

INTRODUCTION TO QUALITATIVE EVIDENCE SYNTHESIS

Presented by

King Costa (PhD)

Global Centre for Academic Research
South Valley University

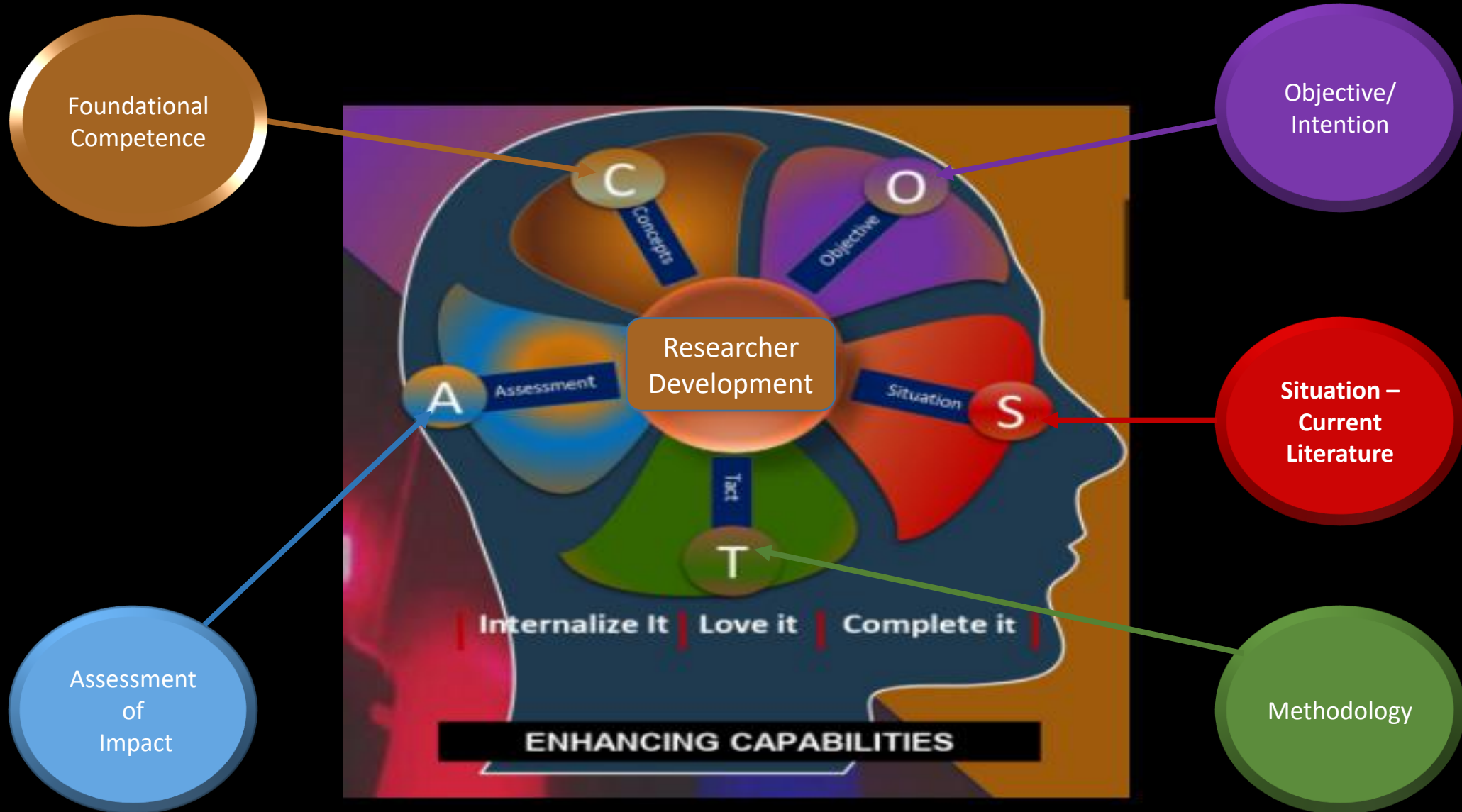
Qualitative Evidence Synthesis
as a
Methodology
in
Academic Research

Lecture Outcomes

At the end of this session you will be able to:

- Understand elements of our teaching approach - the **C.O.S.T.A Model**
- Understand **Qualitative Evidence Synthesis** (QES) as a Research Methodology
- Describe the value of Qualitative Evidence Synthesis in scholarship
- Locate the QES within the broader typology of Reviews

Elements of our teaching approach - the C.O.S.T.A Model



Qualitative evidence synthesis

Cochrane
Collaboration

JBI

Campbell
Collaboration

- “In 2011 the co-conveners of the then **Cochrane Qualitative Methods** Group settled on this term to distance the emerging methodology from the dominant methods of systematic reviews of effects, and to signal the potential of this group of methods for a wider range of types of evidence”

Qualitative Evidence Synthesis

- **Qualitative Evidence Synthesis (QES)** formally known as **Qualitative Systematic Review**, is part and a type of **Systematic Review Methodology** of inquiry.
- A '**Systematic Review**' is a literature review that employs systematic, **EXPLICIT** procedures to **LOCATE**, **SELECT**, and **CRITICALLY EVALUATE** relevant research from previously published studies relating to the subject at hand.

Review as a function

- To view,
- To inspect,
- To examine

Repeatedly

(Oxford English Dictionary)

How acceptable are SRs for Postgraduate Research

Acceptability of PhD via SRs Globally

Review

Cochrane systematic review as a PhD thesis: an alternative with numerous advantages

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Abstract

In this article we propose that the production of a systematic review within The Cochrane Collaboration should be considered a valid mode of achieving doctoral title in medicine and related professions, including biochemistry.

While engaging in a Cochrane systematic review, an author first registers a title, then writes a peer-reviewed protocol consisting of introduction and methods, and finally publishes a full systematic review in The Cochrane Library, a monthly publication, which in 2009 reached an impact factor of 5.65. Conducting a Cochrane systematic review can give PhD candidates not only an opportunity to acquire a high level of content and methodological expertise, but also the capacity to learn and solve problems by using critical and analytical thinking. This capacity is considered one of the key generic and transferable skills necessary for future researchers.

