

# Case Study Method in Human Resource Development: Reviewing the Research Literature

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## Abstract

This paper is written with a novice social science (management, education, public administration, public policy, and human resource development etc.) researcher in mind at the graduate or doctoral level. A case study research design has been made in this paper for a human resource development (HRD) project after extensively reviewing the research literature. This paper is useful for researchers who are looking for a case study research design plan based on a real-world example that can be adapted to their specific research. The paper is based on a research titled, “Faculty Engagement in Professional Development: A Bangladesh Case Study”. It explains a rationale for the use of case study method in an HRD project, followed by the research questions, the research methods and procedures. The paper also debates on sampling issues, data types, research instruments, data organization and cleaning, data analysis using and issues of validity and reliability. The paper concludes with a discussion on limitations and delimitations.

**Keywords:** case study method, human resource development, training and development, Bangladesh, research design

## 1. Introduction and Background

### 1.1 Introduction

Social scientists usually conduct research by following a systematic plan (Russell, 2012). Conducting social research typically involves the use of three methods, i.e., qualitative, quantitative research, and mixed methods (Creswell, 2002, 2014). Qualitative research investigates social phenomena through such methods as direct interviews, observations, communication with participants, and analysis of the respondents’ opinions etc. (Creswell, 2014). Quantitative research investigates social phenomena by examining statistics (Creswell, 2014). Either way, educational research uses various methods to study qualitative and quantitative phenomena, and these methods can include: case studies, interviews, surveys, and observational, correlational, experimental, and cross-cultural approaches (Creswell, 2002, 2014). However, a mixed methods research design is desirable as compared to a quantitative or qualitative study alone because mixed methods is believed to have many added advantages like providing a complete picture of the problem being researched (Plano Clark & Ivankova, 2016).

This paper is based on case study methodology. The paper first provides the definition of the case study and examines the case study approach as the approach for faculty engagement in professional development in higher education. This will be followed by an in-depth assessment of the historical background and context of the case study. The next section will be an analysis of the theory and practice of case study research. This will be followed by a critical analysis of the debate about case studies as a research methodology or a research method. This paper concludes with a discussion on rationale, the purpose and the research questions, data collection, research design, trustworthiness, credibility, and transferability, and limitations and delimitations of the study (Rahman & Shiddike, 2019, 2020; Shiddike & Rahman, 2019).

### 1.2 Context of the Study

This research has been designed from a developing country’s perspective but can be applied anywhere around the world. Although this paper is meant to review the case study research literature only, a brief context of the actual research is given as a background information. The topic of the research is faculty engagement in professional development and the country of research is Bangladesh. Faculty engagement in Bangladesh has

been an issue since the birth of the country in 1971. Since 1971, Bangladeshi higher education institutions have been culturally developed in such a way that faculty is motivated to engage in partisan politics instead of professional development. Recruitment, promotions, and rewards are based on the political inclinations of the faculty and interest groups prevalent in the respective educational institutions. This results in the creation of an organizational culture where everything revolves around power and politics. Professionalism, a strive for knowledge, a motivation to increase the quality of teaching, an obligation to produce research papers, and an interest to participate in seminars and conferences etc. take a back seat.

The research study, is conducted in Dhaka (the capital city of Bangladesh) and adopts a case study approach in primary data collection. 20 faculty members of University of Dhaka are interviewed for qualitative data collection of the case study (which is University of Dhaka).

### *1.3 Research Problem*

Faculty in the higher education institutions of Bangladesh are in teaching profession but they lack professionalism and there is a deficiency of professionalization. Where profession in this case can be defined in terms of teaching as a profession, professionalism can be defined in terms of the ethical and moral code of conduct through which the profession is being run and professionalization can be understood in terms of the implementation of professionalism. In Bangladesh, there is a need to encourage faculty to participate in productive activities like publications, workshops, and seminars etc. thus engaging them in professional development. Research problem can be further explained as follows:

1. University faculty members often turn to the teaching based on their academic performance, but they may not have formal teaching qualifications or any professional development training. Higher education institutions need to engage faculty in professional development activities such as training, workshops, conferences, and seminars etc.
2. Faculty has a tendency to teach from an orthodox and obsolete mindset in the way that they were taught, with the inherent flaws of outdated teaching, learning, and assessment practices (Ahmed & Iqbal, 2018; Barman & Ray, 2011). Akareem and Hossain (2016) argued that university teaching is at times characterised by unclear expectations and poor alignment among learning objectives, assessment, and course outcomes. Moreover, many assessment processes and practices do not assess students' deeper understanding and analysis, and as a result, the assessment processes fail to encourage students to engage in active, deeper, and independent reflection.
3. Faculty in Bangladesh is deeply involved in partisan politics (Shiddike, 2019). There is a culture where decision making is based on politics and there is no focus on professional development (Hossain & Khan, 2014; Shuva & Taisir, 2016). This is resulting in deteriorating quality of education and a lack of faculty engagement in professional development (Badruzzaman & Mian, 2015).
4. Teaching requires research and constant study. It necessitates the faculty to continuously update their knowledge and experience and contribute intellectually in society and academia (Ahmed & Iqbal, 2018; Barman & Ray, 2011). Only then, the faculty can engage with academic research based on current societal phenomena and focus on contemporary global issues. It would be logical to say that without faculty engagement in professional development and keeping in touch with world class researchers, the quality of academic research and classroom teaching could be questionable.
5. A lack of availability of faculty professional development activities are a barrier for faculty to enhance their professionalism, that may also lead to a lack of student engagement in their academic activities (Ahmed & Iqbal, 2018; Shiddike, 2019; Shiddike & Rahman, 2019; Shuva & Taisir, 2016).
6. One of the problems that Bangladeshi higher education faces is the lack of interaction and networking among faculty members. A focus on faculty engagement in professional development could give the faculty a chance to collaborate and network among each other in professional activities (Ahmed & Iqbal, 2018; Behari-Leak, 2017).

