

Mixed methods research: how to combine quantitative and qualitative research

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Plan of the session

- Focus of session – quality issues in mixed methods research
- Quality criteria in quantitative and qualitative research
- Possibility of mixed methods criteria
- Possible approaches to mixed methods criteria
- Evidence from studies of social scientists
- Examination of examples
- Lessons and tips

Why do we need quality criteria at all?

- Internal pressures
 - Need to have consistent standards for evaluating research
 - Improves the quality of research
- External pressures
 - 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

Quality criteria in quantitative research

- Well known and widely agreed criteria
- Reliability - concerned with consistency of a measure of a concept
- Replicability
- Validity
 - measurement
 - internal
 - external (generalizability)

Quality criteria in qualitative research

- Significant development
- Inappropriateness of traditional criteria
- Two approaches
 - Adapt traditional criteria
 - Alternative criteria
- Lack of agreement about criteria to be used
- This has led to...



1. How credible are the findings?
2. Has knowledge/understanding been extended by the research?
3. How well does the evaluation address its original aims and purposes?
4. Scope for drawing wider influences—how well is this explained?
5. How clear is the basis of the evaluative appraisal?
6. How defensible is the research design?
7. How well defended is the sample design/target selection of cases/documents?
8. Sample composition/case inclusion—how well is the eventual coverage described?
9. How well was the data collection carried out?
10. How well has the approach to, and formulation of, the analysis been conveyed?
11. Contexts of data sources—how well are they retained and portrayed?
12. How well has diversity of perspective and content been explored?
13. How well has detail, depth and complexity (richness?) of the data been conveyed?
14. How clear are the links between data, interpretation and conclusions—i.e. how well can the route to any conclusions be seen?
15. How clear and coherent is the reporting?
16. How clear are the assumptions/theoretical perspectives/values that have shaped the form and output of the evaluation?
17. What evidence is there of attention to ethical issues?
18. How adequately has the research process been documented?

Tracy's 8 'must have' criteria

1. **Worthy topic**—relevant, interesting, significant, etc.
2. **Rich rigour**—rich data supplied in abundance and appropriately
3. **Sincerity**—the researcher is reflexive about values and biases and is transparent in approach
4. **Credibility**—implements practices such as thick descriptions, triangulation, and respondent validation
5. **Resonance**—has an affecting impact on readers
6. **Significant contribution**—makes an impact in terms of such outcomes as theory, practice, and morality
7. **Ethical**—considers and engages in ethical practices
8. **Meaningful coherence**—addresses what it claims to address, uses appropriate methods, and links research questions, literature, findings and interpretations.

What about mixed methods research?

- No criteria for appraising mixed methods research exist (Sale and Brazil, 2004)
- How should we approach quality criteria for mixed methods research?

Why do we need mixed methods quality criteria?

- More to mixed methods research than the presence of 2 or more separate components
- May improve mixed methods research practice
- May enhance credibility of mixed methods research

But

- May stifle creativity at this relatively early stage in development of mixed methods research
- If lack of agreement on qualitative research criteria, how can we have mixed methods ones?
- May divert our attention from criteria common to both quantitative and qualitative components

‘Publishability Guidelines’ Shared by Both Qualitative and Quantitative Research

1. Explicit scientific context and purpose
2. Appropriate methods
3. Respect for participants
4. Specification of methods
5. Appropriate discussion
6. Clarity of presentation
7. Contribution to knowledge

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.’

Mixed methods in tourism research

- 12 leading tourism journals, 1994-2006
- 2,868 articles
 - Quantitative research 59%
 - Qualitative research 19%
 - Mixed methods research 6%

Research on residents' attitudes to tourism

- 140 articles on residents' attitudes to tourism
- 3 leading journals, 1984-2010
 - Quantitative research 72%
 - Qualitative research 12.9%
 - Mixed methods research 13.5%

R. Nunkoo et al. (2013) 'Residents' attitudes to tourism: a longitudinal study', *Journal of Sustainable Tourism*, 21: 5-25.

Mixed methods criteria

1. Teddlie and Tashakkori (2009)
2. O’Cathain et al. (2008)
3. Editors of *Journal of Mixed Methods Research* (2007)
4. Bryman et al. (2008)
5. O’Cathain (2010)

Mixed methods criteria

1. Teddlie & Tashakkori (2009) – emphasise **inference quality** which is made up of *design quality* and *interpretive rigour*. Design quality:
 1. *Design suitability* – appropriate methods?; appropriate mixed methods design?
 2. *Design fidelity* – are methods and design implemented rigorously?
 3. *Within-design consistency* – do components fit together (e.g. sampling appropriate to type of research method?)
 4. *Analytic adequacy* – data analysis rigorous and appropriate to research questions?

