Abstract

Systematic reviews of published qualitative research have emerged as an important set of methods to aggregate, summarize, analyze, and synthesize qualitative data from a variety of study designs. These approaches include meta-study, meta-summary, grounded formal theory, meta-ethnography, and qualitative meta-synthesis. In this workshop, we will focus on qualitative meta-synthesis by presenting a six-step approach for conducting this type of systematic review and sharing our procedures and results from our own studies.
Learning Outcomes

1. Comprehend the importance of systematic reviews of research literature

2. Define qualitative metasynthesis

3. Identify and utilize the steps involved in conducting a qualitative metasynthesis
Systematic Reviews
Narrative Literature Reviews

- Broad literature reviews of previously published research
- Review method not typically reported
- Descriptive, Interpretive, and/or Critical Review
- Report a story of the literature
Systematic Reviews

• Literature reviews adhering closely to a set of scientific methods which are reported as part of the review report

• Explicitly aimed to limit systematic error (bias)

• Rigorous attempt to identify, appraise, and synthesize all relevant studies (of whatever design) in order to answer a particular question (or set of questions) (Pettigrew & Roberts, 2006, p. 9)

• Research (meta) of previous research (primary)
Evidence Pyramid

- Systematic Reviews
- Randomized Controlled Trials
- Cohort Studies
- Case-Control Studies
- Case Series, Case Reports
- Editorials, Expert Opinion
Conducting a Systematic Review

- Requires a team approach

- Considerable commitment from team members

- Members need to clarify each person’s contributions

- What does each member hope to gain from participation
Reflective Questions

• What is the purpose of conducting the systematic review?

• Who is the intended audience of the findings?

• Who will use the products?

• Who will be the members of the team and how will team members be selected? (Paterson, Thorne, Canam, & Jillings, 2001)
Reflective Questions

- Do the reviewers have the necessary resources to access primary research reports?

- Do reviewers have the enough time, space and expertise to conduct the systematic review?

- How will team members relate and interact with each other? (Paterson, Thorne, Canam, & Jillings, 2001)
Reflective Questions

• What will be the role of the primary investigator?

• How will conflicts and/or differing points of view be resolved among the research team? (Paterson, Thorne, Canam, & Jillings, 2001)
Determining the Purpose of the Systematic Review

• Directs the review question

• Develops from reading research within the field

• Identifies questions about assumptions of the work (Paterson, Thorne, Canam, & Jillings, 2001)
Formulating a Review Question

• May relate to a broad or narrow phenomenon

• A broad focus permits a focus on the overall phenomenon as well as related ones

• A narrow focus limits the concentration of the scope of research available to the reviewers (Paterson, Thorne, Canam & Jillings, 2001)
Research Synthesis
Research Synthesis

• A technique for synthesizing the results of primary research studies both quantitatively and qualitatively (Cooper, 1998, p. 4)

• Integrating findings to reach a new theoretical or conceptual level of understanding and development
  – Integration
    – More than the sum of parts
    – Inferences derived from findings as a whole
    – New higher-order interpretations created (Thorne, Jensen, Kearney, Noblit, & Sandelowski, 2004)
Types of Systematic Research
Synthesis Reviews

- Meta-Analysis
- Meta-Ethnography
- Grounded Formal Theory
- Meta-Study
- Qualitative Metasummary
- Qualitative Metasynthesis
Systematic Research Synthesis Reviews

**Meta-Analysis**

A statistical technique for aggregating and integrating the results of primary research studies quantitatively (Cooper, 1998)

**Qualitative Metasummary**

A quantitative oriented aggregation of qualitative findings that are themselves topical or thematic summaries or surveys of data (Sandelowski & Barroso, 2007, p. 151)
Systematic Research Synthesis Reviews

Meta-Ethnography
The focus is on constructing interpretations, not analyzing the data

Often look for “metaphors” as categories or descriptors (e.g., Campbell et al., 2003; Noblit & Hare, 1988)