### *1.4 The Significance of the Study*

This study is significant in shaping the direction of Bangladeshi post-secondary faculty engagement in professional development, and is useful for various stakeholders in higher education. In addition, international stakeholders that provide various professional development platforms for the faculty, such as the Higher Education Quality Enhancement Project (HEQEP), will be able to address the loopholes in their programs thus making professional development more effective.

Bangladesh is one of the world's most populous countries, with a population of over 20 million people. In addition, the country struggles with the problem of persistent poverty. The country needs a skilled, productive, and active workforce to sustain socio-economic development and alleviate poverty levels (Sarker et al., 2013). Professional faculty with state-of-the-art teaching tools and world class research can be an asset for the economic development of Bangladesh. Therefore, the government, the education sector, and the other stakeholders would realize the significance and challenges of faculty engagement in professional development (Sarker & Hossain, 2016). By implementing relevant measures, higher education institutions will help yield the benefits of the practice, both for the students and the country at large. Notably, the flourishing of areas such as the health sector, the corporate sector, the economy, the infrastructure, and the technology heavily relies on the academic foundation of the human resources. It is therefore, crucial that university faculty acquires the skills needed to generate a superior, qualified, and productive workforce through professional development (Nahar, Hossain, & Tazmeen, 2018; University Grants Commission (UGC), 2018).

## 2. Case Study and Research Plan

### 2.1 Definition of the Case Study

A case study is a form of research used for data collection that is popular in sociological research, particularly in examining phenomena requiring in-depth explanations (Gerring, 2017; Merriam, 2009; Swanborn, 2010). A case study may be defined in a variety of ways, such as:

Yin (2009) stated that "A case study is an empirical inquiry which investigates a contemporary phenomenon in its real-life context, when the boundaries between the phenomenon and the context are not clearly evident and in which multiple sources are used" (p. 23). Yin (2014) also posited that 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).

According to Gerring (2017) "Case studies, in which the researcher explores a single entity or phenomenon (the case), bounded by time and activity (a programme, event, process, institution, or social group) and collects detailed information by using a variety of data collecting procedures during a sustained period of time" (p. 12). Stake (2000) stated that a "case study is both the process of learning about the case and the product of our learning" (p. 237), and also mentioned that a "case study is the study of the particular and complexity of a single case" (p. 6), whereas Simons (2009) defined the case study as being used for "...a phenomenon of some sort occurring in a bounded context" (p. 25).

In essence, case studies help in unravelling complex situations within a given environment by thoroughly analyzing the prevailing variables (Crowe et al., 2011). As such, case study research bases its answers on the questions "how" and "why" (Yin, 2017). Formulating responses for such types of questions provides the researcher with an understanding of certain phenomena, particularly those that are based on broad issues. In essence, a case study can provide a thorough understanding of a given phenomenon that answers not only the how and why questions, but also specifies the development of desired outcomes (Yin, 2017). This means that case studies may approach and offer specific answers to a given problem that will be applicable in addressing the issue under investigation.

### 2.2 History and Background of the Case Study

Case study is not a new approach for conducting research. Case study has been used for centuries across a number of disciplines such as education, social sciences, business law, and health, among others (Crowe et al., 2011; Gerring, 2017). As a method, it is widely believed that the case study was first introduced into the social sciences by Frederic Le Play in 1829. In developing this method, Le Play's idea was to become a field worker living with a family for some time, collecting data on the family members' attitudes, interactions, expenditures, and physical possessions, among others (*Encyclopedia of Case Study Research*, 2010). Following this method of data collection through field research, Le Play invented the concept of case study research. His findings and use of case study research can be found in his seminal work in his book *European Workers*, published in 1855.

Further development of the case study method occurred in the 20th century. After case study started being applied in disciplines such as sociology, psychology, and anthropology. The creation of the new approach was done on the basis of case studies in these fields. Examples of such an approach can be found in the works of sociologists Barney Glaser and Anselm Strauss, who published "*The Discovery of Grounded Theory: Strategies for Qualitative Research*" in 1967. Glaser and Strauss argued that there was a need to move from data to theory, wherein contextualized approaches could be developed. After Glaser and Strauss's contextualization of this theory, other significant developments were that previously case study was being used as a qualitative approach

only but then scholars started to use the case study as a quantitative approach by the introduction of hypothesis. In short, it would be logical to say that case studies emerged to solve problems, and later evolved to quantify or synthesize subjective and ambiguous facts in order to facilitate better decision-making in the future (Abou-Elgheit, 2014).

Further, contemporary case study has undergone substantial methodological changes. The evolution from case studies' historical foundations to contemporary use has resulted in a pragmatic and flexible research approach which is capable of providing an exhaustive understanding of a diverse range of issues across a number of disciplines (Harrison et al., 2017). To this extent, the evolution of the case study methodology over time has resulted in a research technique that has broadened the understanding of its applications across various disciplines (Johansson, 2003; Yin, 2004).

In addition, case study research can also be applied in teaching as a teaching tool. For example, in business education, case studies are used as a form of class discussion where a problem is given to the class and a discussion is carried out around it to find a solution. Similarly, in legal education, the case study method was developed by Christopher Columbus Langdell as a way to systematize and simplify legal education by focusing on previous case laws that furthered principles or doctrines (Yazan, 2015). As a result, case study research has broadened the understanding of various phenomena, which has helped in coming up with answers to arising issues or problems.

