'혼합방법론'과 '주제분석'에 대한 이해

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주제분석
Thematic analysis

Definition

6 Phases

Potential pitfalls

- Content analysis

Definition

주제분석은
자료로부터 패턴(주제)을 확인하고 주제의 의미를
분석하는 유연하고 유용한 연구방법이다.
(Braun & Clarke, 2006)

Thematic analysis is a method for identifying, analysing and reporting patterns (themes) within data

The endpoint is the reporting of the content and meaning of patterns (themes) in the data

'emerging' or being 'discovered'

Thematic analysis should be seen as a foundational method for qualitative analysis.

A lot of analysis is essentially thematic

‘commonly recurring themes’

Through its theoretical freedom, thematic analysis provides a flexible and useful research tool
=> Different theoretical frameworks

Thematic analysis does not require the detailed theoretical and technical knowledge of approaches
⇒ Absence of clear and concise guidelines around thematic analysis

'Flexibility' ---→ 'Critique'

Braun and Clarke's 'guide' to the **6 phases** of conducting thematic analysis

1. Becoming familiar with the data
2. Generating initial codes
3. Searching for themes
4. Reviewing themes
5. Defining and naming themes
6. Producing the report

=> Not rule

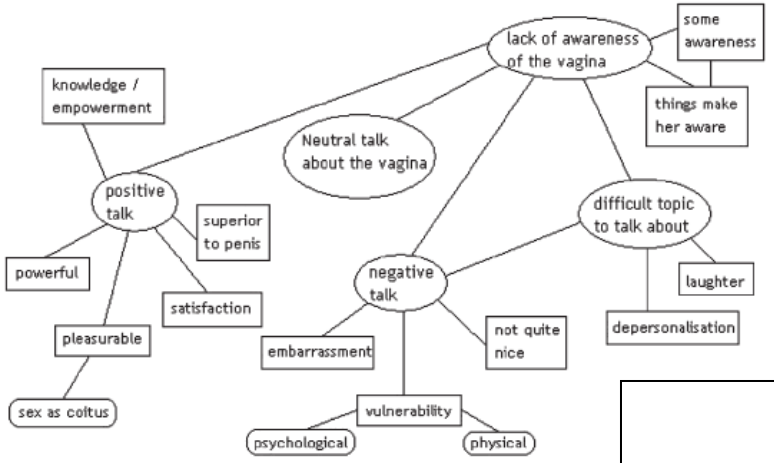


Figure 2 Initial thematic map, showing five main themes (final analysi
Wilkinson, 2003)

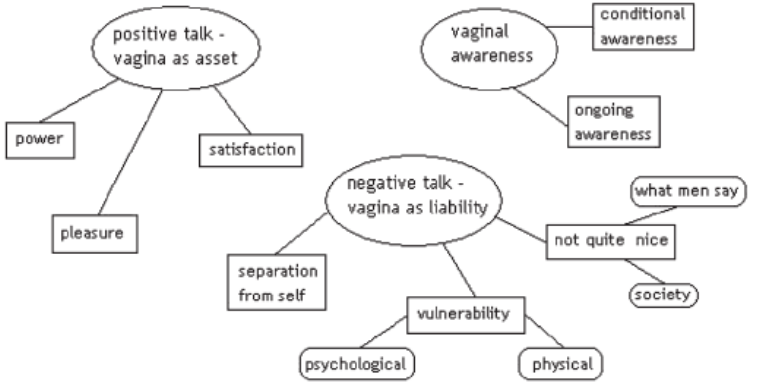


Figure 3 Developed thematic map, showing three main themes (final analysis presented in Braun and Wilkinson, 2003)

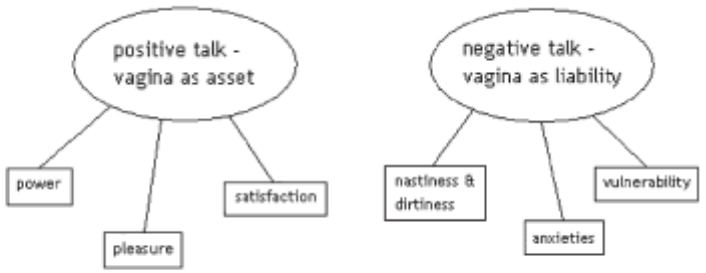


Figure 4 Final thematic map, showing final two main themes

Potential pitfalls

-Too much overlap between themes
-Mismatch between the data and the analytic claims
research question

But TA is either claimed as something else (content analysis) or not identified as any particular method at all

Thematic analysis

Reliability less important
Interpretation more important

Content analysis

"A research technique for the objective, systematic, and quantitative description of the manifest content of communication"
(Berelson, 1952, p.18)

"A technique for making replicable and valid inferences from data to their context"
(Krippendorff, 1980)

혼합방법론

Mixed Method Design

Theoretical drive

- Qualitative
  - Core
  - Supplementary
- Quantitative

Pacing

- Simultaneous
- Sequential

Point of Interface

- Analytic point of interface
- Results point of interface

Mixed method를 왜 하는가?

