

# Garbage in, garbage out – assessing data collection instruments

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As researchers in the language sciences, we select, design or adapt instruments to collect data on our topic of interest. To ensure meaningful and useful interpretations of the data we gather, we need to establish that the research instruments themselves are valid for our research purposes and population. If the research instruments are flawed, the conclusions we draw – whether with respect to language theory, learning, teaching or assessment – will be misleading, lack sufficient grounding, and will not be credible.

It follows that an assessment or evaluation of the data collection instruments used should be a key step in any research project. This process, termed *validation*, involves obtaining evidence for the quality of the instruments, and thus for the claims being made about them and about the data and findings resulting from them. It requires collecting evidence to justify the interpretations of participants' scores or answers on the research instruments. While the importance of validating research instruments is increasingly recognised among researchers in the language sciences, in practice, it is still not systematically implemented and validation efforts do not always meet the accepted standards for developing, using and evaluating research instruments.

In this talk, I will draw on the field of language testing and assessment to explain current conceptualisations of validity and validation, and to describe validation frameworks that can be used in language sciences research. I will also show examples of how such frameworks can be used in practice to validate research instruments.