### *2.3 Case Study: Research Methodology or Method?*

Case study methodology is a strategy of inquiry in which the researcher explores an event, activity, program, process, or people (Hyett, Kenny, & Dickson-Swift, 2014; Merriam, 2009). Cases are bounded by time and activity, and researchers collect detailed information using a variety of data collection procedures over a continued period of time (Yin, 2004). Yin (2009) also stated that unlike other qualitative research designs, case study has the advantage of amalgamating a diverse range of evidence sources, which may include documents, artifacts, interviews, and observations. Yin (2004) stated that the researcher makes real-time observations and collects data in person instead of depending on secondary data in case study methodology.

Creswell (2002) recommended using a case study approach for two scenarios. The first is when the problem being studied requires an exhaustive understanding of the case (here, the higher education system of Bangladesh). The second is when the study aims to understand "an event, activity, process, or people" in a particular situation (Creswell, 2002, p. 496).

Moreover, Swanborn (2010) mentioned that case study methodology can be considered as a form of research that analyzes a real-life phenomenon. There are two types of case study research methodology, which are: intensive and extensive research (Yin, 2017). Intensive methodologies involve one case study, while extensive methodologies involve multiple case studies. The case study method can involve simply observing what can happen in the history of a participant or group of participants. In research, "the case study method has been defined as a contemporary phenomenon in a real-life context, mainly when the boundaries between the phenomenon and the context are not clearly evident" (Schell, 1992, p. 4).

In this paper case study has been considered as a research methodology rather than research method. Research methodology incorporates an entire study and can include segments such as research questions and research objectives, and reasons for selecting specific research methods, research approaches, and choices of theoretical frameworks. One major feature of the case study research methodology is that different methods are combined with the purpose of illuminating a case from different angles, i.e., to triangulate by combining research methodologies (Harrison, Birks, GFranklin, & Mills, 2017; Hyett et al., 2014; Johansson, 2003; Swanborn, 2010; Tellis, 1997; Widdowson, 2011). This means that while the research method is a single method of inquiry, the case study methodology is a combination of various research methods used to explore a specific study area. These research methods can include simulations, correlational, experiments, historical interpretations, and logical arguments (Phelan, 2011; Rahi, 2017). This is exactly what is intended in this paper.

Knowledge of a research methodology can ensure that a researcher develops a candid critique or analysis in a specific study area (Swanborn, 2010). Given this, a proper research methodology (in this case a case study approach) is spread across a chosen topic area and is not limited only to the methodological section (Swanborn, 2010). On the other hand, if case study is considered as a method, a researcher has to consider if the research method would answer the research questions and if the research method is appropriate for the participants. For example, Hyett et al. (2014) established that case study research methods miss methodological details and often utilize small samples of no more than three people or phenomenon. This is in contrast to case study methodology, which requires consistency in the design, description, and focus on the case (Patton, 2002; Stake, 2000). In

essence, for case studies to adequately examine a given phenomenon, the case study research methodology can offer more understanding and/or interpretations of an issue.

As a research methodology, case study research can be evaluated by the number of sources used. For example, single sources of information provide a holistic overview of a given phenomenon, while multiple sources allow for the use of methodological triangulation (i.e., many methods are combined) (Denzin & Lincoln, 2003; Schell, 1992). The interpretation is that research methods and research methodology in case studies can be distinguished on the basis of divergent sources of information. However, a concern raised among scholars is that the case study approach has limitations, which affects its recognition as a methodological approach (Hyett et al., 2014). Limitations in case studies may arise from insufficiency of details regarding a study's design and rationale. As a consequence, it is increasingly necessary for researchers to ensure that adequate explanation is provided for the study's design so that readers may understand the study's direction.

#### *2.4 The Theory and Practice of Case Study Research*

Case study research provides a better understanding of a given research area by answering the how and why questions (Gerring, 2017; Harrison et al., 2017; Merriam, 2009). This is where each case is examined on its own in order to compare identified mechanisms that can lead to theoretical conclusions (Ridder, 2017). The underlying explanation is that case study research has various objectives in formulating a theory. Specifying the academic issues fundamentally begins with a clear outline of the specific issues of concern for a proposed study, and related to this process of considering issues is the basic need to clarify the underlying research questions, that is, the how and why questions (Yin, 2017; Zainal, 2007). In effect, case study research has different objectives concerning its contribution to theory. Ridder (2017) noted two overarching objectives of case study research in contributing to theory, stating that the strength of case study research can be derived in creating theory by expanding constructs and relationships within distinct settings; for example, in single case studies. As well, a case study is a way of advancing theories by the comparison of similarities and differences, including in multiple cases (Verschuren, 2003; Yin, 2004, 2017).

In perspective, single case studies are typically useful in cases that examine single propositions (Crosthwaite, Macleod, & Maicolm, 1997). This design might also be used as a basis for an exploratory study of a given phenomenon, which might form the basis of a pilot study for a multiple case design. For the multiple case scenario, case designs are more common and are generally used to replicate findings and or support theoretical generalization processes (Crosthwaite et al., 1997). By constructing a rich theoretical framework as the basis for individual cases, a single case study can broaden a theory or understanding of a given phenomenon of interest. For example, the process and context of faculty professional development in higher education. The underlying point is that case study research can be evaluated on its contribution to theory depending on its strengths or weaknesses (Swanborn, 2010; Thompson, 2010).

