Glossary of Terms

The following terms have been taken directly from the sources listed below the glossary. The reference for each term has been indicated with a number following the definition.

Types of Scores

Age Equivalent The chronological age in a defined population for which a given

score is the median (middle) score. An examinee assigned an age equivalent of 7-5 indicates that he or she received the same score (raw score, scale score, standard score, etc.) as the average child

who is seven years, five months old. (6)

Composite Score A score that is derived by combining one or more scores

according to a specified formula. This is typically accomplished by averaging or summing the contributing scores which are often

weighted according to their relative importance. (6)

Derived Score A score to which raw scores are converted by numerical

transformation (e.g., conversion of raw scores to standard scores,

percentile ranks, grade equivalents, stanines, etc.) (6)

Grade Equivalent A norm-referenced score; the grade and month of the school year

for which a given score is the actual or estimated average. A grade equivalent is based on a 10-month school year. If a student scores at the average of all fifth graders tested in the first month of the school year, he/she would obtain a G.E. of 5.1. There are some problems with the use of grade equivalents, and caution should be used when interpreting this type of score. For example, if a student at the end of fourth grade obtains a G.E. of 8.8 on a math subtest, this does *not* mean that the child can do eighthgrade work. Rather, it means that the child obtained the same score as an average student in the eighth month of the eighth

grade, had the eighth-grade student taken the fourth-grade test. (3)

Percentile

A point on the norms distribution below which a certain percentage of the scores fall. For example, if 70% of the scores fall below a raw score of 56, then the score of 56 is at the 70th percentile. The term "local percentile" indicates that the norm

group is obtained locally. The term "national percentile" indicates

that the norm group represents a national group. (3)

Percentile Rank The percentage of scores in a specified distribution that fall at or

below the point of a given score. Percentile Ranks range in value

from 1 to 99, and indicate the status or relative standing of an

individual within a specified group (e.g., norms group), by indicating the percent of individuals in that group who obtained lower scores. For example, if a student earned a 72nd Percentile Rank in Language, this would mean he or she scored better than 72 percent of the students in a particular norm group who were administered that same test of Language. This also implies that the only 28 percent (100 - 72) of the norm group scored the same or higher than this student. (6)

Raw Score

A person's observed score on a test, i.e., the number correct. While raw scores do have some usefulness, they should *not* be used to make comparisons between performance on different tests, unless other information about the characteristics of the tests is known. For example, if a student answered 24 items correctly on a reading test, and 40 items correctly on a mathematics test, we should not assume that he or she did better on the mathematics test than on the reading measure. Perhaps the reading test consisted of 35 items and the arithmetic test consisted of 80 items. (3)

Standard Score:

Raw scores that have been transformed to have a given mean and standard deviation. They express how far an examinee's score lies from the mean of the distribution in terms of the standard deviation. For example, the WISC IV has a mean standard score of 100, with each standard deviation being 15 points. A standard score of 85 would be one standard deviation below the mean. (4)

Stanines

A type of norm-referenced score, in which the only possible scores are the whole numbers from 1 to 9. The score scale is defined so that each score level will include a specified percentage of the norm group: small percentages for the highest and lowest levels; large percentages for the middle levels. (1)

Measurement

Confidence Interval A band or range of scores that has a high probability of including the examinee's true score. The stand error of measurement provides the basis for forming the confidence interval. A 95 percent confidence interval can be thought of as the range in which a person's true score will be found 95 percent of the time. (4)

Mean

The mathematical average of all the scores in a set of scores. To obtain the mean, divide the sum of all the scores by the total number of scores in the set. (4)

Median

The middle score in a distribution or set of ranked scores; the point (score) that divides a group into two equal parts; the 50th percentile. Half the scores are below the median, and half are above it. (3)

Mode

The score or value that occurs most frequently in a distribution. (3)

Normal Distribution (Bell Curve) A distribution of scores or other measures that in graphic form has a distinctive bell-shaped appearance. In a normal distribution, the measures are distributed symmetrically about the mean. Cases are concentrated near the mean and decrease in frequency, according to a precise mathematical equation, the farther one departs from the mean. The assumption that many mental and psychological characteristics are distributed normally has been very useful in test development work. (3)