Denzin(1989): 4가지 triangulation methods
1) Personal reflective diaries of participants
2) Focus group with LP
3) Various meetings
4)LP의 스트레스와 소진을 분석하기 위한 설문지

- 연구결과의 수렴이나 보충증거(확증)를 통해 결론에 대한 보다 강력한 증거를 제시할 수 있다.

- 한 가지 연구방법을 통해서 놓칠 수 있는 이해나 통찰을 첨가할 수 있다.

- 결과가 모순적일 때 반대로 알려지지 않은 가정이나 어떤 것을 측정하거나 해석하는 방식의 모순과 편견을 밝힐 수 있다.

Mixed method design

is a scientifically rigorous *research project*, driven by the inductive or deductive **theoretical drive**, and comprised of a qualitative or quantitative ***core*** *component* with qualitative or quantitative ***supplementary*** *component(s)*.

- "Incomplete"
- Only has meaning, or significance, in the context of the core component

Pacing

Mixed Method **Simultaneous** Design

the core and the supplementary component are conducted **at the same time.**

Mixed Method **Sequential** Design

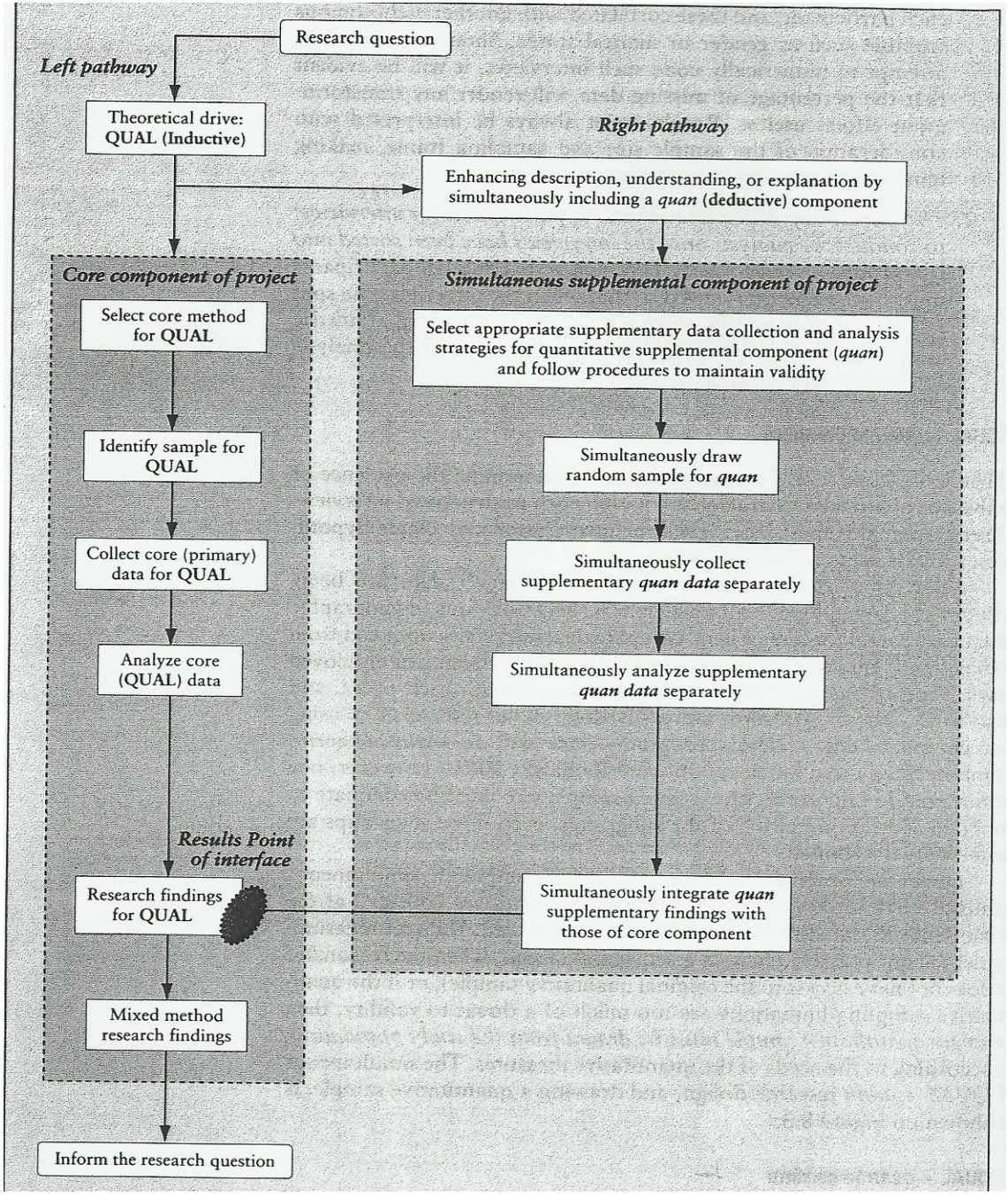
the supplementary component are conducted **after** the core has been completed.

