



## Qualitative Analysis - A Newfangled Approach

### KEYWORDS

Qualitative Research, Data Displays, Textual Data Analysis, Triangulations, Flow Charts, Pareto Charts, Ishikawa Charts and Logical Frame Work Analysis.

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### ABSTRACT

*Social Work, since its beginning has been involved with the study of natural occurrences and the interactions between human behavior and the social context. However, only minor acknowledgments have been made pertaining to the importance and use of qualitative techniques. Qualitative research methods is about exploring issues, understanding the occurrence of phenomena's and answering questions by analyzing and making sense of unstructured data. Qualitative research is designed to reveal a target audience's range of behavior and the perceptions that drive it with reference to specific topics or issues. It uses in-depth studies of small groups of people to guide and support the construction of hypotheses. The results of qualitative research are descriptive rather than predictive (Qualitative Research Association, 2014). Apart from conventional qualitative techniques which include Focused Group Discussions, Case Studies, Observations, Interview and Interview Schedules, this paper aims to give insight to students, research scholar, academicians, practitioners, entrepreneurs and research advisors in the field of Social Work to have a holistic purview in the field of qualitative analysis. In India, most of the research scholars and advisors are more inclined and comfortable to quantitative analysis and only handful of research studies have adopted qualitative analysis and mixed methodological techniques. Breaking traditional barriers in qualitative research, this newfangled approach brings to light techniques such as data displays, textual data analysis, triangulations, flow charts, Pareto charts, Ishikawa charts and logical frame work analysis in qualitative research. This would enable budding research scholars with a thirst for qualitative research to quench the same by adding profound knowledge and value to their research article or thesis in the field of social work and social sciences.*

### INTRODUCTION

Social Work since its beginning has been involved with the study of natural occurrences and the interactions between human behavior and the social context. However, only minor acknowledgments have been made pertaining to the importance and the use of qualitative techniques. Qualitative research methods is about exploring issues, understanding the occurrence of phenomena's and answering questions by analyzing and making sense of unstructured data.

It is concerned with non-statistical methods of inquiry and analysis of social phenomena. It draws on an inductive process in which themes and categories emerge through analysis of data collected by techniques which include interviews, observations, focused group discussions, videotapes, and case studies. Samples are usually small and are often purposively selected. Qualitative research uses detailed descriptions from the perspective of the research participants themselves as a means of examining specific issues and problems under scientific enquiry.

### THE ADVANTAGES OF QUALITATIVE RESEARCH

- As qualitative research focuses on small groups, it can be less expensive than quantitative research which may require large groups of participants or expensive measurement tools.
- Issues can be examined in detail and in depth.
- Interviews are not restricted to specific questions and can be guided / redirected by the researcher in real time.
- The research framework and direction can be quickly revised as new information documented.
- The data based on human experience that is obtained is powerful and sometimes more compelling than quantitative data.
- It also provides a holistic view of the phenomena under investigation (Bogdan & Taylor, 1975; Patton, 1980)

### TECHNIQUES IN QUALITATIVE RESEARCH

**1. Data Displays:** Data display in a graphic format is a way of portraying information succinctly and efficiently, illustrating details provided in longer textual information. The main goal of any diagram is to provide ready access to information and convey a message, a discovery, or a particular perspective on a specific data or topic (Illiinsky, 2010; Lengler & Eppler, 2007). A graphic representation allows the reader to acquire insights, develop an elaborate understanding, or appreciate new knowledge. Data display goes a step beyond data reduction to provide "an organized, compressed assembly of information that permits conclusion drawing". When reporting the findings of qualitative research studies, it is typically very important to display data. Qualitative data may be displayed by:

- Selecting key quotes or exemplars.
- Building tables or matrices.
- Using diagrams to visually display theories or models that emerged from a qualitative study.

Displaying direct quotes, short stories or excerpts from interviews, focus groups, field notes or naturally-occurring talk are a widely used method for describing themes. Using direct quotes is important because it allows readers to examine the data collected and analyzed by the researchers, to understand the findings of the analysis, and to evaluate the plausibility, credibility or face validity of the researchers' claims.

**2. Textual Data Analysis:** This is the systematic documentation of the spoken words of the respondents in to data. According to Weber (2014) this is what makes qualitative data analysis dynamic, exciting and intellectually challenging in the iteration between generation and analysis and within the different types of analytical work expressed by the researcher.

