

ential theories of human intellectual abilities and their assessment. The procedures used to support the psychometric qualities of the MP were appropriate but ample demographic information of the samples used in the various standardization samples was lacking; hence, meaningful comparisons cannot be made. Internal consistency reliability was demonstrated by alpha values in the range of the .80s and .90s. Despite substantial correlations between subtests and the total score on the MP, no reasonable conclusions about test-retest reliability can be made without information regarding the time frame between test administrations. Criterion-related validity was demonstrated by significant correlations between MP subtests and several well-accepted standardized tests measuring the criteria of interest.

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Motor-Free Visual Perception Test, Third Edition.

Purpose: Designed to assess an individual's "visual perceptual ability without any motor involvement needed to make a response."

Population: Ages 4–94.

Publication Dates: 1972–2003.

Acronym: MVPT-3.

Score: Total score only.

Administration: Individual.

Price Data, 2004: \$120 per test kit including manual (2003, 95 pages), test plates, and 25 recording forms in portfolio; \$30 per manual; \$65 per set of test plates; \$25 per 25 recording forms.

Time: (20–30) minutes.

Comments: Revision includes updated norms.

Authors: Ronald P. Colarusso and Donald D. Hammill.

Publisher: Academic Therapy Publications.

Cross References: For reviews by Nancy B. Bologna and Theresa Volpe-Johnstone of an earlier edition, see 14:241; see also T5:1725 (8 references) and T4:1677 (6 references); for a review by Carl L. Rosen of an earlier edition and an excerpted review by Alan Krichev, see 8:883 (9 references).

Review of the Motor-Free Visual Perception Test, Third Edition by GARY L. CANIVEZ, Professor of Psychology, Eastern Illinois University, Charleston, IL:

DESCRIPTION. The Motor-Free Visual Perception Test, Third Edition (MVPT-3) is an extension and new standardization of the MVPT-R. To increase the utility of the MVPT with adults, it was

necessary to add items of increasing difficulty to better assess visual perception in adulthood. It was also necessary to expand norms to the adult population and to obtain a nationally representative standardization sample, characteristics lacking in earlier editions. An additional "Response Time Index" was developed for the MVPT-3 so that speed of visual perceptual skills may also be assessed.

The MVPT-3 purports to measure visual perception skills as defined by Chalfant and Scheffelin (1969): spatial relationships, visual discrimination, figure-ground, visual closure, and visual memory. The authors of the MVPT-3 acknowledge the interaction of visual perception and cognition in the responses to item content of the MVPT-3, suggesting that "perception, as used in the real world, most often involves a combination of perceptual skills, so the overlapping of constructs in MVPT-3 tasks is to be expected" (manual, p. 14).

DEVELOPMENT. The MVPT-3 was expanded to better assess visual perception among adults. An additional 31 items were created and following item analysis, 29 items were selected (4 sample items, 25 test items), added to the original 40 MVPT-R items, and included in the standardized version. The MVPT-3 uses black-and-white line drawings in stimuli and response choices where the individual selects from among four choices the answer matching the stimulus. As such, no physical manipulation is required in making responses rendering the MVPT-3 "motor free."

TECHNICAL. The standardization version of the MVPT-3 was administered to 2,005 individuals, 1,856 of whom comprised the normative sample. The remaining individuals were part of validity samples. Standardization data were collected in 118 cities from 34 states from across the continental United States and Alaska by 166 examiners who were mostly occupational therapists. Examiners were asked to randomly select students from regular classrooms or non-head-injured adults from hospitals or institutions where the examiner worked. No details were provided on how random selection was done. Various disability groups were also sampled and data used for validity studies. Overall, stratification variables of geographic region, race/ethnicity, gender, residence (urban/rural), and disability fairly closely matched the U.S. population based on the 2000 Census; however, stratification by age, race/ethnicity, and geographic region resulted in some significant over- and

underrepresentation of some groups, which was reportedly statistically corrected using weighting procedures. For example, there were no Asian American or Black/African American individuals in the age range of 55–69 and there was only one Asian American individual and there were no Black/African American individuals between 70–84+. Details on weighting procedures were not provided.

Raw scores on the MVPT-3 are transformed to standard scores ($M = 100$, $SD = 15$) and percentile ranks. Standard score confidence intervals (85% and 90%) based on the standard errors of measurement within age groups are also provided. Although the MVPT-3 includes items from five different areas, only an overall total score is computed as with earlier editions. Although age equivalent scores are provided, problems with this metric (Sattler, 2001), including correct interpretation of age equivalent scores, suggest that it, like grade equivalent scores from other tests, should not be used.

