

### *Validating Your Data Collection Instrument*

In some cases, you may wish to create your own data collection instrument. How do you know it is a valid collection instrument? There are several ways that you can validate a data collection instrument if you choose to make it yourself:

The validation phase in creating your own data collection instrument is the **last** one you will experience in choosing or constructing your data collection instrument. Consider the following steps when using your own data collection instrument:

- **Conduct a pilot study and then analyze the results.** In this way, you will be able to ask participants for valuable feedback and refine your instrument if needed based upon this feedback. Also, the pilot study will allow you to use data and test for internal consistency.
- **Establish the validity of your instrument.** To do this, you will determine which concept of that validity is important, typing them as either **content**, **criterion-related**, or **construct**.
  - a. **Content:** How representative are a survey's questions on your survey to questions that might be asked in similar surveys? In other words, how do your survey's questions compare to questions included on similar surveys?
  - b. **Criterion-related:** Are the scores from your instrument a good predictor of the expected outcome? In other words, do the scores you get when using your own data collection instrument predict the expected outcome accurately?
  - c. **Construct:** Are the scores recorded on your instrument meaningful? Are they significant? Are they useful? Do they have a purpose?

To make sure you have mastered construct validity, you will have to assess the scores two ways: using **statistics**, and **actually using the instrument in a practical, real-life situation**.

You will also need to test for convergent and divergent validity. Convergent validity means that scores on your instrument relate to constructs or measures that they should relate to (e.g., participant feelings of depression related to participant feelings of despair). Divergent validity means that scores on your instrument do not relate to constructs or measures that they should not relate to (e.g., a measure of intelligence related to a measure of self-esteem).



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**Source:** Martyn Shuttleworth (Aug 21, 2009). Convergent and Discriminant Validity. Retrieved Jun 23, 2021 from Explorable.com: <https://explorable.com/convergent-validity>

Additionally, there is a way to find validated assessments or surveys others have used to replicate a study. The best way to know this information is to do a review of the literature. You can find existing collection instruments and how they have been used by others in the following resources:

The *ERIC* website: [www.eric.ed.gov](http://www.eric.ed.gov)

*Mental Measurements Yearbook* (Impara & Plake, 1999)

*Tests in Print* (Murphy, Impara, & Plake, 1999)

**Resources:**

Adapted from: [Creating and Validating an Instrument](#)