Interpretive rigour

1. *Interpretive consistency* – are inferences consistent with data and research methods employed?
2. *Theoretical consistency* – are inferences consistent with theory and what is known?
3. *Interpretive agreement* – would other researchers draw same inferences and are inferences consistent with those of participants?
4. *Interpretive distinctiveness* – are inferences more plausible than other possible inferences?

Interpretive rigour (continued)

5. *Integrative efficacy* – do meta-inferences incorporate inferences made in each component and are any inconsistencies in findings explored?
6. *Interpretive correspondence* – do inferences correspond to the research questions and ‘do the meta-inferences meet the stated need for using an MM design? (i.e. is stated purpose for using MM met?)’ (p. 302)

Mixed methods criteria

2. Review of mixed methods quality criteria

- A good mixed methods study...
 - clearly justifies why mixed methods approach is suitable
 - provides a transparent account of the mixed methods design
 - provides appropriate sampling, data collection and analysis of individual components
 - integrates quantitative and qualitative findings and explains process of integration

A. O’Cathain, E. Murphy & J. Nicholl (2008) ‘The quality of mixed methods studies in health services research’, *Journal of Health Services Research & Policy*, 13: 92-8.

Good Reporting of A Mixed Methods Study (GRAMMS)

1. Describe the **justification** for using a mixed methods approach to the research question
2. Describe the **design** in terms of the purpose, priority and sequence of methods
3. Describe each **method** in terms of sampling, data collection and analysis
4. Describe where **integration** has occurred, how it has occurred and who has participated in it
5. Describe any **limitation** of one method associated with the presence of the other method
6. Describe any **insights** gained from mixing or integrating methods

Mixed methods criteria

3. Good mixed methods manuscripts

- Founding editors of *Journal of Mixed Methods Research*:
 - i. Well-developed ... quantitative and qualitative components
 - ii. Integration of the quantitative and qualitative strands
 - iii. Inclusion of mixed methods approach that adds to the literature about mixed methods research

Mixed methods criteria

4. Study of quality criteria among social policy researchers

Defining Quality Criteria in Social Policy Research



A survey conducted by Saul Becker and Alan Bryman on behalf of the Social Policy Association and Social Policy Committee of the Joint University Council

- E-survey:
- URL sent to 800 researchers
- 347 logged onto website
- 251 completed

Research Procedures and Process

When evaluating the quality of any piece of social policy research, how important is it to know in the published output that each of the following procedures has been observed?

(For each item tick ONE box only)

	Very Important	Fairly Important	Fairly Unimportant	Not at all Important
The research conforms to appropriate ethical codes and protocols (eg SRA/BSA/Research Governance Framework for Health and Social Care)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Informed consent was given	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The safety of researchers has been assured	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The safety of participants has been assured	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Data are stored and protected according to established protocols and legislation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
An explicit account of the ethics and governance of the research is provided	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Qualitative telephone interviewees

- Purposive sample of 28 from 90 who had agreed to be interviewed in e-survey
- Sampling based on orientations to research, e.g. quantitative vs. qualitative research; user involvement; research vs. policy and practice

Evidence from interviews

- Interviewees probed on criteria for mixed methods research
- 3 criteria stood out
 - Relevance to research questions
 - Transparency
 - Integration of quantitative and qualitative findings
 - Also, having a rationale for mixed methods approach

Bryman, A., Becker, S., and Sempik, J. (2008) 'Quality criteria for quantitative, qualitative and mixed methods research: The view from social policy', *International Journal of Social Research Methodology*, 11: 261-76.

Mixed methods criteria

5. The comprehensive approach (O’Cathain, 2010) – 6 domains + 2

Domain 1: Planning quality – 4

Domain 2: Design quality – 4

Domain 3: Data quality – 5

Domain 4: Interpretive rigour – 8

Domain 5: Inference transferability – 4

Domain 6: Reporting quality – 3

28 + 2 = 30 quality criteria

O’Cathain, A. (2010). Assessing the quality of mixed methods research: toward a comprehensive framework. In A. Tashakkori and C. Teddlie (Eds.), *SAGE handbook of mixed methods in social and behavioral research* (2nd edition, pp. 531-55). Los Angeles: Sage.

