Q methodology

Its uses in nursing research

Dr Joan Simons
Q methodology was designed to expressly explore the subjective dimension of any issue towards which different viewpoints can be expressed.

A defining principle of Q methodology is its assumption that subjective viewpoints are amenable to systematic analysis.

Therefore it is ideal for many aspects of nursing.
Examples of studies

• Nurses attitudes to euthanasia (Holt 2006)
• Assessing learners in palliative care education (Gaebler-Uhing 2003)
• The identification of subjective constructions of health-related quality of life using Q methodology (Dahlstrom 2005)
• Q methodology : an alternative approach to research in nurse education (Barker2008).
History

• William Stephenson a psychologist first introduced Q methodology in 1935.

• He said it offered psychology a scientific approach through which a systematic examination and understanding of individual’s subjectivity could be achieved.
William Stephenson
• His contemporaries disagreed and there was severe criticism of the method, due to its departure from traditional factor analysis
• As a result q methodology fell out of use until it had a revival in the US in the 1970s and in the UK in the 1990s.
• The recent growth in interest across both psychology and the social sciences mirrors a growing interest in subjectivity and a wavering in the commitment to the positivist tradition.
PROF WENDY STAINTON ROGERS

*SAGE HANDBOOK OF QUALITATIVE RESEARCH IN PSYCHOLOGY* (SAGE, 2008)
Pain Studies

• Eccleston et al (2003) How can we learn to live with pain?
Sampling the diversity of possible accounts / building the concourse

1. Pain clinicians and researchers were interviewed for their ideas of acceptance
2. Literature on the acceptance of chronic pain was searched
3. A database of interviews with people reporting chronic pain was examined.
4. Internet sites of parent and carer discussion groups were searched
5. Popular media and television were observed.
80 item q set

• 60 people were contacted
• 33 completed packs returned
• 30 analysable packs
• PQ method computer package used for analysis
• 8 factors emerged.
• Used alongside biographical data
• Comments made by participants whilst completing the q sort.
Q sort

Always | Frequently | Sometimes | 50% | Occasionally | Rarely | Never
8 Factors

1. Taking control: chronic pain should not be avoided but recognised and then controlled. To accept pain is strongly rejected.

2. Living day to day: recognising pain but not being defined by it. Accepting chronic pain means it must be experienced in the present, and therefore makes planning difficult.
8 Factors

3. Acknowledging limitations: accepting chronic pain is to accept that there are limitations to life and that one should alter or surrender goals or aspirations to meet the changing situation.

4. Empowerment: an acceptance of chronic pain requires a strength that comes from personal empowerment.

5. Accepting loss of self: to accept pain is to accept that one is a permanently changed person.
6. More to life than pain: in accepting pain, one can live despite its influences, because there are many important aspects to life other than pain.

7. Do not fight battles that cannot be won: living without pain is a battle that cannot be won, pain is a fact of life.

8. Spiritual strength: to accept pain is to be realistic, to accept social inequality and learn to live with the pain day to day.
Common features of an acceptance of chronic pain

• To resist becoming overpowered by chronic pain and to focus away from it to other aspects of life
• To acknowledge that pain is unlikely to change so change in life is required
• To refute any idea that chronic pain is a sign of personal weakness and failure in life.
What is not clear...

• How acceptance of pain is achieved, and does it involve a fundamental change in identity.
Alternative methods

• Questionnaires: criticised for claiming to provide an ‘objective’ measure of what is often a subjective experience.
• Critics suggest that questionnaire designers are in danger of imposing on subjects a limited and perhaps inaccurate range of options concerning the topic to be measured.
• Q methodology avoids this by not imposing structure on participants.
Q methodology

• Instead of scoring or rating various questions subjects are asked to compare various statements or opinions with other statements or opinions, thereby ranking statements as to how much they agree or disagree with them.

• Statistical analysis is then used to reveal factors which represents points of view, which the subjects themselves have constructed.
Q Study on stress and coping in Community Psychiatric Nurses (Leary et al 1995)

• Aim of the study was to examine which aspects of their work CPNs currently find stressful

• Q methodology study provided the opportunity for CPNs to construct their own concepts of stressors and coping strategies.

