

METHODOLOGICAL DILEMMA IN QUALITATIVE RESEARCH IN EDUCATION

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ABSTRACT

This paper discusses methodological dilemma that arise in qualitative research, specifically in education field. It outlines the broad principles that underpin good qualitative research and the aspects of practice that qualitative researchers should consider when designing, conducting, and disseminating their research. Two primary methodological dilemma are (i) lack of objectivity, and (ii) issue of generalizability in qualitative research. The aim of this paper is to argue the dilemmas and encourage researchers to examine the relevance of qualitative issues to their own research. These dilemmas could be taken as important consideration for others who wish to conduct qualitative research in education.

INTRODUCTION

Qualitative research is an inquiry process of understanding based on distinct methodological traditions of inquiry that explore problems that are happening in the society (Creswell & Poth, 2016). Strauss and Corbin (1990, p.17) state that “qualitative research is any kind of research that produce findings not arrived by means of statistical procedures or other means of quantification”. Qualitative researchers are more interested in understanding how participant constructs the meaning of the phenomenon under study, through interpreting their experiences in uncovering the meaning of a phenomenon for those involved (Merriam, 2009). In other words, qualitative researchers are especially interested in how things occur in its natural phenomena (Bogdan & Biklen, 2007) in a holistic perspective which conserves the complexities of human behavior (Creswell, 2008; Denzin & Lincoln, 2005; Merriam, 2009).

Regardless of its numerous strength and advantages, qualitative research has been criticized and regarded with doubt and biases due to its general characteristics that remain poorly understood (Myers, 2000). Among dilemmas or issues and criticism that are commonly raised towards qualitative research are the lack of objectivity, inability to replicate the research, problem in generalization of the findings, lack of transparency and ethics in conducting research with human subjects. Despite the various issues or dilemmas, this paper will only discuss two dilemmas, namely the (i) lack of objectivity and (ii) issue of generalizability in qualitative research. These dilemmas that much underlie qualitative research practice will be explained in detail, and the counter-arguments regarding the criticism will be further discussed. The dilemma discussed here can be a guide to qualitative researchers in enhancing their own research.

Dilemma 1: Objectivity versus Subjectivity

A positivist orientation assumes the reality that exists in our world is observable, stable, and measurable. Researchers who are more familiar with the positivist view of knowledge construction regard that research which relies on knowledge gained through scientific and experimental research is quantifiable and therefore objective (Hoepfl, 1997, Patton, 2002). Thus, knowledge gained through the study of this reality has been labeled “scientific” and included the establishment of “laws” (Merriam, 2009).

In the opinion of Kivunja and Kuyini (2017), objectivity in education research is quite a broad criterion. Objectivity refers to the degree to which a researcher employs precise research instruments, approach the research without bias, and with honesty (Myrdal, 1969). On the basis of research methods, objectivity means that all sources of bias are minimized and that personal or subjective ideas are eliminated as humanly possible (Kivunja & Kuyini, 2017). Moreover, positivist claimed that this standard requires the researcher to remain distanced from their research so that the findings will depend on the nature of the data, rather than on the researcher’s preferences, personality, beliefs and values.

Interpretive research such as qualitative research on the other hand, assumes that reality is socially constructed and there are multiple interpretations of a phenomenon that occur around us, as the aim of interpretivist is to understand the subjective world of human experience (Guba & Lincoln, 2005). Hoepfl (1997) elaborates that qualitative research is value-bound and relies on interpretation, therefore subjective and hence, through positivist perspective are both unreliable and invalid. There is lack of agreement among the qualitative researchers themselves with regard to the amount or type of researcher influence that is acceptable, and whether and how it needs to be controlled or accounted for (Galdas, 2017; Ortlipp, 2008). Thus, the debate about the problem of subjectivity in qualitative research still remains unclear.

