	x		x
<i>Student Form</i>					
Elementary	x	x		x	x
Secondary	x	x		x	x

average. Such indices are available for each domain and the total score.

Norming

The SSRS norming samples consisted of 4,170 children, 1,027 parents, and 259 teachers who completed forms in 1988 (Gresham & Elliott, 1990). The sample used for the Student Form is well-described in the manual. On the other hand, the Parent and Teacher Form samples are described in only a few paragraphs. The characteristics of the children rated on the Teacher Form, such as their SES and ethnicity, are not given. The SES of the parent sample is heavily skewed toward high levels of SES. The lack of detailed information given for norming of the Teacher and Parent Forms makes it difficult to evaluate the quality of the norms and to make recommendations for their use.

Reliability

The reliability estimates for the Teacher and Parent forms reported in the SSRS manual are generally adequate. Mean coefficient alpha reliability estimates for the Teacher Form subscales were in the high .80s and .90s. Parent Form coefficients are slightly lower with more coefficients in the .70s. Student Form reliabilities were generally low. Coefficients for the Cooperation, Assertion, and Self-Control scales did not exceed .70. The test-retest coefficients for the Student Form were even more disappointing, with none of the values exceeding .70, including the Total Scale value, which was only .68 (Gresham & Elliott, 1990). Moderate correlations between parent and teacher ratings on the SSRS have been found (Ruffalo & Elliott, 1997).

Validity

Conducting criterion-related validity studies with the SSRS may be difficult because of debate about the appropriate criterion. There is not a clear criterion in the

assessment of social skills. Some sense of criterion-related validity may be gained from the studies reported in the manual (Gresham & Elliott, 1990).

A study of the SSRS Teacher Form correlations with the Social Behavior Assessment (SBA) lends some criterion-related validation to the Teacher Form. The majority of correlations were significant for a sample of 79 cases, suggesting that the two measures share considerable overlap. The Cooperation subscale of the Teacher Form was most highly correlated with scores from the SBA. This scale correlated $-.70$ with the Interpersonal domain of the SBA and $-.73$ with the Task-Related domain of the SBA.

A study of the relation of the Teacher Form to the Achenbach Child Behavior Checklist-Teacher Report Form (CBCL-TRF) provided mixed support for the Problem Behavior scales. The Externalizing Scale correlated $.69$ with its counterpart on the CBCL, but the Teacher Form correlated only $.33$ with its CBCL counterpart (Gresham & Elliott, 1990).

Similar results were obtained for the SSRS Parent Form. In a study of 45 parent ratings of children, the Externalizing Scale correlated $.70$ with the Externalizing score of the CBCL-PRE. Again, however, the Internalizing Scale correlated only $.50$ with the Internalizing Scale of the CBCL-PRE (Gresham & Elliott, 1990). These studies of the Problem Behaviors scales of the SSRS suggest that the Internalizing Scale measures something different from the corresponding scale of the widely used Achenbach.

The factor analyses provided in the SSRS manual provide limited insights into the underlying traits assessed by the SSRS primarily because of the methods used. Principal components were extracted, but factor analysis was not conducted. Furthermore, the components were apparently derived solely on the basis of empirical methods. Subsequent research has found a poor fit of the factor structure described in the manual for parent ratings of elementary school-aged children (Van Horn et al.,

2007). In particular, Van Horn et al. (2007) found better support for a shorter version of the SSRS with the same domains as traditionally used in the SSRS (Gresham & Elliott, 1990). Importantly, that longitudinal study also suggested that the structure of the SSRS may vary across ethnic groups and that the SSRS may evaluate a somewhat different construct for 3rd grade children than for children in kindergarten. In other words, SSRS scores may not be a good way to track changes in social skills over time because the scores may change in meaning over time (Van Horn et al., 2007). Similarly, Whiteside, McCarthy, and Miller (2007) found a lack of support for the proposed factor structure of the SSRS for elementary school-aged children. However, in support of the SSRS's overall construct validity, they found that scores on the SSRS were significantly related to a history of peer problems.

Strengths and Weaknesses

The SSRS provides a unique assessment tool for child clinicians in that it is a thorough method for assessing behaviors that are often labeled as social skills. Furthermore, although the norming of the SSRS is not ideal, it is far superior to other measures that do not possess adequate norms and yet are used to make norm-referenced decisions. Other strengths of the SSRS include the following:

1. An attempt at a multi-domain assessment of social skills
2. The use of multiple informants
3. An integrated method of interpretation and intervention planning

Some of the weaknesses of the SSRS include the following:

1. Inadequately described norm samples for the Teacher and Parent Forms
2. Poor reliabilities for some of the subscales, especially those on the Student Form

3. Potential differences in meanings of scores across ethnic groups and developmental stages (Van Horn et al., 2007)
4. Emerging research that does not support the SSRS factor structure described in the manual
5. Less than adequate criterion-related validity for the Internalizing scale of the Problem Behaviors domain

CONCLUSIONS

Adaptive functioning is increasingly being recognized as an important, if not essential, aspect of child assessments. Although Doll introduced this intuitive concept in the 1930s, adaptive behavior was not formally included as central to the mental retardation diagnostic process until the 1950s.

In addition to its inclusion in diagnostic criteria, adaptive functioning also has an important role in intervention planning. To this end, components of adaptive behavior scales are now included on many behavior rating scales, such as the Achenbach and BASC-2, and these components are summarized in Box 14.2. Another interesting trend is for adaptive behavior scales to be single-domain measures. The SSRS is an excellent example of the trend toward developing assessment measures of what may be called sub-constructs of adaptive behavior.

This chapter highlighted several of the most popular adaptive behavior scales, but the reader should be aware that there are a substantial number of such scales available.

