



Qualitative Research in Social Science Research: Paradigmatic, Methodological and Operational Debate

¹Askar Garad, ²Ika Nurul Qamari, ³Arief Hartono

^{1,2}Universitas Muhammadiyah Yogyakarta (UMY), 55183 Yogyakarta, Indonesia

³Universitas Islam Indonesia, Yogyakarta, Indonesia

Abstract: Compared to quantitative research, qualitative research has become commonly used in social science research. This is due to its characteristics that enable it to provide a deep understanding of the issues and problems of the social sciences according to their natural context, in addition to its ability to provide results that may contribute directly or indirectly to achieving a cognitive addition, either theoretical or applied in the field of human sciences. In view of the little of content dealing with qualitative research design - starting with defining the research problem, ending with presenting and discussing results in the field of social science research, in addition to the need for researchers in this field for a comprehensive and brief clarification of the procedures and steps of qualitative research design; Which enables them to use it in studying societal and humanitarian issues and problems, and their teaching methods, and thus find appropriate solutions and treatments for them. Accordingly, the present study aimed to shed light on the philosophical background of qualitative research, to define the concept and characteristics of qualitative research through clarifying the appropriate procedures and steps for designing qualitative research in social sciences research.

Index Terms - Qualitative research, research philosophy, research design, social sciences.

I. INTRODUCTION

The researcher in the humanities in general, and the pedagogical one in particular, must start from a specific and clear vision in relation to Research Paradigm. Because it provides him with the basic philosophies, theories, approaches and tools that support his research model, and contribute to the success of the research process and his achievement of the desired goals (Mack, Woodsong, Macqueen, & Guest, 2005; Gehman, Glaser, & Eisenhardt, 2018). The research model is based on the integration of a set of assumptions, beliefs, models, and procedures. It also includes methods for collecting, analyzing and interpreting data (Neuman, 2007; Dutilh. G, et al., 2019).

The research literature agrees that there are four main research models that a researcher in the social science can adopt and follow to conduct his research and achieve his goals. These models are represented in: the positivism model, the interpretivism model, the theory Critical model and the Pragmatism model (Bailey, White, & Pain, 1999; Luo, 2011; Mackenzie, Noella, & Knipe.2006 ; Czerny, Heller-Schuh, B, & Horacek, 2007; Kivunja & Kuyini, 2017). The following discussion will be limited to the explanatory model; Because qualitative research emerges from it.

The qualitative research emerged from the explanatory model, in reaction to the quantitative research emerging from the positivist model. And the explanatory model assumes that there is more than one (scholar) that the researcher will reveal his various contents during the research. Therefore, the researcher cannot define and understand human behavior through external factors only; But defining and understanding human behavior is shaped by the meanings and concepts that people have about the existence in which they live (Henn, Weinstein, & & Foard, 2005; Rheinhardt, Kreiner, Gioia, & & Corley, 2018).

While the positivist model sees the exact opposite; Because it is assumed that there is one existence, which the researcher will discover its various contents during the research; Therefore, the researcher can define and understand human behavior through external factors, Thus, approaches and methods traditionally used by naturalists can be used to observe and measure the human problem (Delgado-Romero. E. A, Singh. A. A, & De Los Santos. J, 2018).

II. TYPE STYLE AND FONTS

of five years. The time series monthly data is collected on stock prices for sample firms and relative macroeconomic variables for the period of 5 years. The data collection period is ranging from January 2010 to Dec 2014. Monthly prices of KSE -100 Index is taken from yahoo finance.

1. FRAMEWORK

In light of the above, the importance of using qualitative research in studying the issues and problems of the social sciences is evident, in addition to the need for researchers in this field to know the procedures and steps for designing qualitative research that enable them to use it properly to study issues and problems in the field of social sciences and their teaching methods. Accordingly; The current study aimed to discuss the following three axes in light of previous literature related to qualitative research in the field of social sciences:

- The philosophical background of qualitative research (Paradigmatic)
- The concept and characteristics of qualitative research (Methodological)
- Designing qualitative research in social science research (Operational)



Figure 1: Framework Qualitative Research of Social Science (PMO)

III. METHOD

This study is based on a systematic review, this review does not always focus on what someone said (the content), but how it said it (the method of analysis). This approach provides a framework for understanding at various levels (theoretical, conceptual level, research methods, data collection and analysis), enabling researchers to benefit from a wide range of knowledge ranging from the conceptual level to practical documentation for use in field work. This type of review helps Shedding light on several ethical issues that we must be aware of and take into account during our studies (Denyer & Tranfield, 2009).

