Figure 3.3: Research Mind-map – a visual summary of the main steps of the research
Aim

Develop theories
NOT only data analysis
NO theoretical ideas before research

Main points / Method

NO one way to GTM
Set theories aside
Cases taken not variables
Emerging concepts
No clear hypothesis
Constant Comparison with additional data
THEN review literature

Data Collection

Slices of data
Interviews
Surveys
Observations
Quantitative
Anecdotal
Other theories

Emerging concepts
Theoretical Sampling
Further data collection

Data Analysis

Open coding
Selective coding
Theoretical coding
Staying true to data

THEORY

Theoretical Sampling
Coding
Constant Comparison

Concepts

Quality of theory
Its ability to explain new data

Figure 3.5: GTM (personal visualisation)
Figure 3.10: CTSC vs. GTM

**Aim**

- Develop theories
  - NOT only data analysis
  - NO theoretical ideas before research
  - CTSC can start with theories and literature

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**Main points / Method**

CTSC can use clear hypotheses

- NO one way to GTM
- Set theories aside
  - No clear hypothesis
- Cases taken not variables
- Emerging concepts
  - Constant Comparison with additional data

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**GTM VS CTSC**

- CTSC is open to any coding technique
- CTSC main depends on constant theoretical sampling and constant comparison

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**Data Collection**

- Slices of data
  - Interviews
  - Surveys
  - Observations
  - Quantitative
  - Anecdotal
  - Other theories

- Emerging concepts
  - Theoretical Sampling

- Further data collection

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**Data Analysis**

- CTSC uses the big linking long process to filter and link all emerged concepts before theorising
- Theoretical Sampling
  - Coding
  - Constant Comparison

- Quality of theory
  - Its ability to explain new data

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**THEORY**

- data
  - Theoretical Sampling
  - Coding
  - Constant Comparison

- concepts
  - Theory

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Figure 5.2: Process of interviews – after taking permission from the university's committee, interview and consent sheets were designed. Interviewees were reached through personal and professional contacts. Data was recorded, then manually and digitally analysed. Results lead to concepts emerging, which then were filtered and recoded through the big linking process prior to reach the theory.
Figure 6.2: Observations flow – after taking permission from the university’s committee, observations and consent sheets were designed. Participants were reached through personal and professional contacts. Each design project was observed between 4-10 hours. Designers and design teams shared the process of the design and talked in depth about colour. Data was recorded, then manually and digitally analysed. Results lead to concepts emerging, which then were filtered and recoded through the big linking process prior to reach the theory.
Figure 8.8: Colour & design 4D’s process (2016 theory) - the figure indicates in bullet points the main theory factors in relation to their positions on the 4D design timeline. The black dots with yellow framing indicate the main findings reached by using CTSC model (2016 theory)