CHAPTER SUMMARY

1. Edgar Doll first discussed the construct of adaptive behavior by drawing on his experience as a psychologist at

Box 14.2**Adaptive Behavior as a Component of Omnibus Rating Scales**

With recent research and development in the assessment of adaptive behavior, it is sufficient to say that this construct is no longer considered a mere afterthought in child assessment or as a secondary component of evaluations for mental retardation. Instead, adaptive behavior is viewed as an important target of assessment for describing an individual's strengths and weaknesses and for designed skill-based interventions. This increased recognition of adaptive behavior as a central aspect of child assessments is evident in recent changes to omnibus rating scales. For example, although the original BASC (Reynolds & Kamphaus, 1992) was unique at the time in its multi-domain assessment of adaptive behavior, the BASC-2 (Reynolds & Kamphaus, 2004) has an expanded set of adaptive behavior domains. The BASC-2 saw the addition of a Functional Communication (parent and teacher) and Activities of Daily Living (parent) scale. The reader will note that these scales in particular seem consistent with adaptive behavior domains included in the measures reviewed in this chapter. The other adaptive scales (i.e., Adaptability – parent and teacher; Study Skills – teacher; Social Skills – parent and teacher; Leadership – parent and teacher; Self-reliance – self; Self-esteem – self; Relations with Parents – self; Interpersonal Relations – self) may overlap to some extent with Socialization, but they may also provide some unique information (e.g., one's ability to adjust to change in the case of the Adaptability scale). Research is quite scant on these scales to date. Initial validation of the BASC-2 found that the adaptive scales were generally negatively correlated with clinical scales of the BASC-2, as well as other measures

(Reynolds & Kamphaus, 2004). Such results do not provide information as to the potential clinical utility of each individual scale. That is, although the psychometric properties of these scales are adequate, interpretation and clinical use might be best at the item level in terms of pinpointing specific behavioral concerns in the areas of adaptability, communication, self-care, and social skills. On the basis of state of the relevant research, a clinician cannot say with much confidence, for example, what a low (or high) score on the Leadership scale of the BASC-2-PRS really means. However, some items (e.g., “Is creative;” “Is good at getting people to work together.”) may highlight specific strengths of the child or areas that may need some improvement.

The BASC-2 is not the only omnibus scale that directly assesses adaptive behavior. The Achenbach and PIC/SBS/PIY (see Chaps. 6 and 7) systems also have strategies for assessing strengths and socialization. In the case of the former, these are limited to a few screener-type items regarding overall competencies. In the case of the latter, these are framed in terms of social problems, the absence of which would imply adaptive social functioning. Therefore, the assessment of adaptive behavior offered on scales such as the BASC-2 or Achenbach cannot be considered substitutes for more detailed evaluations such as through the Vineland-2 or ABAS-II. If clinicians are routinely using omnibus rating scales as part of comprehensive assessments, then at the very least they will now have the ability to efficiently screen for deficits in adaptive functioning that can be more thoroughly evaluated through means such as those described in this chapter.

the Vineland State Training School, where he was charged with the assessment and rehabilitation of individuals with mental retardation. He noted that such individuals not only lacked

intellectual abilities that were necessary for academic attainment, but they also often appeared to lack day-to-day living skills needed for independent functioning.

2. The American Association on Intellectual and Developmental Disabilities (AAIDD), formerly the AAMR, lists three broad domains (i.e., conceptual skills, social skills, and practical skills) of adaptive behavior that should be evaluated in assessments of mental retardation (see Luckasson et al., 2002). In addition, adaptive functioning is an important construct for case conceptualization and treatment planning for a number of problems (e.g., autism, ADHD).
3. Adaptive behavior has been defined as the performance of the daily activities that are required for social and personal sufficiency.
4. Adaptive behavior scales serve a valuable function for child clinicians in that they pin-point specific deficits that a child has not acquired, which in turn may serve as the focus of treatment efforts.
5. Widaman, Stacy, and Borthwick-Duffy (1993) found clear evidence for the existence of four major adaptive behavior domains: cognitive competence, social competence, social maladaptation, and personal maladaptation. Most present day measures of adaptive behavior include domains consistent with these findings.
6. Parents, teachers, and other caregivers are most often used as informants for adaptive behavior scales. Children may also be used as self-informants for some adaptive behavior scales, although such a strategy has some obvious limitations.
7. Correlations between intelligence and adaptive behavior measures are modest (i.e., .40 to .60), indicating some overlap but also substantial independence.
8. Adaptive behavior scales are commonly administered using a checklist or semi-structured interview technique.
9. The semi-structured interview technique requires a high level of clinical skill. The clinician has to make the interview conversation-like, topical, and empathic, while at the same time collecting the necessary information to allow for accurate rating (scoring) of individual items.
10. The Vineland-2 is probably the most well-known and widely used tool for assessing adaptive behavior for individuals from birth through adulthood. There is an extensive body of research on its predecessor, and a number of changes were made to the present version to facilitate administration, scoring, and interpretation.
11. The Scale of Independent Behavior (SIB-R) in many ways resembles the Vineland. It is a broad-based assessment of adaptive behavior spanning an age range of infancy through adulthood.
12. The ABAS-II is closely aligned with *DSM* and AAIDD criteria. So far, it has demonstrated good reliability and validity.
13. One aspect of adaptive behavior, social competence or social skills, is of such importance that scales that measure this construct exclusively are available.
14. The Social Skills Rating System (SSRS) is a comprehensive measure of social skills which incorporates multiple domains and raters. Teacher, parent, and student forms are provided for measuring a variety of social skills across settings.
15. The assessment of adaptive behavior is increasingly being viewed as a central component of child assessment. Expanded components of adaptive behavior scales are now being included on omnibus rating scales such as the Achenbach and BASC-2.