

Breaking Down Standardized Assessment Scores

So, your child had an occupational therapy evaluation and the therapist hands you the report. After a quick glance you see lots of numbers, percentile rankings, terms like “compared to same age peers”, “within the average range”, raw scores, standard scores, scaled scores..... That is a lot of information to take in, process, and understand. And even when your occupational therapist explains all the numbers you may not remember what’s what by the time she’s done (was she even speaking English??). Interpreting standardized assessment scores can be confusing, especially if you’ve never been exposed to it before. Believe me, these are things that occupational therapists are directly taught in college, we don’t just *know* it.

The majority of occupational therapy assessments are **norm-referenced** tests. What this means is that your child’s performance is compared to a large sample of children their same age. Norm-referenced tests often yield a variety of scores. Here is quick cheat sheet to help you understand and interpret those scores:

Raw Score

The raw score is the number of items your child answered correctly. For example, if the test or sub-test has 20 items and your child answers 17 of them correctly, their raw score is 17. However, the raw score doesn’t really tell us much until we convert it into the **standard score** and **percentile rank**. Bottom line, raw score = how many test items your child got right.

Standard Score

The standard score is a way of showing how close a score is to the average score that was obtained in the sample. Now, there’s a lot of math involved in converting the scores, however, all of that glorious math is done by the test creators. They create a nice, organized little table that lays out all of the information for the test administration (your occupational therapist). So the occupational therapist takes the

child's *raw score* and looks it up in the table in the test manual. The table converts the *raw score* to the *standard score* like magic.

The most important thing for parents to understand with standard scores is what is considered "average". Common practice on standardized tests used for occupational therapy assessments is that 100 is the mean score and the standard deviation is +15 or -15. This means that scores between 85 and 115 are considered to be within the average range. Anything above 115 is considered "above average" and anything below 85 is considered "below average"..

Percentile Rank

The percentile rank tells you what *percentage* of the sample scored equal to or less than your child's score. Remember that magical little table that converted the raw score to the standard score? It also tells you the percentile rank. So, if your child's percentile rank was 50, they scored as well as or better than 50% of the sample population; though the other 50% of the population did better on the test.

TO DEMONSTRATE A LOW PERCENTILE RANK:

- If the percentile rank was 12, they scored as well or better than 12% of the sample population, but 88% of the sample population achieved a higher score.

TO DEMONSTRATE A HIGH PERCENTILE RANK:

- If the percentile rank was 95%, they scored as well as or better than 95% of the population and only 5% achieved a higher score.

Bottom line, the higher the percentile rank, the better your child did compared to his same age peers.

AGE EQUIVALENCY:

Many parents remember this score most often because it's easy to comprehend; but it's often very misleading. Age-equivalent scores are not very helpful in understanding your child's actual skill level.

The age-equivalent represents the mean score of the sample for a particular age group. For example, an age-equivalent score of 4 years, 2 months corresponds to the average raw score obtained by 4 year, 2 month old children in the sample population. The reason the age-equivalent scores are not truly valid is that they do not take in to consideration the *range* of normal performance for children whose scores fall within the average range (Remember the 85-115 rule?) Also, these scores compare children to the "average X-year old" who really does not exist! "Average" refers to a *range* of performance for an age group. **Ignore the age-equivalent scores. It tells you nothing about your child's performance and is often very misleading. Rely on the standard scores and percentile ranks to compare your child to same aged peers. Typically, within the Taunton Public Schools, occupational therapists do NOT include age equivalent scores in their reports.**

Hopefully, this cheat sheet helped you understand the basics of norm-referenced testing scores. Of course, ask your occupational therapist any and all of your questions regarding the scores. They will be more than happy to break them down for you and help you interpret the complicated mess of numbers!