

Q-methodology

Q-methodology has been around for a number of years but has never become a mainstream social research technique. Although originally developed in the field of psychology, it has recently become more popular among researchers in the fields of behavioural and health sciences. Despite this, Q methodology remains on the margins of social research methods. This article provides a brief introduction to the methodology and when you might find it useful.

What is Q methodology?

Q methodology was first introduced by physicist/psychologist William Stephenson in the 1930s and is a means of studying subjectivity in a systematic manner. (In this context, subjectivity refers to an individual's interpretation of a topic i.e. their perspectives, feelings or beliefs about it). In short, the methodology involves presenting respondents with a set of statements about the topic of interest and asking them to order these statements based on their opinion of them (most commonly, the extent to which they agree or disagree with the statements) using a specially designed response grid (discussed further below).

How can Q methodology benefit you?

The aim of Q methodology is to explore the breadth and variety of views that exist on the topic of interest. It is extremely useful for eliciting views on complex and/or controversial subjects; for example the question of Scottish independence. In a traditional survey we often ask respondents to rank options or perspectives from most to least preferred. However, while ranking is effective with a small number of options, it becomes more difficult for respondents and, therefore, often less illuminating, the longer the list. Moreover, regardless of the number of options, the focus and wording of these has to be kept very concise and simple to be suitable for administration in a survey interview. Q methodology provides a framework for enabling respondents to rank a large number of statements, including more longer/more complex ones. It not only helps reveal how respondents feel about the issues raised by a topic but also identifies the relative significance (positive and negative) that they attach to those issues. For example, while someone may agree that an independent Scotland should retain the monarchy and that they would need to see a detailed economic plan in place before voting 'yes' in the referendum, the relative importance of these issues to their overall perspective on independence may be very different.

How does it work?

Selecting the statements for respondents to consider

One of the most important aspects of Q methodology is ensuring that you have selected a set of statements that covers the full range of views held about the topic. The range is known in Q-methodology as the 'concourse'. Identifying statements that cover the concourse is vital to the success of the methodology and therefore thorough preparation is essential. The statements can be identified in a number of ways such as through qualitative research with the relevant audience, content analysis of media stories, online discussion forums, blogs, social networking sites, expert opinion or a review of the relevant literature. In the case of Scottish Independence, you might consider drawing on previous polls and surveys on the topic.

The concourse includes everything that could be said or written about the topic, which is, theoretically, infinite. Therefore, it is necessary to select a subset of statements to present to respondents. This can be achieved through piloting (e.g. to identify statements that essentially mean the same thing to respondents, or statements that are hard to understand etc.) or through the application of existing theory on the topic (e.g. allotting statements into

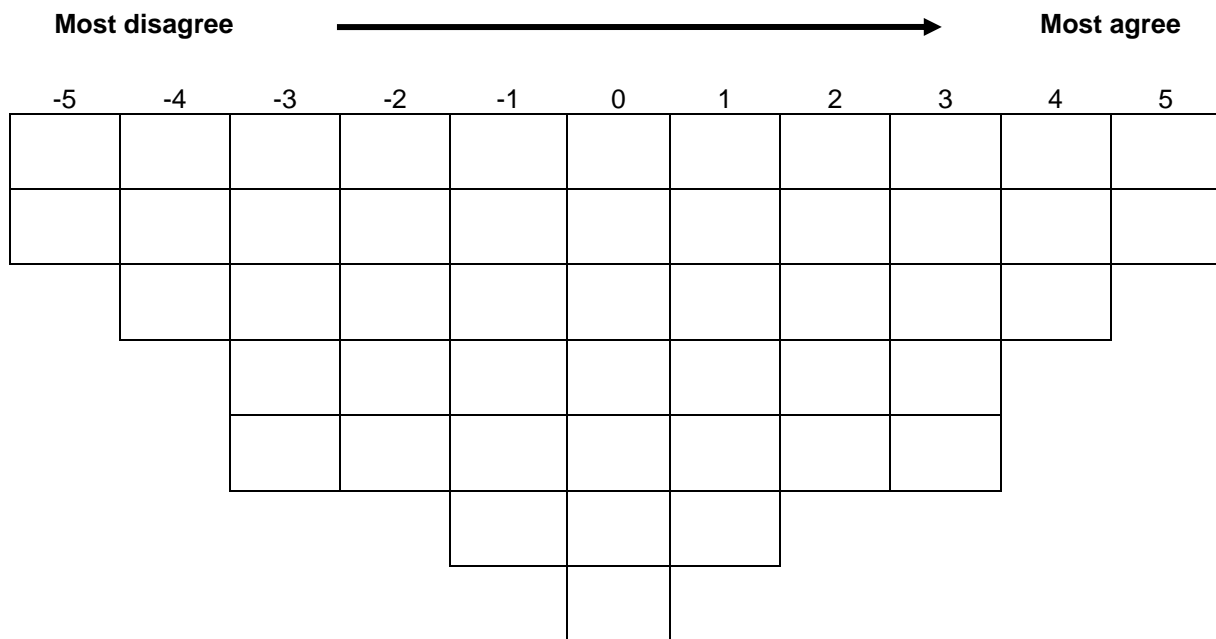
predefined categories on a theoretical basis, such as political, economic or social arguments, and then selecting a limited number of statements from each category). The final number of statements will depend on the selection process outlined above but is usually in the region of 30-50 statements. In our experience it is better to keep the numbers at the lower end of the range to minimise cognitive burden on respondents.

Selecting and interviewing respondents

Respondents are selected in a similar manner to a qualitative research study. They should cover as wide a variety of viewpoints as possible, and be broadly representative of the population under study. However, this does not exclude the possibility of conducting a study with a specific audience if the topic requires it. In terms of Scottish independence, for instance, you may want to explore the views of business leaders specifically, rather than the general public.

The Q methodology interview is undertaken face-to-face and can take up to an hour depending on the number of statements. The respondent is presented with a set of cards, each of which contains a statement. They are asked to sort the cards into three piles: statements they agree with, those they disagree with, and those they feel neutral about or that hold no meaning to them. Finally, they are asked to order the cards on a pyramid shaped grid, like that shown in figure 1, in relation to their relative level of agreement or disagreement with each. The placing is done very gradually, column by column, enabling respondents to build a considered, overall picture of their thoughts. Every card had a place on the grid.

Figure 1 example Q-sort grid



Once the respondent is happy with their placement of the cards, one possibility is to ask them to explain why they have placed them in the order that they have. This helps to provide greater insight on the different viewpoints that emerge and thus aids interpretation.

How is the data analysed?

The data is analysed using a form of multivariate analysis. The analysis identifies groups of respondents whose placement of the statements in the Q-sort grid are correlated. In

essence, these groups of respondents represent shared viewpoints on the topic of interest that are distinct from others. The aim of the analysis is to identify how many different perspectives there are and, of course, what those perspectives are. The analysis is conducted using specialist software as the procedure cannot be carried out on most standard statistical software. However, versions of the software can be freely downloaded.

Q-methodology is an interesting and useful research technique. While it can demand considerable input from the research at the design stage to identify the statements to put to respondents, it can provide rich and detailed information about the ways in which respondents think about a topic, particularly one that is complex.

Further reading

Brown, Steven R. (1991/1992). [A Q Methodological tutorial](#). Eight postings to QUALRS-L@UGA.

Brown, Steven R. [The History and Principles of Q Methodology in Psychology and the Social Sciences](#).

Van Exel, N. Job A. & de Graaf, Gjal (2005). Q methodology: A sneak preview. Download [PDF](#) or visit <http://www.qmethodology.net/>.

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