Grounded Formal Theory
Analyze inductively and interpret theory, methods, and research findings across qualitative studies (Glaser, 2006; Glaser & Strauss, 1967)

Synthesize this work to formulate new interpretations (Finfgeld, 2003; Thorne, Jensen, Kearney, Noblit, & Sandelowski, 2004)
Systematic Research Synthesis Reviews: Meta-Study

• Meta-Data-Analysis
• Meta-Method
• Meta-Theory
• Meta-Synthesis (Paterson, Thorne, Canam, & Jillings, 2001)
Qualitative Metasynthesis
Qualitative metasynthesis is an intentional and coherent approach to analyzing data across qualitative studies. It is a process that enables researchers to identify a specific research question and then search for, select, appraise, summarize, and combine qualitative evidence to address the research question. This process uses rigorous qualitative methods to synthesize existing qualitative studies to construct greater meaning through an interpretative process. (Erwin, Brotherson, & Summers, 2010, p. 186)
Qualitative Metasynthesis

An interpretation of qualitative findings that are themselves interpretive syntheses of data including phenomenologies, ethnographies, grounded theories, and other integrated and coherent descriptions or explanations of phenomena, events, or cases that are the hallmarks of qualitative research (Sandelowski & Barroso, 2007, p. 151)
Reasons for Qualitative Metasynthesis

The move toward evidence-based practice has been a positive impetus to align qualitative research and research synthesis efforts (Sandelowski & Barroso, 2007).

Allows for a collective way of viewing specific research within a discipline and integrating the findings into a form that is readily accessible and understandable.
Conducting a Qualitative Metasynthesis
Sandelowski & Barroso’s Qualitative Metasynthesis

Handbook for Synthesizing Qualitative Research

Margarete Sandelowski
Julie Barroso
Qualitative Metasynthesis Examples

Ron Chenail, Sally St. George, Dan Wulff, Maureen Duffy, Karen Wilson Scott, & Karl Tomm

2012

Clients’ Relational Conceptions of Conjoint Couple and Family Therapy Quality: A Grounded Formal Theory

Journal of Marital and Family Therapy, 38(1), 241-264.
Qualitative Metasynthesis Examples

Kamilah Thomas-Purcell

2018

Exploring Religion and Spirituality as a Key to Addressing Cultural Barriers to Health Literacy

National Institute on Minority Health and Health Disparities
Sandelowski & Barroso’s Six Steps or Stages of a Qualitative Metasynthesis

1. Formulating the review question
2. Conducting a systematic literature search
3. Screening and selecting appropriate research articles
4. Analyzing and synthesizing qualitative findings
5. Maintaining quality control
1. Formulating the Review Question

- **PICO**: Population, Intervention, Comparison and Outcomes
- **SPICE**: Setting, Perspective, Intervention/Phenomena of Interest, Comparison, and Evaluation (Booth, 2006)

Metasynthesis Examples
- To **integrate** published knowledge in order to draw conclusions for practice
- To address apparent discrepant findings by providing **a new interpretation** (Petticrew & Roberts, 2006)
Our review questions

Chenail et al., 2012
From a metasynthesis of the published research, what inductive theory can be built regarding clients’ experiences of their conjoint couple or family therapy?

Thomas-Purcell, 2018
From a metasynthesis of the published research, what inductive theory can be built regarding African American patients’ perceptions of the role of religion/spirituality in the management of chronic disease?
2. Conducting a Systematic Literature Search

• Reviewer selects *key words* to guide the literature search

• The parameters of *who, what, and time* establish the inclusion and exclusion criteria.