Some recurring themes: Alan's 'must haves'

- Need for quantitative and qualitative components to be appropriately implemented
- 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

To appear in a forthcoming article which has been accepted for publication

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Review of quality of mixed methods research in health services research: the transparency issue

- ‘The main quality issue identified was a lack of transparency of the mixed methods aspects of the studies and the individual components. The qualitative components were more likely to be poorly described than the quantitative ones.’

A. O’Cathain, E. Murphy & J. Nicholl (2008) ‘The quality of mixed methods studies in health services research’, *Journal of Health Services Research & Policy*, 13: 92-8.

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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.

From: Teddlie, C. and Tashakkori, A. *Foundations of Mixed Methods Research: Integrating Quantitative and Qualitative Approaches in the Social and Behavioral Sciences*, Los Angeles: Sage, 2009, p. 133.

Example of first approach: separate research questions in a study of nightlife tourism

- Study of nightlife tourism – young Danish tourists at Sunny Beach, Bulgaria
- 2 Research questions:
 - Prevalence of substance use, sex, and vacation-related health problems
 - How do tourists ‘experience and interpret their own risk-taking behavior’

Example of first approach: separate research questions in a study of nightlife tourism

- Study of nightlife tourism – young Danish tourists at Sunny Beach, Bulgaria
- 2 Research questions:
 - Prevalence of substance use, sex, and vacation-related health problems ***Airport survey while checking in for return flight***
 - How do tourists ‘experience and interpret their own risk-taking behavior’ ***Observation & semi-structured interviews***

S. Tutenges (2012) ‘Nightlife tourism: a mixed methods study of young tourists at an international nightlife resort’, *Tourist Studies*, 12: 131-50.

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?

Parmelee, J.H. et al. (2007) ' "What about people our age?": Applying qualitative and quantitative methods to uncover how political ads alienate college students', *Journal of Mixed methods research*, 1(2): 183-99.

Example of second approach: study of political advertising in US

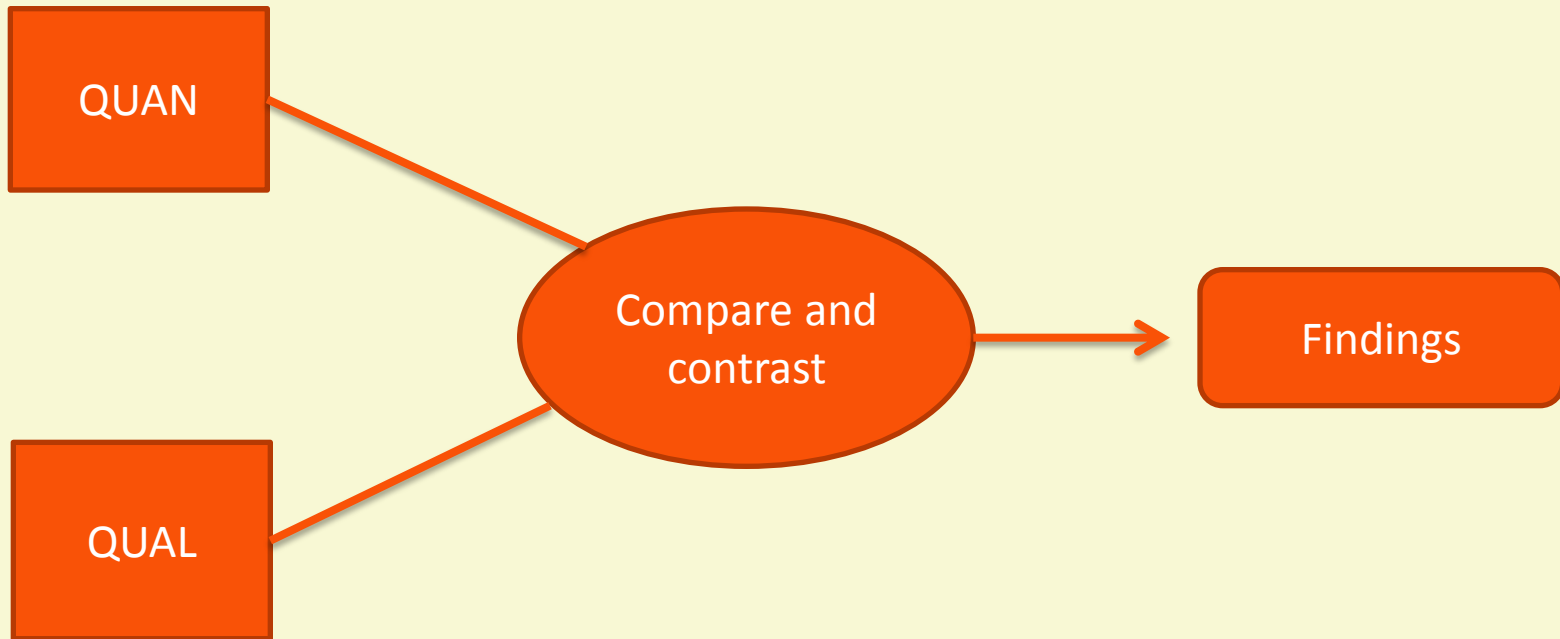
Three sub-questions:

- 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: Alan's 'must haves'

- Need for quantitative and qualitative components to be appropriately implemented
- 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

Types of mixed methods design: Convergent Parallel Design

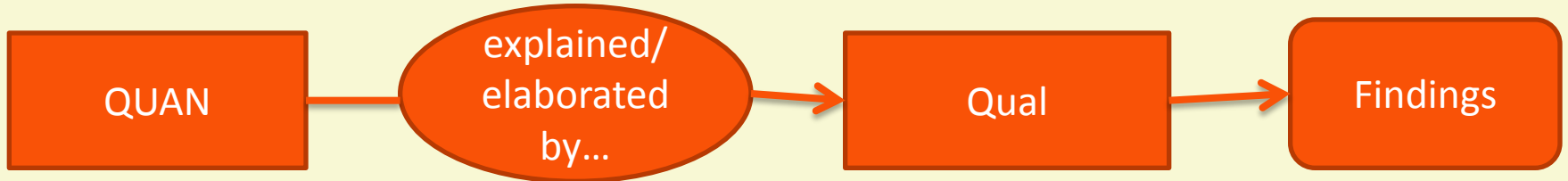


This and the next 3 slides outlining types of mixed methods design based on:
J.W. Creswell & V. Plano Clark, *Designing and Conducting Mixed Methods Research*, 2nd edition, Thousand Oaks, CA: Sage, 2011

Convergent parallel design – destination branding in Edinburgh

- Is the strength of the destination brand greater when stakeholders coordinate their brand activities?
- Qualitative component
 - Documents and reports on the Destination Edinburgh Marketing Alliance
 - 12 semi-structured interviews with ‘individuals representing diverse subsectors of the tourism industry’
- Quantitative component
 - Online questionnaire to stakeholders in tourism organizations (55 usable questionnaires returned)
- ‘Results were **merged** by comparing them and were interpreted and discussed by stating the degree to which they converged, diverged, or related’.

Types of mixed methods design: Explanatory Sequential Design



Explanatory sequential design: childhood obesity in rural Canadian communities

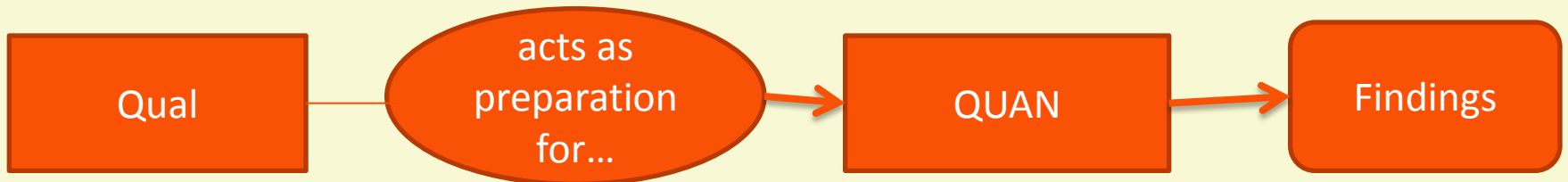
- Meaning of health among children in rural Saskatchewan
- Questionnaire completed by children & parents + height & weight measurements
- Semi-structured interviews with children at school on 2 occasions

H. Bilinski et al. (2013) 'Lessons learned in designing and conducting a mixed methods study to explore the health of rural children', *International Journal of Health Promotion and Education*, 51: 1-10.