+ Simultaneous
-> Sequential

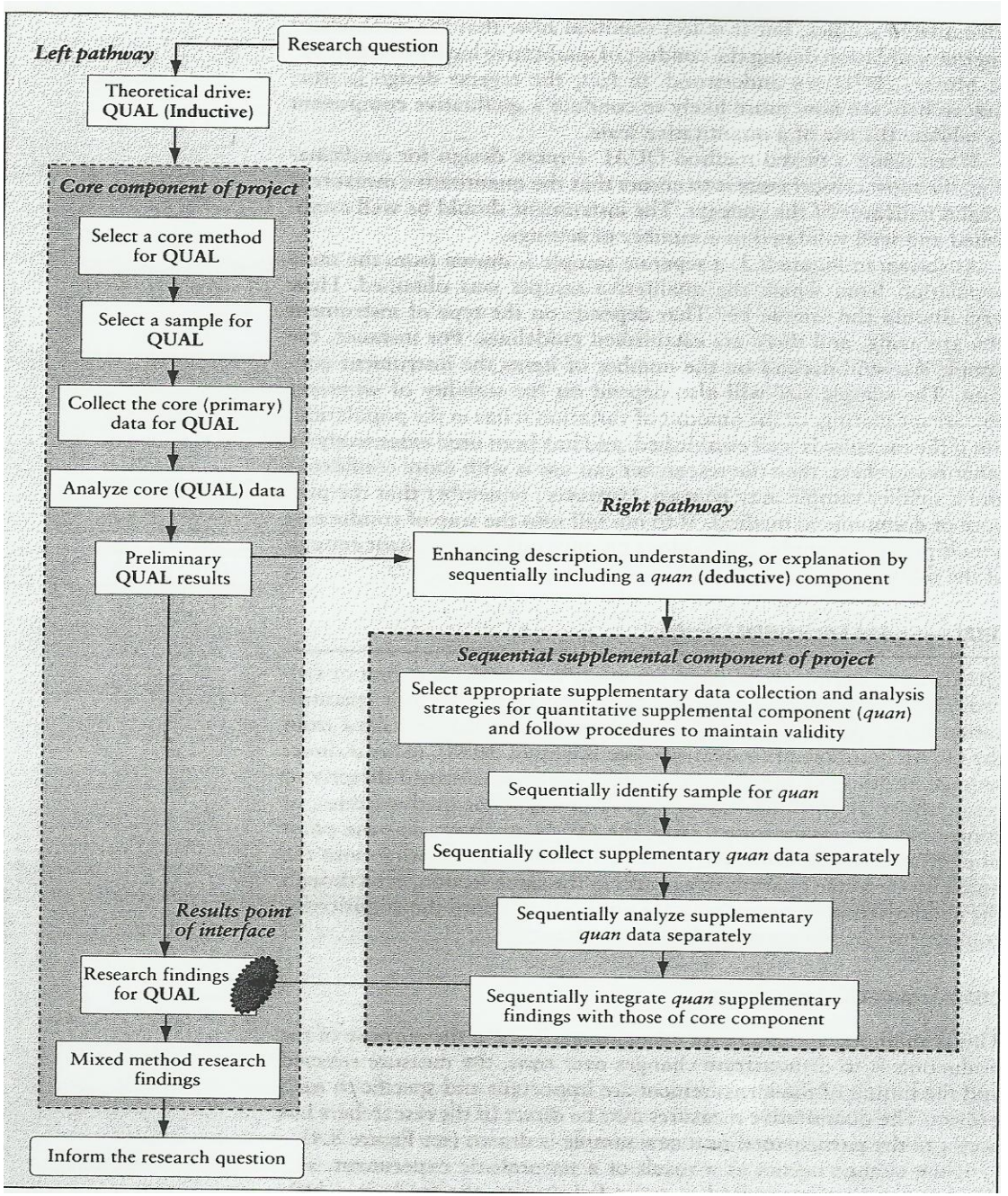
- QUAL + *quan*
- QUAL → *quan*
- QUAN + *qual*
- QUAN → *qual*

- QUAL + *qual*
- QUAL → *qual*
- QUAN + *quan*
- QUAN → *quan*

Simultaneous Design



Sequential Design



QUAL

Qualitative core component

- Grounded theory
- Ethnography
- Narrative inquiry
- Participant observation
- Focus groups
- Semistructured interviews

+quan

Simultaneous supplemental component

- To enhance descriptions: illustrate
- To enable comparison
- To reveal change
- To confirm

->quan

Sequential supplemental component

- To compare
- To test conjectures
- To identify patterns
- To determine distribution of QUAL findings in population
- To test the emerging theory

Example

QUAL→quan to identify patterns

Design
- Theoretical drive: Inductive
- Pacing: sequential
- Qual component: observation
- Quan component: data transformation
- Point of interface: Analysis

<Ex> Cote, J. J., Morse, J. M., & James, S. G. (1991). The pain experience of the post-operative newborn. Journal of Advanced Nursing, 16, 378-387.

