

Standard scores are also useful for determining how a person performed, in a relative sense, on two or more tests. For example, assume the following data for a particular applicant:

	Test 1	Test 2
Raw score	50	48
Mean	48	46
SD	2.5	.80

On which test did the applicant do better? To answer that, simply calculate the applicant's standard scores on the two tests. The Z score on test 1 is .80, and the Z score on test 2 is 2.5. Thus, while the applicant got a higher raw score on test 1 than on test 2, the applicant got a higher Z score on test 2 than on test 1. Viewed in this way, it is apparent that the applicant did better on test 2, relatively speaking.

It should now be apparent that a person with a Z score of 0 scored at the mean. But what is a "high" Z score? What is a "low" Z score? When scores are normally distributed (with the mean, median, and mode all the same), the data for applicants resemble a bell curve (half the people scored above the mean, and half scored below the mean). In this case, a Z score of +1.0 means that the applicant scored in the 84th percentile (at -1.0, the applicant scored in the 16th percentile). A Z score of +2.0 means that the applicant scored in the 98th percentile (at -2.0, the applicant scored in the 2nd percentile). Thus, scoring even one standard deviation above the mean is a relatively high score.

Correlation Between Scores

Frequently in staffing there are scores on two or more measures for a group of individuals. One common occurrence is to have scores on two (or often, more than two) KSAO measures. For example, there could be a score on the test of knowledge of programming languages and also an overall rating of the applicant's probable job success based on the employment interview. In such instances, it is logical to ask whether there is some relation between the two sets of scores. Does an increase in knowledge test scores tend to be accompanied by an increase in interview ratings? Put more simply, is there a relationship between the two measures?

As another example, an organization may have scores on a particular KSAO measure (e.g., the knowledge test) and on a measure of job performance (e.g., performance appraisal ratings) for a group of individuals. Is there a correlation between these two sets of scores? In other words, does knowing an individual's score on the knowledge test tell you something about her likely job performance? If it does, this would provide some evidence about the probable validity of the knowledge test as a predictor of job performance. This evidence would help the organization decide whether to incorporate the use of the test into the selection process for job applicants.