

Challenges and Strengths in Conducting a Qualitative Analysis

NURUL HIDAYAH ZULKIPLI¹ & SURIA BABA¹

¹Centre for Language Studies and Generic Development, University Malaysia Kelantan

*Correspondence: hidayahzulkipli0208@gmail.com; suria@umk.edu.my

ABSTRACT

The problem in analysing qualitative study is regularly highlighted when it comes to data analysis process. Unlike quantitative data that deals with numerical and statistical issues, analysing qualitative data requires the researcher to deal with understanding human experiences and interpreting the data. Therefore, validity and reliability of the analysis are often questioned and becomes a challenge in analysing data from qualitative research. The objective of this writing is to highlight some of the challenges and strengths in the qualitative research process. Validity, reliability, and credibility are among the challenges in analysing qualitative study. Rigor in conducting data collection helps in overcoming the problem in validity, reliability and credibility. In addition, in-depth understanding and triangulation techniques such as interview, document analysis and observation used in qualitative researches are among the strengths for qualitative study.

Key words: *qualitative analysis; challenges; strengths.*

INTRODUCTION

This section will focus on the related issues on the challenges and strengths of analysis using qualitative method and what are the differences between quantitative method. A brief introduction will be described on both methods and how to overcome the limitation in qualitative analysis that would somehow lead to becoming its strength in analysing a qualitative study. Another method of analysing data that is gaining popularity is the mixed method, a combination of both quantitative and qualitative. These three methods of analysing data will each have their own strengths and weaknesses.

In quantitative analysis, numerical data and statistics are the common element during data analysis (Lichtman, M., 2014 & Kuckartz, 2014). Charts and figures are usually associated with quantitative method of data analysis and widely used in economics, geography, etc., (Kuckartz, 2014). However, data that cannot be calculated or measured such as attitude, behaviours or perception can be studied by using qualitative analysis instead (Denoborin, 2010 in Lichtman, M., 2014). Therefore, on the other side of the coin, qualitative method allows researchers in understanding the subjective answers rather than objectives answers (Lichtman, M., 2014).

Some would argue that quantitative analysis is the best method and till today, the debates are still ongoing (Kuckartz, 2014). However, in 'Real Science' as described by Kuckartz (2014), hierarchy system or double standard of which method is the best does not exist. Unlike quantitative analysis, qualitative data considers text, images, audio recordings, etc., as the sources of data (Kuckartz, 2014). The existences of various strategies in data collection techniques or triangulation in qualitative studies can be considered the strength in this method of analysis (Merriam, 2009). Qualitative method of analysis cannot be simply said as low-

quality data compared to quantitative method due to the different form of data between both methods.

For some, qualitative method seems to be a better approach to find out the underlying issues that other method of research such as quantitative, can explore. This is because qualitative method can provide more detailed information with specific issues that can be discussed, unlike quantitative that covers the broad opinion and perspective of one particular social phenomenon. For a more comprehensive understanding of a certain phenomenon, a mixed method of both quantitative and qualitative is recommended. A combination of both methods will be able to overcome the weaknesses that each method has, and provide a more holistic and detailed analysis (Lisle, 2011). Furthermore, the mixed methods were said to provide depth in understanding as well as corroboration (Johnson et al., 2007).

Thus, each method, be it quantitative or qualitative, has its own strengths and weaknesses, but the late emergence of qualitative method does not mean that the latter is not worth a try (Lincoln, 1995). For various social sciences fields like sociology, anthropology, psychology, human resources and even in the medical field, qualitative method is now being used widely for understanding of human interaction and behaviour in a more subjective manner (Lichtman, M., 2014 & Merriam, 2009). Still, there is more that needs to be known about the challenges and strengths in qualitative analysis. The purpose of this paper is to investigate the challenges and strengths that occur while conducting a qualitative research as well as the strategies to overcome them.

The Emergence of Qualitative Method

“Qualitative research” or “qualitative inquiry” is commonly used by sociologists and anthropologists in their field. The qualitative methods were used in order to understand human interaction and values in their actual context (Merriam, 2009). The various techniques of data collection that are normally used while doing qualitative research would be observation, interviewing participants, artifacts collection and analysis, as well as related document overview regarding their study interest. The written findings of these techniques of collecting data are considered as qualitative in nature (Merriam, 2009 p.6). The qualitative method became popular during the late 1970s and early 1980s (Merriam, 2009 p.7). During this time, qualitative inquiry was adopted by various fields of study such as health and education (Merriam, 2009 p.7). The development of qualitative research continues until today as currently, there are plenty of books, journals and conferences that focus on qualitative research (Merriam, 2009 p.7).

