

# Survey data and Concept Mapping analysis

Dr George Thomas

*With thanks to Harvey Wells*

# Objectives

- To present survey data and the Concept Mapping analysis from the first Greater Manchester MI Network.
- To discuss next steps relative to the survey data and Concept Mapping analysis.

# Part-1: Survey data

# MI and professional practice

- 83% of attendees felt that they were familiar with MI theory, techniques and approaches.
- Interestingly:
  - 57% of attendees said that they regularly use MI within their professional practice;
  - 52% of attendees felt confident using MI within their professional practice;
  - 57% of attendees said that they had received significant training in MI.
- Thus, at present, attendee familiarity with MI doesn't directly translate into the use of MI in practice.

# What was helpful about the first MI Network?

- Input on MI:
  - *'Perfect refresher of MI';*
  - *'Understanding that it is not just about the [Transtheoretical Model], but about the way we work with people and the skills we use';*
  - *'The development of MI over the years'.*
- Concept Mapping exercise:
  - *'I really liked learning about concept mapping as well';*
  - *'It was helpful to use the concept map to clarify in my mind what I know and value about [MI]'.*
- Multi-professional networking:
  - *'It was interesting to see the range of professionals interested in MI';*
  - *'Meeting with others who are interested in [MI]'.*

# What would be helpful to cover in future MI Network sessions?

- Application of MI:
  - *'Examples of how MI is being applied within various professions and what that may look like';*
  - *'Discussions about the ways we can make MI accessible to children and young people, or those with lower verbal skills'.*
- Experiencing MI:
  - *'A demonstration of techniques could be useful perhaps'.*
- MI techniques and approaches:
  - *'Details about how to use MI in practice';*
  - *'Time to practise techniques'.*
- MI research:
  - *'Recent research if available'.*
- More opportunities for multi-professional networking:
  - *'Opportunity for a more collaborative task, opportunity to share'.*

# Survey data: Next steps

- Provide attendees with a level of training on the use of MI techniques and approaches.
- Provide input on/ share experiences regarding the application of MI in professional practice.
- Demonstrate MI being used by an experienced practitioner.
- Provide attendees with contemporary MI research (e.g., associated reading).
- Maintain an element of multi-professional collaboration/ networking.
- Revisit the Concept Mapping exercise in the future.

# Part-2: Concept Mapping analysis

# Recap

- At the first Greater Manchester MI Network, attendees created Concept Maps of their understanding of MI.
- It has been useful for us to analyse the Concept Maps in order to get a sense of where attendees are at in terms of their understanding of MI.

# Concept Map analysis

- There are a number of ways of analysing Concept Maps:
  - Look at how many concepts and links are created;
  - Consider the most frequently used concepts;
  - Analyse the structure of the Concept Maps.

# Number of concepts and links

- Of the 17 Concept Maps submitted for analysis:
  - 186 concepts and 175 links were used;
  - There was an average of 11 concepts and 10 links per Concept Map;
  - Over 120 distinct concepts were used to describe MI.

# Frequently used concepts

- Most frequently used concepts:

Concept	Frequency
Motivational Interviewing	17
Change	12
Empathy	7
Collaboration	6
OARS	6
Client/Person Centred	4
Compassion	3

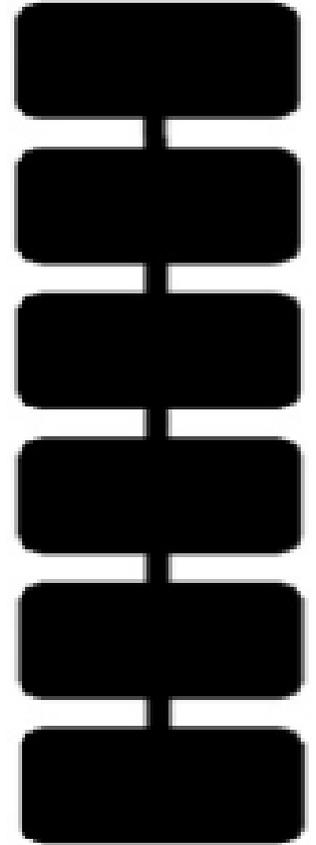
# Structure of Concept Maps

- The term 'map morphology' (Kinchin, Hay & Adams, 2000) is used to describe the structure of Concept Maps.
- There are three distinct Concept Map structures:
  - Chain;
  - Spoke;
  - Network.

