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Session 55: Interpretive synthesis

Thematic synthesis

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Thematic Synthesis*

- Line by line coding
- Comparing & grouping codes
- Descriptive themes
- Analytical themes

*See: Thomas J, Harden A (in press) Methods for the thematic synthesis of qualitative research in systematic reviews. *BMC Medical Research Methodology*
An example of thematic analysis for synthesis

Children and healthy eating: a systematic review of barriers and facilitators*

Review questions

What is known about the barriers to, and facilitators of, healthy eating amongst children?

Do interventions promote healthy eating amongst children?

What are children’s perspectives on healthy eating?

What are the implications of the above for intervention development?
REVIEW PROCESS

Searching, screening and mapping

Focus narrowed to ‘fruit & veg’

Synthesis 1: Trials (n=33)
1. Quality assessment
2. Data extraction
3. Statistical meta-analysis

Synthesis 2: ‘Views’ studies (n=8)
1. Quality assessment
2. Data extraction
3. Thematic synthesis

Synthesis 3: Trials and ‘views’
Thematic synthesis

Stage 1 and 2: Coding text and developing descriptive themes

Stage 3: Generating analytical themes
Stage 1 and stage 2

Data were author descriptions of study findings

Line-by-line coding applied to data
- 36 initial descriptive codes (e.g. bad foods = nice; good foods = awful)

Looked for similarities and differences among descriptive codes in order to group them
- 13 descriptive themes (e.g. ‘Perceptions of health benefits’)

Line-by-line coding in EPPI-Reviewer

Inductive coding: code

Show all 42 items

Coding text for item: Dixey R; Sahota P; Atwal S; Turner A; (2001) Children talking about healthy eating: Data from focus groups with 300 9-11-year-olds (click here to change item and/or text)

as a legitimate use of their money and thought parents should buy this.
Children did not identify friends as an influence on their healthy eating

Children were well aware of the pressures on them (to be healthy) and of the contradictions in their own behaviour, and knew that they did not always act on what they knew to be healthy: 'When they (the Apples project) come round, you think right, I'm going to get healthy now, but when you get home, you get something out of the fridge or something' (Boys, Year 6); 'At home I just nip into the biscuit tin.' (Boys, year 5)' p.74 - e.g. temptation 'All the things that are bad for you are nice, and all the things that are good for you are awful' (Boys, year 6) p.74 Problems with school dinners - 'But once you go down for the school dinners it's a different story, because you've got all your fattening foods' (Boys, Year 6) p.74 Some children reported throwing away foods they knew had been put in because they were 'good for you' and only ate the crisps and chocolate. Influence of advertising - reported keeness to emulate footballer Alan Shearer by eating at MacDonals 'My brother says we have to go to there because Alan Shearer has been there.' (Girls, year 5) 'People thing I want to be like Alan Shearer so I better go to MacDonalds.' (Boys, year 6) Children said that adverts made them 'feel hungry' and were particularly

You are logged in as: James Thomas
Review: Children and Healthy Eating: A systematic review of barriers and facilitators
Database: EPIC
Authors reported influences rather than barriers or facilitators.

Influences on food choices outside the school included advertising. There was a high awareness of food adverts from TV and magazines and it generated much discussion. They were able to recognize and discuss adverts for unhealthy foods (e.g., 

Influences on food choices outside the school included advertising. There was a high awareness of food adverts from TV and magazines and it generated much discussion. They were able to recognize and discuss adverts for unhealthy foods (e.g., *bad food = nice, good food = awful, the ads for unhealthy things tell you how nice they taste*). Although children could readily identify the foods used in the ads to get them to eat certain things and they felt they were not personally influenced by it (just after your money), many did enjoy the foods targeted at them and enjoyed going to places like burger bars.

*Parents and the home environment.* Children perceived parents to be a key influence. They reported positive and negative sanctions (e.g., getting sent to bed if they don’t eat veg), but some reported a more positive environment whereby parents healthier choices influenced the children.

*Friends were less of an influence.* We don’t talk about it (p. 74), but sharing sweets and eating at each other’s houses did come up.

*Disposable cash.* Children saw pocket money as a way to buy sweets. They did not use this money to buy healthy foods as a legitimate use of their pocket money.

*Children did not identify friends as an influence on their healthy eating.* Children were well aware of the pressures on them (to be healthy) and of the contradictions in their own behavior, and knew that they did not always act on what they knew to be healthy. *When they (the Apple project) come round, you think right, I’m going to get healthy now, but when you get home, you get something out of the fridge or something* (Boys, Year 6). At home I just jump into the biscuit tin (Boys, Year 3) (p. 74).

