
How to Conduct a Case Study: A Guide for Novice Researchers

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Abstract

Case study research has been gaining popularity due to its valuable capacity to provide rich, context-specific data as well as understanding of difficult circumstances. This is demonstrated by the fact that it has been utilized more frequently in recent research that has been published. This popularity may be attributed to the fact that case study research is able to deliver rich information about the case of study. This article presents a brief overview of the literature review that was conducted on the qualitative case-study methodology. It might serve as a quick reference tool for novice researchers who are intrigued about pursuing case studies. In this article, a brief historical overview of the evolution of the case study as a significant qualitative approach is demonstrated in connection to the pioneers of this type of research approach, namely Robert Yin, Robert Stake, and Sharan Merriam. The article additionally addresses the significance of the case study. The paper focuses on the types of case studies and basic recommendations that novice researchers may apply to systemically examine the underlying issues, patterns, or dynamics of a particular subject or case using a holistic approach. In light of the fact that case studies usually concentrate on specific instances, the article advises rookie investigators not to generalize the findings of case studies. In this article, numerous characteristics of case studies are examined, with a focus on its use as a separate qualitative inquiry and research approach.

Keywords: single-case study, multiple-case study, qualitative research, transferability.

1. Introduction

There are numerous interpretations of case studies in the literature. A case study is a research methodology in which the case is constrained by time and activity (Creswell, 2014). According to Yin (2009), “a case study is an empirical inquiry that investigates a contemporary phenomenon in depth and within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident” (p. 18). On the other hand, Stake (2000) states that a “case study is not a methodological choice but a choice of what to be studied (p. 435)”. Stake refers to any study on any topic that uses any method as a case study. A case study, according to Merriam (1998), is a mode of inquiry that uses a variety of data gathering procedures to obtain in-depth information on an event, activity, community, or individual. “A case study is an in-depth description and analysis of a bounded system” (Merriam & Tisdell, 2015, p. 37).

2. Historical context

The case study emerged as a qualitative method in Charles Darwin's biography in the early

nineteenth century (Stewart, 2014). Early case study research, according to Stewart, dates from the 1920s to the 1950s. The Chicago School of Psychology conducted the majority of the case study research. A new era of case studies arose at the same time as grounded theory (Glaser & Strauss, 1967). Case study research began in the early nineteenth century, encompassing several disciplines such as history, psychology, sociology, and anthropology, and eventually expanded to include a search for detailed and lengthy investigations of individuals and cultures in the discipline of ethnography (Merriam, 1998; Stewart, 2014). The case study approach was used in natural settings to investigate people's lives, experiences, and how those experiences affected their environment (Merriam, 2009). From the 1940s to the 1970s, quantitative approaches and experimental designs dominated, according to Merriam (2009). In quantitative studies, the case study was also employed as a descriptive research technique (Merriam, 2009; Stewart, 2014). In the 1970s, case studies were originally utilized in educational research to evaluate curriculum designs and drive the process of educational innovation (Merriam, 2009; Stake, 1995). During the 1980s and 1990s, case study research became prevalent in political science.

The most well-known case study methodologists in the realm of case study methodology are Robert Yin, Robert Stake, and Sharan Merriam. Robert Yin underlined the significance of a methodical and concise case study design as a thorough procedure with a strong emphasis on each step of the investigation. Yin defined four quality criteria for any case study design: concept validity, internal validity, external validity, and reliability. Yin is considered a contemporary figure who has significantly contributed to the understanding and application of the case study approach. His book "*Case Study Research: Design and Methods*" is widely used as a guide for researchers. The book examines the case study design and procedures, as well as why it is critical to employ it as a research approach in the social sciences. In addition, it offers "few guides on how to start a case study, analyze the data, or even minimize the problems of composing the case study report" (Yin, 2002, p. 3).

Robert Stake, an educational psychologist, was another significant addition to the area of case study. To guide the research strategy, Stake approached the case study from a constructivist and existentialist perspective. In contrast to Yin, Stake adopted a flexible design, which allowed the researcher to make adjustments even during the post-design period of the study. Because of Stake's interest in establishing evaluation program methods in the field of education, an emphasis on an inductive and holistic study of the case was placed. Stake's *The Art of Case Study Research* is a fantastic resource for researchers whose questions can be answered with a qualitative case study method. Stake's book describes the "naturalistic, holistic, ethnographic, phenomenological, and biographic research methods" (Stake, 1995, p. xi) as the interpretive orientation of the study case approach.

