

Outcome Measure	Vineland Adaptive Behaviour Scales (VABS) – II
Sensitivity to Change	Yes
Population	Paediatrics
Domain	Behavioural Function Neuropsychological Impairment
Type of Measure	Parent-report, teacher-report, clinician interview
ICF-Code/s	d710-d729
Description	<p>The Vineland Adaptive Behavior Scale (VABS) is one of the various assessment tools that can be used to help diagnose and evaluate the special needs of students. The focus of this particular test is the measurement of the adaptive behaviors, including the ability to cope with environmental changes, to learn new everyday skills and to demonstrate independence.</p> <p>Purpose of the test: The primary purpose of the VABS is to assess the social abilities of an individual, whose age ranges from preschool to 18 years old. The results reliably reveal crucial information for diagnosing various disabilities, including autism, Asperger syndrome, mental retardation, and speech impairment. Not only does the VABS aid in diagnosis, but it gives valuable information for developing educational and treatment plans. Since adaptive behaviour is a composite of various dimensions, the test measures five domains: Communication, Daily Living Skills, Socialisation, Motor Skills, and Maladaptive Behaviour.</p> <ol style="list-style-type: none"> 1) The Communication Domain evaluates the receptive, expressive, and written communication skills of the child; 2) The Daily Living Skills Domain measures personal behaviour as well as domestic and community interaction skills; 3) The Socialisation Domain covers play and leisure time, interpersonal relationships, and various coping skills; 4) The Motor Skills Domain measures both gross and fine motor skills. <p>The first four domains are key parts of the Vineland Adaptive Behavior Scale. But the last domain, Maladaptive Behavior, is an optional part of the assessment test. It is used when measuring obvious undesirable behaviors. For children who are younger than 6 years old, a different version of the VABS is used.</p> <p>In whatever setting of work E.g., education, social services, health care, criminal justice, or the military, the VABS helps to perform a variety of tasks:</p> <ol style="list-style-type: none"> 1) Support diagnosis of intellectual and developmental disabilities, autism, and developmental delays 2) Determine eligibility or qualification for special services 3) Plan rehabilitation or intervention programs

	<p>4) Track and report progress</p> <p>With the VABS one can measure adaptive behaviour of individuals with</p> <ol style="list-style-type: none"> 1) Intellectual and Developmental Disabilities 2) Autism spectrum disorders (ASDs) 3) ADHD 4) Post-traumatic brain injury 5) Hearing impairment 6) Dementia/Alzheimer's disease
Properties	<p>Brief Description: Semi-structured interviews and questionnaire that assess personal and social skills</p> <p>Primary Use / Purpose: Especially suitable for assessing those with mental retardation or who have difficulty performing in testing situations</p> <p>Ages: <u>Interview Edition:</u> Birth through 18 years, 11 months (including low-functioning adults). <u>Classroom Edition:</u> Ages 3 through 12 years, 11 months.</p> <p>Administration: This assessment tool is in the form of a questionnaire and it is administered in a semi-structured interview. Recognising the need for flexibility of assessment tools, the updated forms of the Vineland Adaptive Behavior Scale comes in three editions, the Survey Form, the Expanded Form, and the Classroom Edition.</p> <ol style="list-style-type: none"> 1) Survey Interview Form provides a targeted assessment of adaptive behaviour. You administer the survey to a parent or caregiver using a semi-structured interview format. This approach gathers more in depth information with its open-ended questions and promotes rapport between the interviewer and respondent. 2) Parent/Caregiver Rating Form covers the same content as the Survey Interview, but uses a rating scale format. This alternative approach works when time or access is limited. The Parent/Caregiver Rating Form is also a valuable tool for progress monitoring. Use the Survey Interview Form on the initial assessment and track progress by using the Parent/Caregiver Rating Form. 3) Expanded Interview Form provides an in-depth alternative to the Survey Interview form with more items. Particularly suitable for ages 0 to 5 or to help facilitate detailed program planning for low functioning individuals. 4) Teacher Rating Form assesses adaptive behaviour for students in school, preschool, or a structured day care setting. This form uses a questionnaire format completed by the teacher or day care provider. The Teacher Rating Form contains the same Domains as

the Survey Forms but covers content that a teacher would observe in a classroom setting. Targeted and comprehensive, the form lets you evaluate a student's functioning in a single domain or any combination of domains. An adaptive Behaviour Composite score is provided when all four domains are administered.

