



Mixed methods – Cresswell’s perspective

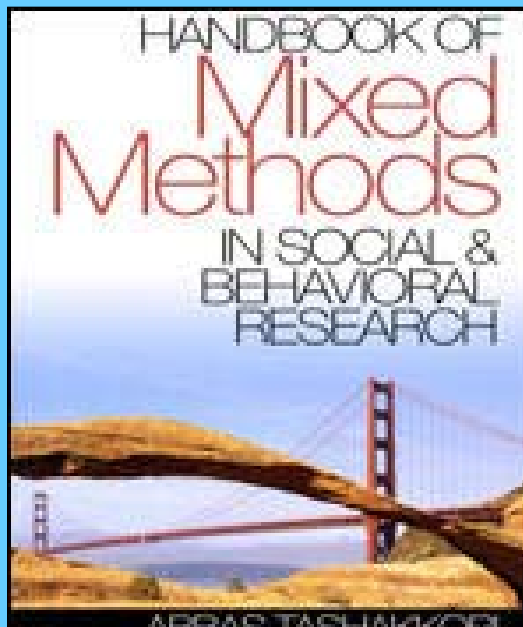
<https://www.youtube.com/watch?v=l5e7kVzMIfs>

Telling a Complete Story with Qualitative and Mixed Methods Research - Dr. John W. Creswell

Mixed Methods as a “Movement”

“The emergence of mixed methods as a third methodological movement in the social and behavioral sciences began during the 1980’s.” (p. 697)

-Tashakkori & Teddlie (2003)



QUANTITATIVE QUESTIONS

- How much training is required?
- Muscle injury incidence?
- Psychologist – wellbeing and marathon running



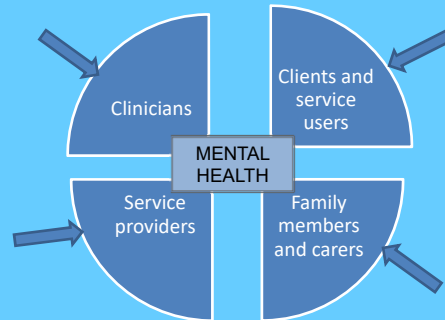
QUALITATIVE QUESTIONS

- Motivation and marathon running
- Exercise and wellbeing

MIXED METHODS QUESTION – systemic

- What is it about a successful marathon that draws community to the event?

How successful was a mental health program for the long term unemployed in the community?



Are there any other possible participant groups to engage with?



Mixed methods research can take place where people interact...

- Why do people sit in coffee shops?
- What can café owners do to entice more patrons?
- What sectors of the population visit more often and why?



What if we have a complex research question?



Lots of stakeholders

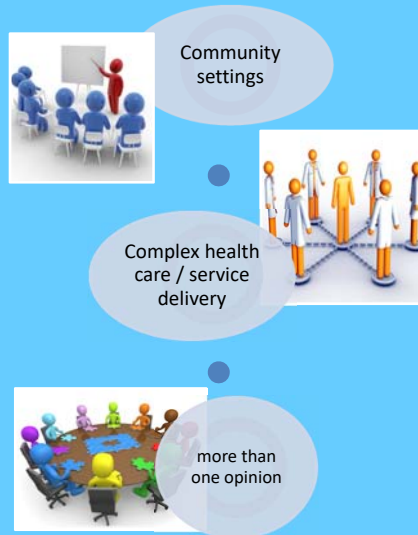


Diverse opinions



A “wicked” problem

What type of research scenario?



Use of mixed methods approach

- Answers the question from a **number of perspectives**.
- Ensures that there are **no 'gaps'** to the information / data collected.
- Ensures that **pre existing assumptions** from the researcher are **less likely**.
- Useful when **one methodology does not provide all** the information required.



Scope of mixed methods approach

Can be a on a micro or macro scale.

Examples:

A classroom for special needs children.



Services provided by a community support organisation services.



A national program for raising dementia awareness.



Uses evaluative research techniques

Data collected by:

- Surveys – postal, web, email, telephone, door to door, central location (shopping centre)
- Observational techniques
- Written material and resources
- Focus group discussions
- Interviews (individual and group)
- World café or Delphi - consensus methods

Mixing methods 3 key models - timing



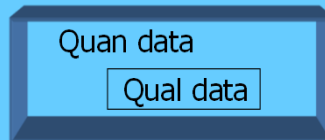
Concurrent
(convergent)



Sequential **Connect data:**



Embedded



MIXED METHODS QUESTIONS – systemic issues

- How well has a school health initiative for high school students been received?
- What are the issues in accessing services for those affected by traumatic injury?



- What information do we require?
- Is there more than one source or opinion?
- What evidence do we require to show the outcomes?

