

# **We14-15 Synthesis (Introduction & Practical)**

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# Objectives

- To look at two types of synthesis for qualitative data:
  - Thematic analysis
  - Framework synthesis
- Some worked examples of each
- Practical session
- Discussion of these two approaches

# Types of interpretive synthesis

- Thematic analysis
  - Miles and Huberman (1994)
  - Grounded in data
- Framework analysis or synthesis
  - Ritchie & Spencer (1994)
  - *A priori* themes
  - Map data to themes
  - Oliver *et al* (2008, 2004); Brunton *et al* (2006)

# The data

- Verbatim quotations from study participants:
  - *“I know it’s completely confidential but . . . your parents will find out”*
- Author-reported findings clearly grounded in study data:
  - *“When shown ‘I would trust my doctor to keep what I say confidential’ 72.9% of pupils said that they agreed”*

# Thematic analysis

- Question: What factors affect whether or not young people use sexual health services?
- Data from: Garside R. et al (2002) Anonymity and confidentiality: Rural teenagers concerns when accessing sexual health services, *J Fam Plan Reprod Health Care* **28** (1): 23-26.

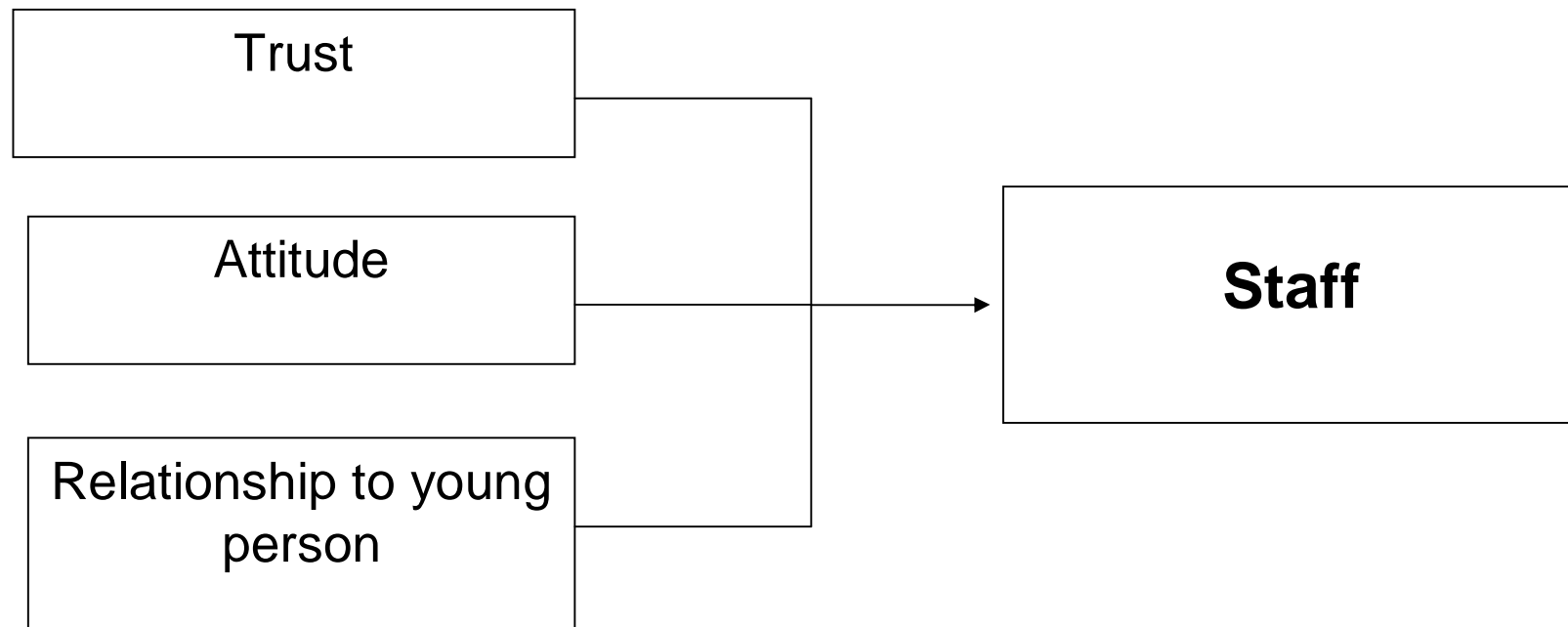
# What factors affect whether or not young people use sexual health services?

- I couldn't trust the school nurse because she's the mum of one of my football team (TRUST; CONFIDENTIALITY)
- My doctor is sort of like my dad's best mate . . . and I'd be embarrassed (CONFIDENTIALITY; STAFF)
- They [doctors] say you should talk to your mum, but I'm like, you don't know my mum! (STAFF ATTITUDE)
- If you're worrying about . . . Being pregnant or something, the last thing you need to worry about is your mum's best friend seeing you walking into the doctors (BEING SEEN; DISCLOSURE; CONFIDENTIALITY)
- You go into the doctors and see loads of your friends in there, and you think 'It's going to go all around the village, my mum's going to find out' (BEING SEEN; DISCLOSURE; CONFIDENTIALITY)

# Framework synthesis

- Question: What factors affect whether or not young people use sexual health services?
- Conceptual model from Owen J et al (2010). School-linked Sexual Health Services for Young People (SSHYP): survey and systematic review. *Health Technology Assessment* 14 (30).
- Data from Garside et al (2002).