• Throughout the search the reviewer continually re-evaluates the definitions of the search terms or the time frame
Our literature searches

Chenail et al., 2012

- Databases: Google Scholar, EBSCOhost, Family & Society Studies Worldwide, ProQuest Psychology Journals, PsycARTICLES, and PsycInfo
- Journals: Family Process, Journal of Family Therapy, Journal of Marital and Family Therapy
- Search Terms: client experience, client perspective, marriage and family therapy, couple therapy, family counseling, and qualitative research
- Span: 1990-2010

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- Databases: Applied Social Sciences Index & Abstracts (ASSIA), PsycInfo, JSTOR, ProQuest Central, Science Direct, CINAHL, Medline
- Search Terms: spirituality, religion, African Americans, chronic disease, qualitative
- Span: 2000-2017
3. Screening and Selecting Appropriate Research Articles

- Identify studies

- Review to determine if they meet the inclusion criteria set prior to beginning the search
Our screening process

Chenail et al., 2012

Created an Inclusion or Exclusion Criteria Form to determine whether or not each study (a) contained qualitative evidence from clients to support the findings (e.g., direct quotes from interviews or questionnaires) and (b) focused on conjoint couple or family therapy being delivered to clients consisting of more than one member of the family being seen in sessions together.

Thomas-Purcell, 2018

Created an Inclusion or Exclusion Criteria Form to determine whether or not each study (a) contained qualitative evidence from patients or health care providers to support findings (e.g., direct quotes from interviews or questionnaires) and (b) focused on religion and spirituality among African Americans.
4. Evaluating Research Studies

• Several checklists exist for the purpose of evaluating qualitative research studies

• Tool to appraise the quality of primary qualitative research studies is the Critical Appraisal Skills Programme (CASP, 2017) 10 Questions to Help You Make Sense of Qualitative Research
Critical Appraisal Skills Programme (CASP, 2017)

• Developed specifically for individuals new to qualitative research

• Guide the reviewer through the appraisal process

• Helps to determine rigor, credibility and relevance of qualitative research studies
The questions focus on:

- The research design
- Sampling strategy
- Data collection
- Reflexivity which includes the relationship between the researcher and the participants
- Ethical considerations
- Rigor of the data analysis
- Clear statement of the findings
- Value of the research.

Tool is available at [http://www.casp-uk.net/casp-tools-checklists](http://www.casp-uk.net/casp-tools-checklists)
Our evaluations

Chenail et al., 2012

- Critical Appraisal Skills Programme’s (CASP, 2017) “10 Questions to Help You Make Sense of Qualitative Research”
- CASP Rubric and Summary Form (Chenail, 2008)
- Sample: From 85 to 49 articles

Thomas-Purcell, 2018

- Critical Appraisal Skills Programme’s (CASP, 2017) “10 Questions to Help You Make Sense of Qualitative Research”
- CASP Rubric and Summary Form (Thomas-Purcell, 2018)
- Sample: From 111 to #TBD articles?
Classifying the Findings

• Typology of qualitative findings from closest to data from farthest from data
  – No finding: Not research (exclude)
  – Topical survey: Not qualitative research (qualitative metasummary)
  – Thematic survey: Exploratory qualitative research (qualitative metasummary)
  – Conceptual/thematic description: Descriptive qualitative research (qualitative metasynthesis)
  – Interpretative explanation: Explanatory qualitative research (qualitative metasynthesis) (Sandelowski & Barroso, 2007)
Extraction of Findings

• Data extraction entails separating in situ findings, or the findings produced within the confines of a reported study, in every report

• Analytic procedures, or the coding schemes and data displays used to produce findings

• Researchers’ discussion of the meaning, implications, or significance of their findings

• Don’t extract findings not supported by data (Sandelowski & Barroso, 2007)
Editing of Findings

• Edit findings to make them as accessible as possible to any reader

• Only minor editing is required (e.g., change phrases to complete sentences) (Sandelowski & Barroso, 2007)
Grouping Findings

• Group findings that appear to be about the same topic

• Render Judgment:
  – Sameness
  – Difference
  – Confirmation
  – Extension
  – Refutation (Sandelowski & Barroso, 2007)
Abstracting Findings

• Categorization

• Concise statements

• Comprehensively captures the content (Sandelowski & Barroso, 2007)
Our extractions

Chenail et al., 2012

Created a simple cross-study display for comparative to extract, review and analyze critical information from their articles:

- Full article citation
- Clinical context of the research participants (e.g., treatment setting, clinical approach, and client characteristics).
- Key methodological information such as research goal, method, procedures, and instrumentation (e.g., interview questions).
- Results of the data analysis with supporting evidence in the form of direct quotes from the clients.