QUAN

Quantitative core component

- Survey
- Questionnaires
- Evaluation
- Assessment
- Experimental design

+qual

Simultaneous supplemental component

- To enhance descriptions
  - Focus groups
  - Interviews
  - Observations
- To provide explanation

->qual

Sequential supplemental component

- To provide explanation
- To confirm

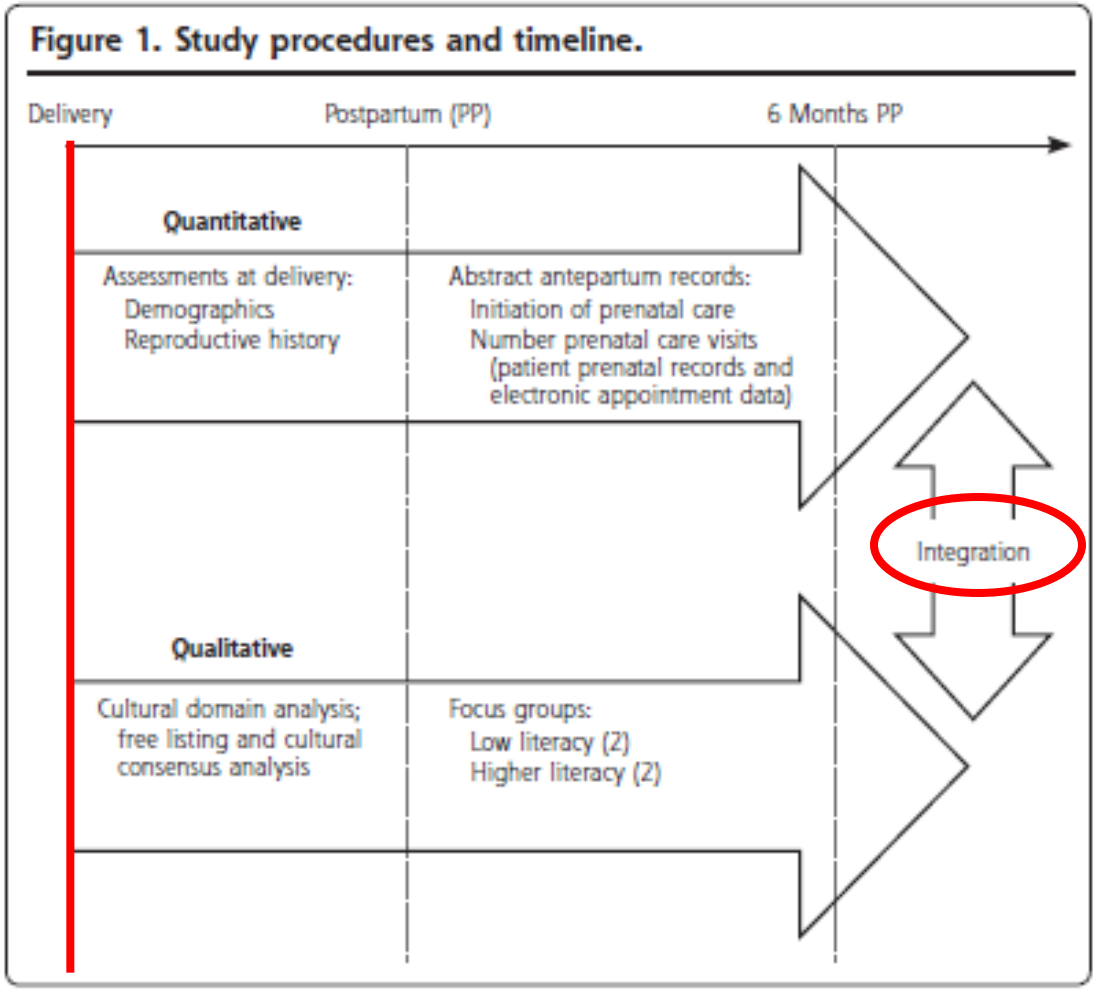
Example

QUAN→qual to confirm

Design
- Theoretical drive: deductive
- Pacing: sequential
- QUAN component: 1 instruments
- Quan component: interviews, focus groups
- Point of interface: results

<Ex> Bennet, I., Switzer, J., Aguirre, A., Evans, K., & Barg, F. (2006). "Breaking it down": Patient-clinician communication and prenatal care among African American women of low and higher literacy. Annals of Family Medicine, 4(4), 334-340.