Reliability of MVPT-3 scores was assessed with internal consistency and test-retest stability estimates. Internal consistency (r_{alpha}) estimates for the standardization sample ranged from .69 to .87 ($Mdn r_{\text{alpha}} = .80$) for ages 4–10 and ranged from .86 to .90 ($Mdn r_{\text{alpha}} = .89$) for ages 11–84+. Based on these internal consistency estimates, the MVPT-3 should only be used for group decision making or screening for 4–10-year-olds (Salvia & Ysseldyke, 1991). The short-term ($M = 34$ days) test-retest stability estimate for an unacceptably small sample ($n = 28$) of 4–10-year-olds was .82 (uncorrected) and showed a moderate gain of 8.44 points (Glass's $\delta = .56$) suggesting practice effects. The short-term ($M = 34$ days) test-retest stability estimate for the 11–84+-year-old group ($n = 75$) was .72 (uncorrected) and showed smaller practice effects with a gain of 3.87 points (Glass's $\delta = .26$). Practice effects were similar to those found with nonverbal/perceptual ability measures on tests such as the WISC-III and WISC-IV (Wechsler, 1991, 2003). The test-retest interval range was not indicated in the manual for either sample so differences between the younger and older age groups in practice effect may be the result of differences in the retest intervals between the two groups. Demographic data on these two samples are collapsed in the MVPT-3 manual and illustrate that mostly college-educated Whites comprised the sample but this obviously pertains to the older group. Response Time Index scores were

also examined for reliability for 87 individuals in a test-retest stability study. The retest interval was between 5 and 125 days ($M = 35.0$, $SD = 38.9$) and the stability coefficient equaled .91. Additional investigation and replication of the reliability of MVPT-3 scores is necessary.

Validity of MVPT-3 scores was reported in content, criterion-related, and construct validity domains. Content validity was reported via item discrimination and item bias studies as well as content “developed to represent the areas of visual perception that have been identified by previous research and that occupational therapists and other users of the test have found to be the most discriminating” (manual, p. 56). There was no mention of content analysis by experts in measurement or in visual perception skills or what criteria were used to determine how “discriminating” the areas were. Criterion-related validity investigations with other tests of visual perception are presented in the MVPT-3 manual but these studies pertain to the first edition of the MVPT and not the MVPT-3. Apparently, there are no current criterion-related studies supporting the MVPT-3. Construct validity of MVPT-3 scores was provided by examining scores across chronological age and illustrated the theoretical developmental change in visual perception skills from early childhood through old age. As such, the MVPT-3 showed increases in scores from age 4 through age 39 and then slow, steady decline into late adulthood. This also parallels the development of fluid, visual, and perceptual reasoning abilities in the cognitive domain (Kaufman & Lichtenberger, 2002). Construct validity was also examined with comparisons to cognitive ability and academic achievement where it was hypothesized that low correlations would be obtained. Given the authors' hypothesis that correlations between the MVPT-3 and tests of cognitive ability and achievement would be low, this would be indicative of divergent or discriminant validity. Of the three small sample studies reported in the manual, only one was for the MVPT-3 and compared scores with the Wechsler Intelligence Scale for Children—Third Edition (Wechsler, 1991). The sample size was unacceptably small for calculation of correlation coefficients, but correlations were calculated and ranged from .22 to .37. These were not statistically significant. The final method of construct validity was the distinct group difference method by com-

paring various exceptional (disabled) groups' performance on the MVPT-3. Three different samples were obtained and included 38 "Developmentally Delayed," 48 "Head Injured," and 51 "Learning Disabled" students. How individuals were classified into these groups is not clear but investigation of demographic data provided in the MVPT-3 manual suggests some irregularities. For example, among the sample of "Learning Disabled" the age range was 5–62, and 29 individuals (56.9%) reportedly were in the 4+ Years College group. Thus, this sample of "Learning Disabled" individuals may well differ from those typically encountered by assessment professionals in schools. A similar phenomenon was observed with the sample of "Developmentally Disabled" where the age range was 4–52, and 22 (57.9%) were reportedly in the 4+ Years College group. All three "exceptional" groups demonstrated MVPT-3 scores that were statistically significantly lower than the population mean. Only the "Developmentally Delayed" group performed more than 2 *SD* below the mean. Other exceptional distinct groups comparisons reported in the MVPT-3 manual pertained to earlier editions of the MVPT and not the current version. Other than a comparison of U.S. and Canadian examinees, no other "validity" studies have been reported for the Response Time Index. "Validity" of MVPT-3 Response Time Index scores was assessed by comparing the U.S. sample to a Canadian sample and found no significant differences between the two groups. No other method of validity was presented so the meaning and interpretability of this index is unclear. Based on the validity studies reported in the MVPT-3 manual, it is obvious that additional investigation is necessary before judgment on the adequacy of the MVPT-3 or its interpretation can be rendered.