In essence, theory-building and testing or processes involving humans have been noted to consist of four dimensions, which are: time, thinking, people, and context (Woodside, 2010). Time consists of the duration, and may be in minutes, hours, years, decades, or centuries. Thinking involves unconscious and conscious thinking and complex problem-solving (Exton, 2008; Woodside, 2010). People can involve one person, a group, or even native cultures as a whole. Lastly, context affects segments such as work, home, and school, among others. All these dimensions are applied to develop assumptions over a given issue, which helps in shaping the dominant theory across an area of study (Coelho, 2017). This means that case study research can help in developing a more robust theory that may assist in identifying the links between the problem, interventions, and outcomes (Baker, 2010). The idea is to make sense of complex relationships that underlie a given area of research, such as faculty engagement in professional development in higher education. As well, case study research can examine the processes of implementation of identified drivers of change within a given study's context, and unravel the dynamics of change to provide better conclusions about a particular phenomenon (Coelho, 2017; Verschuren, 2003).

For any case, the basis of case study practice is the implementation of a successful method, i.e., workable strategies. Good theories fundamentally translate into improved practice (Woodside, 2010). Theory acts as a conduit for generating practice, which underscores an informed practice. Theory can also challenge existing methods by questioning fundamental assumptions by examining their relevance and usefulness to practice (Rule & John, 2015). Either way, a researcher can design a case study to test or apply a theory to a given practice or to generate a theory from practice. In effect, case study research can be a useful way of not only connecting theory to practice, but also to test a theory's relevance to practice (Flyvbjerg, 2006). Case study research is, therefore, a research approach that can help researchers relate theory to practice.

Relating theory to practice requires an understanding of existing variables, whether simple or complex. In case study research, such as professional development in higher education, a case study may arise from theories or practice by basing the study on the experiences of the participants within the study (Rule & John, 2015). Theory and practice in such a case may be derived from the existing knowledge or experiences of the participants in order to gain firsthand information in addressing a research issue or problem. Theory should be able to shed light on a practice, just as a practice should be able to shed light on theory (Boire, 2003; Hyett et al., 2014). The interaction point can help identify specific trends in any given case study research. It has been noted that it is crucial to recognize essential trends in case study research (Ridder, 2017), and the idea is to obtain a better understanding of specific or arising trends, such as in professional development in higher education. Previously identified trends in professional development include the need for establishing quality standard frameworks and identifying the impact of educational technology, among others. In effect, case study research can be evaluated on its abilities to create better understanding, build, develop and test theories, and build practice toward more efficient approaches or strategies for influencing change within a given institution, organization, or sector (Gerring, 2017; Thomas, 2016; Yin, 2017).

Further, the complexity of modern society has necessitated the need for professional development in fields such as higher education, in particular, exploration of how academics interpret their professional responsibilities for improved outcomes within a higher learning institution (Crawford, LePine, & Rich, 2010). Case study methodology can be used in such exploration to understand the factors that have contributed to the shifts in the modern approach to educational research, especially with regard to professional development (Nahar et al., 2018; Shiddike, 2016). Higher education trends are increasingly focused on areas of quality improvement, quality assurance, and overall excellence (Jacob, Xiong, & Ye, 2015).

In essence, the usefulness of the case study methodology is in determining trends involving the practices, skills, and experiences of primary stakeholders such as students, teachers, and university and college administrators. The idea is to gain insight into how professional development has been influenced by existing practices, policies, or even laws in the field of higher education (Nahar et al., 2018). In fact, the basis of the case study methodology is the exploration and investigation of current realities or phenomena by conducting a thorough analysis of events in order to determine their relationships (Zainal, 2007). The outcome sought in the use of a case study methodology in a field of inquiry such as professional development is the formulation of conclusions and recommendations that can influence policies, practices, or programs in higher education to fit with contemporary needs. In fact, in one particular study, the researchers used the following data collection methods which are at the heart of the case study methodology, which were: interviews with faculties, specific PhD holders' senior professions. The findings from such a study can help a researcher express their discoveries and formulate their conclusions and recommendations for a particular area of study.

### *2.5 Application of the Case Study Approach in this Research Design*

A case study is commonly used as a methodology in educational research. The growing interest in using case studies as a research methodology in the field of education is because questions of meaning and processes are answered through understanding the context in which they exist (Merriam, 2009). The basis is that case studies provide a more exhaustive approach to research in the field of education. One reason that the case study has become prominent as a teaching tool in recent times is that it agrees with the constructivism approach to learning (Nath, 2005). This means that case studies shed light on the strategies that go beyond theory to suggest practices that can be applied in teaching and learning for better outcomes.

A research design can be the overall plan for connecting conceptual research problems to pertinent (and achievable) empirical research. In other words, the research design articulates which data are required, which methods are going to be used to collect and analyze the data, and how this approach will answer the research question(s) (Rahi, 2017). As such, different research designs can be applied to different types of studies. Also, a research design is typically used to clarify the direction of the research, and usually involves the collection and analysis of information in seeking to gain more understanding of the research problem. As is known, four types of research designs can be used in conducting research, which are: descriptive, correlational, quasi-experimental, and experimental.

In essence, it is vital to evaluate whether or not a case study can be applied in a research design. The generalization or non-generalization of a case study can be used as a framework to gauge the appropriateness of a case study as a research design, for instance, asking whether the case study offers a narrow explanation or a more comprehensive explanation. Either way, the case study approach should be tied to an acceptable statistical premise to ensure that there is no generalization. This is because generalizations are the exception rather than the

norm in case studies.

