

# Data Quality Checklist

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## Validity

- External validity:** The extent to which an instrument or evaluation can be generalized to different contexts, such as other populations or samples.
- Internal validity:** The extent to which the study or instrument measures a construct accurately and is free of alternative explanations.

## Reliability

- Internal consistency:** The items in a data source (for example, an assessment) consistently measure the same topic (for example, ratios and proportional reasoning).
- Inter-rater reliability:** Processes, such as training on coding interviews or scoring observations, are in place to ensure that data are collected consistently by multiple raters.
- Test–retest reliability:** Individuals receive the same score if tested twice on the same assessment.

## Timeliness

- The data are current and collected within an appropriate time frame.
- The results of data analysis and interpretation are available when needed.

## Comprehensiveness

- The data include sufficient details or contextual information.
- The data can be meaningfully interpreted.

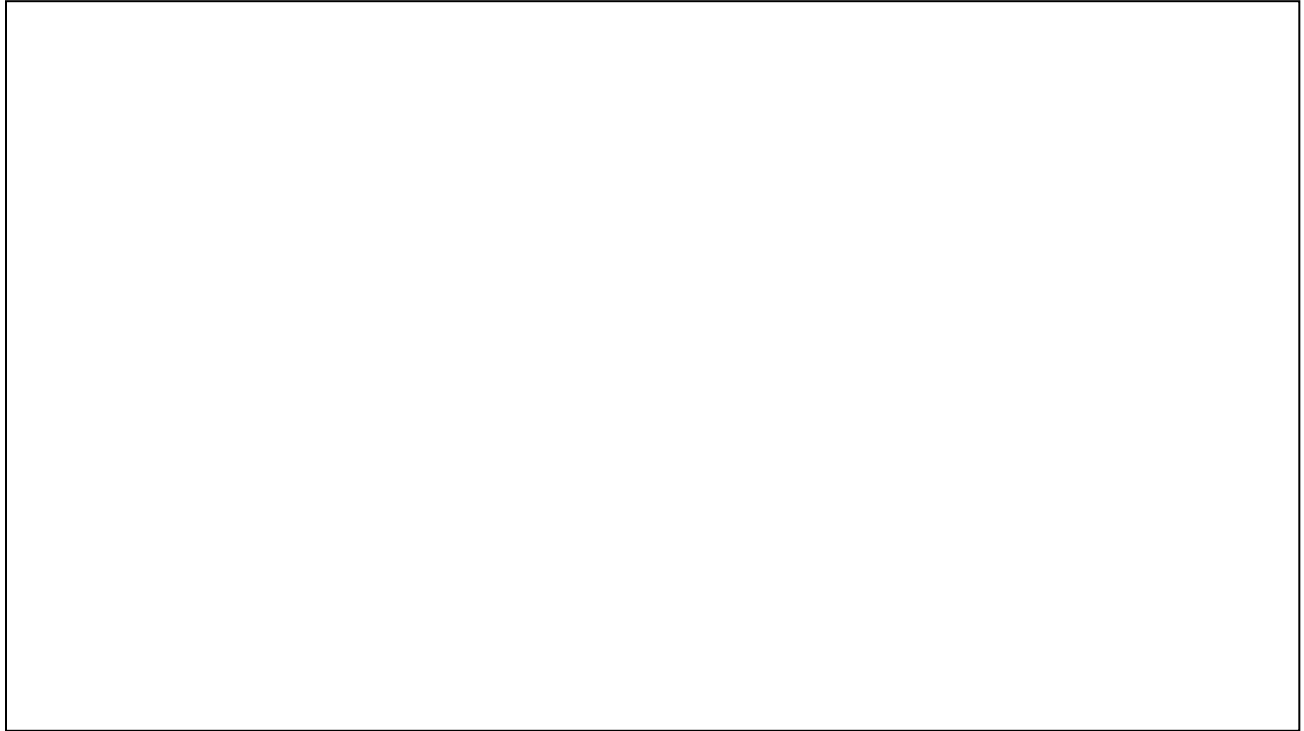
## Trustworthiness

- The data are free from manipulation or entry error.
- The data are as free as possible from bias, and known biases are identified.
- Processes, including training of data collectors, are in place to address potential sources of bias and error.

## Completeness

- The data are collected from all participants in the sample.
- The data are sufficient to address all evaluation questions.
- There is a sufficiently small degree of missing data.
- The results are generalizable to other contexts (for example, other schools, districts, or state education agencies).

## Identified Areas of Concern



*Note.* Adapted from “Ensuring Data Quality in Extension Research and Evaluation Studies,” by R. Radhakrishna, D. Tobin, M. Brennan, and J. Thomson, 2012, *Journal of Extension*, 50(3) (<https://www.joe.org/joe/2012june/tt1.php>).

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