Insider Insights

Using Q Method in Qualitative Research

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Abstract

In this paper the author outlines the features of Q method and assesses its suitability as a qualitative research method. She discusses the process of using the method and its particular approach to researching the range and diversity of subjective understandings, beliefs, and experiences. Q method is particularly suitable for identifying commonality and diversity and has a powerful capacity for thematic identification and analysis. In the author's view, Q method makes a contribution to expanding the repertoire of qualitative research methods.

Keywords: Q method, qualitative methods

Introduction

Q method is considered particularly suitable for researching the range and diversity of subjective experiences, perspectives, and beliefs. At the same time, it facilitates the identification of similarities, the construction of broad categories of the phenomenon being investigated and the exploration of patterns and relationships within and between these categories. Q method has been used in various fields; for example, studies of health and illness (e.g., Stainton Rogers, 1991; Stenner, Dancey, & Watts, 2000) and exploration of emotions such as jealousy (Stenner & Stainton Rogers, 1998) and love (Watts & Stenner, 2005b).

Process

Preparation

In Q method participants are asked to sort a set of statements representing a broad diversity of opinions and perspectives on the phenomenon being investigated. Items for the Q set can be gathered from a variety of sources; for example, direct quotes and themes from interviews with participants (Kitzinger, 1987) and statements originating from academic literature and popular media in addition to interviews (Stainton Rogers, 1991). A complete set of scale items (from previous research) can be used to create a ready-made Q set (Watts & Stenner, 2005a).

A set of between 40 and 80 statements is considered satisfactory. Between 40 and 60 participants are recommended, but effective studies with far fewer participants have been carried out (Watts & Stenner, 2005a). Pilot studies require a small number, perhaps selected strategically to include participants who can provide a wide range of viewpoints, helpful comments, and additional statements from a variety of perspectives. In preparation for the sorting task, each item is numbered and written on a separate card.
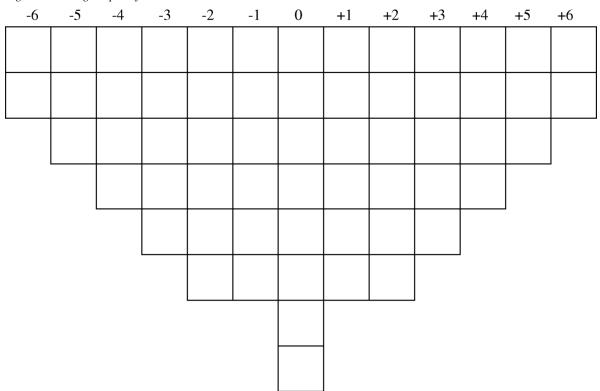
Sorting

Participants sort the cards according to the instructions given by the researcher. For example, an instruction could be to sort the cards initially into three piles according to whether the person "agrees," "disagrees," or "neither agrees, nor disagrees (neutral)" with the statement. Participants continue to sort the cards within each broad pile, according to the number of possible positions in the sorting template (Figure 1). For example, working with the "agree" pile, participants select the two items they agree with most (+6 column in the template), then the three items with a slightly lower degree of agreement (+5), and proceed until all the items in the agree pile have been allocated. The process is repeated with the disagree pile and continues with the participant distributing the cards in the neutral pile into the remaining positions until all cards have been sorted. Participants then write all of the statement numbers in the appropriate boxes in the template provided.

In a postsorting interview each participant is asked to comment on the statements, to suggest additional items that might be included, and to point out items that are not clear, and so on. Such open-ended questions aid the interpretations of the sorting configuration.

Processing

Each completed template is entered as data. A general statistical package such as SPSS or a dedicated Q package can be used.[1] The program correlates each Q sort (i.e., a completed template) with each other Q sort to identify a small number of factors that can represent shared forms of understandings among participants. Various techniques of factor rotation and statistical procedures are used to safeguard factor reliability.[2] The Q sorts of all participants who loaded significantly on a

Figure 1: Sorting template for 60 cards

-6	-5	-4	-3	-2	-1	0	+1	+2	+3	+4	+5	+6

factor are merged to produce a single configuration, which serves as a factor array, or factor exemplar. A table of all factors and the ranking assigned to each statement in each factor is constructed to serve as a basis for factor interpretation. The example below (Table1) is an extract from a table of ranking of statements for a study of therapists' understandings of addiction (Shinebourne & Adams, 2007).