Completion Time:

20 to 60 minutes: Survey Interview and Parent/Caregiver Rating Forms; 25 to 90 minutes: Expanded Interview Form; 20 minutes: Teacher Rating Form

Forms:

Birth to 90 years old: Survey Interview Form, Expanded Interview Form, and Parent/Caregiver Rating Form; 3:0 to 21:11: Teacher Rating Form

Scores / Interpretation:

Domains and Adaptive Behaviour Composite: Standard scores ($M = 100$, $SD = 15$), percentile ranks, adaptive levels. Subdomain: V-scale score ($M = 15$, $SD = 3$), Adaptive levels, age equivalents. On Survey Interview and Expanded Interview Form only: V-scale scores, maladaptive levels for the optional Maladaptive Behaviour Index.

Scoring Options:

ASSIST™ software or Manual Scoring

Psychometric Properties:

Reliability

Four methods were used to evaluate the reliability of the Vineland-II.

- 1) **Internal Consistency:** A split-half reliability test determined the reliability of scores for two halves of the test using the standardization sample data. The spearman-brown formula was used to determine correlations of the domains and subdomains. Across the age groups, the **Communication** domain correlations ranged from .84 to .93. For the **Daily Living Skills** domain correlations ranged from .86 to .91. The **Socialization** domain ranged from .84 to .93. The **Motor Skills** domain ranged from .77 to .90. The **Maladaptive Behaviour** Index demonstrated internal consistency coefficients ranging from .85 to .91 across age groups. The Adaptive Behavior Composite reliability was determined by the formula from Nunnally (1978); correlations for this composite ranged from .93 to .97 across the age groups.
- 2) **Test-retest Reliability:** The manual notes that in order to determine test stability a sample of 414 respondents from the standardization sample completed two forms of the Vineland-II on separate occasions (between 13 and 34 days from the first administration). Average correlations were found to range between .76 and .92 across domains (with the exception of the Maladaptive Behavior Subscales and Index), subdomains, and ages. The Maladaptive Behavior Subscales and Index have test-retest correlations ranging

from .74 to .98.

- 3) **Inter-interviewer Reliability:** In order to determine if scores remain consistent and do not change drastically depending on interviewer, 148 respondents were interviewed on two different occasions by two different interviewers. Average correlations ranged between .70 to .76 across domains/subdomains (with the exception of the Maladaptive Behavior Subscales and Index) and ages. The Maladaptive Behavior Subscales and Index demonstrate correlations ranging from .59 to the mid .80s across age groups.
- 4) **Interrater Reliability:** Interrater reliability measures the degree to which scores from different respondents about the same individual are consistent. Data from 152 individuals were used to determine interrater reliability. Average correlations ranged between .71 to .81 across domains/subdomains (with the exception of the Maladaptive Behavior Subscales and Index) and ages. The Maladaptive Behaviors

Validity

- 1) **Test Content:** The Vineland-II was designed to measure 4 major aspects of adaptive functioning: Communication, Daily Living Skills, Socialization and Motor Skills. Each of the domains has subdomains each with target behaviors which are deemed important to adaptive functioning. The content of the Vineland-II is supported from several important sources including American Association.
- 2) **Group Differences:** The test developers evaluated measurement bias at the item and scale levels using differential item functioning (DIF). Difference among sex, socioeconomic status, ethnic and group membership were found to be small.
- 3) **Test Structure:** The intercorrelations of subdomain, domain, and Adaptive Behavior Composite scores were analyzed. The authors indicate that “generally correlations between subdomains are moderate in size, and are higher at younger ages than older ages. Subdomain correlations within a domain tend to be larger than those between domains. Overall, however, the amount of subdomains clustering is modest, implying that there are functional relationships among adaptive behaviors in different subdomains” (Sparrow, Cicchetti, & Balla, 2005, p.132). The manual lists results of confirmatory factor analyses. Overall, the results indicate that the data fit the proposed model well.
- 4) **Clinical Groups:** Another important facet of this adaptive functioning measure is to demonstrate how the information provided by the measure assists in diagnostic decisions. It would be expected that certain groups would present with distinctive score profiles. The clinical groups included: Cognitively delayed, Autism, Attention-Deficit/Hyperactivity Disorder, Emotional/Behavioural Disturbance, Learning Disability and Visual and Hearing Impairments. It was demonstrated that generally those with cognitively delayed have a mean adaptive behavior composite score