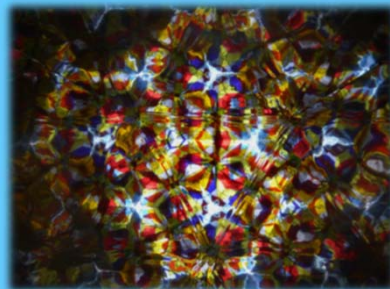
Getting the right information - sampling approaches

- Your sample population will have **more than 1 group of participants** OR more than 1 type of data collection method.
- Consider those groups separately – what is the best way to contact and approach them?
- Initial techniques TO COLLECT YOUR DATA. Focus groups / interviews OR surveys and quantitative data.



Triangulation – Synthesis

Because each **individual telescope's** view **overlaps** that of its neighbours, the **accuracy** of each telescope can be **validated** to a certain extent by the others.



Characteristics of triangulation in mixed methods



- Focuses on triangulation of **methods** or triangulation of **subjects**. Is often a combination of both.
- Triangulation of **methods** – example = focus groups and survey data. Could be for each individual participant.
- Triangulation of **subjects** – different and diverse perspectives from various persons.
- Timing depends on the model.

Concurrent designs

- Data collection happens at approximately the same time.
- The importance of data (QUAL +QUANT) is roughly equal.
- Triangulation and synthesis occurs at the end of data analysis.



Concurrent Model (convergent)



Informal family carers

Same timeline

General Practitioners

Interviews & focus groups

Synthesise = Compare and contrast data findings to give a holistic picture

Survey based data collection

Sequential designs

- Has distinct PHASES of data collection.
- The next phase cannot take place without the preceding one being analysed and complete.
- The preceding phase findings inform the next phase.
- Synthesis of findings occurs at the end of each phase prior to the next.



Model 2 - Explanatory

- Sequential
- The explanatory model *explains* the initial phase of **quantitative findings in more depth** interviewing (or focus groups) + self selected participants from the initial phase.



Explanatory Model (sequential)



Quantitative
Statistical results = Seniors proportionately high ED admissions for medication adverse effects



Qualitative
(eg focus groups to explore why this is the case)

Drafting results in a report or paper to **explain** why this is happening

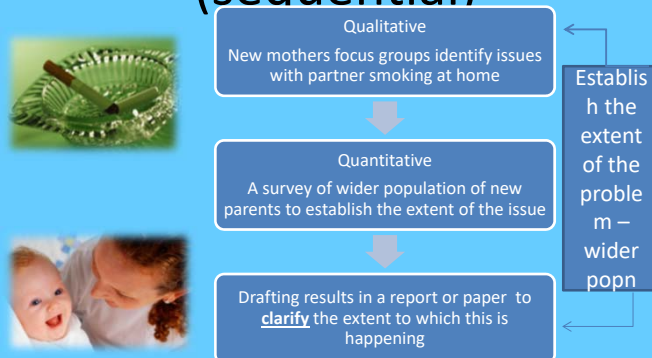
Greater detail of the problem

Model 3 - Exploratory

- Sequential.
- The exploratory model = when little is initially known about a topic.
- Uses qualitative techniques – eg Delphi technique, world café, community forum, focus groups to define a problem.
- Then uses findings to develop a second quantitative phase (eg survey, questionnaire).



Exploratory Model (sequential)



Model 4 - Instrument design

- Sequential.
- Initial - Qualitative in approach.
- Helps in deciding priority areas. Areas to focus on.
- Refining issues discussed (qualitatively) into core areas for formulating a quantitative phase of the model.
- May require a number of iterations before final tool is decided upon.



Instrument Design Model



People diagnosed with a chronic illness seem disempowered

Qualitative
(eg interviews to explore the KEY markers for empowerment)



Quantitative
Design a questionnaire to measure empowerment through statistical calculations

Defining the key issues to investigate / verify with larger population

Model 5 - Embedded design

- A lesser component of a larger study.
- It is not necessarily vital to the larger study.
- Nonetheless is useful information.
- The smaller study can involve any appropriate type of data collection.



Embedded designs

- The overarching study has the priority.
- However, a smaller sub study can occur.
- The sub study produces interesting although not essential results.
- The synthesis of each sub study may not occur – however the results of the sub study may show how feasible the intervention / program is.



Embedded design model



A sound therapy intervention on an aged care setting



Main study
Validated baseline measurable outcomes + observational data



The same validated measures post intervention period



Smaller embedded study
A questionnaire survey for staff – attitudes pre and post intervention

In summary



- Can be labour intensive. Involves multiple stages / types of data collection.
- Provides greater breadth of perspectives around a certain issue.
- Combining approaches overcomes deficiencies in one method only.
- Can help define more 'nebulous' concepts or better addresses more complex issues.

References

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