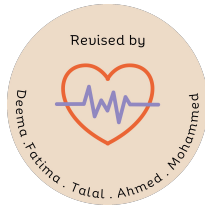


Research  
442



# Qualitative Study Designs

Lecture No. 12

## Objectives:

1. What is qualitative research?
2. Uses of qualitative methods in health research.
3. Compare qualitative with quantitative approach.
4. Major qualitative data collection methods: interviews, focus groups, observations.
5. Overview of qualitative data analysis.

~ This lecture was presented by **Dr. Noura Abouammoh**

~ It is included in the **Midterm Exam**

~ We highly recommended reading the **Ayah** in the first page

## Slides

### Color code

Original text

Dr. Notes

Important

Golden note 

Extra

## Editing file

## سُورَةُ الْأَنْعَامِ

وَإِذَا قُرِئَ الْقُرْآنُ

فَأَسْتَمِعُوا لَهُ وَأَنْصِتُوا لَعَلَّكُمْ تُرْحَمُونَ ﴿١٦٤﴾

المختصر في التفسير

وَإِذَا قُرِئَ الْقُرْآنُ فَاسْتَمِعُوا لِقِرَائَتِهِ، وَلَا تَتَكَلَّمُوا، وَلَا تَشْغَلُوا بغيره؛ رَجَاءُ أَنْ يَرْحَمَكُمُ اللَّهُ.

What is research?

- A systematic <sup>1</sup> approach

## General classification of types of research methods

1 Quantitative research

2 Qualitative research <sup>2</sup>

1. way of collecting/ analyzing data etc.

2. It's not as structured as quantitative research, and it's usually associated with A **WHY** and **HOW** Type of questions.

## Newton's apple

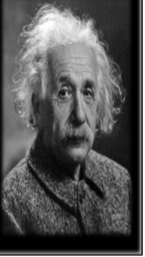
- The open question was **WHY?**
- **WHY** Is usually associated with qualitative study.



We know, the first few slides are horrible.

Everything that can be counted does not necessarily count; everything that counts cannot necessarily be counted.

(Albert Einstein)



## Examples

- 81% <sup>3</sup> of deaths in the hospitals are due to RTAs (road traffic accident).
- 20% of hospital beds are occupied by RTA victims.
- Excessive speeding is the most common reported cause of RTAs.
- The young and economically productive age groups are the most affected. <sup>4</sup>
- The reported gross loss due to accidents is between 2.2 - 9%.

3. Represents the magnitude of the problem.

4. Ask them why? → once we know the reason → we can take action to prevent it.

## SAHER system to reduce RTAs in KSA

- SAHER
- Recognize
- This is what was written by the doctor.



## How can I reduce RTAs?

1 **Why do people speed?**

2 **Why do people cross red lights?**

Why is asked usually to know the reason behind the action.

Thus, enable actions to be eliminated = preventions

## Infertile couple

1 **What** are the predictors of complementary and alternative medicine use in infertile couple?

2 **How** do infertile couples seek treatment?



## What is qualitative research?

- A strategy for systematic collection, organization, and interpretation of textual information.
- **Answers how and why a certain phenomenon occurs.**
- Uses inductive approach to generate novel insights into phenomena.

## Why qualitative?

- Focus on **lived experience**.
- Preserves **chronological flow**.
- Makes sense of **incongruent** (غير متناسب) data.
- **Rich** and holistic (كلي).
- **Compliments quantitative data.**

## When to use qualitative research?

- **Exploring a health problem** or issue about which little is known.
- Produce **conceptual models**.
- Investigating the **feasibility**, acceptability, and appropriateness of potential programmes.
- Identifying **problems in ongoing interventions** and suggesting appropriate solutions in those problems.
- Can help in identifying **cultural and social factors** that affect health care positively or negatively.
- **Complementing quantitatively** collected data by **helping to interpret its results**.
- **Designing** more valid **survey instruments**.

