

Early Childhood Measurement and Evaluation Tool Review

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Peabody Picture Vocabulary Test, Fourth Edition (PPVT-4)

Measurement Areas:

The Peabody Picture Vocabulary Test - 4th Edition (PPVT-4) is designed to measure the **receptive (hearing) vocabulary** of English-speaking adults and children. While no specific content areas are described in the manual, the authors declare that the test is designed to cover a broad range of English-language content.

The PPVT-4 is promoted as a tool for assessing receptive vocabulary performance for **ages 2 years 6 months to 90 (or more) years**.

Purpose:

The PPVT-4 is a norm-referenced language assessment tool that can be used to:

- evaluate English-language competence;
- measure language learning in second-language speakers;
- determine the appropriate level and content for educational instruction;
- identify language deficits due to injury or disease.

Length and Structure:

The PPVT-4 is designed to assess individual children and adults. Administration should take approximately 10-15 minutes for most ages and abilities.

The tool consists of 228 items equally distributed across 19 item-sets. Each item-set contains 12 items of increasing difficulty. The test is separated into two forms, “Form A” and “Form B”. Form A & B have similar content and design but individually they also pose unique items and can be useful for language progression monitoring or longitudinal research.

Materials:

The publisher classifies the PPVT-4 as a “Level 2” qualification, targeted to institutions consisting of psychologists, speech-language pathologists, early childhood teachers, and special education teachers with experience and training in standardized testing. The publisher requires the purchaser to be one of the following categories: (a) trained and certified by a recognized institution in a relevant area of assessment with a minimum Bachelor’s degree, or (b) a member of

the American Speech-Language-Hearing Association, American Psychological Association (APA), National Association for School Psychologists (NASP), or (c) graduate students or teachers whose order is made on institutional letterhead with signed approval from an administrator.

Since the PPVT-4 was designed as a complementary tool to the Expressive Vocabulary Test, Second Edition (EVT-2), institutions can purchase a combined kit Forms A and B and ASSIST software for USD \$764. However, the PPVT-4 complete hand-scoring kit (A and B) and ASSIST software is also available for standalone purchase through the publisher for USD \$419. The complete kit includes the easel, manual, 25 record forms for Form A and B, carrying bag, and ASSIST software. Scoring software (Mac and Windows compatible) is also available through the publisher for USD \$249.

Accessibility:

The PPVT-4 is available in the English language only. The manual also contains suggestions for score interpretation when testing children that are deaf or hard of hearing.

Administration, Scoring, and Interpretation:

While the PPVT-4 manual contains no specific suggestions for examiner, scorer, or interpreter qualifications, it can be assumed that a “Level 2” qualification is reasonable for interpreters. It is likely that paraprofessionals can administer the test with training and qualified supervision. The test is moderately easy to administer, easy to score, and moderately difficult to interpret based on the interpretation guide in the manual. Raw scores are tabulated and converted into standard scores, percentiles, normal curve equivalents, stanines, approximate age and grade equivalents, and “growth scale values” (GSVs).

Subscales:

The PPVT-4 is a single-scale test that is intended to measure English “vocabulary knowledge” in a person.

Documentation:

The manual, which is included in the PPVT-4 kit, contains specific procedures for administration, scoring, and a comprehensive section on interpretation. The manual also includes extensive sections describing test standardization, norm development, and various forms of validity and reliability.

Norming Sample:

The PPVT-4 was co-normed with the Expressive Vocabulary Test, Second Edition (EVT-2). The normative sample included 3,540 individuals (approximately 50% Female, 50% Male) between 2 years 6 months and 81 (or more) years of age. Each 6-month age group was stratified to approximate the U.S. population “with respect to sex, race/ethnicity, SES, geographic region, and special-education status.” The examiner’s manual discusses the sample’s demographic information in detail.

As the PPVT-4 is the newest version of the Peabody Picture Vocabulary Test, academic reviews or studies of the test are not yet available. As such, score interpretation should be completed carefully, especially if used outside of American populations.

Reliability:

The PPVT-4 manual discusses several kinds of reliability measures:

Test-retest Reliability: A sub-sample (340 individuals) of the normative sample was retested with the PPVT-4 four weeks after the first administration. The test-retest reliabilities were calculated, and yielded correlations between .92 and .96 (very high).

Internal Consistency: A split-half reliability for each form of the test (A and B) was completed for the entire normative sample, yielding .94 and .95 on each form. The authors note that the test is reliable across all the age groups that were measured.

Alternate-Form Reliability: Since the PPVT-4 uses two forms (A and B), it is necessary to compare how reliably individuals score on both forms of the test. According to the manual, a sub-sample (508 individuals) of the normative sample was given both forms of the test. The reliability coefficients were calculated between .87 and .93, which are considered “very reliable.”

Validity:

A fairly extensive discussion of validity is contained in the PPVT-4 manual. According to the authors, the PPVT-4 was designed to address a wide range of vocabulary, based on vocabulary sources such as the *Merriam-Webster’s Collegiate Dictionary*, and *Webster’s New Collegiate Dictionary*. The content areas were developed with American English standards in mind; therefore suggesting that the PPVT-4 demonstrates reasonable content validity for American populations.

Construct and Convergent Validity: The manual discusses four validation studies that were designed to assess the PPVT-4’s similarity to other kinds of vocabulary tests.

The first study compares the PPVT-4 to the Expressive Vocabulary Test, Second Edition (EVT-2); the correlations between the scores on each test were high ($r = .80$ to $.84$) for all age ranges.

The second study compared scores on the PPVT-4 with measures of oral language. The Comprehensive Assessment of Spoken Language (CASL) and Clinical Evaluation of Language Fundamentals Fourth Edition (CELF-4) tests were compared to the PPVT-4, yielding correlation coefficients between .37 and .79 (poor to good) dependent upon age group.

The third study compared PPVT-4 scores to the Group Reading Assessment and Diagnostic Evaluation (GRADE) test, yielding an average correlation of .63 (moderate).

The final study, compared the PPVT-4 scores to scores on the previous edition of the test (PPVT-III), yielding a strong relationship between the tests (.84) as would be expected.

Scoring on the PPVT-4 was also examined for 12 different “special populations,” such as people with speech impairment, language delay, hearing impairment, cognitive delay, giftedness, or attention-deficit/hyperactivity disorder. The scores for each of these groups varied widely, and the authors suggest that the PPVT-4 is a difficult test for those with hearing impairments due to its auditory-receptive nature.

Test specificity and sensitivity are not discussed in the PPVT-4 manual. It should be noted that since the PPVT-4 is a newly revised test, no outside academic reviews or analyses of this scale are available and this review is based on information in the manual.

Publication Information:

The Peabody Picture Vocabulary Test, Fourth Edition, was developed by Lloyd M. Dunn and Douglas M. Dunn. This review is based on the 4th edition published in 2007 by Pearson Assessments.

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