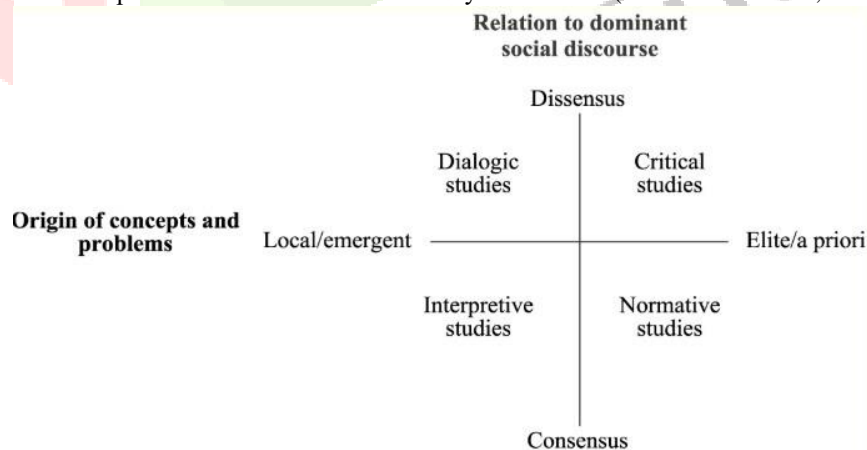
IV. RESULTS AND DISCUSSION

4.1. Paradigmatic

The design of a research study begins with the selection of a topic and a paradigm. A paradigm is essentially a worldview, a whole framework of beliefs, values and methods within which research takes place. It is this world view within which researchers work (Held, 2019).

According to Cresswell (1994) "A qualitative study is defined as an inquiry process of understanding a social or human problem, based on building a complex, holistic picture, formed with words, reporting detailed views of informants, and conducted in a natural setting" (Cresswell, 1994).

Alvesson (2000) "Research perspectives can be contrasted based on the extent to which they work within a dominant set of structuring's of knowledge, social relations, and identities, called here a 'consensus' discourse, and the extent to which they work to disrupt this structuring's called here 'dissensus' discourse. This dimension is used to show a significant way that we can think about what makes postmodernism and critical theory different from Other current research programs. The second dimension focuses on the origin of concepts and problem statements as part of the constitutive process in research. Differences among research perspectives can be shown by contrasting 'local/emergent' conceptions with 'elite/a priori' ones. This dimension will be used to show one interesting way to think about the differences in postmodernism and critical theory discourses" (Alvesson & Deetz, 2000); see Figure 1.



Source: Alvesson & Deets (2000, p. 24)

Figure 1: Major Paradigm

Table 1: Major Paradigm

<u>Origin of concepts and problem statements</u>	
<ul style="list-style-type: none"> - Local/Emergent – Seeks situated knowledge claims - Elite/a priori- Search for large- scale empirical generalizations 	
<u>Relation of research to existing social orders</u>	
<ul style="list-style-type: none"> - Consensus – identifying the social world’s underlying stable and orderly patterns - Dissensus – conflict, fragmentation, struggle, and disorder as normal 	
<u>Normative/Post-Positive Paradigm</u>	<u>Interpretive Paradigm</u>
<ul style="list-style-type: none"> - Goal: Uncover basic, law-like patterns between variables - Represents an objective reality - Minimize the subjectivity of researcher and participants 	<ul style="list-style-type: none"> - Goal: Understand how particular realities are produced and maintained - Focuses on shared values and common practices - Explores multiple, subjective realities and perspectives of those who are studied
<u>Critical Paradigm</u>	<u>Dialogic Paradigm</u>
<ul style="list-style-type: none"> - Goal: demonstrate and critique forms of domination - Social world is full of struggle and power relations - Use a prior theoretical commitment to deconstruct domination 	<ul style="list-style-type: none"> - Goal: focus on ruptures, struggles, and fragmentation seen to characterize language use - Central place given to discourse, or ideology by which social realities are shaped

In addition to the above, the research literature indicated that the research models consist of four basic components (Creswell & John W., 2007; Castellan, 2010). In the following discussion, an explanation of these components, and linking them to the explanatory model (qualitative research).