# Qualitative Vs. Quantitative and approaches

## Qualitative approaches

- 1. Look for individual.
- 2. Immersion one-selves in the culture

- **Phenomenology<sup>1</sup>** :
  - Is the study of **human experience** and the ways things present themselves to us in and through such experience (Sokolowski 2000).
  - Is the study of structures of consciousness as experienced from the first-person point of view (Smith 2008).
- **Grounded theory, why how.**
- **Ethnography<sup>2</sup>** :
  - It's a description and interpretation of **cultural or social group or system**.
  - The research examines the group's observable and learned patterns of behaviour, cucutoms, and ways of life.
- **Case study.**

	Qualitative	Quantitative
<b>Approach</b>	Inductive (generate hypotheses)	Deductive
<b>Setting</b>	Natural	Experimental setting/quasi (وما شابه ذلك)
<b>Sampling</b>	Purposeful	Random
<b>Data Collection</b>	Interview, guides, and observational tools (researcher way to collect data)	Data from surveys, administrative or clinical data
<b>Process of Data Collection</b>	Iterative	Linear
<b>Generalizability of the Results</b>	Less generalizable	More generalizable (it's the aim)
<b>Validity and Reliability (Trustworthy + subjectivity)</b>	Largely depends on skill and rigor of the researcher	Largely depends on the measurement device or instrument used
<b>Epistemology</b>	relativism	Realism
<b>Ontology</b>	Interpretivism	Positivism

## Exercise

Area of Investigation	Qualitative Investigation	Quantitative Investigation
GP Consultation	Experience patient going to GP for first time	Number of patients going to GP after having asthma symptoms
Lung Cancer	How can lung cancer affects quality of life	Prevalence/Association

## How might you collect data for a qualitative study? ★

- Interviews (qualitative):
  - Structured <sup>1</sup>
  - Semi-structured <sup>2</sup>
  - Unstructured <sup>3</sup>
- Focus groups <sup>4</sup>:
  - Why do a focus group? <sup>5</sup>
    - Little is known about a topic.
    - At the early stages of a research project.
    - Mixed <sup>6</sup> methods.
- Observations <sup>7</sup>: Researcher observes participants in natural environments.

1. Similar to quantitative research in which there are structured papers (questions) that cannot be altered on by the interviewer.
2. There are papers or questions that the interviewer follow on, but still the interviewer can ask other questions (not mentioned on the paper) based on the interviewee answers.
3. Ground theory (why / how).

4. As a discussion, e.g. customers and consumers.
5. To evaluate an issue, and is not used to understand a topic deeply
6. Quantitative and Qualitative.
7. An interview must be done afterward to prevent subjective bias



## Sampling in Qualitative Research

- Types of sampling, e.g. purposive, snowballing <sup>1</sup>, etc.
- Collect data until data saturation <sup>2</sup>

1. شخص يدلني على شخص ثاني  
لين ما يكفي العدد).

2. (تكرار المقابلات لين ما النتائج  
تصير متكررة: بمعنى مافي أي نتائج

There can be some  
demographic info.

(A text based data structure)

### IMG 11: 47y/o Syrian female, 6 y experience in SA.

N: OK Dr. IMG11

IMG11: OK.

N: Dr. Sonia is a 33 years old Indian physician who works in a PHCC in Riyadh for 3 years as a GP. In your opinion, what are the challenges that she might face living in Riyadh?

IMG11: Ummm...for her the first challenge is language. People in Riyadh speak Arabic only. It is rare to find someone who speaks English. This could be a challenge in the first years however it can be solved quickly after couple of years. Customs and habits are, for sure, are different for a new comer.

N: What about customs and habits?

IMG11: You know, Saudi Arabia is rich in tradition. Saudis usually link their traditions with their religion. A Muslim new comer may find some conflicts. They may be judged by others just because they do not follow a Saudi tradition that is though by Saudis to be part of Islam

N: Can you give me an example for that?

IMG11: For example..ummm...most women here cover their faces. I do not even cover my head in Syria but here I have to cover even my face to avoid being judged by my patients if they see me in a supermarket or anywhere else. And yes, women do not drive and they say it is (Haram) [religiously forbidden], since when driving a car is Haram!? Providing a personal driver is costly and my husband is busy most of the times, he is a cardiac surgeon in X hospital, he is very busy. Sometimes I feel like if I am imprisoned and cannot do anything, you know, taxis are not safe.

N: I want to talk more about patients judging you if you do not try to look like them. How does that affect your work?

