Woodcock-Johnson Tests of Achievement: Explanation of statistics

Three types of statistics or scores are generated by the WJ-III (A. level of development: B. comparison with peers and C. degree of proficiency) as detailed below:

LEVEL OF DEVELOPMENT

A. **Age equivalents**
An age equivalent (AE) or age score, reflects the client's performance in terms of age level in the norming sample at which the average score is the same as the client's score. For example, if a client named Sam is 18 years old and receives an AE of 12.1 on a particular test, the correct interpretation would be, "Test results indicate that Sam's performance on this test is comparable to that of an average12 year old."

B. **Grade equivalent**
A grade equivalent (GE), or grade score, likewise reflects the client's performance in terms of the grade level of the norming sample at which the average score is the same as the client's raw score. For example, if a client named Rita, an 11th grader, received a GE of 6.5 on the Reading Fluency test, the correct interpretation would be, "Rita is an 11th grader who currently performs at the mid-sixth grade level in reading fluency."

COMPARISON WITH PEERS

A. **Standard Score**
The standard score (SS) on the WJ-III describes a client's performance relative to the average performance of the comparison group. The scale is the same as the IQ test. In other words, the average standard score is 100 with a standard deviation of 15. (See Table Two) For example, if a client named John had a standard score of 85 in the calculation test, he would be functioning in the low average range for that particular skill.

B. **Percentile Rank**
A percentile rank (PR) describes a client's relative standing to his or her peers on a scale of 1 - 100. Thus, a percentile rank of 6 would indicate that only 6 clients out of a hundred in a comparison group (similar age and education level) would score as low or lower.

TABLE TWO: RELATIONSHIP BETWEEN THE STANDARD SCORE, PERCENTILE RANK AND CLASSIFICATION

Score Range	Percentile Rank Range	Classification
131 and above	98 to 99.9	Very Superior
121 to 130	92 to 97	Superior
111 to 120	76 to 91	High Average
90 to 110	25 to 75	Average
80 to 89	9 to 24	Low Average
70 to 79	3 to 8	Low
69 and below	0.1 to 2	Very Low

c. **Degree of Proficiency**
Relative Proficiency Index (RPI) This statistic is particularly useful in predicting the client's adjustment to a particular academic program. The RPI predicts a client's level of proficiency on tasks that typical age or grade peer would perform with 90% proficiency. For example, suppose a particular client generated a RPI of 55/90 on the calculation test. This means that, on similar math tasks, the client would demonstrate 55% proficiency, whereas the same age or grade peer would demonstrate 90% proficiency. Please note the denominator in the RPI is always 90 (representing 90% efficiency on the test or task) whereas the numerator varies from 0 - 100 and represents how proficient the particular client tested is on that task. Table two presents the interpretations of RPI scores.

TABLE THREE: CRITERION REFERENCED INTERPRETATION OF RPI SCORES

Reported RPIs	Functionality	Implications For Academic Achievement
100/90	Very Advanced	Extremely Easy
98/90 to 100/90	Advanced	Very Easy
95/90	Within Normal Limits to Advanced	Easy
82/90 to 95/90	Within Normal Limits	Manageable
67/90 to 82/90	Mildly Impaired to Within Normal Limits	Difficult
24/90 to 67/90	Mildly Impaired	Very Difficult
3/90 to 24/90	Moderately Impaired	Extremely Difficult
0/90 to 3/90	Severely Impaired	Impossible

While each RPI score only measures a narrow slice of academic functioning, it provides a direction for specific remedial suggestions and strategies. It also "red flags" academic skill sets that might be a real struggle for a particular client. If the RPI is between 1/90 and 24/90 on a particular subtest, that means the client is quite impaired on that skill set compared to his peers. Therefore, this is a particularly useful statistic on predicting how one might fare in college.

An example of the compuscore report that is included in the psychological evaluation is on the next page. The compuscore report includes all of the statistics provided in the "Explanation of Statistics" section of this desk reference. Interpretation of the abbreviations in the compuscore report as well as a brief definition of the key statistics is provided below.

AE = Age Equivalent
The client's performance on a particular task is presented in terms of the age level of an average performance on that task.

GE = Grade Equivalent
The client's performance on a particular task is presented in terms of the grade level of an average performance on that task.

Easy to Diff = Easy to difficult
This statistic provides the age range of what the client would find easy to very difficult on a particular academic task.

RPI = Relative Proficiency Index
This statistic provides the level of proficiency on a particular task.

SS = Standard Score
This statistic compares the client's performance to others of his age (average standard score is 100).