

# Critically Reviewing Research

*Why do this?*

- Critically reviewing the literature to set the context, explore theory, methods, experiences, language, sampling and replicability/usefulness for your research

1. Gain an overview – read introduction and summary (perhaps an abstract), plus conclusion – is it clear and transparent what the research is about/theories/concepts?
2. - Identify and assess the methodological approaches: quantitative? qualitative? Why was particular methodological approach taken, plus strengths and weaknesses of it?
  - What is the focus and size of sample/or what is focus and sources of evidence?
  - Tools/methods?
  - Alternatives identified and examined?
  - Timescale clear?
  - Any ethical issues?

### 3. Assessing findings (i)

- Evidence

- plausibility? (sources, use of evidence?)

- reliability?

- validity?

- clarity?

# Validity and Reliability

- Validity
  - covered/compensated for objectivity (or lack of)?
  - credibility? (arguments, extrapolations, evidence)
- Reliability is a form of validity (quality control)
- How do we set up data collection so that it can be relied upon as having integrity? Consider what makes data collection unreliable?
- We can test to see if a questionnaire is reliable by using it on a pilot cohort/group (more than once, with short gap in between): all conditions being equal, participant's responses should remain consistent

# Threats to reliability

- **participant error**: fluctuation in responses due to external (changed) circumstances
- **participant bias**: social desirability effect (i.e. saying what participant thinks boss or interviewer wants to hear)
- **observer error**: fluctuation in attention (to survey continuity) due to external circumstances
- **observer bias**: conscious or unconscious interpretation that has to do with researcher's own beliefs/experience ('hearing/seeing' what you want to 'hear/see' and conclude)

# External validity (generalisability)

- **The extent to which the findings are generally applicable.**
- **When generalisation from a properly constructed random sample to the research population from which the sample drawn is a straightforward case of statistical inference**
- **Generalisations to other settings, to other (non-statistically controlled) groups not so straightforward**
  - **direct demonstration: achieving and identifying the same results with a different group, hence that findings are transferable**
  - **making a case: persuading that it is intuitively & logically reasonable to make generalisations (based on qualitative evidence and factors)**

# Threats to external validity

- selection: findings specific to the group studied
- setting: findings dependant on context
- history: specific/unique historical experiences may determine or affect the findings
- construct effects; you may not be able to generalise because the effects studied are specific to the group studied
  - BUT all can be accommodated if 'threats' are identified and 'flagged up'/allowed for in the research and findings

# Credibility

- Is there sufficient detail on the way the evidence was produced for the credibility of the research to be assessed?
- The responsibility to give sufficient information and justification: transparency is especially important with all research (and in particular in ethnographic and qualitative research) so that we can weigh up the conclusions reached in terms of the contexts given



# Establishing trustworthiness in qualitative data

- **Dealing with the potential for bias as interpretative**
  - **Truth value: how do you establish confidence in what is the 'truth' for the persons in the context and the truth of the context itself? (allowing and accommodating for how they see the situation, and how the situation is seen by others?) Impacts upon the applicability of findings (accommodate in findings – both/multiple interpretations)**
- **Consistency: repeatable with similar group within similar context?**
- **Neutrality: can it be established that the findings are determined by the participants, responses, contexts rather than perspectives, biases, motivations, interests of the enquirer?**

# Transferability

- Transferability is the qualitative version of external validity or generalisability
- Have to make a case for transferability of findings by establishing sufficient detail (about similarities, contexts, factors/circumstances, etc. of cases?) so that the decision to transfer is possible, and moreover reasonable, and academically acceptable and sustainable

### **3. Assessing findings (ii)**

- Evaluation (strengths and weaknesses)**
  - assessing conclusions – validity? - legitimate given findings in the research? – empirical adequacy (verify or falsify/challenge)?**
  - alternative interpretations?**
  - relevance? (to your research and subject area overall)**
  - coherence (clarity, logic, plausibility, accuracy) of claims and argument(s)**
  - generalisability/comprehensiveness (space and time)?**