To apply this technique researchers have to analyze texts for their meaning, and they have to be fluent in the language which the research participants use. Not just the formal language, but also the colloquialisms used in every day talk. The most common way in the application of processing texts is to

transcribe taped talk into word processed documents that would later enable the researcher the present his/her document in a meaningful format.

**3. Triangulation:** It refers to the use of more than one approach to the investigation of a research question in order to enhance confidence in the ensuing findings. Triangulation is one of the several rationales for Multi Method Research, although a commonly used term, researchers must understand that it is not the application of the mere term but the sole purpose which the application is used.

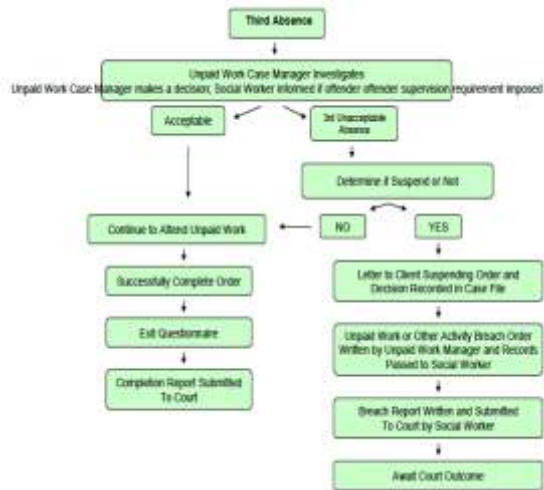
In Social Work, triangulation is often used to indicate that two (or more) methods are used in a study in order to check the results. "The concept of triangulation is borrowed from navigational and land surveying techniques that determine a single point in space with the convergence of measurements taken from two other distinct points Paulette (2008).

**Triangulation as a technique of qualitative analysis can be classified in to Four Types:-**

**Data triangulation:** This entails gathering data through several sampling strategies, so that slices of data at different times and social situations, as well as on a variety of people, are gathered.

- **investigator triangulation:** Refers to the use of more than one researcher in the field to gather and interpret data.
- **Theoretical triangulation:** States the use of more than one theoretical position in interpreting data.
- **Methodological triangulation:** Implies the use of more than one method for gathering data.

**4. Flow Charts:** Flowchart is a type of diagram that represents an algorithm or process, showing the steps as boxes of various kinds, and their order by connecting them with arrows.



**Figure 1: Breach Process Flow Chart**

This graphical or symbolic representation of a process states the implication of a Social Worker in addressing an employee who has been under suspension and absence despite many notices issued by the department. Each step in the process is represented by a different symbol and contains a short description of the process step. The flow chart symbols are linked together with arrows showing the process flow direction.

**5. Pareto Charts:** A Pareto chart, named after Vilfredo Pareto, is a type of chart that contains both bars and a line graph, where individual values are represented in descending order by bars, and the cumulative total is represented by the line. Pareto charts are extremely useful for analyzing what problems need attention first because the taller bars on the chart, which represent frequency, clearly illustrate which variables have the

greatest cumulative effect on a given system.

#### When to Use a Pareto Chart?

- When analyzing data about the frequency of problems or causes in a process.
- When there are many problems or causes and the researcher wants to focus on the most important and the significant.
- When analyzing broad causes by looking at their specific components.
- When communicating with others about your data.



**Figure 2: Example #1**



**Figure 3: Example #2**

Example #1 shows how many customer complaints were received in each of five categories.

Example #2 takes the largest category, "documents," from Example #1, breaks it down into six categories of document-related complaints, and shows cumulative values.

**6. Ishikawa Charts:** It is commonly known as the Cause and Effect Diagram. Ishikawa charts are a method of charting and evaluating all the inputs for a given process. Ishikawa diagrams (also called fishbone diagrams, herringbone diagrams, cause-and-effect diagrams, or Fishikawa) are causal diagrams created by Kaoru Ishikawa (1968) that show the causes of a specific event.

Common uses of the Ishikawa diagram are product design and quality defect prevention, to identify potential factors causing an overall effect. Each cause or reason for imperfection is a source of variation. Causes are usually grouped into major categories to identify these sources of variation. The categories typically include:

**People:** Anyone involved with the process

**Methods:** How the process is performed and the specific requirements for doing it, such as policies, procedures, rules, regulations and laws

**Machines:** Any equipment, computers, tools, etc. required to accomplish the job

**Materials:** Raw materials, parts, pens, paper, etc. used to produce the final product

**Measurements:** Data generated from the process that are used to evaluate its quality

**Environment:** The conditions, such as location, time, temperature, and culture in which the process operates

Purpose in Qualitative Research: To arrive at a few key sources that contributes most significantly to the problem being examined. These sources are then targeted for improvement. The basic form of an Ishikawa diagram is presented below.