Yin (2003) argued that depending on the study purpose, there are three types of case studies, i.e., exploratory case studies, explanatory case studies, and descriptive case studies. Exploratory case studies aim to explore any phenomenon in the data, which serves as a point of interest for the researcher, and is also used to define the framework of future research. As stated by (Yin, 2003, p. 6), "In this type of case study, fieldwork and data collection are undertaken prior to the final definition of study questions and hypotheses." In contrast, explanatory case studies are used to define how and why an experience took place. This type of study seeks to specify "clues to possible cause-and-effect relationships" (Yin, 2003, p. 7). Finally, the descriptive case study is used to develop answers to a series of questions based on theoretical constructs and the intricacies of an experience (Yin, 2003; Stake, 1995). A case study can begin by writing down specific points that the study wants to investigate. Not only will noting down the study points help with creating more understanding by exploration, but will also assist in the analysis of data to come up with relevant conclusions.

### *2.6 Data Collection Methods*

The primary source of data collection are one-on-one interviews which are conducted face-to-face. The interview protocol is semi-structured and open-ended questions, as suggested by Rubin and Rubin (2005) in their responsive interviewing model. Participants are asked pre-chosen set of questions "to stimulate responses from [each] interviewee" (Merriam, 2009, p. 96) with follow-up prompts to elicit strong descriptions and arguments.

Each interview is scheduled for ninety minutes to two hours. As the questions are open-ended, participants might need more than an hour to finish the interview. According to Rubin and Rubin (2005), the responsive interviewing model requires the researcher to probe deeply by asking additional questions based on an interviewee's first response. Applying the responsive interviewing model in this study will assist me in obtaining a concrete and profound understanding of Bangladeshi university faculty's' engagement in professional development. The interviews will be recorded as mp3 files with the help of a digital voice recorder that will be placed within reach of the participants, who will be informed that they can pause or stop the recording at any time. Subsequently, I will proceed to interview each participant individually. As Boje (2002) suggested, in qualitative research interviews, the researcher's records are more important than the interviewees' words, experiences, and actions, all of which are narrative expressions. In addition, the open-ended questions used in the interviews will be in accordance with the research questions. Transcription of the audio files will produce unstructured text data (Creswell, 2014), and so after the interviews I will transcribe the data with the consent of the interviewees.

### *2.7 Data Analysis and Interpretation*

A qualitative research approach involves a continuous interplay between data collection, data analysis, and data interpretation (Strauss & Corbin, 1998). Consequently, I will start to analyze the data following the first interview to identify patterns and to facilitate subsequent data collection. According to Patton (2002), every qualitative study is distinctive because each phase of the study depends on the research skills of the enquirer. Qualitative analysis also depends on the analytical skills of the researcher. In view of this and to capture every significant step during the data analysis, I intend to use a formative and summative analytical approach, as suggested by Bogdan and Biklen (2007). This formative and summative analytical approach implies that my analytical method will be progressive; starting with analysis during the fieldwork and ending with the final analysis after the data have been collected. My decision to start the analysis during the fieldwork is founded on the need to guarantee the credibility of the research findings, as explained by Guba and Lincoln (1989). Field analysis will also help me to reduce, compile, and organize the main ideas into easily manageable categories and concepts (Merriam, 1988) so that I do not end up with confusing or disorganized data. According to Esterberg (2002), "getting intimate with data" (p. 157) is a primary objective that involves immersing oneself in the interview transcripts. Moreover, Esterberg also talked about the data coding system, and stated that open coding is a process where "you work intensively with your data, line by line, identifying themes and categories that seem of interest" (p. 158).

I will follow Creswell's (2014) six steps for data analysis process. Creswell described "an interactive practice" for data analysis, which involves the following:

1. The researcher should organize and compile the data for analysis.
2. Researcher should read through the data.
3. The researcher begins detailed analysis with a coding process.

4. The researcher uses the coding process to generate a description of the setting or categories during data analysis.
5. The researcher should findings the data description and themes based on the participants' responses, which will be represented in the qualitative narrative.
6. Finally, the researcher interprets the meaning of the data.

To follow Creswell (2014), I will organize and interpret the data step-by-step based on the research questions. Lastly, I will then employ thematic analysis, as described by Buetow (2010). Based on the research questions, the related sections of the data for each participant will be separated. This isolation will help me to obtain the patterns and themes. Subsequently, the themes and designs will be cross-examined in order to determine any relationships between them. The categorized data will then be linked to the observations recorded in the field notes and the data obtained from the archival material. I will highlight common issues in both the categorized data and the secondary data sources (i.e., archival materials and observations) and use them for the presentation and analysis of the findings of the study.

### *2.8 Credibility, Trustworthiness, and Transferability*

Guba and Lincoln (1989) mentioned credibility, transferability, dependability, and conformability as the main features that determine the trustworthiness of a qualitative study. The authors stated that credibility is a vital element in ascertaining the integrity of a study, and relates to whether the deductions of a study are congruent with reality. Shenton (2004) offered various ideas to ensure credible research, and to establish credibility in my research, I will apply some of those provisions. The first provision is the adoption of well-established research methods. As discussed throughout this paper, the methodology to be employed will be supported by relevant literature that gives evidence of its practicability.

The second provision is the establishment of familiarity with the culture of the participants. This provision was also supported by Guba and Lincoln (1989), who stated that prolonged engagement between the enquirer and the participants enhances their mutual trust. I was born and raised in Bangladesh and am therefore well conversant with Bangladeshi culture. Nonetheless, when I arrive in Bangladesh, I will meet with the participants before the interviews to give them further details of the importance of this study. I hope that these meetings will help to boost our mutual trust. In addition, the application of purposive sampling will enhance the credibility of this study by reducing any nonresponsive bias which may result from the absence of participants or their refusal to cooperate. Additionally, as mentioned in the data collection section, I will probe more deeply by tactfully rephrasing various questions and checking my interpretations with the participants. This method is also listed in the provisions provided by Shenton (2004) for enhancing credibility.