Interpretation

Factor interpretation is based on an examination of the ranking assigned to each statement together with participants' comments from the postsorting interview, which are integrated in narrative accounts of each factor, as in the example in Table 2, an extract from the narrative account of Factor A in the study of therapists' understandings of addiction (Shinebourne & Adams, 2007). Factor interpretation is seen as a hermeneutic process (Stenner, Dancey, et al., 2000), engaging the interpretative perspective of the researcher. However, it is constrained by the subjective input of the participants as expressed in the sorting templates and in postsorting interviews.

Evaluation

Q method shares with other qualitative methods the principles of seeking meaning through the exploration of subjective understandings from participants' perspectives, the attempt to identify broad categories and common themes, and a commitment to a collaborative engagement with participants. In Q method the factors emerge from participants' sorting activity rather than being arrived at through the researcher's process of analysis and classification of themes as in other qualitative methods. For this reason, "the analysis involved in Q methodology may incorporate less 'researcher bias' than other interpretive techniques" (Cordingley, Webb, & Hillier, 1997, p. 41). However, the initial activity of selecting the statements for the Q set privileges the researcher at an

Table 1.-Extract from table of ranking of statements

Reading the table by column reveals the comparative ranking of items within each factor array.
Reading the table by row reveals the comparative ranking of a particular item across all factors.

Factor A—acceptance, Factor B—challenge, Factor C—ambivalence, Factor D—disease.

Statements: ↓ Factors: →	A	B	C	D
01. Addictive behavior is developed, in part, by repeating patterns learned in the social environment (e.g., family/peers)	+2	0	0	-3
05. Attachment to the addiction is a substitute to other relational attachments	-2	+6	+5	+3
06. Denial is a typical feature of addictive behavior	-1	+6	0	+2
07. Medication is helpful in supporting recovery from alcohol/drug addiction	+1	0	+1	+2
08. Thinking about addiction as a disease helps to remove stigma or blame	-1	-1	-4	+4
18. I recognize addictive elements in my own behavior	+4	0	+6	0
20. Group therapy is helpful for people with alcohol/drug problems	+2	0	+3	+1
25. People use alcohol/drugs as "self medication"	+1	+4	0	-2

earlier stage of the process. Participants are constrained to engaging with the selected statements, in contrast to some qualitative approaches in which participants' accounts in their own words are at the heart of the enquiry. However, to a certain extent participants' own words can be incorporated in a Q set by deriving statements directly from interviews (Kitzinger, 1987).

It is possible to envisage the Q set as a "launch pad for an investigation, an entrée into a phenomenon," the researcher's "best initial guess" (Brown, 1980, p. 39) to start the process and engage in a collaborative manner in a dialogue with participants. Indeed, Q method can be used as a first step in conjunction with follow-up in-depth interviews with selected participants. For both researchers and participants Q methodology provides an opportunity to engage with the research topic in a novel and creative manner.

Table 2. Extract from narrative account of Factor A. The numbers in brackets represent the statement number followed by the rank given to the statement, as shown in Table 1. For example (17:+4) indicates that statement number 17 is ranked at +4.

Factor A: Acceptance

In this view, addiction often occurs with other mental health problems (30:+4) but is not seen as an incurable disease (34:-2). Thinking about addiction as a disease might encourage addicted people to believe that someone, a doctor or a health care professional, will deal with the problem for them (47:+3). There is no support for directive approaches, such as teaching clients coping and life skills (12:-5).

In the Factor A account, addiction has meanings and functions in the life of the person (54:+5), and it is suggested that alcohol/drug use can help in coping with negative emotional states such as anger, frustration, low self-esteem, anxiety, or loneliness (56:+3) and with stressful life events such as unemployment or divorce (37:+3). There is a strong feeling of compassion for people struggling to overcome problems with drugs/alcohol (46:+6) and a belief that many people with problems of addiction recover eventually (38:+5).

Notes

1. PCQ (Stricklin & Almeida, 2001) or freeware PQMethod-2.11d, available at http://www.rz.unibw muenchen.de/~p41bsmk/qmethod.
2. These can be performed automatically by the program. The varimax procedure for factor rotation is suggested by Watts and Stenner (2005a). For a factor to be interpretable, one requirement is an eigenvalue greater than 1.0 (an eigenvalue is the sum of squared loadings for a factor; it conceptually represents the amount of variance accounted for by a factor). A second requirement is that a factor must have at least two sorts that load significantly on it alone.

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