While working on a Cochrane systematic review, an author builds international research network. Cochrane Review Groups as editorial bases of The Cochrane Collaboration offer ongoing support and advice to the authors. Besides being clinically relevant and high-impact, Cochrane systematic reviews should be especially interesting to doctoral students from low- and middle-income countries because they are associated with relatively small financial burden.

In conclusion, systematic reviews have a number of advantages and therefore institutions offering postgraduate training should consider adopting a "Cochrane PhD", and students should consider doing a Cochrane systematic review for their doctoral thesis.

Key words: The Cochrane Collaboration; PhD thesis; The Cochrane Library

Acceptability of PhD via SRs Globally



Available online at www.sciencedirect.com

ScienceDirect

journal homepage: <http://ees.elsevier.com/hsag/default.asp>



Systematic review as a research method in post-graduate nursing education



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ABSTRACT

In South Africa, there appears to be poor understanding about using a systematic review as an acceptable research method in post-graduate nursing education. The lack of understanding may result in research supervisors being unable to guide post-graduate students, such as masters and doctoral students, in using the systematic review methodology in the completion of an academic qualification. Furthermore, they might not be able to assist post-graduate students in completing their studies, or conducting studies, in particular systematic reviews, which are of high quality. Valuable opportunities can thus be missed that might add to the body of knowledge to inform and improve research, education, and clinical practice. This article may set the field for an informed debate on systematic reviews as a useful and acceptable research method to be used by post-graduate nursing students in South Africa. We conclude that a systematic review could be a useful and acceptable method for research in post-graduate nursing education. However, the method's benefits and disadvantages should be considered before a post-graduate student embarks on such a journey.

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Title: A Systematic Review: Student and supervisor variables affecting completion of postgraduate research requirements

Student Name: Nicolette Rae

Student Number: 3476064

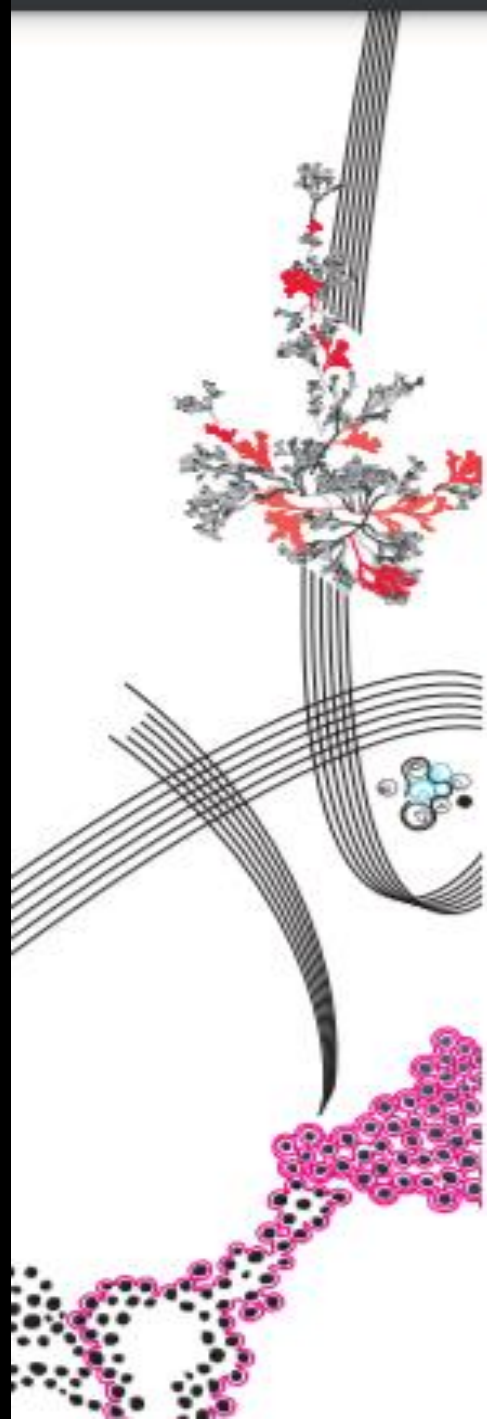
Type of Thesis: Full Masters Thesis

Degree: MA Psychology

Department: Psychology

Supervisor: Dr. Mario Smith

Date: June 2015



MASTER THESIS

Systematic review of scientific literature published on the topic of public procurement between the years 1997 and 2012

Sandra Lange

Submitted in fulfillment of the requirements for the degree of Master of Science (MSc.) in Business Administration of the School of Management and Governance (MB)

Examination Committee:

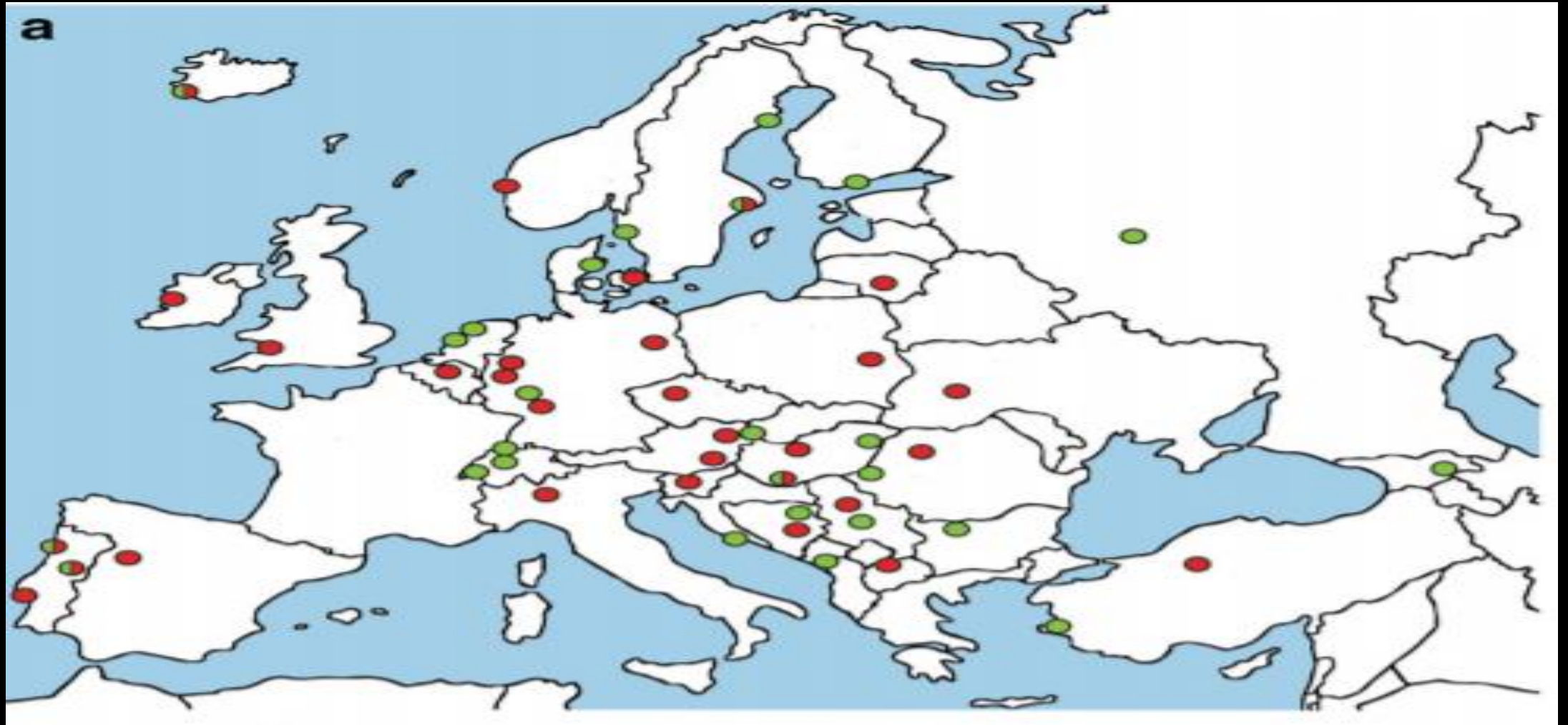
Prof. Dr. Jan Telgen

Dr. Fredo Schotanus

June 13, 2014

Organization of PhD Education in Biomedicine and Health Sciences in the European System (ORPHEUS)

- The organisation has 105 member institutions in 40 countries such as:
 - Canada, Georgia, Iran, Kyrgyzstan, Kazakhstan, USA
- A study conducted in 2017 on acceptability of PhDs by SRs
- 43% of the programmes, it was indicated that SRs were acceptable for PhD studies
- 53% of the programmes, it was indicated that SRs were not acceptable for PhD studies



(Thomas & Harden, 2008)

Who undertakes systematic reviews?

- **Cochrane**/**JBI**/ and **Campbell** Collaboration
- Regulatory bodies
- Academics/researchers/clinicians
- M or D students
- Businesses or Industry formations

When to conduct systematic reviews?

- When there is uncertainty, for example about the effectiveness of a policy or a service, and where there has been some previous research on the issue
- In the early stages of development of a policy, when evidence of the likely effects of an intervention is required
- When it is known that there is a wide range of research on a subject but where key questions remain unanswered – such as questions about treatment, prevention, diagnosis, or etiology, or questions about people's experiences
- When a general overall picture of the evidence in a topic area is needed to direct future research efforts
- When an accurate picture of past research, and past methodological research is required to promote the development of new methodologies

Typology of Systematic Reviews

(Grant & Booth, 2009)

	Review Type	Appraisal	Description	Synthesis
C	Critical review	No formal quality assessment	Aims to demonstrate writer has extensively researched literature and critically evaluated its quality. Goes beyond mere description to include degree of analysis and conceptual innovation.	<ul style="list-style-type: none"> Typically narrative
U	Umbrella review	Quality assessment of studies	Specifically refers to review compiling evidence from multiple reviews into one accessible and usable document.	<ul style="list-style-type: none"> May be graphical and tabular with narrative commentary
R	Rapid review	Time-limited formal quality assessment	Assessment of what is already known about a policy or practice issue, by using systematic review methods to search and critically appraise existing research.	<ul style="list-style-type: none"> Typically narrative and tabular
L	Literature review	May or may not include quality assessment	Generic term: published materials that provide examination of recent or current literature. Can cover wide range of subjects at various levels of completeness and comprehensiveness.	<ul style="list-style-type: none"> Typically narrative
M	Mapping review	No formal quality assessment	Map out and categorize existing literature from which to commission further reviews and/or primary research by identifying gaps in research literature	<ul style="list-style-type: none"> May be graphical and tabular
O	Overview	May or may not include quality assessment	Generic term: summary of the [medical] literature that attempts to survey the literature and describe its characteristics.	<ul style="list-style-type: none"> Typically narrative
Q	Qualitative systematic Review (QES)	Quality assessment to mediate messages	Method for integrating or comparing the findings from qualitative studies. It looks for 'themes' or 'constructs'	<ul style="list-style-type: none"> Qualitative, narrative synthesis

	Review Type	Appraisal	Description	Synthesis
S	Scoping review	No formal quality assessment	Preliminary assessment of potential size and scope of available research literature. Aims to identify nature and extent of research evidence (usually including ongoing research)	<ul style="list-style-type: none"> Typically narrative
M	Meta-Analysis	Determine inclusion/exclusion	Technique that statistically combines the results of quantitative studies to provide a more precise effect of the results.	<ul style="list-style-type: none"> Graphical and tabular with narrative commentary.
S	State of the Art	Quality assessment of studies	Tend to address more current matters in contrast to other combined retrospective and current approaches. May offer new perspectives on issue or point out area for further research.	<ul style="list-style-type: none"> Typically narrative, may have tabular accompaniment.
M	Mixed studies review/mixed methods review	Requires formal or a generic appraisal instrument	Refers to any combination of methods where one significant component is a literature review (usually systematic).	<ul style="list-style-type: none"> Typically both components will be presented as narrative and in tables.
S	Systematic Review	Quality assessment may determine inclusion/exclusion	Seeks to systematically search for, appraise and synthesis research evidence, often adhering to guidelines on the conduct of a review	<ul style="list-style-type: none"> Typically narrative with tabular accompaniment.

