

# What are the types of reliability in SPSS?

Authored by  
**stats writer**

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There are three main types of reliability in SPSS: internal consistency reliability, test-retest reliability, and inter-rater reliability. Internal consistency reliability measures the consistency of responses within a single measurement tool. Test-retest reliability examines the consistency of scores over time when the same test is administered multiple times. Inter-rater reliability assesses the consistency of scores when different raters or observers are used. Each type of reliability is important in ensuring the accuracy and consistency of data in SPSS.

## Types of Reliability in SPSS

**In this section, we are going to learn about types of reliability in SPSS. In SPSS, there are many types of reliability, but the most popular type of reliability is of three types. These are as follows:**

### Test-Retest Parallel Form Internal Consistency

#### Test-Retest

**The idea of test-retest reliability is straightforward. We take a test, and we test a group of persons or a single person. We calculate its reliability coefficients, and then we again administer this test on the same group of individuals after some time. If we found that there is a good amount of correlation between test scores and retest scores in both cases, then we can say that the reliability of the scale is good.**

**So test-retest reliability refers to a correlation between scores of scale taken at two points of time one at the**

point of the test and second at the point of the retest. When we calculate the test-retest reliability, generally, there is a gap of sufficient time to minimize any learning effect on the part of subjects. Generally, the recommended minimum period between the test and retest of a score is 15 days period.

The idea is that it should not be concise, like say, today and tomorrow. In that case, subjects will feel disavow because they are taking the same test. The subject will think that why they are taking the same test, so they will not be able to appreciate it. In another case, suppose the time gap is huge, like say years. In that case, again, the test and retest score might not be very meaningful because of learning and their physical growth. So, the subjects might be responding very differently to the questionnaire. So 15 days to 1 month period is a desirable period within which test and retest score should be calculated and correlated.

#### Parallel Form

Another important type of reliability is parallel form reliability. So, Parallel is a kind of reliability estimation process in which we create two forms of our test. One

of our original tests and another is an equivalent test. By the equivalent test, we mean the nature of the item, the difficulty level of the items, the kind of dimensions we hypothesis in both cases and ditto the same or almost the same as possible.

We cannot exactly replicate the same kind of test in both cases. Their items must be different slightly, but they are as if parallel. They are the two forms of the same test. Parallel form reliability estimation has an advantage over the test-retest method because we need not wait for a time period, which is a debatable time period like say 15 days or 30 days. So, in that case, we are having two parallel forms of a test. We can administer a test with both form simultaneously to a group of subjects, and immediately, we can calculate the correlation between these forms. If the correlation between parallel forms is good, we can say the scale has good reliability.

Now we saw that there could be a big amount of problem in creating the exact parallel form of a single test or equivalent part of a test. So the good practice is that when we create a test, we take the odd number of

items on one side and even number of items on another side. We administer an odd number of items to a group of students and then an even number of items. If there is a good amount of correlation between these two forms of a test, odd number and even number, then we say that the test has good reliability.

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