Thomas-Purcell, 2018

Will create data tables to extract data direct to tables to review and analyze study characteristics, methodological quality and findings of articles

- Full article citation
- Clinical context of the research participants (e.g., chronic disease patients, medical professionals, caregivers, general population).
- Key methodological information such as research goal, method, procedures, and instrumentation (e.g., focus groups, in depth interviews).
- Results of the data analysis with supporting evidence in the form of direct quotes from research participants.
4. Analyzing and Synthesizing Qualitative Findings

- Look for themes that emerge across the studies included in the metasynthesis
- Create a taxonomy (category)
- Place related themes under the taxonomy that best describe the phenomenon
- Other synthesis methods
  - Constant Targeted Comparison
  - Imported Concepts
  - Reciprocal Translation and Synthesis of In Vivo and Imported Concepts
  - Event Timeline (Sandelowski & Barroso, 2007)
Our analyses

Chenail et al., 2012
Constructionist Grounded Theory (Charmaz, 2014)
• Initial (Open/Focused), Axial, and Theoretical Coding
• Synthesized themes
• Constant Comparison
• Theoretical Sampling

Thomas, 2018 (planned)
Constructionist Grounded Theory (Charmaz, 2014)
• Initial (Open/Focused), Axial, and Theoretical Coding
• Synthesized themes
• Constant Comparison
• Theoretical Sampling
5. Maintaining Quality Control

- Provide clear descriptions and explanations for the choices made

- Use established approaches to the synthesis of primary qualitative research studies

- Use established programs (e.g., CASP) to appraise the quality of the primary qualitative research studies.

- Employ both electronic and manual search strategies to locate all relevant articles (Sandelowski & Barroso, 2007)
Maintaining quality control

- Audit Trail

- Negotiated Consensual Validity

- Expert Peer Review

- Take precautions to address publication bias (Sandelowski & Barroso, 2007)
Our quality control

Chenail et al., 2012
- Audit trails
- Used established methods (CASP, Grounded Theory)
- Utilized manual and electronic searches
- Enlisted expert peer review (Karl Tomm)

Thomas-Purcell, 2018
- Audit trails
- Plan to use established methods (CASP, Grounded Theory)
- Utilized manual and electronic searches
- Use of multiple extractors
6. Presenting findings

• Describing the steps taken in the construction of the synthesis

• Authors can use
  – Visual displays such as charts, tables, and figures

• Numbers

• Present rich descriptions of the data, quotations, and the development of the conceptual model or working hypotheses drawn from the integration (Sandelowski & Barroso, 2007)
Presenting Findings

• Introduction: Problem and Purpose

• Methods: Sampling Strategy and Techniques and Tools for Appraising and Comparing Reports, and Classifying and Synthesizing Findings, and Validity Procedures

• Results: Profile of Reports, Profile of Report Samples, and Synthesis of Findings

• Discussion of Findings

• Citations (Sandelowski & Barroso, 2007)
Our findings

Chenail et al., 2012

**Clients’ Relational Conceptions of Conjoint Couple and Family Therapy Quality**—suggesting clients evaluate their experiences as being positive when clients perceive (a) encouraging connections between their preconceptions of therapy and what they experience in therapy, (b) connections between processes and outcomes in their sessions and significant positive or negative changes in their lives, and (c) constructive balances between all family members' bonds, roles, goals, behaviors, and treatments inside and outside of therapy. The investigators suggest their theory Conversely indicates that clients evaluate their experiences as being negative when clients perceive (a) a disconnection between their preconceptions of therapy and what they experience in therapy, (b) a disconnection between processes and outcomes in their sessions and lack of significant changes in their lives, and (c) an imbalance between family members' bonds, roles, goals, behaviors, and treatments inside and outside of therapy.