IMG11: It may affect trust between my patients and I. People her are so much connected to their religion, which is good of course, so I know by looking d

## Analyzing data

- Cut and paste.
- Software programmes, e.g. NVivo, ATLAS.ti, NUD\*IST

**K-State MOOC Feasibility Study.nvp - NVivo**

File Home Create External Data Analyze Query Explore Layout View

Navigation View Dock All Undock All Close All Close Window

Find Quick Coding Detail View Workspace

Annotations See Also Links Relationships Links Node Node Matrix Classification Report Detail View Reference Color Scheme Visualization

Look for: Search In Open Sourcing Find Now Clear Advanced Find

**Open Sourcing**

Name	Sources	References	Created On	Created By	Modified On	Modified By
CommunityCollege	1	1	4/26/2013 11:17 AM	SHJ	10/24/2014 5:01 PM	NV
CosttoLearners	6	14	4/26/2013 11:07 AM	SHJ	10/24/2014 5:01 PM	NV
EmploymentOpportunitiesforLearners	6	12	4/25/2013 1:41 PM	SHJ	9/28/2014 4:04 PM	NV
GlobalAccess	43	161	4/25/2013 11:13 AM	SHJ	10/24/2014 5:01 PM	NV

Word Frequency Query Result 10.1007\_978-3-642-03278-3\_ DelphiMethodology

**Delphi protocol can be applied when a community of experts is required to deliver a consensual answer.**

Reference 2 - 0.24% Coverage

an agreement among the experts about what the answer should be. This consensus reaching problem has been already considered in the literature, though its automatization remains as a challenge.

Reference 3 - 1.22% Coverage

The Delphi Process in general is not rigid and its structure depends on the situation. Looking for guidelines, this paper follows the steps and guidelines stated in [5]. The Delphi approach has been applied for several areas for different uses. For instance, Roth [31] used the Delphi approach for acquiring knowledge from multiple experts. Recently, Bryant [4] applied the Delphi method for estimating the risk factors of the terrestrial chemical spill; Hayes [13] did a Delphi study of the future of marketing of the higher education; Mir'o[21] applied the delphi method to reach consensus among professionals with interest in chronic pain among children and adolescents. The automatization of Delphi is considered first as a set of computers and software assisting human experts in the process. In this line, literature mentions DEMOS[19], which is an on-line discussion system based on Delphi, and Turo[34], who presents a Delphi method with computer assistance.

Internals\DelphiResearch\10.1007\_978-3-642-16373-9\_20> - \$ 1 reference coded [0.18% Coverage]