• Identified 9 distinct areas of stress within their work and 12 distinct coping strategies which they considered useful in attempting to deal with such stress.
Q Study on stress and coping in Community Psychiatric Nurses (Leary et al 1995)

• Leary et al suggest that the usefulness of questionnaires has been criticised for claiming to represent an accurate or ‘objective’ measurement of what is often a subjective experience.

• Critics of questionnaires suggest that researchers who design them are in danger of imposing a limited and perhaps inaccurate range of options concerning the topic to be measured.
Q Study on stress and coping in Community Psychiatric Nurses (Leary et al 1995)

Findings:

• Factors represent different ways in which the respondents view work related stress

• The most dominant stress factor to emerge was that of feeling professionally isolated, particularly when required to deal with crises alone.
Q Study on stress and coping in Community Psychiatric Nurses (Leary et al 1995)

Results

• Different ways or strategies they utilise in attempting to cope with stress.

• The recognition and acknowledgement that the CPN profession is a particularly stressful one, and therefore it is important to protect oneself by receiving support from different sources.
Accessibility of research based knowledge for nurses (Thompson et al 2001)

Found three perspectives

1. Human sources were the most accessible
2. Local information for local need: care protocols and procedure manuals
3. Moving towards technologies – working in coronary care was linked to a more positive attitude to using online databases.
Q methodology: An alternative approach to research in nurse education (Barker 2008)

• Four factors were derived from the analysis:
1. Control subjectivity
2. Therapeutic subjectivity
3. Managerial subjectivity
4. Protector subjectivity
Q methodology: An alternative approach to research in nurse education (Barker 2008)

• For some participants it was an empowering experience as they had not considered what knowledge they were drawing on in their daily practice and were surprised at the scope and variety of knowledge used.
Advantages of Q methodology

• Combines the strengths of both qualitative and quantitative methods
• A defining principle of Q is its assumption that subjective viewpoints are communicable and amenable to systematic analysis
• The categories or themes that emerge from the data are arrived at statistically
• The participants use the statements to construct their own versions of their subjectivity rather than relying wholly on the interpretive skills of the researcher
Advantages of Q methodology

• Meaning is only attributed to an item by the person sorting the cards at the point of sorting and in relation to the other items.

• The activity of q sorting gives participants significant control in deciding what it is about an issue or phenomenon that is important to them.
Advantages of Q methodology

Q methodology is useful in qualitative nursing research concerned with the exploration and comparison of subjectivity and attitudes. It can be used to effectively identify;

– Attitudes
– Perceptions
– Feeling and values
Advantages of Q methodology

• The end result is the generation of theory, rather than hypothesis testing; a developing of new ideas through the consideration of whole people, rather than a reduction of these to their various parts thus allowing a capturing of the human experience
Advantages of Q methodology

• As well as explore life experiences such as
  – Stress
  – Self esteem
  – Body image
  – Satisfaction

  (Brown 1986)
Measurement of attitudes

• Attitudes may influence behaviour and in turn be influenced by it.
• Attitudes also imply evaluation and are concerned with how people feel about an issue.
• Oppenhiem (1992) Attitudes are reinforced by beliefs and often attract strong feelings which may lead to particular behavioural intents.
• The operation of q sorting is inescapably subjective in the sense that the participant is sorting the cards from his or her own point of view – the subject therefore applies his or her own ‘meanings’ and understanding to the items.

» (Cross 2005)
Disadvantages

• An effective q study depends on meticulous and thoughtful sampling of the propositions

• Developing the concourse

• Distinguishing the statements

• Time - it is time consuming and for those not familiar with the approach requires clear, comprehensive instructions.
Conclusion

• Can you see where q methodology, with its emphasis on the study of subjectivity could fit into your area of interest?
Forthcoming book

• Doing Q Methodological Research: Theory, Method & Interpretation [Paperback]
  Mr Simon Watts (Author), Professor Paul Stenner (Author), Dr Wendy Stainton-Rogers (Author)