Thomas-Purcell, 2018

- TBD
Next Steps
Read


Read completed studies too!
Explore Resources

Critical Appraisal Skills Programme (CASP)

Making sense of evidence

THE JOANNA BRIGGS INSTITUTE
Start the Process

- Read, read, read!
- Volunteer
- Conduct self-assessment for resources, time, and skill sets
- Consider a consultant
- Meet with a reference librarian
- Recruit team

- Conduct preliminary search of published qualitative research studies in your general area of interest.
- Reflect on purpose of review and intended audience
- Begin process of focusing review question and selecting systematic review methodology.
- Begin the review!
References


References


Presenters

Ronald J. Chenail, Ph.D., is Associate Provost for Undergraduate Academic Affairs, Professor of Family Therapy, and Director of the Graduate Certificate in Qualitative Research Program at Nova Southeastern University (NSU). Since 1990, he has been part of 16 grants and contracts totally over $6,500,000, published over 130 publications including seven books, and given over 190 formal academic presentations at conferences and meetings. He founded The Qualitative Report, the world’s first online, open-access trans-disciplinary qualitative research journal in 1990, and remains the journal’s editor-in-chief. He also serves as Editor-in-Chief of the Journal of Divorce and Remarriage. Previously, he served as Editor-in-Chief of the American Association for Marriage and Family Therapy’s Journal of Marital and Family Therapy (JMFT). In addition he is an editorial board member of Qualitative Research in Psychology; American Journal of Family Therapy, Contemporary Family Therapy, Qualitative Social Work; Counselling, Psychotherapy, and Health; JMFT; and Sistemas Familiares; as well as a founding editorial board member of Qualitative Inquiry.

Dr. Kamilah B. Thomas-Purcell is an Assistant Professor of Public Health and a Master Certified Health Education Specialist at Nova Southeastern University College of Osteopathic Medicine. In her capacity as an Assistant Professor, she lectures Master of Public Health courses in Health Promotion and Disease Prevention, Health Disparities and Health Literacy, Foundations of Public Health, Social and Behavioral Foundations of Public Health, Principles of Health Education, and Interprofessional Leadership. Research in health disparities and disease prevention incorporating qualitative methods are a central focus of her scholarship and she has published multiple manuscripts in that area. Her most recent research on the quality and availability of services for breast and cervical cancer patients in the Caribbean was published in Cancer Causes and Control (2017). Dr. Thomas-Purcell has conducted research with distinguished organizations including the National Institutes of Health, the Caribbean Public Health Association the United Nations Population Fund, amFAR, the Foundation for AIDS Research, Moffitt Comprehensive Cancer Center and Research Institute, and the Centers for Disease Control and Prevention.
Sally is a Professor in Faculty of Social Work and she serves as the Graduate Program Director and Director of the MSW Clinical Specialization. She is also a Family Therapist and Clinical Supervisor at the Calgary Family Therapy Centre. Her areas of specialty include teaching and developing family therapy clinical practices and supervision, teaching and supervising those conducting qualitative research, and helping teachers of higher education succeed in the classroom. Her primary research activity is in the area of “Research As Daily Practice” in which she has been conducting research that joins family therapy practices and the social discourses of daily living. She has also been teaching other practitioners ways in which they can conduct research on their own practices for improving their services to their clients.

Dan Wulff, PhD, is an Associate Professor in the Faculty of Social Work and family therapist/supervisor in the Calgary Family Therapy Centre at the University of Calgary. He works to integrate the professions the family therapy and social work in his classes, in publications/presentations, in program development, and in practice. Dan also serves on the Advisory Board for the Global Partnership for Transformative Social Work, an international organization focused on education, research, and practices that support social justice locally and globally. Together with Dr. Sally St. George, they are working on what they call Research As Daily Practice, practical ways that practitioners can research what they do (and what they could do) in the course of their regular practice.
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