

Shutay Consulting

Research & Data Sciences



The Four Major Types of Validity

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What is Validity?

- Validity pertains to truth. The sole purpose of conducting research is to solve either a practical problem or a theoretical problem by addressing research questions via the collection of data, using valid instruments (**construct validity**), a valid research design (**internal validity**), and then making valid conclusions based on the analysis of the data (**conclusion validity**). Finally, the researcher determines the extent to which he/she is able to generalize the findings from his/her study (findings are valid) to other people, places, settings, and times (**external validity**).

Four Major Types of Validity

Construct

Internal

Conclusion

External



Construct Validity

- Construct validity pertains to the validity of the operationalization of the research variables, which includes the validity of the instruments used to measure the constructs (variables) in the study.
- Construct validity pertains to the degree to which the researcher is measuring what he/she says that he/she is measuring.

Internal Validity

- Internal validity pertains to the extent to which the researcher can show that the cause of the dependent variable (DV) is in fact due to the independent variable (IV) and not a third-party variable.
- Causality is determined by first showing that there is a relationship between the IV and the DV, then showing that the IV precedes the DV in time, and finally by ruling out potential rival causes. It is this third and final part of the process that pertains to internal validity.
- Internal validity is dependent on the rigorousness of the research design.

Conclusion Validity

- Conclusion validity pertains to the researcher's ability to draw the correct conclusion (reject or retain the null hypothesis).
- Conclusion validity is dependent on factors such as the reliability of instruments, sample size, and the use of appropriate statistical tests (e.g., using parametric tests only when appropriate).
- Conclusion validity can be increased by using instruments that have been empirically shown to be reliable, by conducting a power analysis and using the recommended sample size, and by using the appropriate statistical tests based on the type of data being analyzed.

External Validity

- External validity pertains to the extent to which the findings of a particular study can be generalized to other people, places, settings, and times.
- External validity is highly dependent on the sampling techniques that were used by the researcher. Random samples result in greater external validity (no selection bias).
- External validity is only considered after the researcher has determined that the study is internally valid. If a study is not internally valid, then there is no reason to try to generalize its findings.

References

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