- a. **Ontology:** It is the starting point and starting point for any research. Because it determines the nature of the reality and the social context in which we live, and how can we understand the relationship that people have in this reality on the one hand, In addition to the relationship between us and reality and the social context on the other hand (Blaikie & Norman, 2018; Rehman & Alharthi, 2016; Grix & Krakow, 2004). And existence from the philosophical point of view is either one or multiple; The qualitative researcher assumes a plurality of existence. Accordingly, the relationship between him and the existence that he will study is inseparable, so he must be independent when studying human behavior. Because it interacts directly with this existence in order to understand the various implications of the human problem in that multiple existence (Golby & Parrott, 1999; Grix & Krakow, 2004; Krauss, 2005; Mauthner, 2019).
- b. **Epistemology :**It refers to how we can obtain and understand knowledge from the existence in which we live (Grix & Krakow, 2004). And the researcher's position on obtaining knowledge from the philosophical perspective is either objective or subjective. And the qualitative researcher, based on his position on existence, as stated above - must be subjective, it is not objective in obtaining knowledge from a plural existence that will study its contents, this is done by using qualitative data collection tools, not quantitative as will be discussed later (Crotty, 1998).
- c. **Methodology:** They are the principles, procedures, and practices that control the research and guide it in the correct direction to achieve its objectives, and answer its questions (Marczyk, 2005). Qualitative research has a multi-set set of research methods that can be adopted and used. These models will be explained - later - when discussing the qualitative research design (Vatrapu, Mukkamala, R., Hussain, & Flesch, 2016).
- d. **Method:** They are the mechanisms or procedures used to collect and analyze data related to research questions (Crotty, 1998). Qualitative research has a set of tools that can be used to collect and analyze data, and these tools will be explained - later - when discussing the design of qualitative research (Korstjens & Moser, 2018).

From the above, it is evident that the qualitative researcher should have familiarity with the components of the previous research models. Because it will assist him in designing his research, and guide him in achieving his goals properly. In the following discussion, an explanation of the qualitative research concept, its characteristics, and how to design it.

4.2. Methodological

Qualitative Research, which may be called an interpretative research; Because it stems from me in expository philosophy, or field research; Because it is conducted in the field and is considered a type of scientific research (Lodico & Spaulding, 2010; Vannini, 2018). Scientific research is an organized process whose end is: (A) Answer specific research questions, (B) Using a predetermined set of procedures; To answer the questions that have been identified, (C) Collecting sufficient evidence to answer the research questions, (D) Reaching reliable and unspecified results, (E) The application of the findings (generalization) to other contexts (Mack & Natasha, 2005).

Qualitative research focuses on understanding, explaining, exploring, discovering, and clarifying situations, feelings, perceptions, attitudes, values, beliefs, and experiences that people have about the problem being studied (Kumar, Mills, & Hargrove, 2011). It provides results that have not been obtained by statistical or other quantitative methods of measurement (Strauss & Corbin, 1998). Qualitative research has a set of characteristics that distinguish it from quantitative research and mixed search, and it has been analyzed (Creswell J. W., 2009; Morgan, 2018), a group of qualitative research literature has concluded that qualitative research is characterized by the following:

- Qualitative research is mostly conducted in the field. That is, it is a field research, and this allows the researcher to directly and effectively interact with the participants (the research sample) in their context and the environment in which they live.
- The qualitative researcher is part of the data collection tool; Because he collects data by himself by studying and analyzing documents, observing participants 'behavior, or interviewing them.

- Qualitative research is often characterized by the multiplicity of tools that are used to collect data, and this requires the researcher to carefully review the data that he collected, understand it and understand its different contents, and organize it into categories or topics. To obtain reliable results that help in understanding the problem studied.
- The qualitative researcher adopts inductive analysis to analyze the data; Because it builds patterns, categories, and themes from the bottom up, or from the part to the whole.
- Qualitative research focuses on identifying the meanings and contents that the participants have, and not the meanings and contents that the researcher has.

One of the most prominent models of qualitative research design is the model developed by (Maxwell, 1998), which contains five components as shown in Figure 2, and these components are: (1) Research questions, (2) Objectives, (3) Methodology (4) Conceptual framework, (5) Trustworthiness of Results.

