

Validity in qualitative research

Päivi Kinnunen

T-106.5550/6500 Methods and results in Computing Education Research

1

By validity in this context I mean

- plausibility
- credibility
- trustworthiness

2

Validity in qualitative research

- Basic presuppositions and goals in qualitative research differ from quantitative research. Hence, trustworthiness check also differs.
 - Qualitative research doesn't pursue generalization of results (some qualitative researchers don't even believe that universal explanations for how people act exist/are attainable). Instead qualitative research strives for rich description of some phenomenon/group of people.
 - Qualitative research doesn't seek for finding cause-effect relationships in a same way than quantitative research does.

3

Hirsjärvi & Hurme 2004;
Eskola & Suoranta 2005

- People change all the time. Therefore same results can't be obtained in two different measuring /observing time
- Interpretations from some situation are unique and it is not likely that the researcher would end up with same interpretations later. That is because surrounding world affects researcher as well. (for example, there are trends in scientific community that dictate what is worth studying, what kind of methods are preferable...)
 - Qualitative research is often extremely hard/impossible to replicate

4

Different types of validity in qualitative research (Johnson & Cristensen 2004)

- **Descriptive validity**
- **Interpretative validity**
- **Theoretical validity**
- **Researcher bias**
- **Internal validity**
- **External validity**

5

Descriptive Validity:

- Accuracy in reporting descriptive information (like events, behaviors, settings, time, place...)
 - Investigator triangulation



6

Interpretive Validity:

- Degree of understanding research participants "inner worlds" = Degree to which the research participants' viewpoints, thoughts, intentions are accurately understood by researcher. How well they are portrayed in the research report.
 - participant feedback
 - citations

7

Theoretical Validity:

- Degree to which theoretical explanations that are developed from the study fits to data
 - Collecting data in the field over an extended period of time
 - → gaining confidence that patterns of behavior /relationships are stable
 - → gaining better understanding of the phenomenon.
 - Theory triangulation
 - Pattern matching: Predicting a pattern of the results and determining whether actual results fit the predicted pattern.
 - Negative-case sampling
 - Peer review

8

Researcher bias



- Researcher allows one's personal views and perspectives to affect how the research is conducted (selective observation/ recording) and data are interpreted
 - Continuous reflection (awareness of own presuppositions)
 - Actively seeking negative-cases
 - Reporting carefully the whole research process (including interpretation!) so that other researcher/reader can understand and accept the conclusions that have been made based on the data.
 - Directly stating the subjectivity of the researcher

9

Internal Validity:

- Is it justified to say that observed relationship is causal, does the cause-effect relationship exist?
 - Often is not interesting for qualitative researchers
 - However, if cause-effect relationship is found and one wants/needs to discuss it's validity:
 - mental comparison with hypothetical control group
 - published research studies
 - when the causal factor occurs again, does the effect follow?
 - Method and data triangulation

10

External Validity

- Are results generalizable?
 - Doesn't apply qualitative research (people rarely randomly selected, the aim of qualitative research is rich description rather than generalizability)
 - However, if one wants to discuss about external validity:
 - Rough generalization/naturalistic generalization: generalization on the basis of similarity (this is why it is so important to report carefully your research settings and methods).
 - Replication logic: has somebody else got the same/similar results.

11

Conclusion

- **Validity is a matter of degree, not an absolute state**
- Social reality is multi-storey and therefore straightforward explanations are impossible → look out for far reaching conclusions and theories that claim to explain "everything"
- Results and conclusions reveal at their best only some standpoints to some phenomenon. They can't explain the "whole truth" from all possible standpoints.
- Qualitative and quantitative research have both their pros and cons. Their starting points, goals, methods and the nature of results are different. At best they complement each others.

12

References

- Cohen, L., Manion, L., and Morrison, K. 2000. Research Methods in Education (5th Edition). London: Routledge Falmer.
- Eskola, j. & Suoranta, J. 2005. Johdatus laadulliseen tutkimukseen. Tampere: Vastapaino.
- Hirsjärvi S., Hurme, H. 2004. Tutkimushaastattelu: teemahaastattelun teoria ja käytäntö. Helsinki: Yliopistopaino.
- Johnson, B. & Christensen, L. 2004. Educational research. Quantitative, qualitative, and mixed approaches. Boston: Allyn and Bacon