

Overview of mixed methods: a health services research perspective

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Outline of presentation:

- Address some of the conceptual and practical challenges, drawing on (extensive) social science literature
 - Can research paradigms be mixed?
 - Why used mixed methods?
 - How to design mixed method studies?
 - Why bother?

Mixed or multi-methods?

Multi-methods:

- Use different methods of data collection and analysis *within* a single research paradigm
- e.g. questionnaire measuring community nurses' palliative care attitudes *and* analysis of place of death statistics

(Addington-Hall et al, 2006)

Mixed or multi-methods?

Mixed methods:

- Bring together methods from *different* paradigms
- e.g. in a study of attitudes of Spanish hospital nurses to dying patients
 - observation,
 - in-depth interviews
 - a representative survey

(Arantzamendi et al, Poster 382)

1. Can/should paradigms be mixed?

1. Purists

- The philosophical paradigms are incompatible and cannot be mixed

2. Complimentary

- because their assumptions differ, methods from different paradigms should be kept apart

3. Alternative paradigms

- Traditional paradigms are no longer relevant to practice
 - A new paradigm should inform mixed methods research 'which actively embraces and promotes the mixing of methods'
- Pragmatism-** Tashakkori and Teddie
- The research question is of most importance – both the method and the philosophical worldview should be driven by this
 - Qualitative and quantitative methods can be used together

Greene, 2007

2. Why do it?

- to develop a better understanding of the phenomena being studied
- **Not** always appropriate – use of mixed methods (and choice of which mixed method design) depends on the purpose and questions of the research

There are costs involved

- requires expertise within research team (if not within individual) in research methods from both qualitative and quantitative ‘camps’
- may increase complexity of study – requiring better study management, increased costs, more time
- relatively new research field – knowledge of ‘how to do it’ still limited
- presents challenges in writing up and publishing

5 main purposes (after Greene, 2007)

- **Expansion** - different methods are used to assess different phenomena to expand the scope and range of the study
- **Triangulation** - different methods used to measure same phenomenon, to increase confidence in the conclusions reached – if consistent or convergent information reached
- **Complementarity** - methods are used to investigate different aspects or dimensions of the same phenomenon - to deepen and broaden the interpretations and conclusions from the study

- **Development**

- Results from one method are used to inform the development of the other method eg instrument development, but also sampling and implementation

(Flemming, Adamson and Atkin (2008). Palliative Medicine).

- **Initiation**

- as in complementarity, different methods are used to investigate different aspects or dimensions of the same phenomenon - but the intention is divergence in order to generate new understandings – to raise new ‘I wonder why ...’ questions

3. How design a mixed method study?

- Tashakkori and Teddlie (2003)
 - nearly 40 different types of mixed methods designs in the literature
- Cresswell and Plano Clark (2007)
 - 12 different mixed method design classifications
- ‘... guidelines for mixed methods practice are still in the development phase ...’ (Greene, 2007)

Decisions to make:

- Timing of qualitative and quantitative methods (data collection, analysis *and* interpretation):
 - concurrent or sequential (and which first?)
- Weighting of qualitative and quantitative methods:
 - equal or unequal weight (and which has more emphasis)

Decisions to make:

- How will the qualitative and quantitative components be mixed?
 - merge the data – during interpretation or analysis?
 - embed the data – which in which?
 - connect the data – which leads to which?

4. Why bother!

- Palliative care involves physical, psychological, social and spiritual wellbeing for patients, and for their families
- Who – like the health and social care professionals who care for them – are part of 21st century society with its plurality of opinions, attitudes and beliefs, and complex healthcare delivery systems
- Palliative care involves complex phenomena – and we need (where appropriate) to use all appropriate methods to understand these better

‘the core meaning of mixed methods ... is to invite multiple mental models into the same inquiry space for purposes of respectful conversation, dialogue and learning one from the other, towards a collective generation of better understanding of the phenomena being studied ...’

where ‘mental models’ include philosophical paradigms, theoretical assumptions, disciplinary theories, methodological traditions, life experiences, values and beliefs – everything which influences how the individual researcher sees and makes sense of the world.