"We used a concurrent mixed methods (quantitative and qualitative, weighted equally) study design. A concurrent rather than sequential approach was chosen to minimize the time between the prenatal period, the focus of the study, and data collection."



"the qualitative and quantitative components of the study were carried out independently and synthesized at the time of analysis (Figure 1)."

Is it important that both the QUAN and the qual samples consist of the same people?

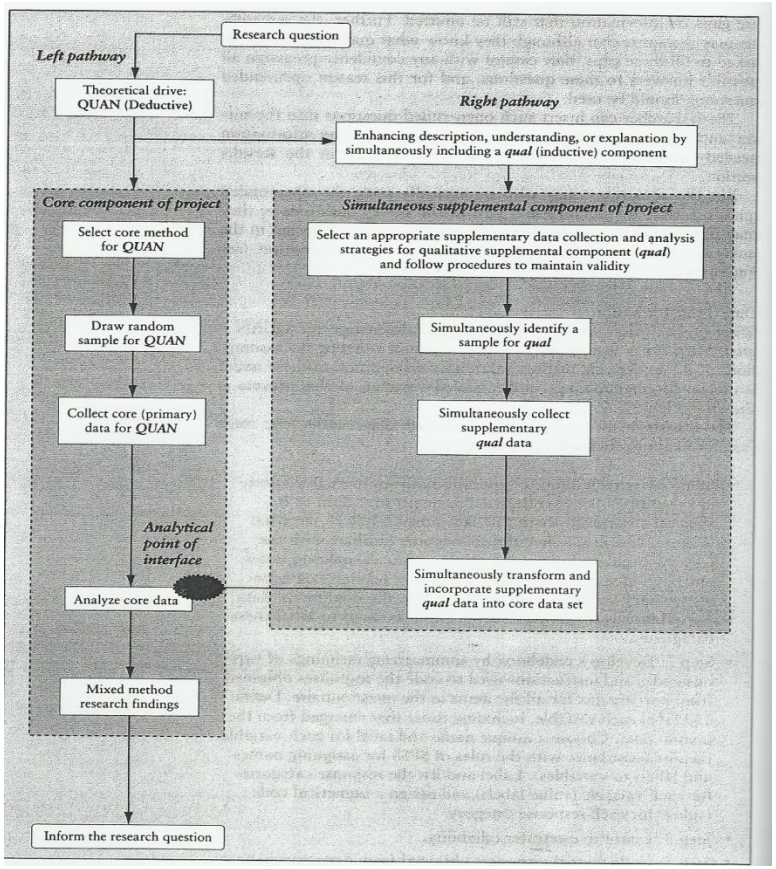
Focus Groups

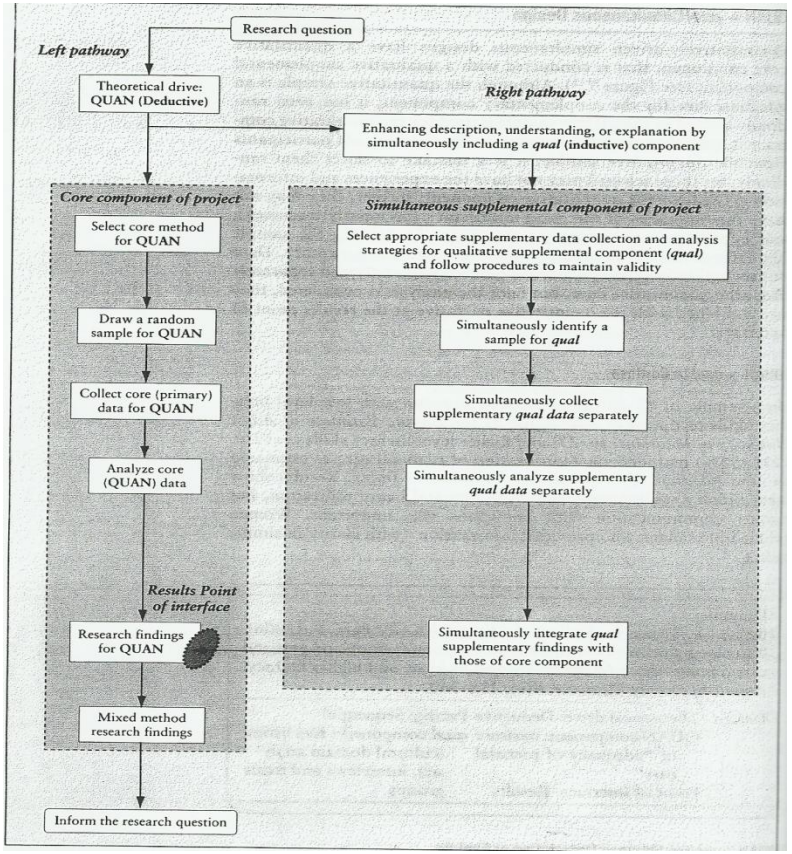
"Focus groups were carried out to confirm and explore the items identified by the CDA.
All women having low-literacy skills (≤6th grade) and an equal number of women with higher-literacy skills (≥9th grade), matched by age and postpartum month, were invited to participate in the focus group interviews." (p336)

