

Reliability vs. Validity

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<https://statisticsbyrachel.wordpress.com/2011/10/18/reliability-vs-validity/>

‘Reliability’ and ‘validity’ are two words that almost always crop up when discussing and analysing scientific research. So, why are they so special? This week I’m going to be discussing the importance and possible flaws surrounding these two fundamental aspects of psychological research.

Firstly I will define each term, since I know how easily they can be confused and mixed up. **Reliability refers to consistency.** For example, you step on your bathroom scales and read that you have lost 5lbs since last week, you think back to the amount of McDonalds you stuffed yourself with that week and so step back onto the scales to double check. Now you read that you have in fact gained 2lbs (which sounds a bit more reasonable) and realise that you can’t really trust your scales, you need scales that are more *reliable*.

Validity, on the other hand is the extent to which the procedure measures what it intends to measure. There are many different types of validity, including external validity, which is the extent to which the results can be generalised, and internal validity.

Reliability and validity are both very important criteria for analysing the quality of measures. Although they are independent aspects, they are also somewhat related. A measurement procedure cannot be valid unless it’s reliable; however, a measurement can be reliable without being valid (someone could measure your height and say they are measuring intelligence, they would get a consistent and reliable result each time but this would NOT be valid since height is not an indicator of intelligence).