Qualitative Analysis

In conducting an analysis, regardless whether one uses qualitative or quantitative research method, there must be some challenges or limitation faced by the researcher. According to Merriam (2009) the process of choosing the most suitable method in research is very important. To understand and make changes in people’s life, the selection of the design of study for the research is important so that the designing and implementing process of the research goes smoothly. This is because qualitative research focuses on understanding people’s experience, and the way they interpret their experience (Merriam, 2009 p. 5).

Merriam (2009) further categorised qualitative research into six types of study. Case study, phenomenology, ethnographic, grounded theory, narrative analysis, and critical qualitative research. Despite these different types, the basic is still the same. Denzin and Lincoln (2005) further added that the qualitative study takes place in their actual setting in order to try and

understand and generate a meaning from whatever that the researcher is trying to study. The main element in qualitative study is to be able to understand and interpret one particular phenomenon from the *emic* perspective or the insider perspective not from *etic* or outsider or researchers' perspectives (Merriam, 2009).

Unlike quantitative design that uses inanimate instruments such as scales, tests, or survey, the qualitative researcher or investigator is considered as the primary instrument in data collection and analysis (Merriam, 2009). Even though the credibility of the interviewer is usually questioned in a qualitative research (Ratcliffe, 1983), Merriam (2009) is of the view that in a qualitative research, the human is more suitable as an instrument because they can be responsive and adaptive at the same time.

Due to its empirical nature of research, the findings for qualitative can be more comprehensive, holistic, expansive, and richly descriptive (Merriam, 2009). In addition, the data for qualitative is in the form of 'soft data' rather than 'hard data' (Neuman, 2006). Therefore due to the differences in the study design and methods, researchers from both qualitative and quantitative area could not evaluate each other's method according to the other's standard of research. Neuman (2006) further suggested that in qualitative studies, researchers tend to build and develop new theory on the existing one during the analysis and interpreting the data.

Challenges in Qualitative Analysis

First, the general critiques of qualitative studies is that the data is not objectively verifiable. Intensive analysis process and the quality of the interviewer in conducting the interview is needed (ACAPS, 2012). Moreover, it is time consuming when the data needed to undergo several analysis stages such as recording, categorization and coding. The concern of validity and reliability in qualitative research includes the reliability of the data collected, analysed, interpreted and presented (Merriam, 2009 p. 210). Thus to ensure validity and reliability of the findings, it was suggested that qualitative studies need to be conducted rigorously (Merriam, 2009). Eight strategies have been suggested by Merriam (2009) in promoting validity and reliability. They are:

- (i) triangulation (using multiple data collection methods or theory to confirm the findings)
- (ii) member checks (giving back the analysed data to the informant for credibility)
- (iii) adequate engagement in data collection (adequate duration of time spent in data collection to enable data saturation)
- (iv) peer review (discussion with friends regarding the findings)
- (v) audit trail (detailed procedures while conducting the study)
- (vi) reflexivity (the interpretation by researcher that may affect the investigation)
- (vii) rich thick descriptions (high quantity of information that can help in conceptualizing process and interpret the findings)
- (viii) maximum variation (the detailed process in selecting the sample for the study).

Second, trustworthiness is another aspect to tackle in qualitative analysis. The authentication of the qualitative study and analysis has also been raised by Lincoln and Guba (2000) by questioning the authentication and trustworthiness of qualitative findings. Merriam (2009) too has pointed out that the credibility of a researcher in qualitative research design is an important aspect to ensure trustworthiness.

Earlier, Guba (1981) has described four criteria in achieving trustworthiness in qualitative analysis. They are; credibility, transferability, dependability, and confirmability. First is credibility or internal validity, one of the most important factors in establishing trustworthiness (Lincoln & Guba, 1985). In other words internal validity or credibility is the extent that the findings or result of the research is matched to the reality or truth (Merriam, 2009). In considering validity in qualitative research, Ratcliffe (1983) proposed that the data need to be interpreted and the translator is needed for that purpose. He also believed that it is impossible for the researcher to not change the phenomenon while observing them. Moreover, the data that is gathered in the form of words, equations, and numbers cannot be considered as a reality itself. Maxwell (2005) further agreed that the reality can never be captured.