* cultural domain analysis(CDA)

Point of Interface

The core and the supplement strategies meet in two positions: the **analytic** point of interface and the **results** point of interface.





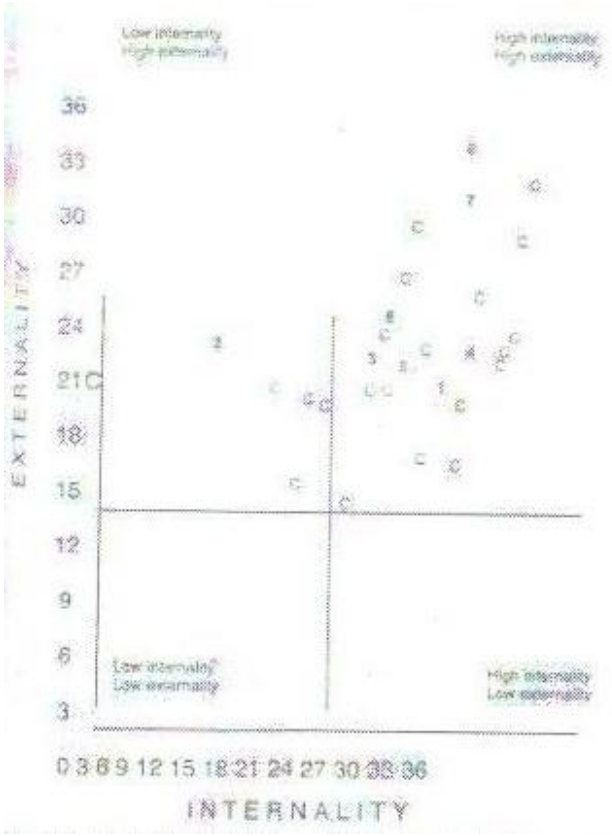
Analytic point

Quantitizing

TABLE 3. Example of Modified Stem Leaf Plot

Internality Behaviors	Recipients
Setting personal goals for surgical recovery	(1) (3) (4) (5) (6) (7)
Working hard, giving full effort, showing initiative	(1) (3) (4) (5) (6) (7) (8)
Trying to establish a schedule in the hospital	(1) (3) (4) (7)
Finding lack of control in hospital frustrating	(1) (3) (4) (7)
Taking the initiative to learn new medications	(1) (3) (4) (7)
Identifying strategies to reduce side effects	(1) (3) (4) (7)
Watching staff closely, making sure	(1) (2) (3) (4) (5) (7)
Noticing dramatic improvements in their condition	(1) (3) (4) (7) (8)
Keeping a journal of notes, progress, reminders	(1) (7) (8)
Looking up own resources regarding care	(1) (4) (5) (6) (7)

Qualitizing



Factor label	Infant I ($n = 682$) Variable	Factor loading
Quiet alert No distress	Factor I	
	Left eye open	0 93
	Right eye open	0 89
	Wide awake	0 82
	Right leg extended	0 32
Drowsy No distress	Factor II	
	Right eye slightly open	0 90
	Left eye slightly open	0 88
	Drowsy	0 71
Acute distress	Factor III	
	Crying	0 81
	Frown	0 79
	Right leg movement	0 60
	Left leg movement	0 55
	Care given	0 47
Subacute distress	Factor V	
	Slight frown	0 81
	Left leg extended	0 41
	Right leg extended	0 39
	Right eye shut	0 35
	Left eye shut	0 32
Sleepy No distress		

Table 4 Behavioural states of infant III, before and after analgesic

		Infant pain							
	Total*	Light sleep		Drowsy		Quiet alert		Crying	
	n	*n*	%	*n*	%	*n*	%	*n*	%
First dose									
Before	(506)	473	93 5	7	1 4	—	—	26	5 1
After	(558)	376	67 4	169	30 4	—	—	13	2 3
Second dose									
Before	(538)	466	86 6	39	7 2	—	—	33	6 1
After	(361)	220	60 9	118	32 7	20	5 5	3	0 8

*The total number has been calculated from 10 observations a minute for the 1 hour before and after the administration of analgesic