COMMENTARY. The MVPT-3 remains easy to administer and score. The instructions seem clear and test items are clearly presented for the examinee. Reliability estimates suggest the MVPT-3 is adequate for individual decision making for those 11 and older but inadequate for individual decision making below age 11. Interpretation of the MVPT-3 is limited due to the limitations in validity studies presented. What is most disappointing is the general lack of empirical studies supporting the MVPT-3 score reliability and validity. Many of the studies reported in the MVPT-3 manual pertain to earlier editions of the

MVPT and these studies are fairly limited in scope. Although distinct group differences are presented as evidence of construct validity, this is a necessary but not sufficient condition for determining the diagnostic utility of a test. Studies examining other types of construct validity such as discriminative validity (diagnostic efficiency/utility), incremental validity, and factorial validity would be more useful determinants of construct validity than the distinct group differences presented in the manual.

Norm tables were divided into 3-month intervals for ages 4–10, 6-month intervals for ages 11–15, 1-year intervals for ages 16–19, 5-year intervals for ages 20–49, and 2-year intervals for ages 50–93. Examination of sample sizes within age groupings of the standardization sample suggests that although the proportions of individuals at younger ages (4–10) may be adequate for estimating the population, there appear to be too few individuals to adequately divide the 50–93 age group into 2-year intervals. Specific details as to the exact number of individuals within each 2-year interval is not provided but simple calculation suggests an average of less than 9 individuals per age group; which seems insufficient for providing a norm-based score.

The MVPT-3, like earlier editions, was constructed to measure visual perceptual abilities; however, item types like visual short-term memory and spatial orientation seem to require "cognitive" skills in addition to "perceptual" skills. This conundrum is acknowledged by the authors in that "real world" tasks require both perception and cognition, so the overlap in constructs (tasks) in the MVPT-3 is expected. However, if one is constructing a test to measure "perceptual" skills then tasks should minimize the influence of "cognitive" skills. It appears that the perception and cognition in visual short-term memory and spatial orientation tasks may be too confounded to be good measures of "perceptual" skills, the goal of this measure. In fact, tasks of short-term (working) memory and spatial orientation are typically included in measures of cognitive ability (Horn & Noll, 1997; Kaufman & Lichtenberger, 2002; Sattler, 2001). Clarification of just what these tasks measure (perceptual vs. cognitive) should be the topic of validity research.

SUMMARY. The MVPT-3 is an easy-to-administer test of visual perception and cognitive

skills with a fairly nationally representative standardization sample. Limited reliability and validity data are presented and further research is necessary, particularly in validity of MVPT-3 scores. Construct validity studies with larger samples and utilizing methods such as discriminative validity, incremental validity, and factorial validity would be much more helpful than the distinct group differences in judging the utility of this test.

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Review of the Motor-Free Visual Perception Test, Third Edition by JOHN D. KING, Professor Emeritus, University of Texas at Austin, Licensed Psychologist, National Health Service Provider, Licensed Specialist in School Psychology, Austin, TX:

DESCRIPTION. The Motor-Free Visual Perception Test, Third Edition (MVPT-3) is a 65-item test that is designed to assess overall visual perceptual ability without requiring the use of motor responses. According to the manual, the MVPT-3 is an alternative to commonly used measures of visual perception that require examinees to draw or copy figures. Such instruments assess motor problems or visual-motor integration rather than visual perception. The MVPT-3 was designed for use with individuals ranging in age from 4 to 95 years of age and above. The test is untimed and individually administered, and all items are multiple choice. Visual perceptual tasks included in the MVPT-3 are spatial relations, visual discrimination, figure-ground, visual closure, and visual memory. The test provides a single score representing general visual perceptual abilities. Test authors strongly caution that the MVPT-3 is intended only for use as a general screening of visual perceptual skills and that it is not designed to produce subtest scores or to reveal specific strengths or weaknesses on any of the visual perception tasks.

Clinicians such as school psychologists, occupational therapists, teachers, or other professionals can administer the MVPT-3. The manual

indicates the test can also be administered by nonclinical staff if they are trained and supervised by “a professional familiar with the principles of educational and psychological assessment and interpretation” (p. 21). Administration takes approximately 20 to 30 minutes. Directions are presented in the manual. They are clear and easy to follow. Examinees are presented with a series of test plates and asked to choose the correct answers from four alternatives for each item. A spiral-bound easel is used to present the test plates. For children under 11 years of age, Items 1 through 40 are administered. Items 14 through 65 are administered to children over 11 years and adults. The examinee may indicate the answer by saying the letter corresponding to the answer choice or by pointing to the choice.