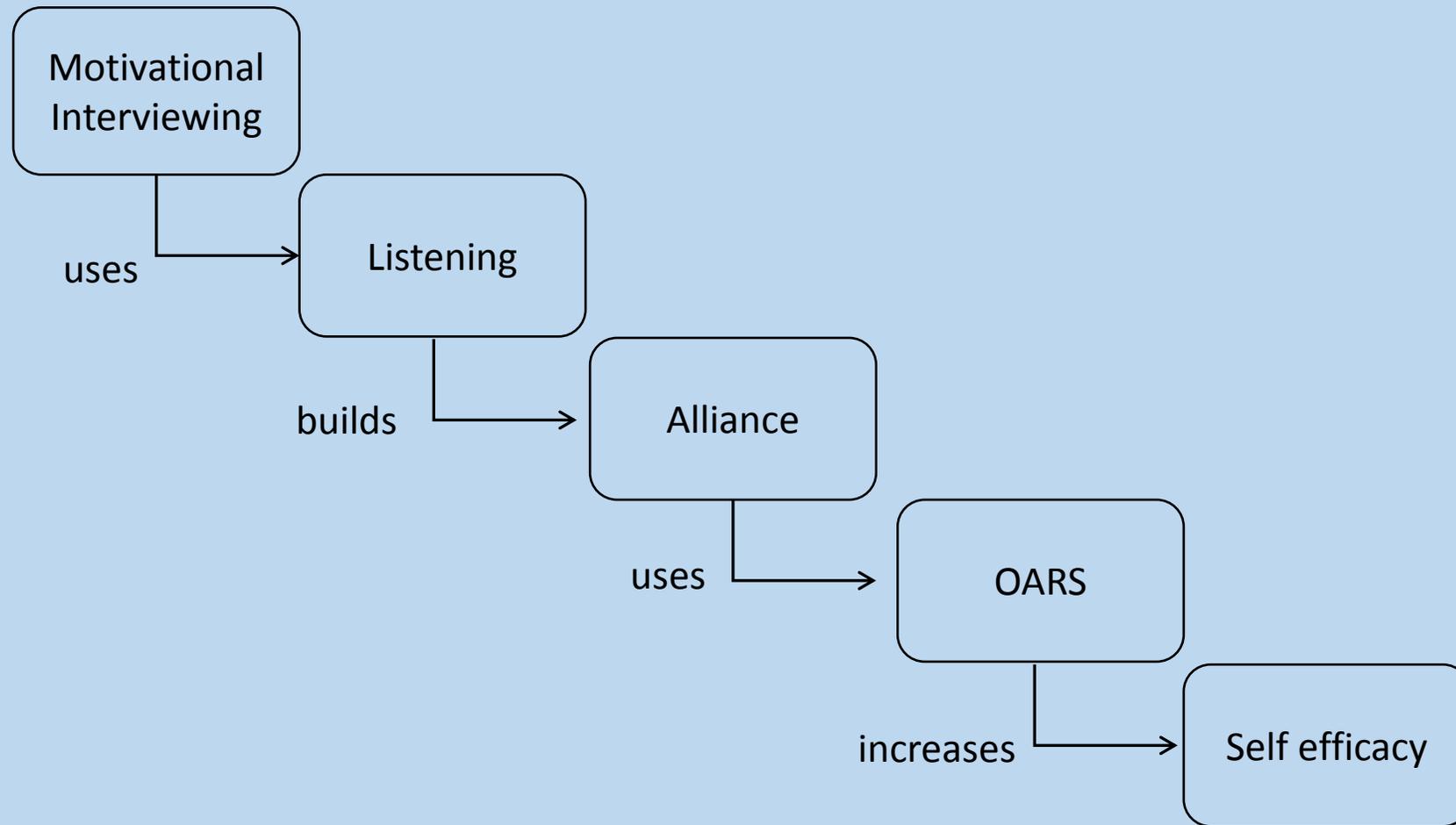
# Chains



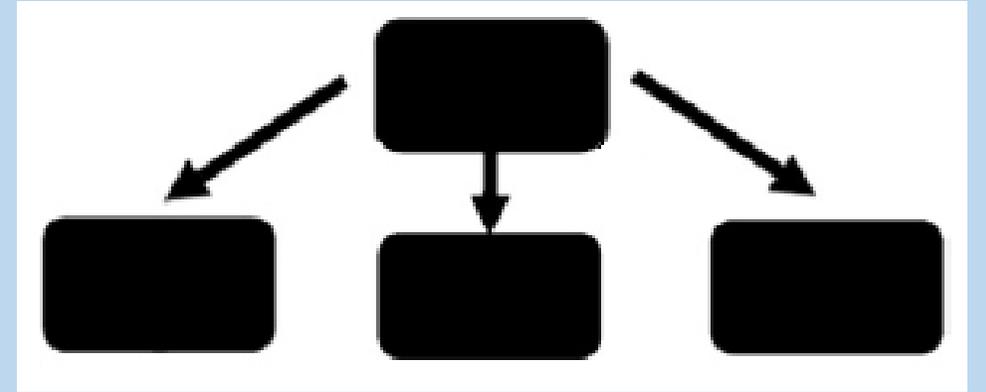
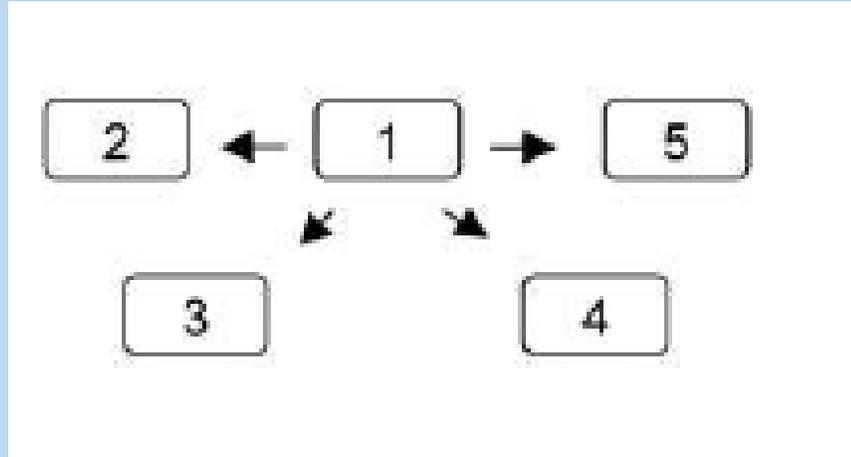
- Chains comprise linear/ temporal sequences of information.
- Individual concepts are only linked to concepts either side or above/ below.
- Chains are fragile in that they need restructuring when concepts are added/ removed.
- Chains suggest a narrow perspective and are characterised as a 'novice' level of understanding.