	<p>two standard deviations below the mean of the nonclinical group.</p> <p>5) Relationship to other measures: Concurrent validity is determined by demonstrating the relationship between the scale and other scales that measure the same construct. The Vineland-II was compared to the previous version the Vineland Adaptive Behavior Scales. Correlations between the two measures ranged between .69 to .96 across domain/subdomains and across ages. The Vineland-II scores were also compared to scores on the Adaptive Behavior Assessment System-Second Edition (ABAS-II) for 197 individuals. The overall Adaptive Behavior Composite on the Vineland-II and the General Adaptive Composite from the ABAS-II correlated at .70. Using a sample of 236 children and adolescents, the Vineland-II scores were also compared to those produced by the Behavior Assessment System for Children, Second Edition (BASC-2) parent rating form. It should be noted that the Vineland-II measures mostly adaptive behavior while the BASC-2 measures predominately maladaptive behavior with a section devoted to adaptive skills. The most similar subscales were correlated and results indicated a range of .34 to .74 across the age range. Maladaptive scales on the Vineland correlated with the Behavior Symptoms Index on the BASC-2 at .80 for the Parent Rating Form - Child and .69 the Parent Rating Form - Adolescent.</p> <p>Discriminant validity demonstrates that a measure is not related to tools that purport to measure different constructs. The relationship between the Vineland-II and the Wechsler Intelligence Scales for Children-Third Edition (WISC-III) and the Wechsler Adult Intelligence Scale-Third Edition (WAIS-III) was investigated on a group 28 children and 83 adults. The results for the relationship between the WISC-III and the Vineland-II indicate a near zero correlation. Similarly the relationship between the Vineland-II</p> <p>Standardisation: Description: National sample stratified for age, sex, region, parental education, community size and race. Date: 1981–1982 Size: Total sample size 3,000: 200 per year group through 11 years, 200 in each of three age groups for ages 12 through 18 years. Based on U.S. census data in the year: 1980</p>
Advantages	<ol style="list-style-type: none"> 1) Addresses today's special needs populations, such as individuals with intellectual and developmental disabilities, autism spectrum disorder, and ADHD. 2) Updated with new norms, expanded age range, and improved items. 3) Useful for diagnosis, qualification for special programs, progress reporting, program and treatment planning, and research. 4) Offers both respected semi-structured interview format which focuses discussion and gathers in-depth information, and also offers convenient rating forms. 5) Because the instrument consists of forms requiring ratings from the observations of teachers and caregivers, and because it focusses on

	observable behaviours, it is suitable for the assessment of individuals from diverse cultural backgrounds. Special attention has been given to individuals whose first language is Spanish, with the provision of a Spanish Record Booklet for teachers in the Classroom Edition, and Parent Report Forms for the Survey, Expanded and Classroom versions.
Disadvantages	Due to the nature of its administration, in which adult observers, such as the parent and the teacher, answer the items, this assessment test is used to assess the adaptive behaviours only of individuals who are 18 years old and younger. In cases of individuals who are older and whose social functioning abilities have already been identified as below developmental expectations, the VABS can be utilised.
Additional Information	The Vineland-II manual suggests that the test examiners and scorers have graduate training in test administration and interpretation. A rater (E.g., teacher, parent, and caregiver) should be an adult who is familiar with the everyday activities and behavior of the individual being assessed. The rater should also have significant contact with the individual over an extended period of time. A caregiver could be a parent, guardian, grand parent, nurse, social worker or other individual who is close to the person being assessed.
Reviewers	Vicki Anderson Cathy Catroppa

References

Nunnally, J. C. (1978). Psychometric theory (2nd ed.). New York: McGraw-Hill. Sparrow, S. S., Cicchetti, D. V., & Balla, D. A. (2005).

Vineland-II Adaptive Behavior Scales: Survey Forms Manual. Circle Pines, MN: AGS Publishing.