According to the manual, scoring takes approximately 10 minutes. A single raw score is calculated and used to obtain derived scores. Three main types of derived scores are available including standard scores, percentile ranks, and age equivalents. Procedures for obtaining derived scores are clearly described in the manual and examples are provided. Norm tables and information on interpretation of scores are included in the manual as well.

DEVELOPMENT. This test is the third version of the MVPT, which was originally developed in 1972. Earlier editions were normed only on children. Unlike previous versions, norms for the MVPT-3 were based on a nationally representative sample of the population and were expanded to include individuals from 4 to 95 years of age and up. All 40 items of the MVPT-R were retained in this edition, and 31 new items were added. New items were designed to be more difficult in order to allow for assessment of older children, adolescents, and adults.

The manual (Colarusso & Hammill, 2003) includes a thorough description of procedures used to evaluate new items for the development of the MVPT-3; however, there is no information about the development of original test items. For this edition, new test plates were developed and then administered to 136 young adults to determine how difficult items were and to get feedback from examinees. Based on findings from that preliminary tryout, new items were created that were similar to preliminary items with an item difficulty in the .20 to .80 range. A normative study using the 40 original items and the 31 new items was

then conducted. Item analysis was used in order to determine which new items would be retained. Test authors also conducted item bias studies in order to determine whether or not the MVPT-3 is fair to use with all segments of the general population. Results indicated no significant differences between groups based on demographic characteristics.

TECHNICAL. Procedures for collection of standardization data and characteristics of the standardization sample are thoroughly described in the manual. A total of 1,856 participants were selected for inclusion in the norm group in order to meet a variety of demographic criteria. Testing was conducted in 118 cities in 34 states across the United States. Testing took place in public, private, and parochial schools and in private practice settings. A detailed description of sample characteristics is included in the manual, and test authors provide evidence that the overall sample compares to the characteristics of the U.S. population based on information from the 2000 U.S. Census.

Evidence to support the reliability of scores from the MVPT-3 is provided. In order to estimate internal consistency, Cronbach's alpha was computed for each of the age groups in the standardization sample. For children 4 through 10 years of age, estimates ranged from .69 to .87. For participants who were 11 years of age or older, estimates ranged from .86 to .90. For ages 5 through 10, reliability coefficients approach or exceeded .80, and for ages 11 and up, coefficients were at or near .90. Based on that information, test authors concluded that the MVPT-3 "can be used with confidence for ages 5 and above" (manual, p. 52) but that it "is best used as a screening instrument" (manual, p. 52) for children who are 4 years of age. To provide evidence of test-retest reliability, 103 participants from the standardization sample were retested by the same examiner with an average time of 34 days between tests. For children ages 4 to 10 years, the corrected test-retest correlation was .87, and for individuals 11 years of age and up, a corrected test-retest correlation of .92 was found. Based on those findings, it can be concluded that the test scores are adequately stable over time.

Evidence to support the validity of the MVPT-3 was presented as well. The authors suggest that evidence of content validity can be found in the methods used to develop the test. For example, a test format was selected that does not

require the use of motor skills, and the content was developed based on previous research and information from experts in the area of visual perception. In addition, test items "were required to meet rigorous criteria of item discrimination and item bias studies" (manual, p. 56). Criterion-related validity is evidenced by findings of moderate to high correlations of the MPVT with other tests that purport to measure the same abilities; however, the original version the test, not the MVPT-3, was used for those studies. Evidence of construct validity is provided, but most of the studies reported used previous versions of the test. In reported studies, low correlations were found between the MVPT and measures of cognitive ability and academic achievement. Studies also found that, as expected, individuals with head injuries or academic difficulties performed poorly compared to the normal population. Other validity studies suggest that the MVPT can be used with individuals who have motor difficulties, stroke patients, patients with ALS, and those with schizophrenia. Although evidence that lends support to the validity of scores from this test is presented, many of the findings reported were based on older versions of the test. Correlations between the older versions of the MVPT and the MVPT-3 were not reported, and one would expect that due to the addition of new items, the MVPT-3 is much different than its earlier versions. As a result, it is unclear how the validity findings reported in the manual pertain to the MVPT-3. The authors acknowledge that evidence is limited and encourage further study.