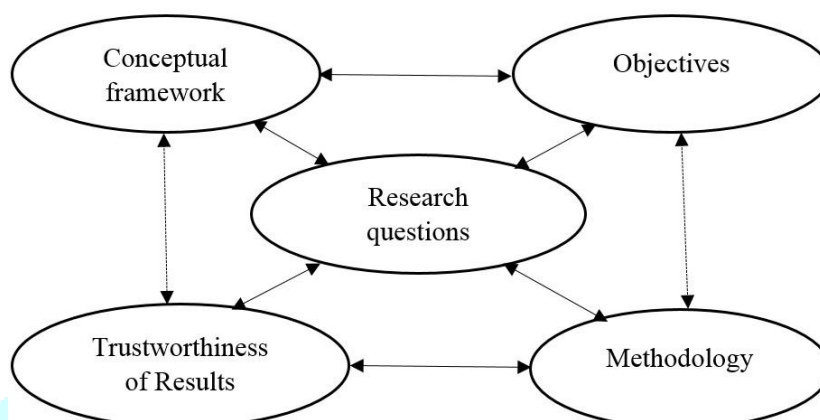


Figure 2: Maxwell model (1998) for qualitative research design

Research questions are the starting point for qualitative research. Because the rest of the four components (objectives - conceptual framework - approach - reliability of results) stem from these questions and are related to them. The previous components of the qualitative research design model can be formulated in the form of questions that the researcher is required to answer when designing and conducting his qualitative research.

4.3. Operational

After determining the research method that will be used to achieve the objectives of the research, and answering his questions, the researcher (a) selects the participants in the research, (b) determines the tools for collecting qualitative data, (c) determines a model for analyzing qualitative data, and the following is a brief explanation of these three aspects.

4.3.1. Selection of research participants: In qualitative research, the sample to be conducted is called participants instead of the sample; This is because they share with the researcher / researchers. They interact directly or indirectly with them during the conduct of the research, and the qualitative researcher - as previously explained - aims from his research to reach an in-depth understanding of the studied human problem (Levitt, Bamberg, & Creswell, 2018), and he does not claim or aim to generalize the results of his research to all members of the research community (Alston & Bowles, 2003). Therefore, the research literature indicates that purposeful sampling is a common strategy for selecting participants in qualitative research (Gentles & Vilches, 2017).

On the other hand, the researcher at this stage must provide a detailed description of the participants' characteristics, the context in which they live, and the time and place in which they will participate in the research.

Finally, with regard to the number of participants, there is no clear agreement between the literature of the research methods on a specific number of participants, but it indicates that the number of participants is preferable to take into account the nature of the problem studied, its context, circumstances, and dimensions, in addition to the goals that the researcher seeks to achieve (Klassen, Creswell, Clark, Smith, & Meissner, 2012; Rahman, 2017).

4.3.2. Defining qualitative data collection tools: After identifying the participants in the research, appropriate methodologies / tools for collecting data are identified. Often observations, interviews, documents, and audio-visual materials (photos - video recordings - computer programs - films) are most commonly used and used for collecting qualitative data (Creswell J. W., 2009; Clark & Vealé, 2018; Wilson, Onwuegbuzie, & 2016 .). At this stage, the researcher should clarify in his research the following aspects:

- Determine the justification for using the data collection tool (s).
- Clarify the steps you will follow in designing the tool, and explain and detail its content.
- Discussing the content of the tool with specialists in the same research field; Because their suggestions and comments have an impact on achieving the validity of the tool, which is considered a basic criterion that should be achieved before starting to implement the tool.
- Determine the strategies that will be used to achieve the validity, credibility and dependability of the tool / tools used to collect the data, and there are a set of strategies indicated in the literature of qualitative research methods, that can be used to achieve validity and reliability in the tools of qualitative data collection, Therefore, the researcher must review and take into account in his research.
- Clarify the procedures that will be followed to apply the tool to the participants, from the beginning of the application to its end, including the technical and non-technical means that will be used to record the data.
- Clarification of the ethical considerations that will be taken into account when carrying out the research, the most important of which are:

- a. Obtaining prior consent from the research participants, including an explanation of the research objectives, the tools that will be used to collect the data, and when and where it will be applied.
- b. To allow the research participants to withdraw from it at any time without any obligations or undertakings on them.
- c. Not declaring the identity of the research participants.
- d. Preserving the confidentiality of information provided by research participants (Lewis, Robinson, & & Wilkinson, 2003; Young, et al., 2018).

