Quality Issues in Mixed Methods Research

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Plan of the session

• Idea of quality criteria
• Key dimensions of mixed methods criteria
• Is mixed methods research always superior to mono-method research?
• Lessons and tips
Why do we need quality criteria at all?

- **Internal factors**
  - Need to have consistent standards for evaluating research
  - Improves the quality of research

- **External factors**
  - Useful to be seen to be self-policing
  - Enhances confidence of funding bodies
  - Need for policy-makers to know which research to ignore or give less weight to

- **But** may stifle innovation and creativity
The rise of mixed methods research
But what is mixed methods research?

• ‘Mixed methods research is the type of research in which a researcher or team of researchers combines elements of qualitative and quantitative research approaches (e.g., use of qualitative and quantitative viewpoints, data collection, analysis, inference techniques) for the broad purposes of breadth and depth of understanding and corroboration.’

• ‘A mixed methods study would involve mixing within a single study; a mixed method program would involve mixing within a program of research and the mixing might occur across a closely related set of studies.’

Some recurring themes

- Need for quantitative and qualitative components to be appropriate and rigorously implemented
- Need for transparency about methods employed
- Use of mixed methods to be linked to research questions
- Need to be explicit about the mixed methods design and its appropriateness to research questions
- Importance of a rationale for the use of mixed methods research
- Importance of integration
Some recurring themes

• Need for quantitative and qualitative components to be technically competent
• Need for transparency
• **Use of mixed methods to be linked to research questions**
• Need to be explicit about the mixed methods design and its appropriateness to research questions
• Importance of a rationale for the use of mixed methods research
• Importance of integration
Two common approaches to mixed methods research questions

1. Separate quantitative and qualitative research questions.
2. Overarching mixed research question; then expanded or broken down into quantitative and qualitative sub-questions.

Example of second approach: study of political advertising in US

- Overarching research question:
  - to explain how and why the political ads of the 2004 presidential candidates failed to engage young adults

- Three sub-questions:
Example of second approach: study of political advertising in US

Three sub-questions:

– How does the interaction between audience-level and media-based framing contribute to college students’ interpretations of the messages found in political advertising?

– To what extent do those interpretations match the framing found in the ads from the 2004 U.S. presidential election?

– How can political ads be framed to better engage college students?

Example of second approach: study of political advertising in US

Three sub-questions:

- How does the interaction between audience-level and media-based framing contribute to college students’ interpretations of the messages found in political advertising? *Focus groups*

- To what extent do those interpretations match the framing found in the ads from the 2004 U.S. presidential election? *Content analysis and focus groups*

- How can political ads be framed to better engage college students? *Focus groups*
Some recurring themes

- Need for quantitative and qualitative components to be technically competent
- Need for transparency
- Use of mixed methods to be linked to research questions
- Need to be explicit about the mixed methods design and its appropriateness to research questions
- Importance of a rationale for the use of mixed methods research
- Importance of integration
Convergent Parallel Design

Exploratory Sequential Design

Explanatory Sequential Design

Embedded (Nested) Design
Some recurring themes

- Need for quantitative and qualitative components to be technically competent
- Need for transparency
- Use of mixed methods to be linked to research questions
- Need to be explicit about the mixed methods design and its appropriateness to research questions
- **Importance of a rationale for the use of mixed methods research**
- Importance of integration
Mixed methods research rationales

- Triangulation
- Offset
- Completeness
- Process
- Different research questions
- Explanation
- Unexpected results
- Instrument development

- Sampling
- Credibility
- Context
- Illustration
- Utility
- Confirm & discover
- Diversity of views
- Enhancement
- Other/unclear/not stated

A. Bryman (2006) ‘Integrating quantitative and qualitative research: how is it done?’, Qualitative Research, 6: 97-113
The highlighted rationales

- **Triangulation** – comparing quantitative and qualitative findings for corroboration
- **Completeness** – using both quantitative and qualitative research for a more comprehensive account
- **Sampling** – using either quantitative or qualitative research to facilitate selection of respondents
- **Illustration** – using qualitative data to illustrate quantitative findings
- **Enhancement** – supplementing to or adding to one set of findings by gathering further data
- **Explanation** – one is used to help explain findings uncovered by the other
- **Different research questions** – explicit link between research questions and mixed methods
- **Instrument development** – qualitative data used to develop a questionnaire measure
Some recurring themes

• Need for quantitative and qualitative components to be technically competent
• Need for transparency
• Use of mixed methods to be linked to research questions
• Need to be explicit about the mixed methods design and its appropriateness to research questions
• Importance of a rationale for the use of mixed methods research
• Importance of integration
Findings on integration

• Study of health sciences research:
• ‘Research reports were assessed to identify the extent to which the potential for integration had been exploited. A fifth of reports were categorized as exploiting their potential for integration.’

Tips on integration

1. Rationale
2. When should integration occur?
3. Don’t ignore data clashes
4. Try to see bigger picture as well as snippets of data
5. Skills
6. Themes
One approach to integration

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<thead>
<tr>
<th>Theme</th>
<th>Method 1 (quantitative)</th>
<th>Method 2 (qualitative)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theme 1</td>
<td>Data</td>
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<td>Theme 2</td>
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Tips on integration

7. Don’t have separate chapters/sections for quantitative and qualitative findings

8. Examine some mixed methods examples
Is mixed methods research superior?

- Universalistic vs. particularistic discourses

- Particularistic discourse - ‘mixed-methods research should only be used when it is appropriate to an investigation’s research questions’

- Universalistic discourse – views ‘mixed methods research as providing better outcomes more or less regardless of the aims of the research’

Strategic management research

- Quantitative – 77%; Qualitative – 7.9%; Mixed methods – 15.2% (percentages are of all empirical articles)
- ‘the comparison group consisted of randomly selected monomethod articles that were matched by year and issue to the 165 mixed methods studies. Thus, for each mixed methods study, a monomethod article was selected from the same year and issue of SMJ’ p. 38

Figure 2. Annual average citation counts for mixed and monomethod articles.
Highlights of Findings: Practice

- Main categories in terms of practice:
  - Enhancement 52% (rationale 32%)
  - Triangulation 35% (rationale 13%)
  - Completeness 29% (rationale 13%)
  - Illustration 23% (rationale 2%)
  - Explanation 14% (rationale 6%)

- For example, 80 articles used a triangulation approach but only 29 of them gave it as a rationale, i.e. majority of articles using triangulation didn’t cite it as a rationale
Lessons

✓ Provide a rationale (or rationales) for doing mixed methods research. Don’t assume rationale self-evident

✓ Don’t forget the importance of describing clearly how the quantitative and qualitative components were conducted

✓ Show how research methods proposed/used relate to your research questions

✓ Be explicit about the mixed methods design you’ve employed

✓ Demonstrate what is gained by using mixed methods

✓ Show how quantitative and qualitative findings are mutually informative (integration)

✓ If possible, think about quantitative-qualitative integration right at the outset & at as many stages as possible

✓ Try not to think of mixed methods purely in terms of triangulation – very limiting