The phenomenon under the study (the effect) appears at the head of the central spine. Principle factors (causes) are first identified and these are represented by ribs, which branch laterally. Having identified principle factors, these are then subdivided into their sub-causes, which appear as branches on the main laterals.

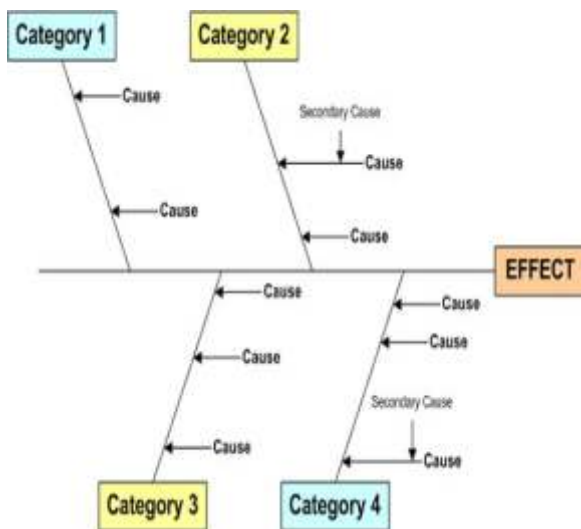


Figure 4: Ishikawa charts – Fish bone diagram

The diagram also illustrates the relationships among the wide variety of possible contributors to the effect. These cause-and-effect diagrams can reveal key relationships among various variables, and the possible causes provide additional insight into process behavior.

**7. Logical Frame Work Analysis:** A log frame (also known as a Project/Research Framework) is a tool for planning and managing development of research projects. It looks like a table (or framework) and aims to present information about the key components of a project in a clear, concise, logical and systematic way.

**A log frame in research summarizes, in a standard format:**

- ◆ What the research project is going to achieve?
- ◆ What activities will be carried out to achieve its outputs and purpose?
- ◆ What resources (inputs) are required?
- ◆ What are the potential problems which could affect the success of the project?
- ◆ How the progress and ultimate success of the project will be measured and verified?

## Discussions

The presented newfangled approach hereby provides students, research scholar, academicians, practitioners, entrepreneurs and research advisors in the field of Social Work to have a holistic purview in the field of qualitative analysis. The said techniques presented is for researchers to identify and choose a novel approach to qualitative analysis techniques, rather that restraining themselves to the conventionally techniques. This would enable them to compete with global standards and have an edge over conventional research methodologies.

### The strengths of the presented qualitative methods include:

- Obtaining a more realistic feel of the world that cannot be experienced in the numerical data and statistical analysis used in quantitative research.
- Flexible ways to perform data collection, subsequent analysis, and interpretation of collected information;
- Provide a holistic view of the phenomena under exploration
- Ability to interact with the research subjects in their own language and on their own terms.
- Descriptive capability based on primary and unstructured data.

### Future of Qualitative Research

Qualitative research methodology is receiving growing acceptance in the social work research community. Qualitative methods are becoming particularly popular among researchers working on family issues. A Qualitative Family Research Network was formed in the late 1980s, and an increasing number of social workers and family researchers exchange ideas on qualitative methodologies (Gilgun, 1990). Another indicator of the growing acceptance of qualitative research in social work practice is the recently established journal Research on Social Work Practice, which seeks manuscripts based on qualitative studies as well as on a combination of qualitative and quantitative research.

Clearly, quantitative and qualitative methodologies have different strengths and weaknesses, and the strategy taken should depend on the nature of the question being investigated. In many instances, both qualitative and quantitative approaches can be used in the same study. For example, standardized measures might be used to collect data in conjunction with open-ended interview questions. It is possible to code interview data using both qualitative and quantitative techniques and to report the results of both the qualitative and quantitative analyses of the same data set (McRoy et al., 1988). Qualitative strategies need not be limited to small-scale studies. Daly (1992) reported a technique for applying grounded theory principles in the design and analysis of a large national survey on adoption trends.

The conclude, compatibility of qualitative research methods with social work practice techniques is likely to lead to greater use of qualitative strategies in practice evaluation. As more social work researchers' network adopt and publish qualitative studies that clearly specify the techniques used, then, qualitative methodology is likely to receive even greater acceptance among social workers.

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