Characteristic of QES

Synthesis of qualitative research is becoming more and more common, in which literature is rigorously:

- identified,
- appraised, and
- synthesized

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T
M
O
S
-
S
R

It must be

- Explicit
- Transparent
- Methodical process
- Objective
- Standards
- Structure
- Reproducible

It must also be:

- Comprehensive
- Imaginative
- Creative
- Stimulating
- Topical
- Well-written
- Publishable

It must not be:

- Implicit
- Opaque
- Chaotic
- Subjective
- Variable
- Idiosyncratic

Majid & Vanstone,2018; Lewin et.al.,2018; Carol,2017).

What we covered in this session

- Elements of our teaching approach - the **C.O.S.T.A Model**
- **Qualitative Evidence Synthesis** (QES) as a Research Methodology
- Described the value of Qualitative Evidence Synthesis in scholarship
- Located the QES within the broader typology of Reviews

Review Process

- **Define review question** – very precisely; with a team using established methods
- **Develop protocol** – provides transparency; defines exact inclusion criteria and methods
- **Identify relevant studies** – usually comprehensive search across multiple bibliographic databases plus reference checking
- **Assess eligibility** – careful matching of studies against inclusion criteria

Review Process

- **Extract *relevant data*** – only what is required to answer the question
- **Critically appraise** studies – use a published tool to compare methodological features across studies
- **Synthesise** appropriately – depending on type of question and study designs
- **Disseminate** to appropriate audience – full transparent write-up plus as appropriate short report to funder, journal article, patient leaflet...

Uses of QES

To explore barriers and facilitators to the delivery and uptake of services;

To explore differing views and opinions on determinants of social behavior;

To inform the prioritization of services where evidence on effectiveness is equivocal;

(Thorne, Jensen, Kearney, Noblit & Sandelowski, 2004)

Types of QES

Cochrane reviews of qualitative evidence

Thematic synthesis

Framework synthesis

Narrative summary

Narrative synthesis

None-Cochrane reviews of qualitative evidence

Meta-ethnography

Meta-synthesis

Thematic synthesis

Thematic analysis

Other Reviews in Social Sciences

Content Analysis

Constant Comparative Method

Interpretive description

Other Reviews in Social Sciences

Document Analysis

READ Approach: (1) Reading Materials, (2) Extracting Data, (3) Analysing Data, (4) Distillation

Interpretive description

Characteristic of QES

Synthesis of qualitative research is becoming more and more common, in which literature is rigorously:

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- Opaque
- Chaotic
- Subjective
- Variable
- Idiosyncratic

Majid & Vanstone,2018; Lewin et.al.,2018; Carol,2017).

Characteristic of QES

Structure

It may be defined as:

- Development of a clear, focused research question
- Development of a detailed protocol
- Development of a search strategy
- Development of a workflow

Characteristic of QES

Comprehensiveness

It may be defined as:

- Report on literature search returns
- Replicability of the search strategy
- Appraisal and screening methods
- Data extraction strategies

Characteristic of QES

Synthesis

It may be defined as:

- Steps followed
- Rationale for conclusions
- Reporting procedures

(Campbell Collaboration, 2014; Cochrane Collaboration, 2014; Joanna Briggs Institute, 2014; Salmond, 2012; Sandelowski & Barroso, 2007)

Key Features – Quality & Trustworthiness

- There needs to be an authority for acceptability of SR publication
- Quality appraisal methods ensure authority for reporting on
 - theory,
 - methods,
 - methodology,
 - findings and
 - value

Methods & Protocols

QES (Thematic Synthesis)

Meta - Analysis

Purpose

Interpretive Explanations

Purpose

Prediction

Sampling

Purposive

Sampling

Exhaustive

(Thorne, Jensen, Kearney, Noblit & Sandelowski, 2004)

Question Formulation

SPICE	SPIDER	PICOC	CHIP
Setting	Sample	Population	Context
Perspective	Phenomenon of Interest	Intervention	How
Interest, Phenomenon of	Design	Comparison	Issues
Comparison (if any)	Evaluation	Outcome	Population
Evaluation	Research Type	Context	

Stages of QES

Stage One

Identification

Searching/Sampling

Searching Strategy
Sampling Strategy

Stage Two

Quality Assessment

Critical Appraisal

PRISMA Workflow
Appraisal Tools
Selection

Stage Three

Analysis

Synthesis

Reporting:
ENTREQ



My searches	Search terms	Source
Trash		
	qualitative evidence syntes...	Google S..
	qualitative evidence synthe...	Google S..
		Google S..

Google Scholar search

Authors:

Publication name:

Title words:

Keywords:

Maximum number of results: Include citations Include pate

Results	Cites	Per year	Rank
Publication years: 1973-2021			
Citation years: 48 (1973-2021)			
Papers: 110			
Citations: 171986			
Cites/year: 3583.04			
Cites/paper: 1563.51			
Authors/paper: 3.55			
h-index: 98			
g-index: 110			
hI,norm: 92			
hI,annual: 1.92			
hA-index: 56			
Papers with ACC >= 1,2,5,10,20: 109,108,105,102,99			

- [Frequently Asked Questions](#)
- [Training Resources \(multilingual\)](#)
- [YouTube Channel](#)

Results [Help](#)

Publication years: 1973-2021
 Citation years: 48 (1973-2021)
 Papers: 110
 Citations: 171986
 Cites/year: 3583.04
 Cites/paper: 1563.51
 Authors/paper: 3.55
 h-index: 98
 g-index: 110
 hI,norm: 92
 hI,annual: 1.92
 hA-index: 56

Papers with ACC >= 1,2,5,10,20:
109,108,105,102,99

- [Frequently Asked Questions](#)
- [Training Resources \(multilingual\)](#)
- [YouTube Channel](#)

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06...	2021/06...	89
05...	n/a	89
05...	2021/05...	264

Years: -

ISSN:

	Publisher	Type
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	Springer	HTML
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	implementationscienc...	HTML
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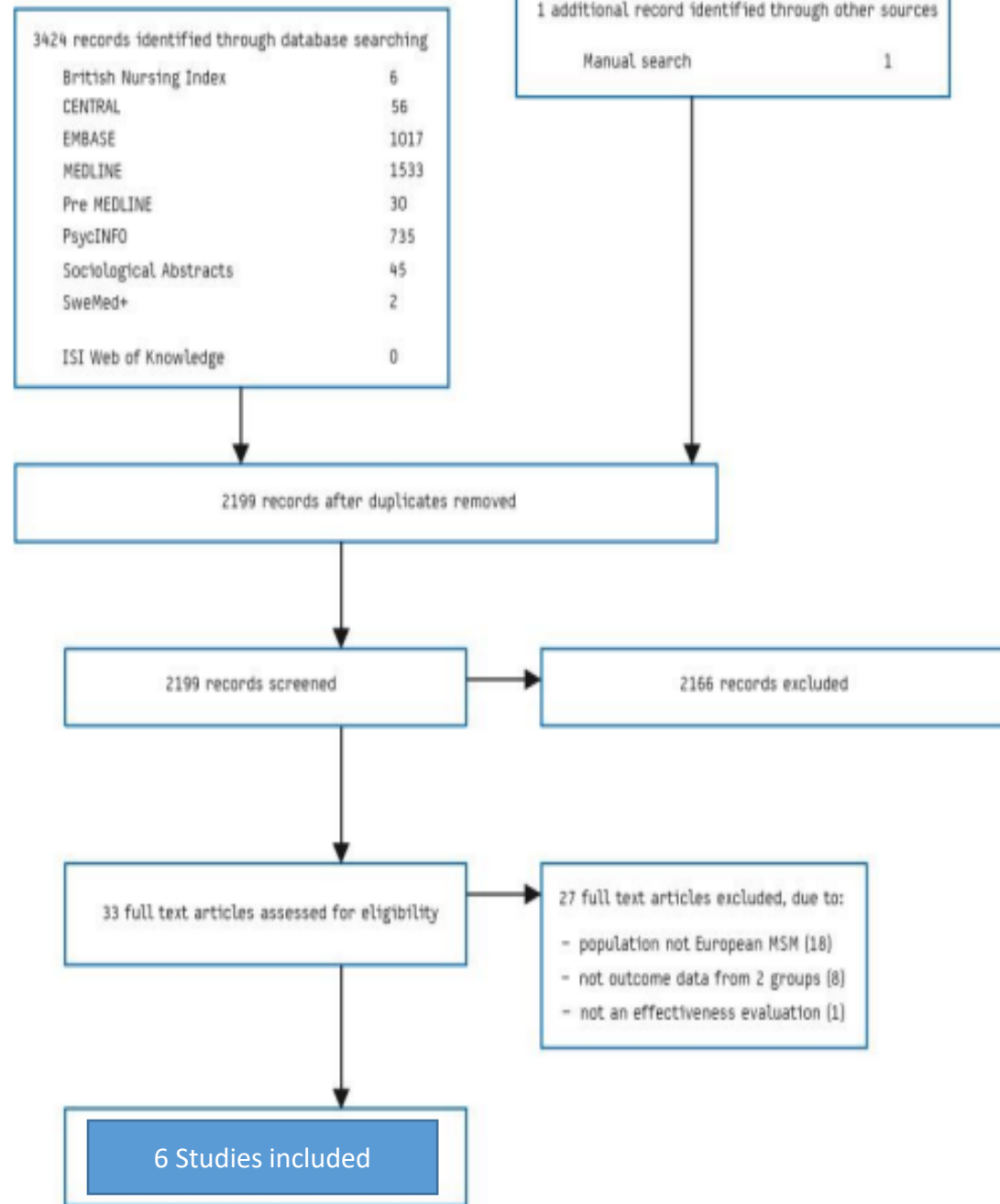
A

Identification

Screening

Eligibility

Included



Key Features – Quality & Trustworthiness

- No consensus on the singleness of quality appraisal tool
- Appraisal tools are continually being developed
- Currently, there are over 100 quality appraisal tools

Things to look out for :

- Country of origin
- Tool citation
- Academic discipline

Obtain clarification for :

- Purpose
- Content
- Application

Why do we need to appraise for quality in QES?

- Argument to and for quality appeal in Qualitative Evidence Synthesis
- Educational apparatus for new entry researchers
- A reporting standard for qualitative studies used in QES
- Quality standard for different types of research
- A tool for streamlining appraisal of qualitative research studies

Quality Appraisal

Country of Origin

Purpose of the Appraisal Tool

CASP

United Kingdom

1. Improve Transparency of qualitative research
2. Provide clear standards for reporting qualitative research

3. Assist review process for evaluating manuscript for publication
4. Appraisal in Qualitative Evidence Synthesis

COREQ

Australia

1. Reporting standards for qualitative research

2. Appraisal in Qualitative Evidence Synthesis

QF

United Kingdom

1. Appraisal in Qualitative Evidence Synthesis

2. Primary purpose is for use in evaluative and policy research

SRQF

United States

1. Improve Transparency about all aspects of qualitative research
2. Provide clear standards for reporting QLR

3. Assist the review of evaluating a manuscript a manuscript for potential publication
4. Appraisal in Qualitative Evidence Synthesis

WALSH

United Kingdom

1. Appraisal in Qualitative Evidence Synthesis

2. Primary purpose if for use in rapid reviews in policy

CASP : Critical Appraisal Skills Programme

The CASP tool is considered to be a user-friendly option for a novice qualitative researcher and is endorsed by:

- Cochrane
- World Health Organization

Collaborators

The logo for the Trip Database, featuring the word "Trip" in a stylized, multi-colored font.

TRIP Database

www.tripdatabase.com



NICE Evidence Search

www.evidence.nhs.uk



Cochrane

Cochrane Library

www.cochranelibrary.com



Campbell Collaboration

www.campbellcollaboration.org



Critical Appraisal Skills Programme
CERTIFICATE OF COMPLETION

Awarded To

Dr King Costa

CONGRATULATIONS ON COMPLETING
Introduction to critical appraisal & CASP

Date: 2021-05-31

Serial No.

cert_jr5j11hh

A handwritten signature in black ink, which appears to read 'Paula Gray', is written over a horizontal line.

