Chapter 22 Setting Up and Running a Q-Methodology Study in an Online Survey Research Suite

Shalin Hai-Jew

Kansas State University, USA

ABSTRACT

The q-method, as a graphic (visual) elicitation, has existed since the mid-1930s. Setting up a q-method, with q-sort capabilities, in an online survey platform, extends the reach of this method, even as data has to be processed in a quantitative data analytics suite. This chapter describes the setting up of a visual q-sort and the related debriefing on the Qualtrics Research Suite. The available data may be extracted and analyzed in a basic statistical analysis tool for factors and preference clusters.

INTRODUCTION

A q-methodology study (q-method, q-inquiry) elicits "operant subjectivity" through the presentation of various selected text and visual elements to a p-set (of respondents) to place into three general categories: agree strongly, neutral, or disagree strongly. The presented elements are selected from a "concourse" of elements from the particular relevant issue universe related to the particular research question. After select respondents (in the p-set) provide insights, they also are asked to debrief their responses for follow-on information. The q-method provides insights about general preferences around a particular issue but also individual human patterns of preferences, which may be studied as preference clusters.

Often, when researchers want to understand what people think of particular policies, practices, messaging, and in-world phenomena, among other things, they will conduct interviews, focus groups, surveys, and other research approaches. They will generalize from the findings and use their insights for awareness, decision making, policy making, policy implementation, marketing, and advertising. One lesser-known approach for understanding people's thinking is the q-methodology, a "card sorting" approach based on various topic-related statements that involves selected insider participants (in small groups) to represent diverse opinions (to saturation) and to map various stances around particularized

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topics. Q-methodology enables the exploring of "tastes, preferences, sentiments, motives and goals, the part of personality that is of great influence on behaviour but that often remains largely unexplored" (van Exel & de Graaf, 2005, p. 2). Here the sampling is "strategic" vs. "random" (Armatas, et al., 2014, as cited in Sy, et al., 2018, p. 4). One key feature is the convenience of the setup for analysis.

Q-methodology (q-method, q-inquiry, q-technique) was first introduced back in 1935 by British physicist and psychologist William Stephenson (1902 – 1989). This approach enables data collection through a card sorting activity (known as the q-sort) by a group of selected "insider" respondents (known as the p-set). Here, the data analysis is described as an "inverted factor analysis" with "persons as the variables rather than the tests, and the population (as)...the group of tests rather than the group of persons; i.e. the rows of the matrix are correlated" (Stephenson, 1936).

These individual rankings (or viewpoints) are then subject to factor analysis. Stephenson (1935) presented Q methodology as an inversion of conventional factor analysis in the sense that Q correlates persons instead of tests; "(w)hereas previously a large number of people were given a small number of tests, now we give a small number of people a large number of test-items". Correlation between personal profiles then indicates similar viewpoints, or segments of subjectivity which exist (Brown 1993). By correlating people, Q factor analysis gives information about similarities and differences in viewpoint on a particular subject. If each individual would have her/his own specific likes and dislikes, Stephenson (1935) argued, their profiles will not correlate; if, however, significant clusters of correlations exist, they could be factorised, described as common viewpoints (or tastes, preferences, dominant accounts, typologies, et cetera), and individuals could be measured with respect to them. (van Exel & de Graaf, 2005, p. 1)

A follow-on to the card sorting involves debriefing the respondents about their selections to better understand them. Q-methodology research and analysis enables the study of selected people's subjective perceptions (viewpoints, beliefs, values, opinions, tastes, and preferences) around target issues to understand their "operant subjectivity," their unique points of view which may inform their public stances and behaviors. This method enables the mapping of people's individual response patterns around a topic (based on collections of granular opinion statements as the basic units of analysis) and group-based subjective patterns. The respective textual cards are sorted into three general categories: agreement, neutrality, and disagreement (Table 1). [Other variations are like "most like how I think," neutral," and "least like how I think," for example, to align with colloquial expressiveness. Some research studies only use two categories: agreement or disagreement. The "distinguishing statements" are those placed on the sorting grid "in a statistically significant different position compared with all other factors", and the "characterizing statements" are those "placed at the two polar ends of the sorting grid of each factor" and will affect how the research is understood (Paige, 2015a, p. 76).] Some q-methodology research involves the usage of imagery, audio, video, and a mix of other types of informational contents, beyond cards. This research approach is also referred to as "discourse analysis" (Baxter & Hacking, 2015, p. 3111), in part because of the aligning of the cards to be sorted with the level of knowledge of the respondents in relation to the focal research topic. (A q-methodology research targeting experts would differ from the research related to lay-persons.)

As compared to a factor analysis, a q-method describes "a population of viewpoints" vs. "a population of people." Its main question is to ask "what is the relationship between different peoples" viewpoints" as compared to "what is the inter-relationship among a large set of observed variables." In a q-method study, "opinion statements are the unit of analysis" as compared to people as the unit in conventional

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