Norms

The distribution of test scores of some specified group called the norm group. For example, this may be a national sample of all fourth graders, a national sample of all fourth-grade males, or perhaps all fourth graders in some local district. (3)

Norms vs. Standards: Norms are not standards. Norms are indicators of what students of similar characteristics did when confronted with the same test items as those taken by students in the norms group. Standards, on the other hand, are arbitrary judgments of what students *should* be able to do, given a set of test items. (3)

Reliability

Refers to the consistency of a measurement. A test with a low degree of reliability should not be used. (4)

Representativeness

Refers to the extent to which the norm group is characteristic of a particular population. (4)

Standard Deviation

The extent to which scores deviate from the mean. (4) A measure of the amount of variation in the scores of a group of test takers. It is the average distance of the scores from the group mean score (but with the average distance computed by a procedure called "root-mean-square," which is a bit more complicated than the usual procedure). If there are many high

and low scores, the standard deviation will be large. If the scores are bunched closely together, the standard deviation will be small. (1)

Standard error of measurement (SEM)

The difference between an individual's observed score (actual score received) and their underlying true score (a theoretical construct referring to an error-free assessment of the person's ability). (6)

Validity

The degree to which a test measures what it is supposed to measure. (4)

Cognitive Abilities

Auditory Processing

Discrimination, analysis, and synthesis of auditory stimuli.(5) The way we understand information we hear. LDs affecting this process can affect the accuracy of what's heard, memory of what's heard, organization of what's heard, or figure-ground discrimination of sounds. (2)

Cognitive

Aother way of talking about intelligence. Cognition means thinking. (2)

Cognitive Assessment The process of systematically gathering test scores and related data in order to make judgements about an individual's ability to perform various mental activities involved in the processing, acquisition, retention, conceptualization, and organization of sensory, perceptual, verbal, spatial, and psychomotor information. (6)

Executive Functions

These skills are needed to plan, manage, organize, evaluate things in everyday life as well as school and work. (2)

Fine-motor/Grossmotor control Te ability to accurately use either fine-motor or gross-motor muscle control. Fine-motor muscle control refers to small muscles doing small things – threading a needle, holding a pen. Gross-motor muscle control are large – like dancing or jumping. (2)

Full Scale Intelligence Quotient (IQ) Long Term Memory Overall measure of intelligence (composite score). (5)

Memory that stores information for later use. For example, the phone number of your best friend or a family member that you have memorized is stored in your long-term memory. (2)

Nonverbal LDs Learning disabilities that affect all learning not related to

language, including social skills and physical coordination. (2)

Performance IQ A measure of visual-spatial reasoning. (5)

Processing Speed How quickly or slowly a person is able to use, take in, or bring

out information. It is not related to cognitive ability – just to

speed and fluency. (2)

Phonemic

Awareness/Phonolo gical Awareness **Short Term** Memory

The ability to recognize the distinct sounds in words, which is required for further language and reading development. (2)

Memory that holds information briefly while you use it. For example, when you read a phone number and then dial it, the

number is held in your short-term memory. (2)

Verbal IO A measure of verbal ability. (5)

Visual Motor Integration

The ability to use sensory feedback to guide physical movements – what is loosely referred to as "coordination". A deficit in this area can make it difficult to coordinate large or small movements - catching a ball while running, waving goodbye, to more complex tasks like brushing teeth or copying seatwork from the

blackboard. Also known as dyspraxia. (2)

Visual Processing Perception, analysis and synthesis of visual stimuli (5)

> The way we understand information from our eyes. LDs affecting this can affect the accuracy of what's seen, memory of what's seen, understand what's seen, or figure-ground discrimination. (2)

Memory that holds an idea while you are using it - for example, **Working Memory**

your working memory holds a formula when you are working on

a math problem. (2)

References

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verbal reasoning

- Reasoning and comprehension using languageVerbal Expression
- Vocabulary

Fluid Reasoning

- Inductive and deductive reasoning
- Problem Solving on novel tasks