4.3.3. Define the qualitative data analysis model: There are several models / approaches that can be used to analyze qualitative data, and they include a set of main stages, stages and sub-steps that the researcher follows to analyze qualitative data, the most prominent of which are the following:

- a. **Model**, (Huberman & Miles, 1994): It contains three stages: data shrink - data presentation - conclusion.
 - b. **Model**, (Alston & Bowles, 1998): It consists of three stages: data shrink - data organization - interpretation.
 - c. **Model**, (Creswell & John W., 2007): It includes five stages: data collection - data management - reading and writing notes - description, classification and interpretation - representation and visualization.
 - d. **Model**, (Ary, Jacobs, Sorensen, & Razavieh, 2010): It consists of three phases: regulation and familiarity - coding and reduction - interpretation and representation.
 - e. **Model**, (Yin, 2011): It contains five stages: assembly - disassembly - recombination - interpretation - conclusion.
- After analyzing and reviewing the previous models, it was found that the Ary et al model (2010) is suitable for analyzing qualitative data in social science research, because it is comprehensive, contains specific and clear stages and steps.

4.3.4. Credibility and reliability: The purpose of conducting qualitative research in the field of human sciences research is not to produce results that only answer the research questions. Rather, these results should be characterized by trustworthiness (Nowell, Norris, White, & Moules, 2017); Therefore, the qualitative researcher must identify the aspects that threaten the reliability of his research results, by adopting appropriate strategies that contribute to making the results documented (Belotto, 2018).

It was previously indicated that the researcher in qualitative research is considered part of the data collection tools. Because he interacts and communicates directly with the participants (Fiesler & Proferes, 2018). Therefore, when collecting, interpreting, and discussing the results of his research, he must ensure that the results he arrived at are not biased, that is, they are not affected by his previous ideas, beliefs and trends. He must also accurately clarify his position and position on the studied problem, and his relationship with the participants in the research (Fusch, Fusch, & Ness, 2017).

Finally, the literature on qualitative research methods has illustrated a multiple set of strategies that can be adopted to achieve reliability in the results of qualitative research. Therefore, the researcher should review and take into account in his research (Cypress & Brigitte S, 2017).

V. CONCLUSION

Based on the above discussed, it can be concluded that qualitative research has become commonly used in social science research. Because its characteristics help the researcher in understanding the studied issues and problems according to their natural context, and reaching results that may contribute to achieving a cognitive addition, either theoretical or practical, to the field of its teaching and learning and teaching curricula, however; most researchers still rely on quantitative research methods in studying social sciences issues and problems.

Given that a group of them lacks knowledge, skills and experiences related to qualitative research and its uses, therefore; the present study aimed at introducing researchers in the field of human sciences to the philosophical background of qualitative research, the concept and characteristics of qualitative research, in addition to how to design qualitative research in human science research and its teaching methods.

In light of the above, the researcher recommends academic institutions pay attention to qualitative research in human sciences research, and support researchers using it by adopting the following strategies:

- a. Urging and encouraging researchers and academics specialized in the field of research to compose references concerned with clarifying the procedures and steps of qualitative research design, starting with identifying the research problem, and ending with presenting and discussing the results.
- b. Directing researchers to use qualitative research and its various approaches to study research issues and problems.
- c. Allocating courses for qualitative research, especially at the postgraduate level.
- d. Provide intensive and continuous training courses by specialists that focus on developing the knowledge and skills of researchers in qualitative research