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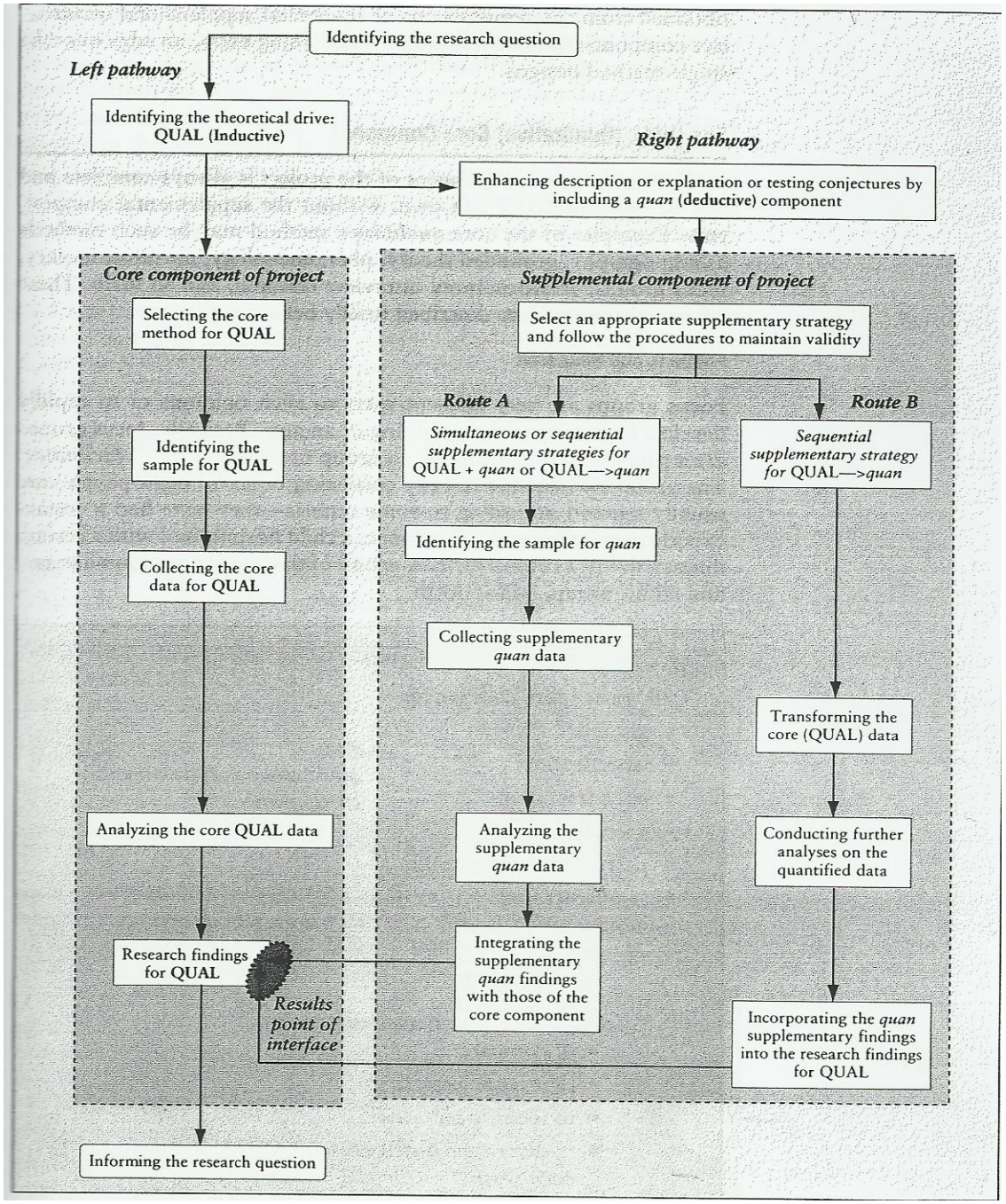
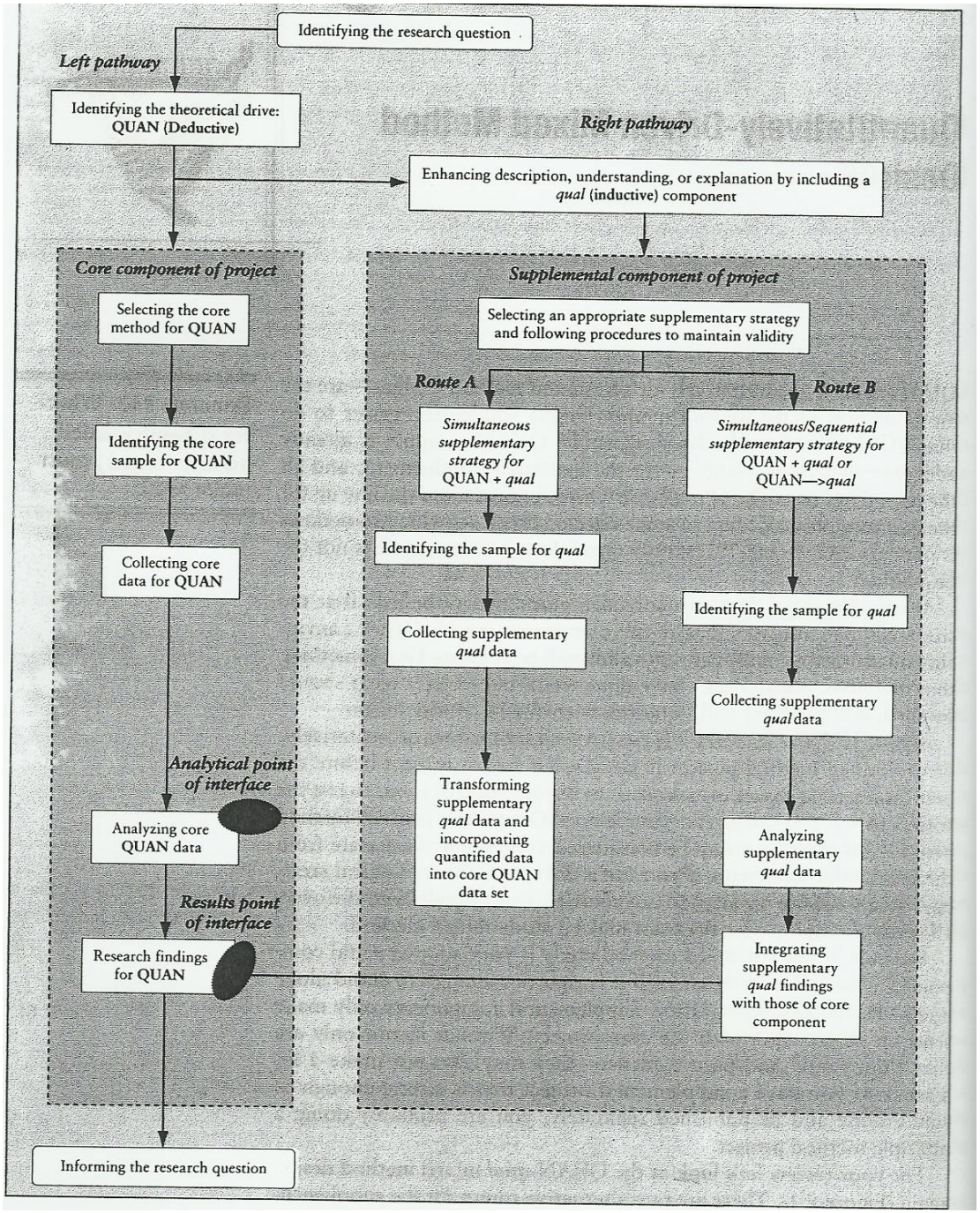