Sharan Merriam, the case study approach's third major contributor, expanded on the work of both Stake and Yin. Merriam employed Yin's well-structured case study design as well as Stake's rendition's four research quality standards. Merriam and Yin hold opposing views to Stake's about validity and trustworthiness. Merriam, on the other hand, encounters Stake via her research lens as a constructivist who believes that reality is relative and subjective to everyone's unique life experience. Merriam's *Qualitative Research and Case Study Applications in Education* is a work of art that demonstrates Merriam's vision as well as the stages involved in conducting a case study. Merriam's book debunks the

myth of the case study in qualitative research by explaining “what constitutes a case study, how it differs from other qualitative research methods, and when it is most appropriate to use it” (Merriam, 1998, p. 19).

It's important to note that the use of case studies has evolved over time, and many researchers in various fields have contributed to its development and refinement. The pioneers mentioned here represent just a few recent key figures associated with the early adoption and popularization of the case study method in their respective disciplines. One of the early pioneers of the case study method is often considered to be Frederic Play, a 19th-century sociologist. However, the case study approach gained prominence in the social sciences through the works of other scholars, such as Robert Stake, Robert Yin, and Sharan Merriam.

3. Types of case studies

Once the researcher has determined that a qualitative case study is the best way to answer the research question and understand the phenomenon under examination, he or she must choose a specific style of case study. Case studies are classified into two types: single-case studies and multiple-case studies (Stake, 1995; Yin, 2003). Case studies can be classified based on the purpose of the analysis (Creswell, 2014). According to Yin (2003), case studies are classified into three types based on their purpose: explanatory, exploratory, and descriptive. Yin (2003), for example, suggests utilizing an explanatory case study when seeking to explain a phenomenon that cannot be investigated by surveys or experimental investigations. For research with unclear outcomes, an exploratory case study may be preferred. A descriptive case study, according to Yin (2014), is one in which the investigator describes the relationship between the phenomenon and its real-life situation. A multiple-case study, as indicated by Yin, should be conducted when the purpose of the study is to compare the similarities and differences across selected examples (Baxter & Jack, 2008; Yin, 2003).

Stake (1995) divides case studies into three types based on their analytical goal: intrinsic, instrumental, and collective. According to Stake (1995), researchers who want to investigate a unique scenario would do an intrinsic case study. In this scenario, Stake assures that the focus is on the case itself, and the transferability of the study results is limited. Stake (1995) suggests using an instrumental case study when the purpose of the inquirer is to get additional insights into a specific occurrence. Stake (1995) describes specific steps to obtain a better knowledge of the case in this instance: "a research question, a puzzlement, a need for general understanding, and feeling that we may get insight into the question by studying a particular case" (p. 3). Stake (1995) describes collective-case studies, also known as multiple-case studies, as case studies that investigate a problem of interest in order to obtain a deeper knowledge of it. Cases, such as programs or activities, can be picked from a single or numerous research sites in this situation.

4. General guidelines/rules

In his book *Qualitative Research and Evaluation Methods*, Patton (2015) provides a set of eight clear and thorough rules for constructing case studies. Patton highlights the significance of thoroughly analyzing each case before moving on to a cross-case study. Each case is unique, according to Patton (2015), and it is the researcher's obligation to achieve justice by noting the distinctive aspects of each

case independently. Patton then confirms that the inquirer should seek analysis for particular examples that constitute the smaller units of analysis. "No matter what you are studying, always collect data on the lowest level unit of analysis possible" (Patton, 2015, p. 536). Patton also encourages case study scholars to combine data from many sources while doing case studies. Patton's next piece of advice is to report the case in a descriptive narrative with a beginning, middle, and end. Furthermore, the reader should be kept in mind by delivering a clear core story of the case. The investigator should take the reader to the point of investigation by offering a thorough and exhaustive narrative of the case or instances. Patton then proposes asking a peer reviewer for feedback to double-check the reliability and coherence.

5. Procedures for conducting a case study

Merriam and Tisdell (2015), Stake (1995), and Yin (2009, 2014) are all excellent resources for explaining different case study approaches (Creswell & Poth, 2018). Creswell and Poth (2018) offer four stages for conducting a case study based on Stake (1995) and Yin (2014). First, the researcher must decide whether the case study method is appropriate for investigating the research issue. This process should include finding cases with limits and determining whether to examine cases for in-depth comprehension or perform a case comparison. Second, the inquirer must determine the purpose of the study and carefully select the subject or cases. The type of case study, whether a single or multiple-case study, and the type of sampling, which is usually an intentional sample, should be chosen during this step. Third, the researcher must devise a technique for gathering data from various sources. Data can be gathered through interviews, direct observations, participant observation, tangible artifacts, and documentation. "Yin (2014) recommends six types of information to collect: documents, archival records, interviews, direct observations, participant observation, and physical artifacts" (Creswell & Poth, 2018, p. 100). Fourth, while focused on a specific instance issue, the researcher must build a comprehensive approach for assessing the obtained data. Beginning researchers, according to Baxter and Jack (2008), should use either Yin's or Stake's data analysis approaches.