For ethnographic research, LeCompte and Preissle (1993) suggested that internal validity can be obtained based on these four characteristic; (1) the rapport that is built when the researcher is participating and living with the subjects, and the long amount of time spent with them helps in reducing the gap of reality with the interpretation and analysis. (2) the interviews with informant that is less abstract. (3) the participants' observation which is conducted in the informant actual setting that can provide more accurate information and data to the researcher. (4) the researcher's reflection.

Third, is the transferability or the extent of the ability to generalize the findings of the study or in other words, the range of which the study is applicable to be applied in other circumstances (Merriam, 2009). To discuss the issues of external validity or transferability as highlighted by Guba and Lincoln (1981), the findings first should be internally valid. Merriam (2009) suggested that to enable transferability, the most common strategies used is a rich and thick description. This strategy will enable the investigator "to a highly descriptive, detailed presentation of the setting and in particular, the findings of the study".

Fourth, dependability or reliability, according to Lichtman (2014) refers to the "emphasis on the need for the researcher to account for the ever-changing context within which research occurs" Lastly, is confirmability or objectivity that refers to the flexibility of the findings of the research that is able to be verified and agreed by others.

Strengths and Advantages

In qualitative design, the researcher acts as an instrument in collecting the data. This gives advantage in the analysis stage where the researchers can try to clarify and probe further for deeper understanding and communicate verbally or non verbally during the data collecting process (Merriam, 2009). Qualitative research approach allows the researcher to explore new and various perspectives that are disclosed within the community (Dudwick, Kuehnast, Jones and Woolcock, 2006). Qualitative methods are able to discover more issues by using open-ended style of asking the questions and data gathering. Moreover, this study design allows more opportunities to dig more for underlying values, belief and assumptions (Yauch and Steudel, 2003).

To enrich the quality of analysis, triangulation techniques are commonly used in qualitative studies. The combination of more than one technique in data collecting like interviews, observation and document analysis may increase the credibility of the collected data. The use of only one method in collecting the data may contribute to errors occurring compared to the use of multiple techniques of data collection. Moreover, the multiple techniques could "provide cross-data validity checks" (Patton, 1999).

Merriam (2009) proposed four kinds of triangulation that “contribute to verification and validation of qualitative analysis”. They are:

- (i) methods triangulation – multiple methods used in generating the consistent findings
- (ii) triangulations of sources – different data sources within the same method are examined
- (iii) analyst triangulation – multiple analysts are involved in cross check the findings
- (iv) triangulation of theories and concept – multiple theories and concept are used to interpret the data

Triangulation, as stated by Patton (1999), can be considered as an ideal technique but this may require more hard work and allocation of time, money, and training.

DISCUSSION

Based on previous literature discussed, there are challenges and strengths in conducting qualitative research analysis. The status of validity, reliability and credibility in analysing qualitative data is often questioned. In overcoming these issues, the researcher should conduct the study rigorously. Having multiple sources of data collection will allow the researcher to acquire rich and thick data. Interviews, observation and document analysis are three types of data collection methods in qualitative research. The rich data is understood as very detailed and informative data. Meanwhile the thick description is understood as enough description of the data provided that allows the context and meaning of the data to be developed. According to Lincoln & Guba (1985), the best way to secure the transferability is by obtaining thick description which can provide and send the context of one particular culture to the receiver so that they in turn, will be able to understand the meaning of the context. Therefore, rigourness in conducting a qualitative study by using multiple sources of data collection method or triangulation of sources is a very important aspect to ensure the validity and reliability of the study.

In some cases the trustworthiness issues of the data may be questioned with only one analyst to review the data. Triangulation of analysts or multiple analysts may be needed to review and cross check the findings. The availability of more than one reviewer for the findings allows more than one perspective of the research findings to be gathered. One reviewer may misinterpret or miss the points while reviewing the transcripts. Therefore, having a multiple reviewer in reviewing the same data seems to be a better approach in ensuring trustworthiness for qualitative data analysis.