Explanatory sequential design: childhood obesity in rural Canadian communities

- ‘although the quantitative data identified that many children (34%) were an unhealthy weight with a significantly higher prevalence of unhealthy weights in boys, the qualitative data discovered that neither weight status nor gender influenced children’s beliefs about health. That is, both boys and girls, and children of healthy and unhealthy weight status described themselves as healthy, had similar beliefs about health, and emphasized that happiness was the most important dimension to their health’.
- **...qualitative data allowed an elaboration of the quantitative findings**

Types of mixed methods design: Exploratory Sequential Design



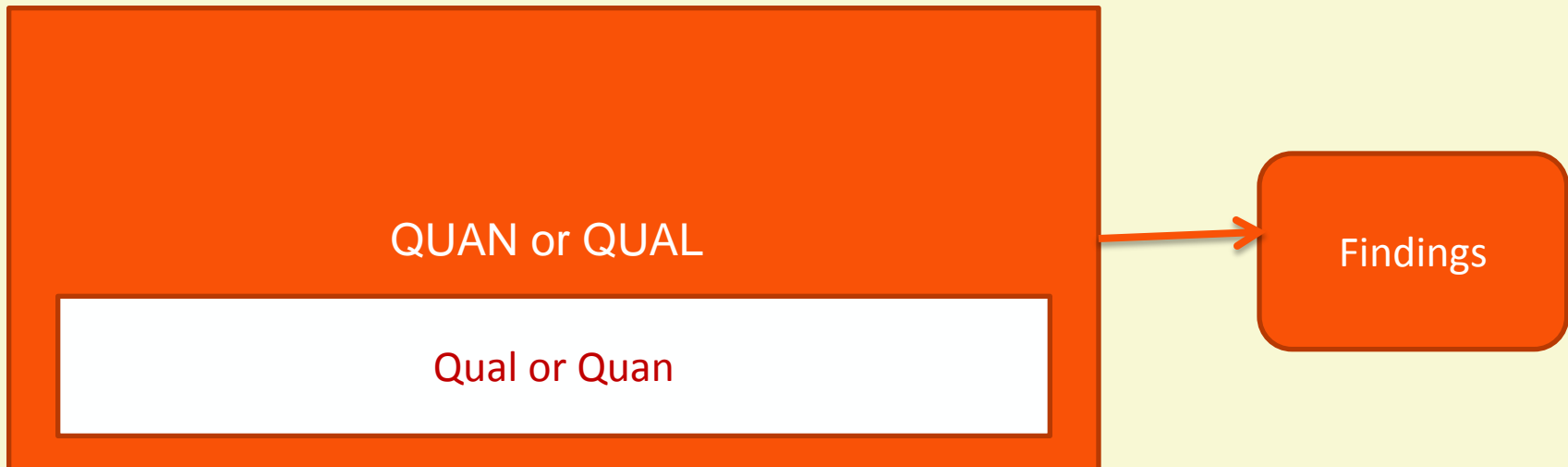
Exploratory sequential design: single women's holiday experiences

- Power relations in single women's holiday experiences
- Qualitative component:
 - 2 sets of focus group interviews before and after summer 2005
 - Solicited diaries kept during summer holiday
- Quantitative component:
 - Survey of 190 single female students, 2008-9

Exploratory sequential design: single women's holiday experiences

- Qualitative research **'provided the framework for the quantitative phase'**
- 'Based on the findings from the qualitative phase, a questionnaire was designed, which attempts to map the social aspects of holidaying and how younger women value company and solitude.'
- '...both the qualitative and quantitative data demonstrate how bonding with friends during a holiday is important to both younger and midlife single women.'
- 'The survey also suggests that cities are seen to be more suitable as solo holiday destinations by single women regardless of age.'

Types of mixed methods design: Embedded Design



- Arises from a sense that one set of data won't be enough to answer all aspects of the phenomena of interest (e.g. research questions require quantitative *and* qualitative data). One set of data often subsidiary to the other

Embedded design: Sustainability perspectives on Oulanka National Park, Finland

- Sustainability of tourism from perspective of local stakeholders
- ‘A mixed methods approach involving a concurrent embedded strategy with qualitative and quantitative data collection techniques was used to gain a **holistic understanding** of local stakeholders’ ideas and perceptions of tourism and park development in ONP’
- 40 semi-structured interviews followed by self-administered questionnaire with 33 interviewees

Embedded design: Sustainability perspectives on Oulanka National Park, Finland

- Main method – qualitative. Interviewees classified into 1 or 4 groups according to dominant sustainability discourse in their interviews
- For quantitative component – sustainability operationalized and related to other variables
- ‘the results of qualitative and quantitative analysis **supplemented each other and led to a deeper understanding** of local perceptions of tourism development pertinent to PAN [Protected Area Network] Parks’

Embedded design: Sustainability perspectives on Oulanka National Park, Finland

- ‘The stakeholder interviews **complemented** the quantitative analysis since the interviewees discussed issues, especially critical aspects, which were not asked in the survey’.