COMMENTARY. The MVPT-3 is an improvement over earlier versions due to its expanded age range and the use of a nationally representative norm sample. There is evidence that it measures the construct of visual perception, as it was developed based on previous research and expert opinion in the area. It also appears that the test can be used reliably for individuals 5 years of age and up with a wide variety of demographic characteristics. The MVPT-3 has been used in a variety of settings to assess a number of problems, and because of its design, it may be particularly useful for individuals with motor impairments. A limitation of the test is that its focus is very limited. It is designed only to screen for potential visual perception problems and gives no information about the particular deficit or the source of

the problem. An additional concern is the fact that most validity studies are based on older versions of the test, and it is unclear how the older versions relate to the MVPT-3.

SUMMARY. The MVPT-3 is quick and easy to administer and score, and the directions are clearly explained in the manual. The usefulness of the test was improved by the changes made to this version. Although its focus is very limited, it appears to be a useful tool for the assessment of visual perception.

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Multiphasic Sex Inventory II.

Purpose: "To assess a wide range of psychosexual characteristics of the sexual offender."

Population: Adult males, ages 18–84.

Publication Dates: 1984–2003.

Acronym: MSI II.

Scores: 42 scales and indices: Suicide, Sexual Ethics, Sex Knowledge and Beliefs, Repeated Items, Infrequency, Social Sexual Desirability, Sexual Obsessions, Dissimulation, Lie, Molester Comparison, Rapist Comparison, Child Molester, Rape, Exhibitionism, Voyeurism, Sex Harassment, Net Sex, Obscene Call, Pornography, Transvestism, Fetishism & NOS Paraphilias, Bondage Discipline, Sexual Sadism, Masochism, Physiologic Dysfunction, Desire, Premature Ejaculation, Body Image, Social Sexual Inadequacies, Emotional Neediness, Cognitive Distortion and Immaturity, Antisocial Behavior, Conduct Disorder, Sociopathy, Domestic Violence, Substance Abuse, Denial, Justification, Scheming, Superoptimism, Gender Identity, Treatment Attitudes.

Administration: Group.

Price Data: Available from publisher.

Foreign Language Edition: Spanish language version available.

Time: (45–120) minutes.

Comments: May be administered via audio cassette or paper-pencil; computer scoring done by publisher.

Authors: H. R. Nichols and Ilene Molinder.

Publisher: Nichols & Molinder Assessments.

Cross References: See T5:1744 (8 references) and T4:1689 (2 references).

Review of the Multiphasic Sex Inventory II by PAUL A. ARBISI, Staff Clinical Psychologist, Minneapolis VA Medical Center, and Associate Professor, Department of Psychiatry, University of Minnesota, Minneapolis, MN:

DESCRIPTION. The Multiphasic Sex Inventory II (MSI II) is a 560-item self-report questionnaire that was designed to identify a wide

range of psychosexual characteristics in a sexual offender population. All items are keyed true or false. The authors claim that the 40 resultant scales and indices are "theory driven" and provide a means to assist the clinician in evaluating and treating sexual offenders. Candidate items designed to assess test-taking behavior and a wide range of attitudes, behaviors, drug and alcohol problems, and attitudes toward sex were identified, and through a series of poorly described and idiosyncratic steps, some items were modified and others deleted. From this pool of items, indices and scales were derived using several different procedures including rational, empirical, "summated," and "compound scaling," as well as a factor analytic strategy. This process resulted in the derivation of 13 indices through rational item selection (Sex Knowledge/Beliefs, Obscene Call, Pornography, Fetishism, Bondage/Discipline, Sado-Masochism, Physiological Dysfunction, Impotence, Premature Ejaculation, Gender Identity, Body Image, Substance Abuse, and Treatment Attitude. Two scales, Molester Comparison and Rapist Comparison, were constructed through a criterion-oriented procedure by contrasting item responses between a "normal" control group and either a child molester or a rapist group. Seventeen scales (Social Sexual Desirability, Sex Obsessions, Lie, Child Molester, Rape, Exhibitionism, Voyeurism, Sexual Inadequacies, Hypercritical Sexuality, Sexual Repression, Emotional Neediness, Cognitive Distortion/Immaturity, Conduct Disorder, Sociopathy, Scheming, Superoptimism, Manipulation Awareness) were developed through a summated scaling method in which items were selected based on the average correlation among items, although not all scales achieved the specified level across all developmental samples. The Domestic Violence and Dissimulation scales were formed using a combination of rational, content, and summation approaches. The Denial and Justification scales were formed using "coaxial items" where a "bivariate scaling method" (handbook, p. 31) was developed by the authors to better assess the excuses and justifications used by the sex offender. The items comprising these scales are purported to be composed of two axes of information, a general component and a specific indication (e.g., "My sex offense happened because I was sexually molested as a child"). Finally,