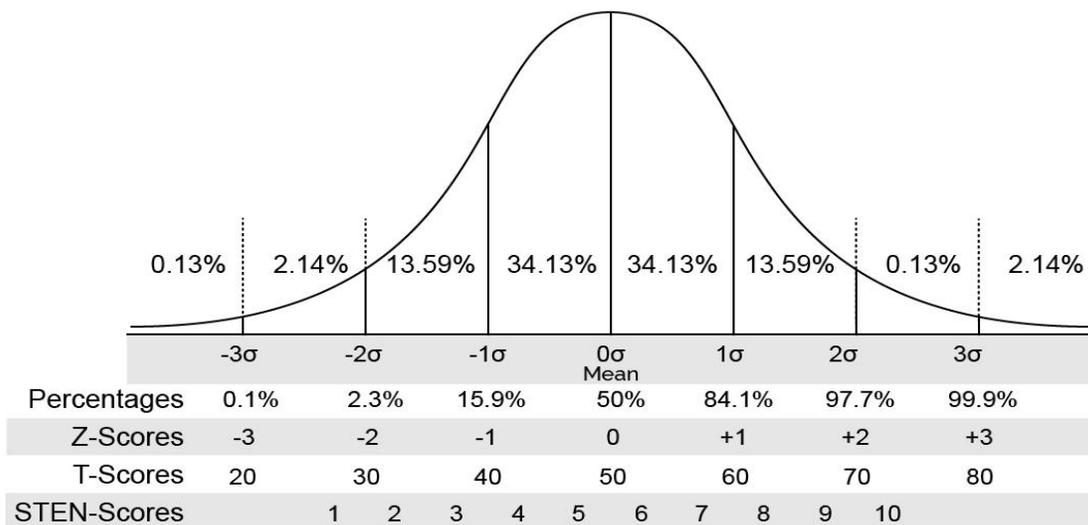


# Commonly Used Statistical Scales

We use various scales in the field of statistics. Since these terms can be confusing at times, we developed a summary graphic that shows the relationship of the most often used statistical terms for scales.

**Normal Distribution Bell-shaped curve and typical numbering systems**



- **Percentages.** When we refer to percentages, such as on the DISC Behavioral Instrument, Spiritual Gifts, etc., we use percentages to indicate the relationship of the score to the normal distribution.
- **Z-Scores.** Underlying most instruments is a standardized score that reflects a **relationship** to the mean in terms of standard deviations. The z-score is positive or negative to indicate the position on the normal distribution.
- **T-Scores.** Like the Z-Score, the T-Scores provide an easy-to-read numbering system to **depict** scores on the normal distribution. Our example of Emotional Intelligence uses T-Scores in the report.
- **STEN-Scores.** STEN scores divide the normal distribution bell curve into ten units to describe **where** most responses fall:
  - STEN-Scores of 1 or 2 is far below average
  - STEN-Scores from 5 to 7 scores make up most of the curve
  - STEN-Scores of 9 or 10 is far above average

# Glossary

The following definitions of terms are given for the reader to understand how these words *are used in the context* of this book. They are not technical in their orientation but allow the reader to understand technical terms in common usage.

- **A-Game or sweet spot**—The convergence of the hardware and software factors in an individual. It is the role, activity or venue where this individual has an unfair advantage over others.
- **A priori**—Predicting a match for a target role from instruments before anything is known of an individual
- **Alpha**—The round of iterative testing to determine the validity of each scale within an instrument
- **Assessments**—Is the process of measuring the fitness of an individual (or couple) for a specified targeted role.
- **Beta**—The round of iterative testing to determine the internal reliability of the items within each scale.
- **Construct**—The quality or factor that is being measured, assessed or described within an assessment instrument. For example, Extroversion would be a construct on various assessment instruments.
- **Cronbach's Alpha**—The measure of the consistency of the items of a scale which is also called the internal reliability of the scale. For instance, if there are 10 items which assess the same construct, they all measure the construct consistently.
- **Domain**—The general area that an assessment evaluates. For example, EQ evaluates one's emotional domain, while DISC evaluates one's behavioral domain.
- **False negative**—The outcome which was predicted negatively when in reality the individual would have succeeded in such. For example, an individual is assessed to not have the ability to successfully start a church, but actually could successfully start and sustain a church.
- **False positive**—The outcome which was predicted positively, when in reality the individual would not have succeeded in such. For example, an individual is assessed to have the ability to successfully start a church, but actually could not successfully start and sustain a church.

- **Hard-wire**—Term used to describe the combination of hardware factors and software factors.
- **Hardware**—The factors that influence the way an individual feels, thinks, talks, or acts which are more lifelong in their orientation; that is, they are independent of experiences shaping them.
- **Item**—Questions, statements, or descriptors used in an instrument to which a respondent makes a judgment. They are not called questions because often the items are not explicit questions. For example, they may rate the appropriateness of a statement on a scale from “very much like me” to “Not very much like me”.
- **Norming**—Implies the scores or numbers assigned to scales have been compared to something of absolute measure. For example, the individual's scores may have been compared to the scores across a large normal population of individuals who have taken the instrument.
- **Post-hoc**—Comparing assessment results after an individual has already performed in the role for which the assessment is targeted
- **Reliability**. Items within scales produce consistent results (internal) and overall results are consistent (external)
- **Scales**—Measure used to assess the strength of a construct.
- **KSA**—Knowledge, Skills, and Abilities are the qualifications necessary to appropriately fulfill a specific role or position
- **Software**—The factors that influence the way an individual feels, thinks, talks, or acts which were sculpted from the life events within their culture of origin.
- **Sweet spot or A-Game**—The convergence of the hardware and software factors in an individual. It is the role, activity, or venue where this individual has an unfair advantage over others.
- **Validity**—How the instrument actually measures what it purports to measure. In other words, does a scale or instrument actually measure what people think it measures?
- **Venue**—The area within which the individual operates. We talk about venues quite often in this book because it's important to appreciate that assessments created for one venue.