When subjective scores are compared between T_1 and T_2, the concern is with intrarater reliability. Here, the same rater evaluates individuals in terms of A in two different time periods. To the extent that A is not expected to change, there should be high intrarater reliability.

In summary, reliability is concerned with consistency of measurement. There are multiple ways of treating reliability, depending on whether scores from a measure are being compared for consistency within or between time periods and depending on whether the scores are from objective or subjective measures. These points are summarized in Exhibit 7.6. Ways of computing agreement between scores will be covered shortly, after the concept of measurement error is explored.

Measurement Error

Rarely will any of the comparisons among scores discussed previously yield perfect similarity or reliability. Indeed, none of the comparisons in Exhibit 7.6 visually shows complete agreement among the scores. The lack of agreement among the scores may be due to the occurrence of measurement error. This type of error represents "noise" in the measure and measurement process. Its occurrence means that the measure did not yield perfectly consistent scores, or so-called true scores, for the attribute.

The scores actually obtained from the measure thus have two components to them, a true score and measurement error. That is,

$$\text{actual score} = \text{true score} + \text{error}$$

EXHIBIT 7.6 Summary of Types of Reliability

	Compare scores within T_1 or T_2	Compare scores between T_1 and T_2
Objective measure (test items)	Internal consistency	Test–retest
Subjective measure (raters)	Interrater	Intrarater