More holistic account

Some recurring themes: Alan's 'must haves'

- Need for quantitative and qualitative components to be appropriately implemented
- 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

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

Example – Political ads & US college students (Parmelee et al., 2007)

- Mixed methods research entailed
 - Focus groups discussed specific political ads on TV during 2004 presidential race (between Bush and Kerry) and 3 general questions
 - Traditional quantitative content analysis of images and issues in TV ads to establish whether young people and issues in which they are interested are ignored
- Very explicit rationale. Methods closely tied to specific research questions. **Different research questions**
- Quantitative content analysis ‘to confirm as well as elaborate on the qualitative findings’. **Triangulation and enhancement**

Some recurring themes: Alan's 'must haves'

- 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

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 fragments of data
5. Skills
6. Themes

Framework

	Interviewee 1	Interviewee 2	Interviewee 3	Interviewee <i>n</i>
Theme 1				
Theme 2				
Theme 3				
Theme 4				
Theme <i>n</i>				

Based on: Ritchie, J., Spencer, L., and O'Connor, W. (2003), 'Carrying out Qualitative Analysis', in J. Ritchie and J. Lewis (eds.), *Qualitative Research Practice: A Guide for Social Science Students and Researchers* (London: Sage).

A Framework approach to integration

	Method 1 (quantitative)	Method 2 (qualitative)
Theme 1	Data	Data
Theme 2	Data	Data
Theme 3	Data	Data
Theme n	Data	Data

Study of destination branding in Edinburgh by Bregoli

Table 5. Merged Results

Themes	Qualitative Results	Quantitative Results
Brand commitment	10 of 12 interviewees believed that there was mixed commitment to the “Edinburgh Inspiring Capital” brand.	<p>Respondents’ commitment to the brand:</p> <ul style="list-style-type: none"> • 38.2% were strongly committed or committed • 29.1% were fairly committed • 32.8% were not committed or not committed at all • High helping behavior toward visitors
Brand citizenship behavior	More work needs to be carried out so that the brand values are adopted by stakeholders in their job	<ul style="list-style-type: none"> • 63.6% of respondents were aware that, through their behavior, they communicate the destination brand, but just 23.7% of them take into account the effects that their advertising activity has on it • Half of the respondents have discussions with other people on the brand • Few respondents are willing to sacrifice their interests to adopt the destination brand (3.6%) • Not all newcomers to the businesses receive information on the “Edinburgh Inspiring Capital” brand (18.2%) • Half of the respondents are keeping abreast on the destination brand
Effects of coordination on the brand	Increased awareness of the “Edinburgh Inspiring Capital” brand and the city’s promotion strategy	<p>Most useful mechanisms:</p> <ul style="list-style-type: none"> • Communication (51.1%) • Formal rules (49.1%) • Interlocking directorates (43.7%) • Social norms (43.6%)

Putting the two together

- ‘both sets of results show that there is mixed commitment of stakeholders to the “Edinburgh Inspiring Capital” brand because both positive and negative answers coexisted’.
- **‘Thanks to the interviews it was possible to identify some of the possible reasons of both the mixed commitment and the low level of brand citizenship behavior’.** Several factors identified, e.g. high turnover in industry makes it difficult for newcomers to become familiar with the brand, brand regarded as council brand rather than city brand.

Tips on integration

7. At the very least, don't have separate chapters/sections
8. Examine some mixed methods exemplars

Structure of the article: Parmelee et al.

- Introduction
- Young people, voting, cynicism, and advertising
- Theoretical and mixed methods perspectives
- Method
 - Focus groups
 - Content analysis
- Results
 - Short introduction
 - Media-based frames and the failure to engage college-age voters
 - Negative ads, audience-based frames, and cynical voters
 - Students' recommendations for how to build more engaging political ads
- Discussion
 - Summary and implications
 - Limitations and future research

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’

Bryman, A. (2007) ‘The research question in social research: what is its role?’, *International Journal of Social Research Methodology*, 10, 5-20; Bryman et al. (2008) ‘Quality criteria for quantitative, qualitative and mixed methods research: a view from social policy’, *International Journal of Social Research Methodology*, 11: 1-16.