CASP Application

10 Key Assessment Criteria

- 1. Was there a clear statement of the aims of the research?
- 2. Is a qualitative methodology appropriate?
- 3. Was the research design appropriate to address the aims of the research?
- 4. Was the recruitment strategy appropriate to the aims of the research?
- 5. Were the data collected in a way that addressed the research issue?
- 6. Has the relationship between researcher and participants been adequately considered?
- 7. Have ethical issues been taken into consideration?
- 8. Was the data analysis sufficiently rigorous?
- 9. Is there a clear statement of findings?
- 10. How valuable is the research?

Quality Appraisal

- 2
- 1
- 0

Using CASP to quality assure articles for inclusion

Table 2. Table of quality appraisal of the included studies using the CASP qualitative research checklist.

	Was there a clear statement of the aims of the research?	Is there a qualitative design appropriate?	Was the research design appropriate to address the aims of the research?	Was the recruitment strategy appropriate to the aim of the research?	Was the data collected in a way that addressed the research issue?	Has relationship with the researcher been adequately considered?	Have ethical issues been taken into consideration?	Was the data analysis sufficiently rigorous?	Is there a clear statement of findings?	How valuable is the research?
Galea et al [10]	Yes	Yes	Yes	Yes	Yes	Can't tell	Yes	Yes	Yes	Yes
Harwood et al [11]	Yes	Yes	Yes	Yes	Yes	Can't tell	Yes	Yes	Yes	Yes

Using CASP to quality assure articles for inclusion

Table 2. Table of quality appraisal of the included studies using the CASP qualitative research checklist.

	Was there a clear statement of the aims of the research?	Is there a qualitative design appropriate?	Was the research design appropriate to address the aims of the research?	Was the recruitment strategy appropriate to the aim of the research?	Was the data collected in a way that addressed the research issue?	Has relationship with the researcher been adequately considered?	Have ethical issues been taken into consideration?	Was the data analysis sufficiently rigorous?	Is there a clear statement of findings?	How valuable is the research?
1	Schorr et al. [13]	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2	Johnstone [14]	Yes	Yes	Yes	Can't tell	Yes	Can't tell	Yes	Yes	Yes
3	Gibson & Kenrick [15]	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
4	Egberg et al. [16]	Yes	Yes	Yes	Yes	No	Can't tell	Yes	Yes	Yes
5	Gorely et al. [17]	Yes	Yes	Yes	Yes	Yes	Can't tell	Can't tell	Yes	Yes
6	Hallin et al. [12]	Yes	No	Can't tell	Yes	Can't tell	No	Yes	Can't tell	Yes
7	Treat-Jacobson et al. [18]	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes
8	Wann-Hansson & Wennick [19]	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes
9	Wann-Hansson et al. [20]	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes

INSERT STUDY TITLE →

PICOT

INPUT DATA

INCLUSION/EXCLUSION

VISUALISATION

LEARN ABOUT CASP

LITERATURE SEARCH

ABOUT PROF. KING



PICOT OUTPUT

PRISMA INPUT

PRISMA OUTPUT

READING MATERIALS

G-CAR LEARNING

CASP CERTIFICATION

CALL US AT

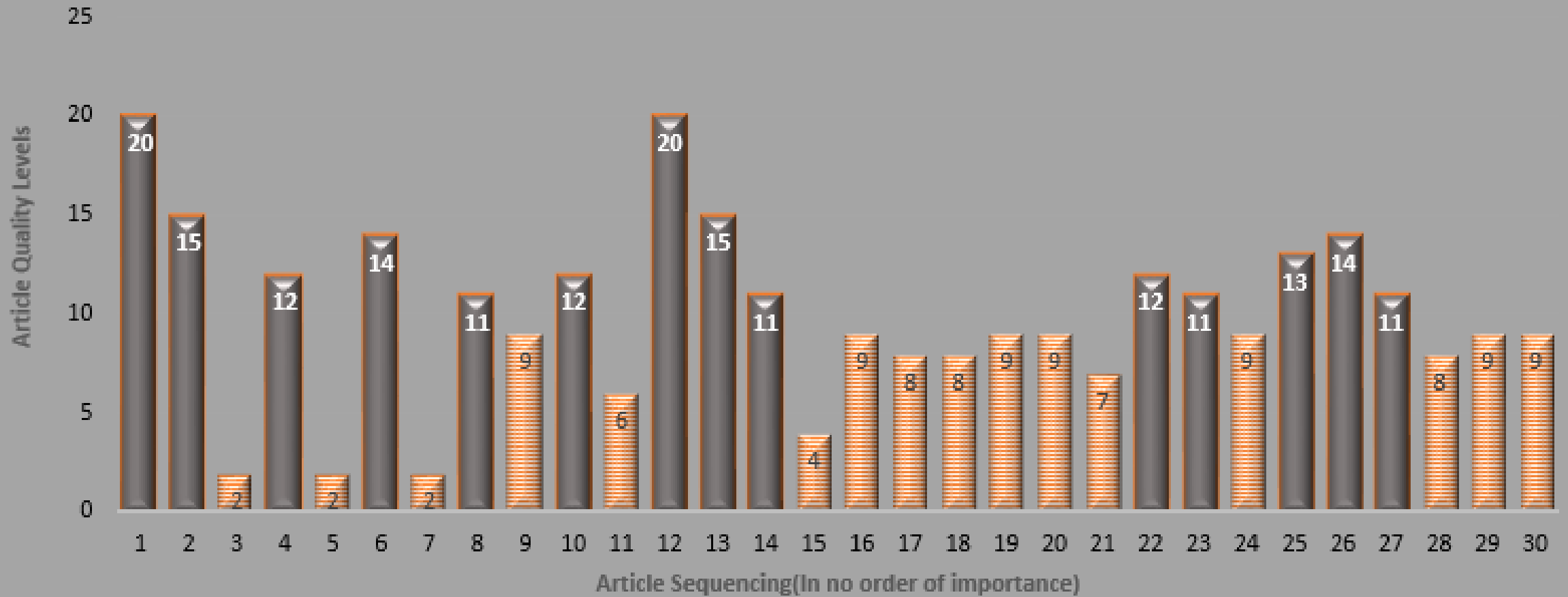
+815735676 or email: costak@researchglobal.net