# Example chain Concept Map



# Spokes

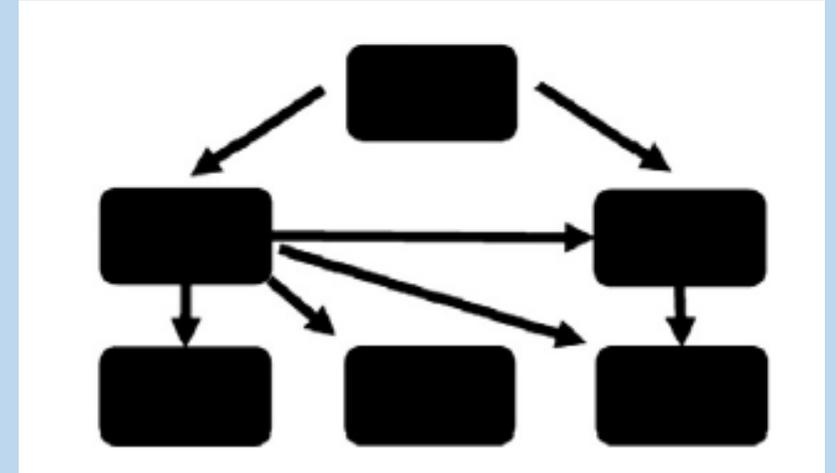
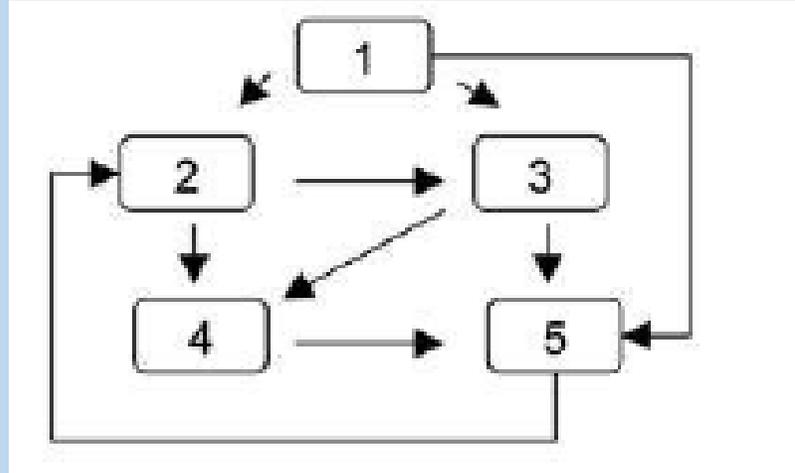


- Spokes comprise a radial structure in which different concepts are organised around a central theme, but are unrelated to each other.
- Spokes are less fragile than chains in that they do not require restructuring when concepts are added/ removed.
- Spokes suggest a basic understanding of the central theme but the lack of integration and interconnections suggest that the author is 'learning ready'.