Identifying the research question
Left pathway
Identifying the theoretical drive: QUAL (Inductive)
Right pathway
Enhancing description or explanation or testing conjectures by including a quan (deductive) component
Core component of project
Selecting the core method for QUAL
Identifying the sample for QUAL
Collecting the core data for QUAL
Analyzing the core QUAL data
Research findings for QUAL
Results point of interface
Informing the research question
Supplemental component of project
Select an appropriate supplementary strategy and follow the procedures to maintain validity
Route A
Simultaneous or sequential supplementary strategies for QUAL + quan or QUAL—>quan
Identifying the sample for quan
Collecting supplementary quan data
Analyzing the supplementary quan data
Integrating the supplementary quan findings with those of the core component
Route B
Sequential supplementary strategy for QUAL—>quan
Transforming the core (QUAL) data
Conducting further analyses on the quantified data
Incorporating the quan supplementary findings into the research findings for QUAL


Identifying the research question
Left pathway
Identifying the theoretical drive: QUAN (Deductive)
Right pathway
Enhancing description, understanding, or explanation by including a qual (inductive) component
Core component of project
Selecting the core method for QUAN
Identifying the core sample for QUAN
Collecting core data for QUAN
Analytical point of interface
Analyzing core QUAN data
Results point of interface
Research findings for QUAN
Supplemental component of project
Selecting an appropriate supplementary strategy and following procedures to maintain validity
Route A
Route B
Simultaneous supplementary strategy for QUAN + qual
Simultaneous/Sequential supplementary strategy for QUAN + qual or QUAN—>qual
Identifying the sample for qual
Collecting supplementary qual data
Identifying the sample for qual
Collecting supplementary qual data
Transforming supplementary qual data and incorporating quantified data into core QUAN data set
Analyzing supplementary qual data
Integrating supplementary qual findings with those of core component
Informing the research question

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