Researcher position in evaluating and interpreting the qualitative data is often critiqued. One may include their own assumptions or biasness in the findings. According to Ratcliffe (1983), qualitative research needs the interpreter to make sense of the information gathered. While observing, it is sometimes impossible for one researcher to not change or add his own assumption and opinion.

Another type of triangulation is triangulation of theories and concepts. It is where the multiple theories and concepts were used in interpreting the data. The use of different theories and concepts in the research will also give advantage in confirming the emerging findings. Seale (1999) stated that the concept and theory will be applied in several hypothesis in order to see the relation between those two.

CONCLUSION

In conclusion, validity and reliability are among the most important aspect to consider in providing a comprehensive and truthful findings. Eight strategies in promoting validity and reliability as well as four characteristic in trustworthiness to tackle issues in qualitative analysis have been discussed. The rigourness of doing qualitative research with the above criteria will allow the findings to be more credible and accepted others. Triangulation will be the best common strategy used in qualitative data collection to permit cross check as well as ensure the quality of the data gained. Therefore, this strategy can be the strength in conducting qualitative analysis process.

REFERENCES

- ACAPS (2012). *Qualitative and Quantitative Research Techniques for Humanitarian Needs Assessment*.
- Denzin, N.K., & Lincoln, Y.S. (2005). *The Sage handbook of qualitative research* (3rd ed.). Thousand Oaks, CA: Sage.
- Dudwick, N., Kuehnast, K., Jones, V.N., & Woolcock, M. (2006). *Analyzing Social Capital in Context: A Guide to Using Qualitative Methods and Data*, World Bank Institute, Washington.
- E.G. Guba, Criteria for assessing the trustworthiness of naturalistic inquiries, *Educational Communication and Technology Journal* 29 (1981): 75-91.
- Guba, E., & Lincoln, Y. (1981). *Effective evaluation*. San Francisco: Jossey-Bass.
- Johnson, R.B., Onwuegbuzie, A.J., & Turner, L.A. (2007). *Toward a definition of mixed methods research. Journal of Mixed Methods Research*, 1(2), 112-133.
- Kuckartz, U. (2014). *Qualitative Text Analysis: A guide to methods, practice and using software*. London: SAGE.
- LeCompte, M.D., Preissle, J., & Tesch, R. (1993). *Ethnography and Qualitative Design in Educational Research* (2nd Ed.). Orlando, FL: Academic Press.
- Lichtman, M. (2014). *Qualitative Research for the Social Sciences*. Thousand Oaks, CA: SAGE Publications, Inc.
- Lisle, J.D. (2011). The benefits and challenges of mixing methods and methodologies. *Caribbean Curriculum*, 18, 87-120.
- Lincoln, Y.S., & Guba, E.G. *Naturalistic inquiry*, Beverly Hills: Sage, 1985.
- Lincoln, Y.S. *Emerging Criteria for Quality in Qualitative and Interpretive Research*, *Qualitative Inquiry* 1 (1995), 275-289.
- Lincoln, Y.S., & Guba, E.G. (2000). *Paradigmatic controversies, contradictions, and emerging confluences*. In N.K. Denzin & Y.S. Lincoln (Eds.), *Handbook of Qualitative Research* (2nd Ed.) (pp.163-188). Thousand Oaks, CA: Sage.
- Maxwell, J.A. (2005). *Qualitative Research Design: An Interactive Approach* (2nd Ed.): Thousand Oaks, CA: SAGE.

Merriam, S.B. (2009). *Qualitative Research: A Guide to Design and Implementation*. San Francisco: Jossey-Bass.

Neuman, W.L. (2006). *Social Research Methods: Qualitative and Quantitative Approaches* 6th Edition, Pearson International Edition, USA.

Patton, M.Q. (1999). Enhancing the Quality and Credibility of Qualitative Analysis. *HSR: Health Services Research*, 34(5).

Ratcliffe, J.W. (1983). *Notions of Validity in Qualitative Research Methodology*. *Knowledge*, 5(2), 147-167.

Yauch, C.A., & Steudel, H.J. (2003). Complementary Use of Qualitative Cultural Assessment Methods, *Organizational Research Methods*, Vol. 6, No. 4, pp. 465-481.