*Problems with school dinners.* But once you go down for the school dinners it’s a different story, because you’ve got all your favorite foods (Boys, Year 6) (p. 74). Some children reported throwing away foods they knew had been put in because they were ‘good’ for you – and only ate the crisps and chocolate. Influence of advertising reported keenness to emulate footballer Alan Shearer by eating at MacDonalds. My brother says we have to go to there because Alan Shearer has been there (Girl, year 5). People say I want to be like Alan Shearer so I better go to McDonalds (Boys, Year 6). Children said that adverts made them feel hungry and were particularly keen on those portraying footballers and burgers, or *Shoppers and the England Team! All adverts for healthy stuff go on about healthy things, the adverts for unhealthy stuff tell you how nice it tastes.* (p. 75) having pocket money having pocket money to spend was seen as a major reason for consuming sweets.

What do children think helps them to eat healthier?
Axial coding

Dixey et al (2001)

Characters: 463 to 978

Children were aware of the relationship between diet and health, in particular for health consequences in the future (main health consequence of not eating healthily was identified as heart disease, although a minority mentioned cancer), although some children did recognise the importance of healthy eating so that they could do things now ("move and run about"). Fat also featured heavily in children's accounts of heart disease (e.g. "too many crisps means too much fat which blocks the arteries of the heart").

Characters: 982 to 1079

Children identified social as well as health concerns as important reasons for not being too fat


Characters: -1 to 180

James

This study addresses the more specific questions of what are children's perceptions of fruit and vegetables. The children's likes and dislikes with regard to vegetables may r /
Structuring the descriptive codes into descriptive themes
Final list of descriptive themes

- Healthy eating concepts (understanding)
- ‘Good’ and ‘bad’ foods
- Health consequences
- Food preferences
- Health benefits
- Knowledge behaviour gap
- Roles and responsibilities
- Non-influencing factors
- Limited choices
- Eating to socialize
- Contradictions
- Food rules
- Breaking rules

Chosen foods

Influences on foods eaten

Food in the school

Provided foods

Food in the home

Understandings of healthy eating
Stage 3: generating analytical themes

The descriptive themes stayed very ‘close’ to the content of the primary studies, but…

Our synthesis of descriptive themes, did not answer our review question directly

Barriers and facilitators framework:

- What do children think stops them from eating healthily?
- What do children think helps them to eat healthily?
- What ideas do children have for what could or should be done to promote their healthy eating?

‘Recommendations for interventions’

Analytical themes emerged through a cyclical process which involved interrogating the descriptive themes to answer these questions
Example: generating analytical themes (1)

Five of the 12 descriptive themes concerned the influences on children’s choice of foods:

- (food preferences, perceptions of health benefits, knowledge behaviour gap, roles and responsibilities, non-influencing factors)

Children identified that:

- taste was the major concern for them when selecting food;
- health was either a secondary factor or, in some cases, a reason for rejecting food;
- buying healthy food was not a legitimate use of their pocket money which they would use to buy sweets that could be enjoyed with friends
These perspectives indicated to us that:

• branding fruit and vegetables as a ‘tasty’ rather than ‘healthy’ might be more effective in increasing consumption

• 'All adverts for healthy stuff go on about healthy things. The adverts for unhealthy things tell you how nice they taste.’

We captured this line of argument in the analytical theme entitled ‘Children do not see it as their role to be interested in health’.
Stage 3: Analytical themes

1) Children don’t see it as their role to be interested in health.

2) Children do not see future health consequences as personally relevant or credible.

3) Fruit, vegetables and confectionary have very different meanings for children.

4) Children actively seek ways to exercise their own choices with regard to foods.

5) Children value eating as a social occasion.

6) Children recognise contradiction between what is promoted and what is provided.

Children consider taste, not health, to be a key influence on their food choice.

Food labelled as healthy may lead children to reject them (‘I don’t like it so it must be healthy’).

Buying healthy foods not seen as a legitimate use of their pocket money.
Implications for interventions

1) Children don’t see it as their role to be interested in health.

2) Children do not see future health consequences as personally relevant or credible.

3) Fruit, vegetables and confectionary have very different meanings for children.

4) Children actively seek ways to exercise their own choices with regard to foods.

5) Children value eating as a social occasion.

6) Children recognise contradiction between what is promoted and what is provided.

Brand fruit and vegetables as ‘tasty’ rather than ‘healthy’.

Reduce health emphasis of messages

Do not promote fruit and vegetables in the same way within the same intervention.

Create situations for children to have ownership over their food choices.

Ensure messages promoting fruit and vegetables are supported by appropriate access to fruit and vegetables.
Thank you!
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