Strategic management research

- All articles in *SMJ* 1980-2006. Citations up to January 2009
- 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

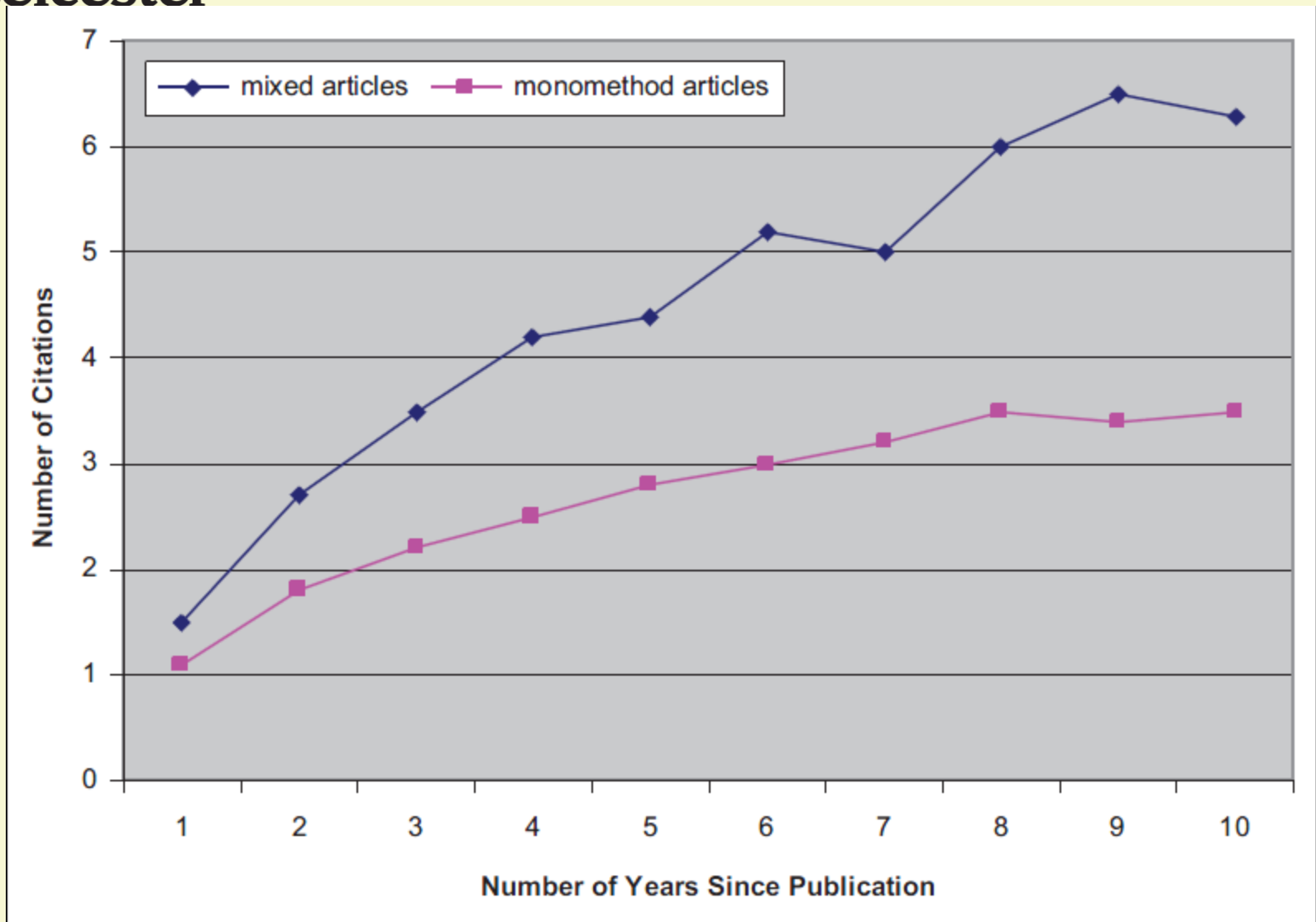
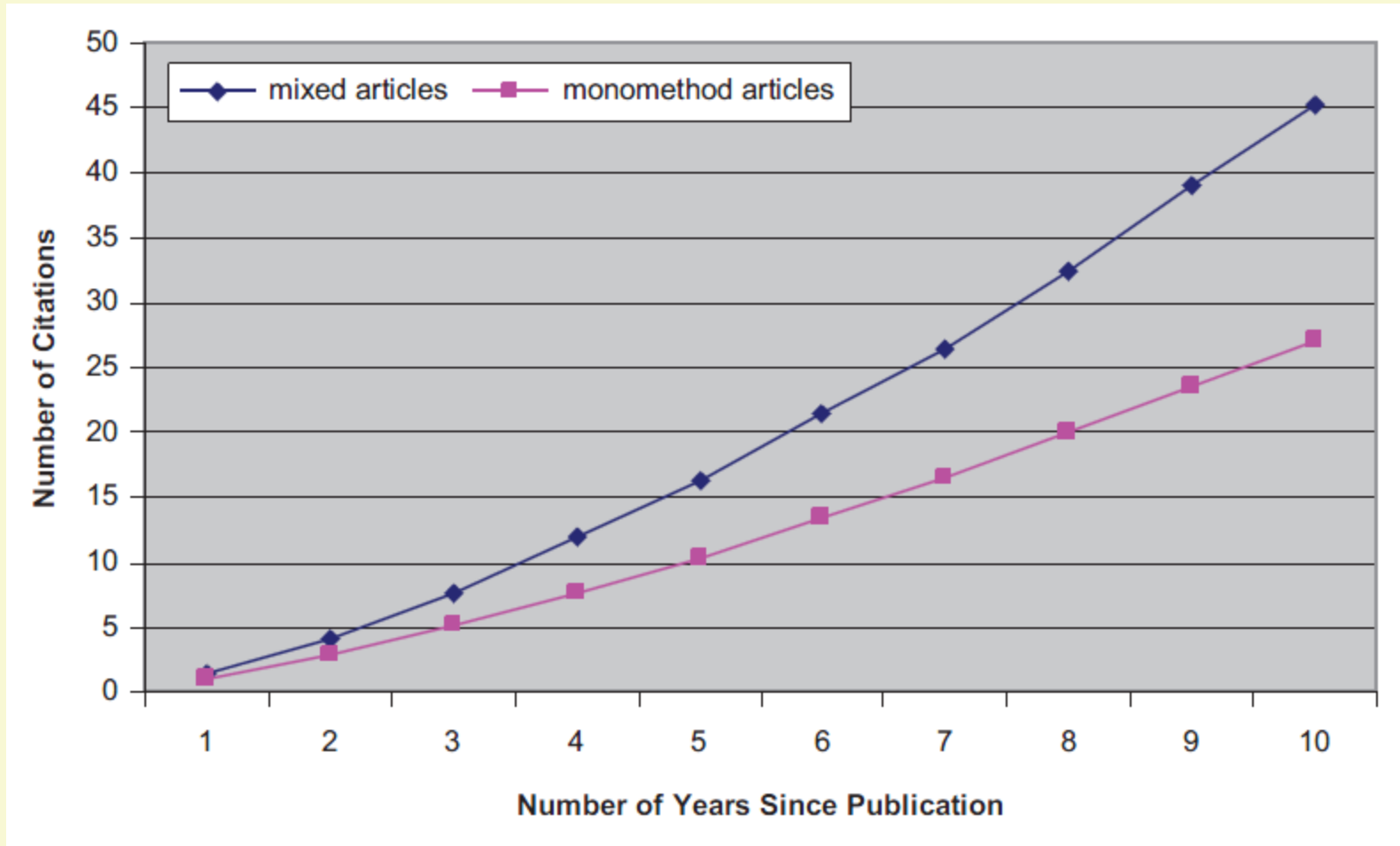