Visit our website at www.vlerresearch.net

		A - Screening Questions		B - Detailed questions							C- Study impact		
		Question 1	Question 2	Question 3	Question 4	Question 5	Question 6	Question 7	Question 8	Question 9	Question 10		
NAME ARTICLE AUTHOR		LINK ARTICLE	Was there a clear statement of the aims of the research?	Is a qualitative methodology appropriate?	Was the research design appropriate to address the aims of the research?	Was the recruitment strategy appropriate to the aims of the research?	Was the data collected in a way that addressed the research issue?	Has the relationship between researcher and participants been adequately considered?	Have ethical issues been taken into consideration?	Was the data analysis sufficiently rigorous?	Is there a clear statement of findings?	How valuable is the research?	
			Score	Score	Score	Score	Score	Score	Score	Score	Score	TOTAL SCORE	
1	N Katmon, O Al Farooque	https://link.springer.com/content/pdf/10.1007/s10551-015-2752-8.pdf	2	2	2	2	2	2	2	2	2	2	20
2	H Wai Kee, O Yu Hock, K Chee Kueng	http://repo.uum.edu.my/id/eprint/21005	2	0	2	2	2	2	0	2	2	1	15
3	D Cumming, I Filatotchev, A Knill, DM Reeb, L Senbet	https://link.springer.com/article/10.1057/s41267-016-0063-7	0	0	2	0	0	0	0	0	0	0	2
4	WM Al-Bassam, CG Ntim, KK Opong...	https://journals.sagepub.com/doi/abs/10.1177/0007650315610611	2	0	1	0	2	2	1	2	1	1	12
5	S Armitage, W Hou, S Sarkar...	https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2954668	0	0	0	0	0	0	0	0	1	1	2
6	G Palaniappan	https://www.emerald.com/insight/content/doi/10.1108/EJMBE-07-2017-005/full/html	2	0	1	2	1	2	0	2	2	2	14
7	D Yermack	https://academic.oup.com/rof/article-abstract/21/1/7/2888422	0	0	0	0	0	0	1	0	1	0	2
		http://journals.moutaintopuniiversity.edu.ng/Banking%20and%20Finance/the-role-of-internal-auditing-in-enhancing-good-	2	1	2	2	2	2	0	0	0	0	11

CASP - INCLUSIONS/EXCLUSION CRITERIA

Included(≥ 11) Excluded(< 11)



Article Number	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Rating	Decision
	Clear Research Aims	QUAL - Suitable Method	Research Design Suitable	Sampling Strategy Suitable	Data Collection Strategy Suitable	Researcher Role Consideration	Ethical Consideration	Data Analysis Rigor	Clear Statement of findings	Research Value Proposition		
1	0	2	2	2	2	2	2	2	2	2	20	TRUE
2	2	0	2	2	2	2	0	2	2	1	15	TRUE
3	0	0	2	0	0	0	0	0	0	0	2	FALSE
4	2	0	1	0	2	2	1	2	1	1	12	TRUE
5	0	0	0	0	0	0	0	0	1	1	2	FALSE
6	2	0	1	2	1	2	0	2	2	2	14	TRUE
7	0	0	0	0	0	0	1	0	1	0	2	FALSE
8	2	1	2	2	2	2	0	0	0	0	11	TRUE
9	2	0	1	0	2	0	0	2	2	0	9	FALSE
10	2	0	0	2	1	1	2	1	2	1	12	TRUE
11	2	1	0	0	0	1	1	1	0	0	6	FALSE
12	2	2	2	2	2	2	2	2	2	2	20	TRUE
13	2	2	1	2	2	2	0	2	2	2	15	TRUE
14	2	2	2	1	1	1	0	0	2	2	11	TRUE
15	2	0	1	1	0	0	0	1	0	1	4	FALSE
16	2	0	2	1	1	1	0	1	1	2	9	FALSE
17	2	1	1	1	0	1	0	1	2	1	8	FALSE
18	2	0	0	1	2	1	0	1	1	2	8	FALSE
19	2	0	2	0	2	2	0	1	1	1	9	FALSE
20	2	0	2	1	1	2	0	0	2	1	9	FALSE
21	2	0	2	0	2	1	0	1	0	1	7	FALSE
22	1	2	2	2	2	1	0	1	1	1	12	TRUE
23	2	1	2	2	2	2	0	1	0	1	11	TRUE
24	2	0	1	1	1	1	0	2	2	1	9	FALSE

Synthesis

- 1. Explicit accounts**
- 2. Precision of accounts**
- 3. Extent and Magnitude of phenomenon**
- 4. Internal Generalization**

(Maxwell, 2010; Maxwell & Chmiel, 2014)

QUALITATIVE APPROACH TO SYNTHESIS

Review Type	Study Design	Synthesis	Output
Narrative Synthesis	Diversity of designs	Summary, descriptions and explications	No attempt to seek cumulative knowledge
Meta-Ethnography	Observations, interviewing and document	Juxtaposition – metaphors, phrases or concepts	Interpretive
Realist Synthesis	Any Research Design	Reviews Evidence	Theory building

Benefits of Frequency Counts Qualitative Research

1. Establish the significance of a research project,
2. Documenting what is known about a problem
3. Sample description

(Sandelowski, 2001)

Benefits of Frequency Counts Qualitative Research

- 1. Labor and complexity of QLR**
- 2. Documentation, verification and Testing of interpretation of findings**
- 3. Target events and experiences**

(Sandelowski, 2001)

Thematic Synthesis

- Descriptive Themes

Primary Qualitative Data

- Analytic Themes

Interpretive Domain

CAQDAS – webQDA, COSTA QDA Technique

Thematic Synthesis

- TS is a method that is based on practices and principles of TA
- It is the most intuitive method of synthesizing data
- It is the most commonly used method
- It is made up of three critical stages