In response to the dilemma, a number of authors have provided rationales to their claims. The term bias is commonly understood to be any influence that distort the results of a study is a term drawn from quantitative research paradigm (Polit & Beck, 2012). Thus, Galdas (2017) claimed that the concept of bias itself can be perceived as being incompatible with the philosophical underpinnings of qualitative inquiry and this was also supported by other authors in qualitative research (e.g. Thorne, Stephens, & Truant, 2016). Noble and Smith (2015) explained that concepts such as reliability, validity and generalizability are also typically associated with quantitative research, thus the concepts are not always appropriate to be applied in the qualitative paradigm.

Moreover, Mehra (2002) argued that subjectivity is inherent in both quantitative and qualitative researches, as the choice of a research topic itself is partly determined by own self-belief. A researcher's personal beliefs and values will drive him or her to choose certain preferred topic to be researched. This means that biasness is inherent in any type of studies, be it quantitative or qualitative. This is despite the fact that traditional positivist research paradigm has taught us to believe that what we are studying often has no personal significance. This argument is also supported by Pyet (2003), who insisted that a researcher's theoretical position or interests might affect the research question, the methodological approach, the analysis and interpretation of the data gathered. Therefore, to a greater extent, the personal beliefs and values will be reflected in a research, not only in the choice of topic, but also in his or her choice of methodology and consequently the interpretation of findings, regardless of being qualitative or quantitative.

In qualitative research, researcher's subjectivity is not only inevitable but it is regarded as important. Not only that subjectivity is always inherent in any research process as argued above, but experienced qualitative researchers (e.g. Mehra, 2002) have also commonly agreed that researcher bias and subjectivity as inevitable and important in qualitative research. Qualitative research paradigm believes that researcher is an important "instrument" (Merriam, 2009) and play an important part of the research process. Qualitative researchers do not "find" knowledge, they construct it, as mentions by Creswell (2008):

In this worldview, individuals seek understanding of the world in which they live and work. They develop subjective meanings of their experiences. These meanings are varied and multiple, leading the researcher to look for the complexity of views. Often these subjective meanings are negotiated socially and historically. In other words, they are not simply imprinted on individuals but are formed through interaction with others (hence social constructivism) and through historical and cultural norms that operate in individuals' lives. (pp. 20 – 21)

Qualitative researcher cannot separate himself or herself from the topic and the participants. Through the interaction between them that the understanding of phenomenon under study is constructed. Hence, meaningful knowledge can be created in a way that provides room for personal and subjective ways of looking at the world. Principally, qualitative researcher needs to accept that the challenge here is not to try and persuade that qualitative work to reflect objectivity. It is better to articulate and highlight the unique value of the knowledge that derived qualitatively, through an evidence-based decision-making perspective, as proposed by Galdas (2017).

Due to the fact that qualitative researcher relies on interpretation and therefore value-laden, several authors (e.g. Guba & Lincoln, 2005; Patton, 2002) have preferred to avoid the terms and futile debates about objectivity versus subjectivity. Thus, alternative terminology was coined in tandem to qualitative research paradigm. Qualitative researchers generally agree that considering concepts such as rigor and conformability, are more pertinent to the subjective nature of qualitative research. According to Mandal (2018), conformability refers to the objectivity of research during data collection and data analysis. It also refers to the extent to which the product of inquiry is confirmable. This include whether the results are grounded in data, the inferences are logical, whether there is inquirer bias and so forth (Teddlie & Tashakkori, 2009).

In essence, conformability requires the researchers to demonstrate neutrality in the interpretations of the research data, through a conformability audit as well as reflective journals (Lincoln & Guba, 1985). Lincoln and Guba (1985) suggested that conformability audit can be done through providing an audit trail consisting of raw data (e.g. original interviews in softcopy audio file, interview transcripts), analysis notes (e.g. notes made during the analysis, coding and categorizing) and personal notes (e.g. short notes taken during interview or observation). Another technique for enhancing conformability is through the use of reflective journals which allow the researcher to make his or her experience, opinion, thoughts, and feeling transparent, visible and acknowledged as part of the research process (Ortlipp, 2008).

