What is RELIABILITY when applied to psychometric testing?

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Reliability refers to consistency of measurement.

If you measure the length of your office wall on two occasions and get two different measurements, you know that something is not right! Maybe you changed your viewing angle of the tape measure between the measurements? Maybe you held the tape measure differently on each occasion?

Reliability is a crucial necessity in psychometric assessment. If there is a lack of reliability, there is a lack of consistency in the scores that test respondents receive and, as a result, the interpretation of their profile of behaviours and abilities changes.

No test can claim to be 100% reliable - indeed, neither can any method of assessment. Test publishers, distributors and users are all part of the process of enhancing the reliability of well designed psychometric tests. The following factors (and more) can all impact upon reliability:

Factors within the testing environment

Such as noise or temperature

Factors within the respondent

Such as mood or desire to undertake the assessment

Factors within the test itself

Such as ambiguous questions or language that a respondent does not understand

If a test lacks consistency in measurement, then it can never be a valid test.

Therefore, **reliability is a necessary precursor to validity**.