The trustworthiness element of a study is also concerned with the measures through which the deductions of the study can be replicated (Merriam, 2009). For instance, if a similar study was to be conducted, to a large extent it should yield similar results. Because my research design is practical and I will be using a qualitative approach, it seems likely that the results of this study could be replicated. I have carefully designed the study so that it is well considered, based on the research questions. Therefore, I expect the study to achieve a high level of trustworthiness. However, depending on the context in which people live, their viewpoints may change over time. Such circumstances would affect the extent to which the findings of the study might be replicable. According to Merriam (1988), transferability measures the level of applicability of the findings of a study to other settings. Hence, transferability is the measure by which the findings deduced from a sample can be applied to the whole population. Similarly, Guba and Lincoln (1989) suggested that the enquirer is responsible for providing adequate background information relating to the fieldwork settings, which enables the reader to decide how transferable the results might be to other contexts. I will follow this suggestion throughout my research. The information I will collect during the fieldwork will be useful in providing the needed contextual information to facilitate transferability.

### *2.9 Limitations and Delimitations of This Study*

In this study, I am using the case study methodology. In my view, the most significant limitation of the study is the lack of generalizability of the findings. The findings represent only the views of the research participants, and therefore, the generalizability of the results should be assessed by the reader (Merriam, 1988). In other words, the study focuses on understanding the faculty members' experiences and their perspectives as they relate to academic research and their understandings of teaching and professional development in Bangladesh. Thus, the views of other higher education stakeholders like Bangladeshi educators, policy-makers, higher institutional administrators, students, and parents will not be incorporated in this study. The study will be based on ten to

twelve participants in one Bangladesh higher education institution who have professional development intervention experience and are interested in volunteering to participate in the research.

In addition, data for this study will be collected through one-on-one in-depth interviews only; I will use the pre-interview open-ended protocol for collecting the data, and there will be no extensive review or use of the participants' employment documents and records, partly because of the issues of confidentiality. The research design will depend solely on qualitative data-gathering methods. Finally, the researcher's personal experience, background as a Bangladeshi national, engagement in higher institution teaching, and familiarity with the issues relating to faculty engagement in professional development will influence the interpretation of the research data.

In this research, due to budget and time constraints for the fieldwork, I am delimiting myself to selecting the participants from one Bangladeshi higher education institution. In addition, as I am interested in doing a case study, I have to limit myself with the case study research design, which is also considered a delimitation in the study.

### 3. Summary and Conclusion

#### 3.1 Summary of This Paper

This is a case study that will be conducted in Bangladesh. The topic of this study is faculty engagement in professional development in higher education in Bangladesh. Faculty engagement in professional development is a fairly new field, and is significant from the perspective of higher education in Bangladesh. The research will be conducted at the 100-year-old, highly reputed Bangladeshi higher educational institution of the University of Dhaka in Bangladesh. Twelve professors will be invited to participate as respondents for this study. Open-ended semi-structured questionnaires will be given out in the interviews, and NVIVO software will be used for coding the data analysis and interpretation of issues for validity and reliability. This paper concludes with a discussion on case study limitations and delimitations.

Moreover, this paper discusses a rationale for the use of the case study research methodology, followed by a review of the research questions, significance, and procedures. This paper also presents debates of the case study research methodology or research method, the rationale for the case study research methodology, and the application of the case study approach in investigating higher education faculty engagement in professional development.

#### 3.2 Conclusion

A case study is a form of inquiry that seeks to investigate specific phenomena by examining and proposing solutions that are likely to eliminate ambiguities in understanding. Historically, case studies emerged to solve problems, and later evolved to quantify or systemize ambiguous facts in order to provide better pictures for future decision-making. Case studies rely on extensive examination of a given phenomenon to form conclusions and recommendations. In essence, a case study can analyze and give meaning to an unclear situation. A pertinent unclear situation is in the field of educational research, where the analysis of professional development trends using case studies may be used to gain a more in-depth understanding of the subject area. Therefore, a case study may be viewed as a research methodology, especially if it utilizes multiple sources instead of single sources, which is the case in other research methods. Case studies, as a research methodology, can offer insightful, in-depth, and useful information to address a particular issue or problem.

### References

- Abou-Elgheit, E. (2014). *Case study development and applications*. International School of Management. Retrieved from [https://www.academia.edu/5626335/Introduction\\_to\\_Case\\_Study\\_and\\_Case\\_Study\\_Research\\_Method](https://www.academia.edu/5626335/Introduction_to_Case_Study_and_Case_Study_Research_Method)
- Ahmed, I., & Iqbal, I. (2018). *University of Dhaka: In Search for Excellence Issues and Policy Recommendations*. Retrieved from <http://fes-bangladesh.org/files/daten/publications/University%20of%20Dhaka.pdf>
- Akareem, H. S., & Hossain, S. S. (2016). Determinants of education quality: what makes students' perception different. *Open Review of Educational Research*, 3(1), 52-67. <https://doi.org/10.1080/23265507.2016.1155167>
- Badruzzaman, M., & Mian, M. N. (2015). Right to education in Bangladesh: An appraisal for constitutional guarantee. *Journal of Studies in Social Sciences*, 13(1), 1-34.
- Baker, G. R. (2010). The contribution of case study research to knowledge of how to improve quality of care. *BMJ Quality and Safety*, 20(1), i30-i35. <https://doi.org/10.1136/bmjqs.2010.046490>