Yin developed five methodologies, including pattern matching, relating data to propositions, explanation building, time-series analysis, logic models, and cross-case synthesis. Stake, on the other hand, essentially summarizes two analysis methods: categorical aggregation and direct interpretation. The data collected and processed should then be thoroughly described. The researcher may focus on a specific issue(s) that will lead to a deeper grasp of the case's complexity rather than generalizing the findings with such detailed descriptions. Finally, the researcher will write a report outlining the case study and the lessons learned. A reflective report must be described and "organized with readers in mind" (Stake, 1995, p. 122). One or more of Yin's six-case reporting procedures may be advantageous for beginning researchers. Linear, comparative, chronological, theory-building, suspense, and unsequenced ways are among Yin's reporting strategies (Yin, 2003). Stake (1995) states that "the report is just one person's encounter with a complex case" (p. 123). Merriam agrees with Stake, who regards the report as a product that conveys the researcher's point of view. "The final product of this type of study is yet another interpretation by the researcher of others' views filtered through his or her own" (Merriam, 1998, p. 22).

Merriam (1998) blends the Yin and Stake methods, with the primary emphasis being placed on the

research of published works. Merriam (1998) recommends that novice researchers perform a literature review as a means of gaining assistance in conceptualizing their work and developing a theoretical framework. She gives very detailed advice on how to do a literature review.

Patton (2015) breaks the methodology of doing case studies down into three distinct components. Collecting the data for the row cases is the first step in the process. The second step, which is completely voluntary, is putting together a case file. Patton (2015) recommends that the researcher provide a file with the row data sorted and classified in a certain way. The very last thing you need to do is compose the very last story for the case study. Patton asserts that the narrative will be easy to read and rich with information, supplying the reader with exhaustive details about each component of the analysis and facilitating the reader's comprehension of the situation. He may relate it in a fashion that is chronological or one that is conceptual.

6. Examples of case-study research

In their 2001 study, *Jermaine: A Critical Case Study of a Talented Black Youngster Living in Rural Poverty*, Hébert and Beardsley (2001) used a qualitative case study approach with aspects of critical ethnography research. The study's overarching goal was to examine the impact of the rural setting on the academic success of a bright black youngster who was raised in an impoverished rural community. Taylor's (2006) comparative case study, aiming to investigate learning in an informal community setting, is another example. In *Making Meaning of Local Nonformal Education: A Practitioner's Perspective*, Taylor (2006) compared the similarities between the planning and instruction of educational activities at state parks and home improvement centers. A third example is Collins and Hansen's *Great by Choice: Uncertainty, Chaos, and Luck—why some thrive despite them all*. Collins and Hansen (2011) conducted a widely-cited case study to determine what set apart high-performing organizations from their average-performing counterparts over a period of 15 years.

7. Procedures for conducting a case study

This paper is a humble attempt to help inexperienced researchers overcome the challenges of conducting case studies by providing fundamental guidelines that case-study pioneers like Yin, Stake, and Merriam have advised and provided. This article is a part of a larger collection of articles that collectively make up the Case Study Rookie's Guide. The process of establishing the case is likely to be the first obstacle that novice researchers encounter. Choosing the appropriate unit of analysis is another obstacle that must be overcome by rookie and experienced researchers alike (Baxter & Jack 2008). Researchers should ask themselves a number of questions about what they want to analyze, according to Baxter and Jack (2008). These questions include: Is the case broad or narrow in scope? How many cases are to be studied? Is it a single-case or multiple-case study? as well as how many cases are to be studied? In order to overcome such a challenge, researchers should ask themselves these questions. Finding the unit of analysis, if such a thing even exists, will be easier for researchers to do if they have the answers to these questions. When writing the report, the results must be presented to the reader in a way that is straightforward in order for them to be relevant to the purpose of the report (Stake, 1995). When describing the findings, the researcher who is also writing the report has a responsibility to keep the readers in mind.

Finally, novice researchers should adhere to the general methods for conducting qualitative research while paying close attention to case study specific criteria. Here are some tips to help rookie researchers do good case study research based on the historical overview and pioneers' viewpoints and techniques presented in the article.

- (a) Create a clear protocol for the research process that addresses the uniqueness of each case.
- (b) Carefully define the case of study.
- (c) Based on the research objectives, choose the type of case study.
- (d) Determine the scope of each case's boundaries to ensure the relevancy of acquired data and a better understanding of the case's context.
- (e) In the case of a multiple-case study, researchers must properly investigate each case before going on to the next instance.
- (f) Examine existing literature to identify research gaps and refine research questions.
- (g) To avoid implicit bias, engage in reflexivity by regularly reflecting on how your background, experiences, and perspectives may influence your perception of the data.
- (h) To avoid data misinterpretation, provide a straightforward description of the findings apart from views.

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