# Example spoke Concept Map

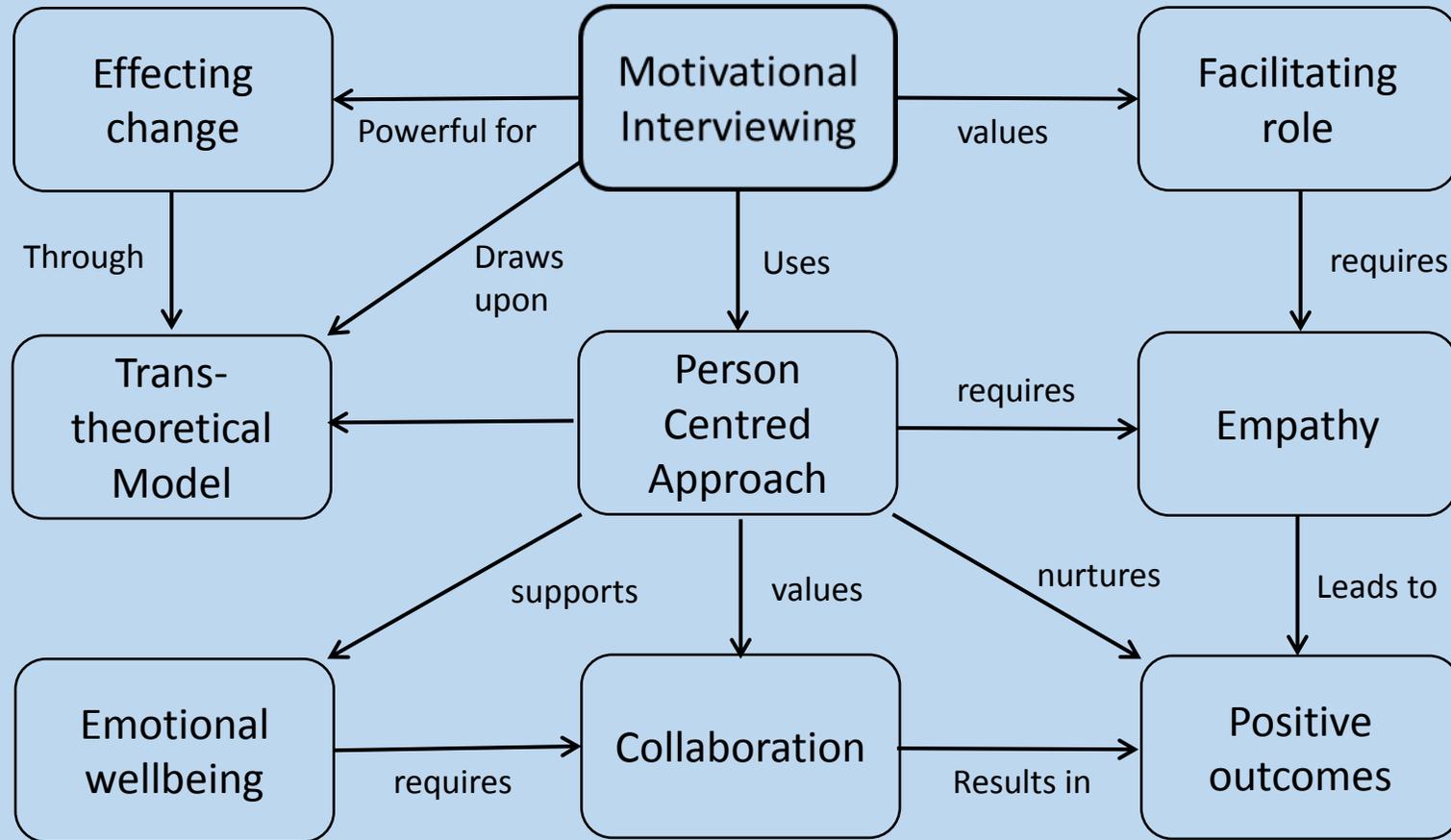


# Networks



- Networks comprise different concepts with various links between them.
- Networks are the most stable structure as adding/ removing concepts has few consequences because of the other 'routes' through the Concept Map.
- Networks suggest an 'expert' understanding.

# Example network Concept Map



# Structure analysis

Concept Map structure	Frequency
Chain	2
Spoke	6
Network	7
Unclassified	2

# Concept Maps: Next steps

- Revisit the Concept Mapping exercise in the future to compare the two Concept Maps and examine how understanding of MI has changed over time.

Any questions/ comments?