- Barman, A., & Ray, M. S. (2011). Faculty engagement in higher educational institution: A proposed model. *Romanian Journal for Multidimensional Education*. Retrieved from [https://www.researchgate.net/publication/215713725\\_1\\_Faculty\\_Engagement\\_in\\_Higher\\_Educational\\_Institution\\_-\\_A\\_proposed\\_model/download](https://www.researchgate.net/publication/215713725_1_Faculty_Engagement_in_Higher_Educational_Institution_-_A_proposed_model/download)
- Behari-Leak, K. (2017). New academics, new higher education contexts: A critical perspective on professional development. *Teaching in Higher Education*, 22(5), 485-500. <https://doi.org/10.1080/13562517.2016.1273215>
- Bogdan, R. C., & Biklen, S. K. (2007). *Qualitative research for education: An introduction to theory and methods* (5th ed.). New York: Pearson Education Group.
- Boire, R. (2003). *A healing to teaching: A case study*. (Master of Education). University of Saskatchewan, Saskatoon.
- Boje, D. (2002). Narrative inquiry: Experience and story in qualitative research. *Human Relations*, 55(6), 731-745.
- Buetow, S. (2010). Thematic analysis and its reconceptualization as 'saliency analysis'. *Journal of Health Services Research & Policy*, 15(2), 123-125. <https://doi.org/10.1258/jhsrp.2009.009081>
- Coelho, R. (2017). *Leadership and teacher engagement: A case study*. (Doctor of Education). Creighton University.
- Crawford, E. R., LePine, J. A., & Rich, B. L. (2010). Linking job demands and resources to employee engagement and burnout: a theoretical extension and meta-analytic test. *Journal of Applied Psychology*, 95(5), 834-848. <https://doi.org/10.1037/a0019364>
- Creswell, J. W. (2002). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research*. Upper Saddle River, NJ: Merrill Prentice Hall.
- Creswell, J. W. (2014). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches* (4th ed.). California: SAGE.
- Crosthwaite, J., Macleod, N., & Maicolm, B. (1997). *Case Studies: Theory and Practice in Agricultural Economics*. Paper presented at the A paper presented to the 41st Conference of the Australian Agriculture and Resource management Economics Society, Gold Coast.
- Crowe, S., Cresswell, K., Robertson, A., Huby, G., Avery, A., & Sheikh, A. (2011). The case study approach. *BMC Medical Research Methodology*, 11(100), 1-9. <https://doi.org/10.1186/1471-2288-11-100>
- Denzin, N. K., & Lincoln, Y. S. (2003). *The landscape of qualitative research: Theories and issues* (2nd ed.). Thousand Oaks, CA: Sage.
- Encyclopedia of Case Study Research. (2010). (A. J. Mills, G. Durepos, & E. Wiebe Eds. Vol. 1 & 2). Los Angeles, London: Sage.
- Esterberg, K. G. (2002). *Qualitative methods in social research*. Boston, MA: McGraw-Hill.
- Exton, V. N. (2008). *A qualitative case study of developing teacher identity among American Indian secondary teachers from the UTE teacher training program*. (Doctor of Education). Utah State University, Logan Utah.
- Flyvbjerg, B. (2006). Five misunderstandings about case-study research. *Qualitative Inquiry*, 12(2), 219-245. <https://doi.org/10.1177/1077800405284363>
- Gerring, J. (2017). *Case study research: principles and practices* (C. Elman, J. Gerring, & J. Mahoney Eds. 2nd ed.). UK: Cambridge University press.
- Guba, E. G., & Lincoln, Y. S. (1989). *Fourth generation evaluation*. New Delhi, India: Sage.
- Harrison, H., Birks, M., GFranklin, R., & Mills, J. (2017). Case study research: Foundations and methodological orientations. *Forum: Qualitative Social Research*, 18(1), 1-17.
- Hossain, M. M., & Khan, A. M. (2014). Higher education reform in Bangladesh: An analysis. *Mediterranean Journal of Social Sciences*, 5(9), 423-427. <https://doi.org/10.5901/mjss.2014.v5n9p423>
- Hyett, N., Kenny, A., & Dickson-Swift, V. (2014). Methodology or method? A critical review of qualitative case study reports. *International Journal of qualitative studies on health and well-being*, 01-13. <https://doi.org/10.3402/qhw.v9.23606>
- Jacob, W. J., Xiong, W., & Ye, H. (2015). Professional development programmes at world-class universities.