- Deracination

Line by line, word by word

- Categorization

Development of descriptive thematic expressions

- Theme-ing

Generation of analytic themes

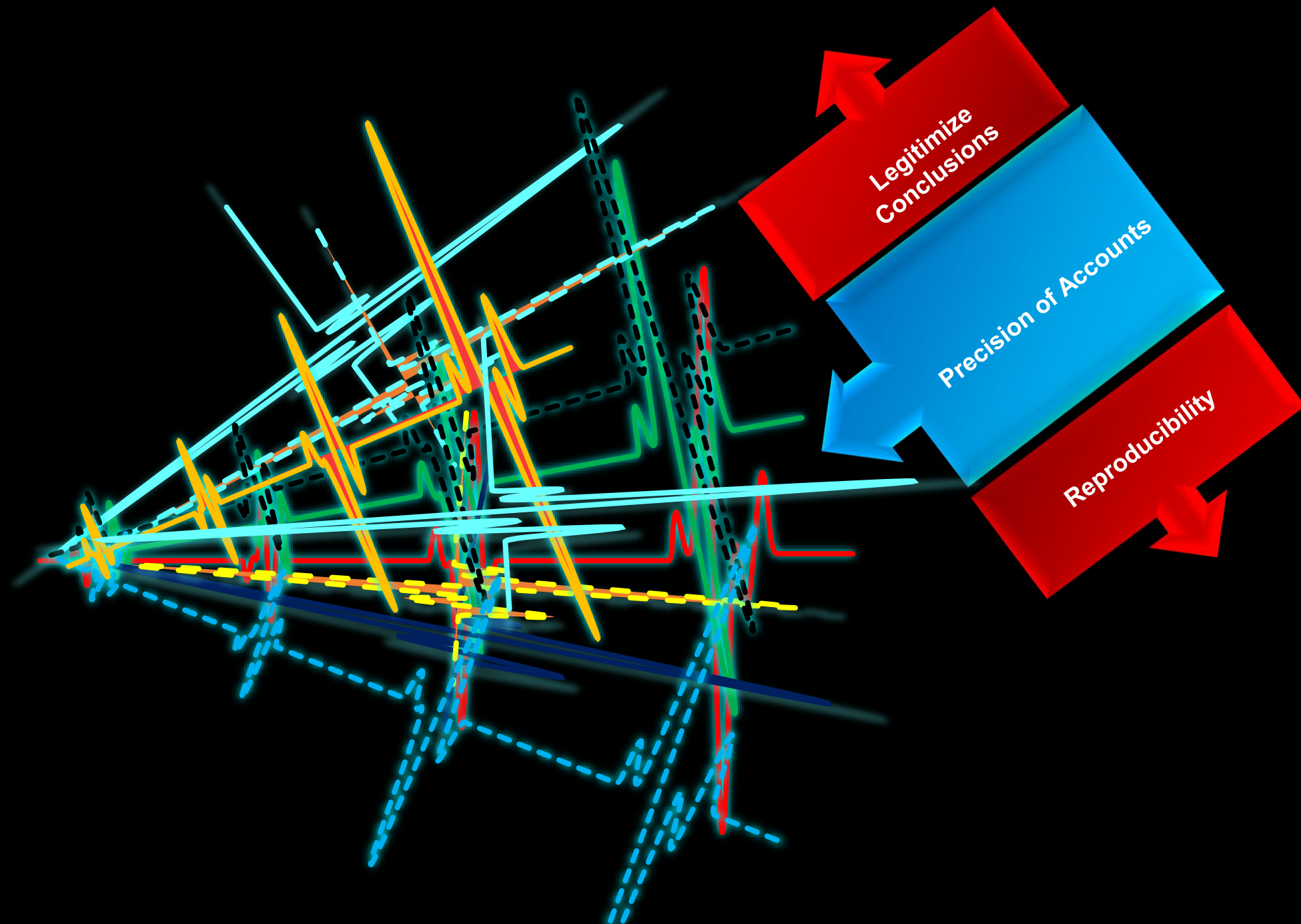
(Costa,2020; Thomas &Harden, 2008)

Configurative

- The practice of arranging texts from study finding processes in terms of their similarities
- The purpose is to determine their relationships in what is called relational analysis

Configurative - Synthesis

- **Combination of “things” into a new whole “thing”**
- **Combinations of concepts for formulation of organised ideas – system or theory**
- **Generated theory exceeds the sum of its parts - synthesis**



CODE PATTERNS AND FREQUENCIES: CODE 75 – CODE 113

75. Supplies 400 schools in Gauteng
 76. Supplies University of Pretoria
 77. Supplies South African Police Service
 78. Employs 28 individuals
 79. Company has seen steady growth over the years
 80. Opportunity presence on the internet to be exploited
 81. An interactive website where customers can view product mix online.
 82. A portal for interacting with customers as a driver of e-business
 83. Ice cream suitable for tropical and Mediterranean regions
 84. Ice cream company doubled production after 6 years
 85. Marketing strategies essential to cater for off-seasons

86. Marketing activities to consider intrinsic and extrinsic determinants of consumer behaviors
 87. Paucity of research on the ice-cream market
 88. Brands play a vital role in the ice cream industry
 89. Youth entrepreneurship strengthens the economy
 90. Youth entrepreneurship provides employment
 91. Youth create businesses to create employment
 92. Younger entrepreneurs are focused on creating employment
 93. Hi potential entrepreneurs see growth and employment in the same light

94. The business environment is changing rapidly
 95. Operations of entrepreneurs should be on a global standard
 96. South African government has failed in SMME development
 97. NYDA fails to deal with youth entrepreneurial needs
 98. Limpopo Economic Development Agency is an intervention (SPV)
 99. The role of LEDA is fast-track opportunity creation in the province for SMMEs
 100. There are many programmes to support business in Limpopo
 101. Support programmes less visible in rural areas

102. 51% of SMMEs are owner managed and employed
 103. 40% of SMMEs employ up to five people
 104. Polokwane Municipality has 25431 SMMEs
 105. 92% of SMMEs in Polokwane alone are informal
 106. Existence of constraints inhibit growth of SMMEs
 107. Discontinuation of entrepreneurship
 108. Entrepreneurial orientation is critical
 109. Entrepreneurial Development
 110. Entrepreneurial orientation
 111. Supportive environment
 112. Enabling environment
 113. Create opportunity through training and development