# Conceptual model





# What factors affect whether or not young people use sexual health services?

- List of factors based on the conceptual model:
- STAFF
  - F1. STAFF TRUST
  - F2. STAFF ATTITUDES
  - F3. STAFF RELATIONSHIP TO THE YOUNG PERSON
  - F4. NEW THEMES?

# What factors affect whether or not young people use sexual health services?

- I couldn't trust the school nurse because she's the mum of one of my football team (F1, F3)
- My doctor is sort of like my dad's best mate . . . and I'd be embarrassed (F1, F3)
- They [doctors] say you should talk to your mum, but I'm like, you don't know my mum! (F2)
- If you're worrying about . . . Being pregnant or something, the last thing you need to worry about is your mum's best friend seeing you walking into the doctors (F4: BEING SEEN)
- You go into the doctors and see loads of your friends in there, and you think 'It's going to go all around the village, my mum's going to find out (F4; F5: OTHERS' RELATIONSHIP TO YOUNG PERSON)

# Practical synthesis

- Question: What factors affect people's decision-making when taking supplements
  - Perform thematic analysis on Oldham study results
  - Perform framework synthesis on George and Oldham studies results

# What factors affect people's decision-making when taking supplements?

- Cost:
  - “I take glucosamine and chondroitin for my arthritis. I start taking it probably 4 or 5 years ago . . . and it was real expensive then, it wasn't massively produced. It was getting too expensive and I quit taking it.
- Prevention:
  - “They just say they're [vitamin C and vitamin E] real good for your health. It's supposed to fight off cancer and heart disease. That's what I heard. Figure it can't hurt.”
  - “Vitamin E is good for the heart and stuff like that. I think at my age a little more vitamin C might do me good and it will help with colds. It's very difficult when I do get sick . . . so I take vitamins [C and E].”
- Health problems:
  - “More than for my diabetes, I take it [a multivitamin] because of my age, and the fact that I can't hold as much [food]. When they say I should have this much carbohydrate and this much protein and this much fruit and this much vegetables and I eat what I can hold. Then I run out of space and can't finish anything or I leave one of those things out entirely. I feel I need some help.”

# What factors affect people's decision-making when taking supplements?

- Media input:
  - The news and television were cited as being a source of information for a number of participants. According to one participant, “You hear all about everything [vitamins] now-a-days on it [television]. But I can’t take all of them!”
- Family input:
  - Daughters were mentioned as the primary source of supplements: “My daughter sent me a bottle and it’s got calcium, potassium, and magnesium, and they’re real good” and “My daughter-in-law is a very healthy person, very health conscious; she’s given me lots of supplements.”

# Framework synthesis

List of themes derived from Huffman (2002) model

- Perceived need
  - 1. Family factors affecting perceived need
  - 2. Personal factors affecting perceived need
  - 3. Media representations of perceived need
  - 8. Community input into decision-making
  - 9. Pharmacy input into decision-making
- Decision-making
  - 4. Spending capacity
  - 5. Media input into decision-making
  - 6. Physicians input into decision-making
  - 7. Family members input into decision-making
- Access
  - 10. Obtaining micro-nutrients
- Use
  - 11. Perceived benefits
  - 12. Perceived risks (negative factors)
  - 13. Habitual use
  - 14. Intermittent use

# Framework synthesis

- Question: What factors affect people's decision-making when taking supplements

F1. Family input into decision-making

F2. Media input into decision-making

F3. Health professionals input into decision-making

F4. Risks

F5. Benefits

F6. New factors or issues?

# What factors affect people's decision-making when taking supplements?

- F1 (Family input into decision-making):
  - “My daughter has Crohn’s disease and she was advised by her specialist ... he suggested that she went on to fish oil [capsules] every day. She thought it was doing her good and I thought, well, it might do me good”
- F2 (Media input):
  - “I just bought [CAM] listening to the wireless, and some health blokes get on and tell you how good they all are and I got out and bought them”
- F3 (Health professionals input):
  - “[CAM users] must get to know about [CAM] independently of the medical profession, I think, because, going on my experience, no doctor has ever mentioned anything like that to me”



# What factors affect people's decision-making when taking supplements?

- F4 (Risks):
  - “I thought, oh well, fish oil, omega 3, and what I’ve read, I thought, well, it can’t do me any harm, I’m not taking a chemical ... nothing’s ever come up in a blood test that it’s doing me any harm, so I feel I’ll benefit by them”
- F5 (Benefits):
  - “Listening to the ‘smart Alec’ on the wireless, telling you how good it is, how we lack it in our meals and stuff ... that’s the only reason why I did it. I thought ... I might miss my meal, and then this would make up [for it]”
- F6: PHYSICAL PROPERTIES
  - “I’ll spend the money but I won’t take them ... because I can’t swallow the big tablets, all of these huge tablets” (woman, 69 years, taking many herbal and vitamin preparations)”

# Discussion: Thematic analysis

- Strengths
  - Grounded in the data
  - Original richness of data is often retained
- Weaknesses
  - Highly interpretive, potentially subjective
  - Highly iterative and time-consuming

# Discussion: Framework synthesis

- Strengths
  - Quick, less interpretive, more reliable
- Weaknesses
  - Need a good model, but unlikely to be exact match, so there will be new themes
  - Need good definitions of *a priori* themes
  - Data may appear to “fit” themes

# Example: Framework synthesis