- Palgrave Communications*. <https://doi.org/10.1057/palcomms.2015.2>
- Johansson, R. (2003). *Case study methodology*. Paper presented at the Methodologies in Housing Research, Royel Institute of Technology.
- Merriam, S. B. (1988). *Case Study Research in Education: A Qualitative Approach*. San Francisco: Jossey-Bass.
- Merriam, S. B. (2009). *Case study research in education*. San Francisco, CA: Jossey-Bass.
- Nahar, N., Hossain, S., & Tazmeen, A. (2018). *Establishment of an effective institutional quality assurance cell in a higher education institution of Bangladesh: Case study North South University*. Paper presented at the First International Conference on Quality Assurance in Higher Education, North South University, Dhaka, Bangladesh.
- Nath, J. L. (2005). The roles of case studies in the education field. *International Journal of Case Study Method Research & Application*, 17(3), 396-400.
- Patton, M. Q. (2002). *Qualitative Research & Evaluation Methods*. Thousand Oaks, CA: Sage.
- Phelan, S. (2011). Case study research: design and methods. *Evaluation & Research in Education*, 24(3), 221-222. <https://doi.org/10.1080/09500790.2011.582317>
- Plano Clark, V., & Ivankova, T. (2016). *Mixed methods research: A guide to the field*. Thousand Oaks, CA: Sage Publications. <https://doi.org/10.4135/9781483398341>
- Rahi, S. (2017). Research design and methods: A systematic review of research paradigms, sampling issues and instruments development. *International Journal of Economics & Management Sciences*, 6(2), 1-5. <https://doi.org/10.4172/2162-6359.1000403>
- Rahman, A. A., & Shiddike, M. O. (2019). Agendas for future training transfer research: Pakistan's perspective. *Developing Country Studies*, 9(4), 39-48. <https://doi.org/10.7176/DCS/9-4-06>
- Rahman, A. A., & Shiddike, M. O. (2020). Mixed methods in human resource development: Reviewing the research literature. *International Journal of business and management*, 15(3), 25-36. <https://doi.org/10.5539/ijbm.v15n3p25>
- Ridder, H. (2017). The theory contribution of case study research designs. *Business Research*, 10, 281-305. <https://doi.org/10.1007/s40685-017-0045-z>
- Rubin, H. J., & Rubin, I. (2005). *Qualitative interviewing: the art of hearing data*. CA: Sage: Thousnad Oaks. <https://doi.org/10.4135/9781452226651>
- Rule, P., & John, V. M. (2015). A necessary dialogue: Theory in case study research. *International Journal of Qualitative Methods*, 1(11), 1-11. <https://doi.org/10.1177/1609406915611575>
- Russell, B. (2012). *Social Research Methods: Qualitative and Quantitative Approaches*. Thousnad Oaks: CA: Sage.
- Sarker, S. H., & Hossain, S. Z. (2016). Budgetary challenges of higher education: Evidence from Bangladesh. *Journal of education and practice*, 7(12), 32-41.
- Sarker, S. H., Rana, S., & Zitu, R. A. (2013). Challenges of quality education in Bangladesh: A study on public universities. *Journal of education and practice*, 4(8), 151-161.
- Schell, C. (1992). *The value of the case study as a research strategy* manchester, UK.
- Shenton, A. K. (2004). Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information*, 22(1), 63-75. <https://doi.org/10.3233/EFI-2004-22201>
- Shiddike, M. O. (2016). *Teacher engagement in national partisan politics: A Bangladesh case study*. (Master of Education). University of Regina, Regina, Canada.
- Shiddike, M. O. (2019). A case study of teacher engagement in partisan politics and it's influences on students learning and classroom practices: Perspective on Bangladesh. *World Journal of Education*, 9(3), 22-29. <https://doi.org/10.5430/wje.v9n3p22>
- Shiddike, M. O., & Rahman, A. A. (2019). Engaging faculty in professional development: Lessons from Bangladesh. *Journal of Educational and Developmental Psychology*, 9(2), 124-137. <https://doi.org/10.5539/jedp.v9n2p124>
- Shuva, N. Z., & Taisir, R. (2016). Faculty members' perceptions and use of open access journals: Bangladesh perspective. *International Federation of Library Associations and Instructions*, 42(1), 36-48.

- <https://doi.org/10.1177/0340035216628879>
- Simons, H. (2009). *Case study research in practice*. Los Angeles, CA: Sage.  
<https://doi.org/10.4135/9781446268322>
- Stake, R. E. (2000). *The art of case study research: Perspectives on practice* (2nd ed.). Thousand Oaks, CA: Sage.
- Strauss, A., & Corbin, J. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (2nd ed.). Thousand Oaks, CA: Sage.
- Swanborn, P. (2010). *Case study research: what, how, and why?* Los Angeles: SAGE.  
<https://doi.org/10.4135/9781526485168>
- Tellis, W. M. (1997). Application of a case study methodology. *The Qualitative Report*, 3(3), 01-21.
- Thomas, G. (2016). *How to do your case study* (2nd ed.). London: Sage.
- Thompson, S. W. (2010). *The caring teacher: A multiple case study that looks at what teachers do and believe about their work with at-risk students*. (Doctor of philosophy). University of Nebraska,
- University Grants Commission (UGC). (2018). *Annual Report-2017*. Dhaka, Bangladesh. Retrieved from <http://www.ugc.gov.bd/>
- Verschuren, P. (2003). Case study as a research strategy: some ambiguities and opportunities. *International Journal of Social Research Methodology*, 6(2), 121-139. <https://doi.org/10.1080/13645570110106154>
- Widdowson, M. (2011). Case study research methodology. *International Journal of Transactional Analysis Research*, 2(1), 25-34. <https://doi.org/10.29044/v2i1p25>
- Woodside, A. G. (2010). Bridging the chasm between survey and case study research: research methods for achieving generalization, accuracy, and complexity. *Industrial Marketing Management*, 39(1), 64-75. <https://doi.org/10.1016/j.indmarman.2009.03.017>
- Yazan, B. (2015). Three approaches to case study methods in education: Yin, Merriam, and Stake. *The Qualitative Report*, 20(2), 134-152.
- Yin, R. K. (2004). *The case study anthology*. CA: Sage: Thousand Oaks.
- Yin, R. K. (2009). *Case study research designs and methods* (4th ed.). CA: Sage: Thousand Oaks.
- Yin, R. K. (2014). *Case study research: Design and methods* (5th ed.). Thousand Oaks, California: Sage Publications Inc.
- Yin, R. K. (2017). *Case study research and applications design and methods* (6th ed.). Washington, DC.: SAGE.
- Zainal, Z. (2007). Case study as a research method. *Jurnal Kemanusiaan bil*, 9, 01-06.

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