Conformability also indicates a means to demonstrate quality. Mandal (2018) and Polit and Beck (2012) mention that techniques such as triangulation can also be useful tools of conformability. Triangulation is one of the strategies to control biasness. According to Bryman (2006), triangulation 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 also defined as a procedure where researchers search for convergence among multiple and different sources of information to form themes or categories in a study (Creswell & Miller, 2000). Engaging multiple methods such as interview, observation and analysis of document will lead us to more reliable, accurate and trustworthy findings and may reduce uncertainty of interpretation. Even though it may be hard to quantify the effect of qualitative research, we should resist the temptation to reach for a positivist tape of measure to solve this problem (Galdas, 2017).

Dilemma 2: Generalizability in Qualitative Research

Generalizability has always been a controversial issue in qualitative research. Generalizability is an act of reasoning that involves drawing broad inferences from particular observations. Simply defined, it is the degree to which the findings can be generalized to the entire population. In quantitative research, it is also known as external validity (Sekaran, 2003). Generalization is widely acknowledged as an important quality standard in quantitative research. The positivist paradigm has made generalizability a crucial criterion for evaluating the rigor of quantitative research (Carminati, 2018). Joseph, William, Barry and Rolph (2010) stated that in order to generalize a research to a universe of generalization, the generalizability procedures must be employed. Research must be based on sufficient representative sample or random samples and adequate statistical controls (Sekaran, 2003).

This positivist echo has led generalizability to acquire a quantitative meaning. Based on the above-mentioned explanation, qualitative research is often criticized for lacking generalizability, mainly due to the nature of qualitative research such as small sample size and its sampling method which is not based on random or representative samples and statistical controls (Niaz, 2007). Morse (1999) argued that if qualitative research was considered not generalizable, then the research would be of little use, insignificant and hardly worth doing. However, qualitative authors have asserted that this definition is inappropriate for describing qualitative studies. The purpose of qualitative research has, thus, been directed toward providing in-depth explanations and meanings rather than generalizing findings.

In response to the criticisms on this dilemma, the proponents of qualitative authors have however counter-argued to the defense of qualitative research. According to Creswell (2008) it is not the intent of qualitative research to generalize findings to individuals, sites or places outside of those under study. Rather, the aim is on producing research that can inform and enhance people's understanding about the phenomenon. Hoepfl (1997) claims that unlike quantitative researchers who seek causal determination, prediction, and generalization of findings, qualitative researchers instead seek for illumination and understanding of certain issue or situations. In fact, Creswell (2008) asserted that the value of qualitative research lies in the particular description and themes developed in context of a specific site.

Consistent with the above-mentioned argument, some proponents of qualitative studies argued that problems related to sampling and generalizations may have little relevance to the goals of the qualitative study and the reality of the situation (Mays & Pope, 1995). Take for example research that aim to understand selected contemporary phenomenon such as child marriage or drug addiction, where in-depth descriptions would be an essential component of the process. In this situation, in order to gain more personal understanding of the phenomenon and result that can potentially contribute valuable knowledge to the community, small qualitative studies will be a better option. A small sample size may be more useful in examining a situation in depth from

multifaceted perspective whereas a large sample would be inconsequential (Creswell, 2008). In other words, statistical representativeness is not a main requirement when the objective is to understand social processes (Mays & Pope, 1995).

Lincoln and Guba (1985) argued that the criteria suitable for quantitative traditions arise from positivist assumption, thus these assumptions are inappropriate for judging research which is conducted within naturalistic paradigm that have different assumptions. Thus, other redeeming criteria can be used to make qualitative research highly valuable to the research community. In qualitative research generalizability is possible, provided that more consistent and unanimous procedures are adopted, but even this should not be a primary concern of qualitative research. Stake (1988) for example, has coined the concept of naturalistic generalization in qualitative research, which is described “as a partially intuitive process arrived at by recognizing the similarities of objects and issues in and out of context (p. 69)”. Kemmis (1974) explains that naturalistic generalizations develop within a person as a result of experience, may become verbalized as propositional knowledge.

