

## RESEARCH TERMS TO KNOW

### z-Score

When a researcher has more than one measure of a particular concept, he or she needs a way to show the different measures on the same scale. In the case of cognitive abilities across the life span (*Figures 15.5 through 15.9*), each graph is based on three or four different measures of the same cognitive ability. Since each measure has a different mean and standard deviation, plotting each measure could give a confusing picture. However, if you converted these to standard scores such that each had the same mean, then you could plot them. This is what a z-score does. Every measure when converted to a z-score has a mean of zero. What you plot in these graphs is the standard deviation or differences from the mean. The actual formula for a z-score is the difference between a particular score and the mean of the scores divided by the standard deviation. Simply put, z-scores allow for the comparison of different measures on the same scale.