REFERENCES

- Alston, M., & Bowles, W. . (2003). *Research for caring professions: an introduction to methods*.
- Alston, M., & Bowles, W. (1998). *Research for social workers*. St Leonard. New South Wales, Australia: : Allen & Unwin.
- Alvesson, M., & Deetz, S. (2000). *Doing critical management research*. Sage.
- Ary, D., Jacobs, L. C., Sorensen, C., & Razavieh, A. (2010). *Introduction to research in education eight edition*. Wadsworth: Cengage Learning.
- Bailey, C., White, C., & Pain, R. (1999). Evaluating qualitative research: dealing with the tension between 'science' and 'creativity'. *Area*, 31(2), 169-178.
- Belotto, M. J. (2018). Data analysis methods for qualitative research: Managing the challenges of coding, interrater reliability, and thematic analysis. *The Qualitative Report*, 23(11), 2622-2633.
- Blaikie, & Norman, . (2018). "Confounding issues related to determining sample size in qualitative research.". *International Journal of Social Research Methodology*, 21.5 : 635-641.
- Castellan, C. M. (2010). Quantitative and qualitative research: A view for clarity. *International journal of education*, , 2(2), 1.
- Clark, K. R., & Vealé, B. L. (2018). Strategies to enhance data collection and analysis in qualitative research. *Radiologic Technology*, 89(5), 482CT-485CT.
- Cresswell, J. W. (1994). *Research design qualitative and quantitative approaches*. Sage Publications.
- Creswell, & John W., e. a. (2007). Qualitative research designs: Selection and implementation.". *The counseling psychologist*, 35.2 : 236-264.
- Creswell, J. W. (2009). *Research design: Qualitative and mixed methods approaches*. . London and Thousand Oaks: Sage Publications.
- Crotty, M. . (1998). *The foundations of social research: Meaning and perspective in the research process*. . Sage.
- Cypress, & Brigitte S. (2017). "Rigor or reliability and validity in qualitative research: Perspectives, strategies, reconceptualization, and recommendations.". *Dimensions of Critical Care Nursing*, 36.4: 253-263.
- Czerny, W., Heller-Schuh, B, & Horacek, M. . (2007). An Analytical Framework For Exploring Knowledge Networks Based On Communication: The Case Of A Research Organization. In Knowledge Management: innovation. *technology and cultures*, (pp. 177-187).
- Delgado-Romero. E. A, Singh. A. A, & De Los Santos, J. . (2018). Cuéntame: The promise of qualitative research with Latinx populations. *Journal of Latina/o Psychology*, 6(4), 318.
- Dutilh, G, Annis, J, Brown. S. D, Cassey. P, Evans. N. J, Grasman. R. P, & N, K. C. (2019). The quality of response time data inference: A blinded, collaborative assessment of the validity of cognitive models. *Psychonomic Bulletin & Review*. 26(4), 1051-1069.
- Fiesler, C., & Proferes, N. (2018). "Participant" perceptions of Twitter research ethics. *Social Media+ Society*, , 4(1), 2056305118763366.
- Fusch, P. I., Fusch, G. E., & Ness, L. R. (2017). How to conduct a mini-ethnographic case study: A guide for novice researchers. *The Qualitative Report*, , 22(3), 923.
- Gehman, J., Glaser, V., & Eisenhardt, M. G. (2018). Finding theory–method fit: A comparison of three qualitative approaches to theory building. *Journal of Management Inquiry*, 27: 284–300.
- Gentles, S. J., & Vilches, S. L. (2017). Calling for a shared understanding of sampling terminology in qualitative research: Proposed clarifications derived from critical analysis of a methods overview by McCrae and Purssell. *International Journal of Qualitative Methods*, 16(1), 1609406917725678.
- Golby, M., & Parrott, A. . (1999). *Educational research and educational practice*. . Fairway Publications Exeter.
- Grix, & Krakow, D. R. (2004). Mutations in the gene encoding filamin B disrupt vertebral segmentation, joint formation and skeletogenesis. . *Nature genetics*, , 36(4), 405-410.
- Held, M. B. (2019). Decolonizing research paradigms in the context of settler colonialism: an unsettling, mutual, and collaborative effort. *International Journal of Qualitative Methods*, 18, 1609406918821574.
- Henn, M., Weinstein, M., & Foard, N. . (2005). *A short introduction to social research*. Sage.
- Huberman, A. M., & Miles, M. B. (1994). *Data management and analysis methods*.
- Kivunja, C., & Kuyini, A. B. (2017). Understanding and applying research paradigms in educational contexts. *International Journal of higher education*, 6(5), 26-41.
- Klassen, A. C., Creswell, J., Clark, V. L., Smith, K. C., & Meissner, H. I. (2012). Best practices in mixed methods for quality of life research. . *Quality of Life Research*, , 21(3), 377-380.
- Korstjens, I., & Moser, A. (2018). Series: Practical guidance to qualitative research. Part 4: Trustworthiness and publishing. *European Journal of General Practice*, 24(1), 120-124.
- Krauss, S. E. (2005). Research paradigms and meaning making: A primer. . *The qualitative report*, , 10(4), 758-770.
- Kumar, J., Mills, R. T., & Hargrove, W. W. (2011). Parallel k-means clustering for quantitative ecoregion delineation using large data sets. . *Procedia Computer Science*, 4, 1602-1611.
- Levitt, H. M., Bamberg, M., & Creswell, J. W.-O. (2018). qualitative meta-analytic, and mixed methods research in psychology: The APA Publications and Communications Board task force report. *American Psychologist*. *Journal article reporting standards for qualitative primary*, 73(1), 26.
- Lewis, D. K., Robinson, J., & Wilkinson, E. (2003). Factors involved in deciding to start preventive treatment: qualitative study of clinicians' and lay people's attitudes. *Bmj*, 327(7419), 841.
- Lodico, M. G., & Spaulding, D. T. (2010). *Methods in educational research: From theory to practice* . John Wiley & Sons, (Vol. 28).
- Luo, H. (2011). Qualitative research on educational technology: Philosophies, methods and challenges. *International Journal of Education*, 3(2), 1.
- Mack, & Natasha, e. a. (2005). "Qualitative research methods overview." . *Qualitative research methods: a data collector's field guide*, 1-12.