Figure 2. Annual average citation counts for mixed and monomethod articles



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 rationale but only 29 of them gave it as a rationale, i.e. majority of articles using triangulation didn't cite it as a rationale

Example: Bregoli's (2012) study of destination branding in Edinburgh

- Rationale for mixed methods in terms of **triangulation**
- Thanks to the interviews it was possible to identify some of the possible reasons of both the mixed commitment and the low level of brand citizenship behavior. **Explanation**

Example: Bregoli's (2012) study of destination branding in Edinburgh

- 'The interviewees felt the coordination activity was useful for increasing the overall level of brand commitment but, at the same time, they believed it was too early to make a judgment about it because DEMA [Destination Edinburgh Marketing Alliance] was set up too recently. Some more pieces of information were gained through the quantitative survey in which respondents were asked whether the coordination mechanisms were useful for becoming committed to the brand values and for adopting them. In this case, it emerged that communication, formal rules, interlocking directorates, and social norms were considered to be the most beneficial by the respondents.' **Enhancement**

Putting the two together

- ‘both sets of results show that there is mixed commitment of stakeholders to the “Edinburgh Inspiring Capital” brand because both positive and negative answers coexisted’.

Triangulation

- ‘Thanks to the interviews it was possible to identify some of the possible reasons of both the mixed commitment and the low level of brand citizenship behavior’. Several factors identified, e.g. high turnover in industry makes it difficult for newcomers to become familiar with the brand, brand regarded as council brand rather than city brand. **Explanation**



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