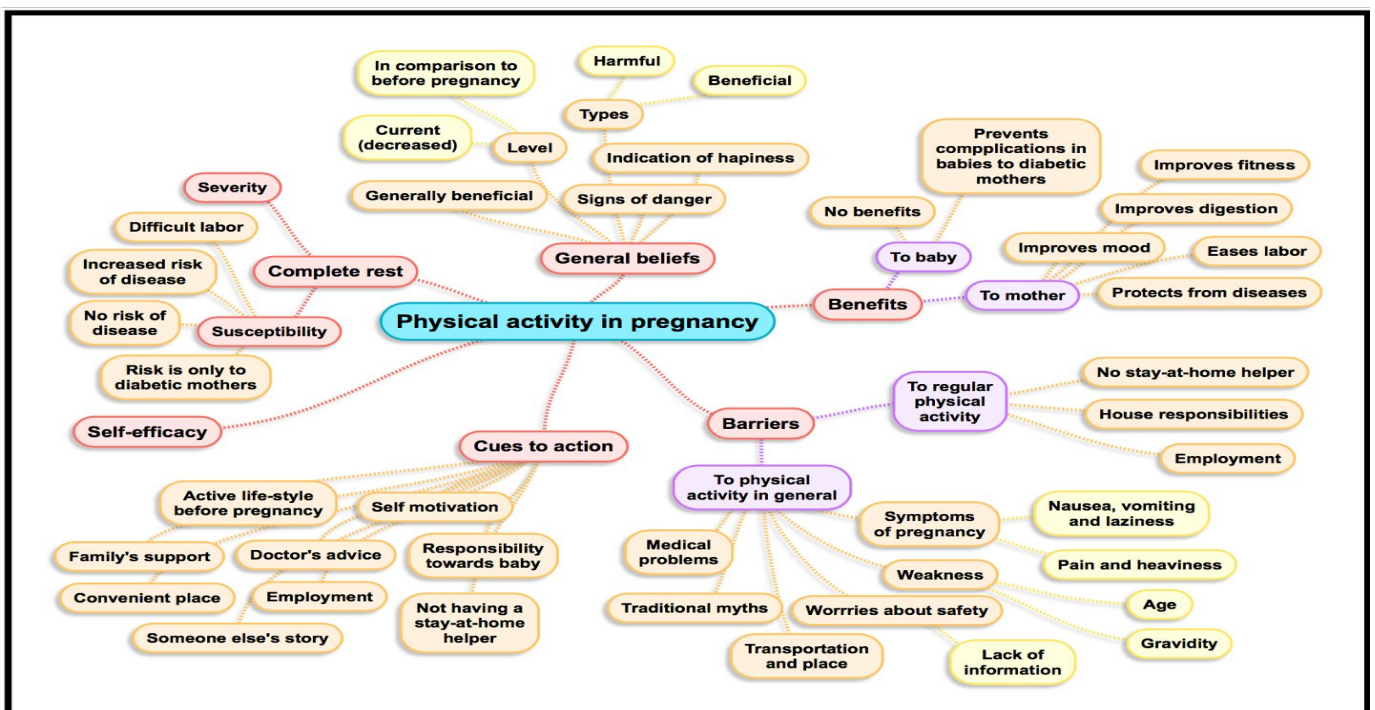
Reference 1 - 0.18% Coverage

Schema matching, the identification of data elements that have the same meaning, is a critical step to ensure the success of database integration.

Internals\DelphiResearch\10.1007\_978-3-7908-2352-3\_14> - \$ 3 references coded [1.21% Coverage]

Reference 1 - 0.50% Coverage

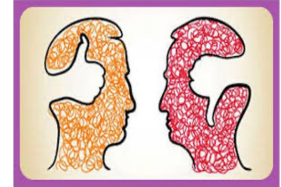
The Delphi method is commonly used for future studies, and it utilizes experts, who are asked to evaluate different statements or hypotheses about the future.





## How can I reduce subjectivity in qualitative research

- Reflectivity <sup>1</sup>
- Probing <sup>2</sup>
- Triangulation <sup>3</sup>



1. The author write his name beside his part of analysis

3. More than one source of info (2 different techniques of data collection).

Incentives are okay in qualitative study (sometimes), but can be biased.

2. Probing is asking follow-up questions when we do not fully understand a response, when answers are vague or ambiguous or when we want to obtain more specific or in-depth information.

## Concluding remarks

- Qualitative research identify what really matter for patients and care providers.
- Qualitative methods can provide unique contributions to health services and clinic research
- There are widely accepted procedures for study design, sampling, data collection, and data analysis in qualitative research.

القارة: نواف التركي  
عبدالله الشهري وهي المتحفي



الأعضاء:

رغد النظيف  
ريما الجريبة  
شهد البخاري  
نوف الضلعان  
أمير الاحمري  
وعد ابونخاع  
نراء الهويش  
في الدوسري  
منار الزهراني

عبدالله التركي  
محمد الزير  
عثمان الدريهم  
عبدالعزیز القحطاني  
ناصر الفيت  
سعد السهلي  
رائد الماضي  
سعود الشعلان  
عبدالله المياح  
عبدالله النجريس  
تركي العتيبي  
عبدالله القرني  
عامر الفامري  
سعد الاحمري  
معاذ آل سلام  
محمد الحصيني

MCQ:

Q1: In qualitative study, what is the guiding principles in deciding the sample size?

- A. Effect size
- B. Data saturation
- C. Number of variable
- D. Subgroup analysis

Q2: A total of 5 focus groups have been done to deeply understand the reasons behind the students' absence from lectures in order to reduce the prevalence of students' absence; thus, increasing their performance. What type of stud is this?

- A. Quantitative study
- B. Cohort study
- C. Qualitative study
- D. RCTs

MCQ:

Q3: You have sent an email to a researcher requesting him/her to allow you to use their questionnaire and to email it to you. However, the researcher CC's another researcher (author) in which he/she have sent a better questionnaire based on your population. which type of sampling has been used?

- A. Purposive
- B. Data saturation
- C. Discussion
- D. Snowballing

Q4: The researcher examines the group's observable and learned patterns of behaviour, customs, and ways of life. This is known as?

- A. Ethnography
- B. Phenomenology
- C. Case study
- D. Grounded theory