- Mack, N., Woodsong, C., Macqueen, K. M., & Guest, G. &. (2005). Qualitative research methods overview. *Qualitative research methods: a data collector's field guide*,. 1-12.
- Mackenzie, Noella, & Knipe., a. S. (2006). "Research dilemmas: Paradigms, methods and methodology." . *Issues in educational research* , 16.2 : 193-205.
- Marczyk, G. &. (2005). *Essentials of research design and methodology*. . John Wiley & Sons.
- Mauthner, N. S. (2019). "Toward a posthumanist ethics of qualitative research in a Big Data era." . *American Behavioral Scientist* , 63.6 : 669-698.
- Maxwell, J. A. (1998). *Designing a qualitative study: Handbook of applied social research methods*.
- Morgan, D. L. (2018). Living within blurry boundaries: The value of distinguishing between qualitative and quantitative research. *Journal of Mixed Methods Research* , 12(3), 268-279.
- Neuman, L. W. (2007). *Social research methods, 6/E. Pearson Education India*.
- Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic analysis: Striving to meet the trustworthiness criteria. *International journal of qualitative methods*, 16(1), 1609406917733847.
- Rahman, M. S. (2017). The Advantages and Disadvantages of Using Qualitative and Quantitative Approaches and Methods in Language" Testing and Assessment" Research: A Literature Review . *Journal of Education and Learning*, 6(1), 102-112.
- Rehman, A. A., & Alharthi, K. . (2016). An introduction to research paradigms. . *International Journal of Educational Investigations*,, 3(8), 51-59.
- Rheinhardt, A., Kreiner, G. E., Gioia, D. A., & Corley, K. G. (2018). Conducting and publishing rigorous qualitative research. . *The SAGE handbook of qualitative business and management research methods*, , 1, 515-532.
- Strauss, A., & Corbin, J. (1998). *Basics of qualitative research techniques*. . Thousand Oaks, CA: Sage publications.
- Vannini, P. (2018). *Doing public ethnography: How to create and disseminate ethnographic and qualitative research to wide audiences*. . Routledge.
- Vatrapu, R., Mukkamala, R., R., Hussain, A., & Flesch, B. (2016). Social set analysis: A set theoretical approach to big data analytics. . *Ieee Access* , 4, 2542-2571.
- Wilson, A. D., Onwuegbuzie, A. J., & , L. P. (2016). "Using paired depth interviews to collect qualitative data." . *The Qualitative Report* , 21.9 : 1549.
- Yin, R. K. (2011). *Applications of case study research*. . sage.
- Young, J. C., Rose, D. C., Mumby, H. S.-C., Derrick, C. J., Finch, T. ..., & Parkinson, S. (2018). A methodological guide to using and reporting on interviews in conservation science research. *Methods in Ecology and Evolution*,, 9(1), 10.

