Understanding Assessment Scores

Bell Curve Distributions

Educational and psychological tests are designed to present normal bell curve distributions

- Raw Score: number of items correctly answered or performed
- Mean: average score
- Percentile rank: amount of **variation** of all scores from the mean
- Standard Deviation (SD): When a score falls significantly above or below the mean, it is referred to as being a distance from the mean, (e.g., 1 or 2 SD).
    - In all tests, the **mean is 0 (zero) standard deviations** from the mean.
    - The next marker on the bell curve is +1 and -1 standard deviations from the mean, followed by 2 standard deviations from the mean.

Scores

- Scaled Scores: a representation of the **raw score** converted onto a consistent and standardized scale.
- Standard/Composite Score: compilation of scaled subtest scores
    - Often, the **mean is 100** and the **standard deviation is 15**.
    - 50% of the students fall Within Normal Limits, less than 1 SD from the mean.
    - 68% fall within -1 and +1 SD from the mean.
- Subtest scores: are combined to obtain a composite/standard score
    - Often, the **mean is 10** and the **standard deviation is 3**.
- Subtest Scatter: difference between subtest scores
    - Significant difference suggests areas of strengths and weaknesses

Measuring Progress

Educational test results can be reported in different formats and compared in different ways

- Formats include:
    - Standard scores (SS) and standard deviations (SD)
    - Percentile ranks (PR)
- Comparisons include:
    - Age equivalent scores (AE)
    - Grade equivalent scores (GE)

When apparent progress is actually regression:

- When an individual's average raw score increases it can indicate progress…but not always.
- If the average performance of the student's in the same age/grade improved…
    - Did the student maintain or improve their % ranking?
    - Or was the improvement of the other students more significant?

Additional Resources

For more information on Assessments and Assessment scoring, visit these websites:

- https://www.wrightslaw.com/advoc/articles/tests_measurements.html
- https://dredf.org/special_education/Assesments_chart.pdf