Consequently, it is essential that the research is properly descriptive because as readers recognize essential similarities to cases of interest to them, they establish the basis for naturalistic generalization (Myers, 2000; Stake, 1988). However, naturalistic generalizations have not passed the empirical tests that portray formal scientific generalizations, as accepted by the positivist.

Hoepfl (1975) argued that rather to generalize results to population, qualitative finding can be extrapolated to a similar situation. Similarly, Green and Caracelli (1997) argued that particularity i.e. particular description and themes developed in context of a specific site, should be the hallmark of qualitative research, rather than generalizability. Moreover, there are some qualitative authors who argued that qualitative research can be generalized. For example, Niaz (2007) had argued about the work by Piaget (1985) at the Centre of Genetic Epistemology in Geneva which has provided an illustration on how qualitative research has been generalized extensively despite they being based on very small samples with virtually no statistical treatments and represent findings that were not repeated many times before being generalized. The degree to which Piaget’s work has been generalized in science education bears witness to its acceptance by the scientific community (Niaz, 2007).

Addressing this dilemma, as in the issue of objectivity, an alternative terminology can be used to express qualitative connotations (Carminati, 2018). For example, the word trustworthiness could be considered as an alternative to the qualitative term for rigor (Davies & Dodd, 2002; Morse, 2008). The concept of trustworthiness has been proposed by Lincoln and Guba (1985) and comprised of concepts such as transferability (prior applicability), credibility (prior truth value), dependability (prior consistency), and confirmability (prior neutrality). In line with this alternative terminology, transferability is preferably used instead of theoretical generalizability for judging the soundness of qualitative research (Carminati, 2018). Transferability refers to the degree to which the results of qualitative research can be transferred from the ‘sending context’ to the ‘receiving context’ (Lincoln & Guba, 1985).

From a qualitative perspective transferability is primarily the responsibility of the one who doing the generalizing (Teddlie & Tashakkori, 2009). The qualitative researcher can enhance transferability by doing a thorough job of describing the research context and the assumptions that were the central to the research. Hence, an exhaustive explanation of these processes should be able to provide high-quality qualitative work (Golafshani, 2003). This is what has been termed as ‘thick description’ in qualitative research. It justifies the importance of the qualitative approach to provide sufficient details in their written report for the reader to grasp the idiosyncrasies of the situation. In this sense, by reflecting valid and rich descriptions of sufficient depth, the research findings warrant a degree of generalizability (Thorne & Darbyshire, 2005).

The researcher who intends to ‘transfer’ the results to a different context is then responsible for making the judgement of how sensible the transfer is. Through thick details of the phenomena under research provided by the author (Delmar, 2010), the researcher can justify the extrapolation and application of the findings to other settings and situations (Shenton, 2004). However, Morse (2008) explicate that even the terminologies was used to bring clarity and to be acknowledged in qualitative research field, these guidelines are still not unanimously accepted by scholars. Consequently, this might be one of the reasons for the skepticism surrounding generalizability in qualitative research (Carminati, 2018; Delmar, 2010).

Conclusion

Despite the dilemmas and critics, qualitative research is making much valuable contributions to the literature in the education field. Although there is no universally accepted terminologies and criteria used to evaluate qualitative research, this paper has briefly outlined some of the strategies that can be used to weigh the dilemma, thus enhancing the trustworthiness of qualitative research, in terms of quality, rigor, and relevance. Unfortunately in general, many qualitative researchers have neglected to give adequate descriptions in their research. It is hereby argued that until and unless these are done, qualitative research will remain as the target of attack and criticism by those who are not embracing this type of research inquiry. Therefore, it is imperative for qualitative researchers to incorporate strategies to enhance the credibility and transferability of a study, based on the different assumptions and the methodologies adopted. Only then the strengths and robustness of qualitative research will be ensured.

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