

*Chapter Three:*  
*Research Methodology*

# Chapter Three

## Research Methodology

### 3.0 Introduction

*The opportunity to learn about what you cannot see and to explore alternative explanations of what you do see is the special strength of qualitative inquiry (Glesne, 2006, p. 81).*

Qualitative research has opened up the gates to study some very personal and largely hidden concept like spirituality to the researcher. This chapter describes the journey of seeing the unseen and articulating the alternative explanations of what is seen. The qualitative research design was used in developing a theoretical framework to describe the role that spirituality plays in improving self-efficacy. The chapter includes the statement of the problem, the purpose of the study, research questions and the entire design of the research. Explanation of the procedures that were used as part of the qualitative design would be presented along with the literature that was used to guide the study.

### 3.1 Statement of the Problem

Policy changes, budget cuts, fewer staff, increasing parental expectations, over ambitious managements, increased accountability and urgency of results all this put together take a heavy toll on teacher efficacy and teacher mental health and well-being. While teacher self-efficacy could a result of multiplicity of factors, the reason for this study was to adequately explore the relationship between spirituality and teacher self-efficacy. More so understand the teachers' perception about spirituality and self-efficacy. And study if spiritual training and practice could enhance the spiritual intelligence of teachers and bring meaningful differences to the lives of teachers. Would that in any way affect the efficacy of teachers? Thus the title of the study could be put as follows;

*“Enhancing Spiritual Intelligence in Teachers: Effect on Self-Efficacy”*

### 3.2 Rationale for the Study

The idea that schools have a responsibility to provide a holistic education that aims to develop more than just a child's academic ability is well supported (Burrows,

2006; Chittenden, 2003; Harris, 2016; Smith and Mc Sherry, 2004). There is an increasing evidence that students who receive holistic education: physical, social, emotional, cognitive and spiritual have higher academic achievement and better life outcomes in relation to health, employment, social inclusion and economic independence (Kimbel & Schellenberg 2013; Noble et al., 2008). Review points out the positive relationship between spirituality and better life outcomes. Eckersely, (2000) noted serious decline in mental health of modern youths and the indications pointed to the lack in spirituality. Ivtzan et.al (2013) measured people's psychological well-being for self- actualization, meaning in life and personal growth initiative, and confirmed the importance of spirituality on psychological well-being. Kidwai et.al (2014) assessed the effect of spirituality on negative life effects and the manner in which people experience and deal with it. Emmons, Cheung and Tehrani (1998) reported that people with higher number of spiritual strivings were found to have a greater purpose in life, better life satisfaction and higher level of well-being. This is equally true with teachers, Dincer (2009) mentioned that spiritual intelligence provides a sense of personal wholeness, goal and direction, he pointed out that teachers with high level of spiritual Intelligence are able to mould students from all age groups to experience a wholesome life filled with self-respect and creativity. Teachers with spiritual Intelligence are more satisfied with their jobs. Spiritual Intelligence has positive influence on Job Satisfaction (Cherati, Mahdavi, & Rezacian, 2013). Teacher with high spiritual intelligence carry out their role with highest regards and nobility not just as a tutor but a holistic educator to awaken creativity and spiritual Intelligence of learners (Colalillo Kates, 2002). This has led to a rekindled emphasis on a timeless certainty: if students are to achieve higher academic standards and better life outcomes then no less can be expected of their teachers.

Teacher needs, teacher quality and teacher development have always been a concern and we often see immense disparity between the idealized goals and expectations from teachers and the actual teaching or professional training they receive in teacher education. While sufficient exposure and training is provided both at pre-service and in-service level to enable teachers to be successful; however, these practices often lack the empowerment to sustain teachers through the arduous tasks, professional stress and demands of being an educator. Teacher education, teacher development programs, and teacher curriculum are oftentimes not designed to equip teachers to

overcome adversity, let alone thrive in the teaching profession. The question is, then, Why do some teachers persevere through adversity, even moving beyond toward excellence in the profession?" Where do they get such a conviction to fight in the face of challenges? Zembylas & Papanastasiou (2004) note that, it is the perceived relationship between what one wants from teaching and what it is offering, it is about the satisfaction that one gets from the profession. The research on teacher effectiveness has largely examined the techniques and strategies that equip teachers to be effective, but there is very little research that has investigated the effect of teacher spirituality upon teachers' beliefs regarding their own efficacy (teacher self-efficacy).

of spirituality enhance spiritual intelligence?

### **3.3 Research Questions**

The purpose of this study was to understand and explore spirituality as a concept & spiritual intelligence as a construct, study its effect on teachers 'self-efficacy and performance. The study was guided by the following research questions:

- How do teachers understand spirituality?
- What different roles does spirituality play in their life?
- How do teachers' perceive their own efficacy?
- Does professional training in the practice of spirituality enhance spiritual intelligence?
- What is the impact, if any of teachers' spiritual intelligence on their self-efficacy?

By exploring teachers' spirituality and self-efficacy and designing an intervention program to enhance spirituality, this study seeks to gain a deeper understanding of spirituality, its different dimensions/aspects and teachers' perception about spirituality and how do they think, feel and practice it and its relationship with teacher performance. As a result the, the focus of this study lends itself to a qualitative design. David Fetterman (1988) speaks of the "secret storm or the silent scientific revolution" (p.22) in his reviews of qualitative methods. He describes the evolution of qualitative research in education as moving away from being a 'monolithic entity' to using multiple approaches that support an emphasis on program evaluation in education. His promotion of qualitative research approaches in education as a varied and integrated Endeavour resonates with my approach to the

methodology of this study. Field diary, Reflective Journals, Open-ended interviews served as major research method for this study. The focus was to explore the relationship between spirituality and self-efficacy. Essentially this study examined how teachers perceive their skills and abilities to meet the expectations to improve educational outcomes for all students, in other words their sense of self efficacy. Additionally the study explored the relationship between teacher self-efficacy and teachers' spiritual intelligence. As a method of study, the qualitative research design offered the best opportunity not just to the researcher but also to the respondents by giving a scope to write dairies, reflective logs, share stories/anecdotes that can give meaningful perspectives, however interpreting these for analysis was a major challenge for the researcher.

### **3.3 Objectives of the Study**

1. To study the existing status of spiritual intelligence and self-efficacy.
2. To develop spiritual intelligence program to enhance spiritual intelligence in teachers.
3. To implement the developed program to enhance spiritual intelligence in teachers.
4. To study the effect of the developed program in terms of
  - a. Participant diary
  - b. Field diary
  - c. Reflective journal
  - d. Feedback
5. To study the effect of spiritual intelligence on self-efficacy.

### **3.4 Explanation of the terms**

For purpose of this study self-efficacy is defined according to social cognition presented by Bandura (1997) where it is described as “beliefs about one’s capabilities to organize and execute the course of action required to achieve the desired results” (p.3). Bandura goes on to say that the effort one puts forth in given endeavours, how long he or she will persevere in the face of obstacles and resilience to adversity all contribute to one’s sense of self efficacy.

Writing a working definition for ‘spirituality’ was the most difficult thing to do. When seeking a definition of spirituality a multitude of interpretations and a vast array of concrete, abstract, metaphysical, relationship-oriented, inner motivation oriented, existential as well as religion oriented definitions were found. A definition that

encapsulates the many broad attempts to define spirituality is that of Yust et al. (2006). According to him *“Spirituality is the intrinsic human capacity for self-transcendence in which the individual participates in the sacred something greater than the self. It propels the search for connectedness, meaning, purpose and ethical responsibility. It is experienced, formed, shaped and expressed through a wide range of religious narratives, beliefs and practices and is shaped by many influences in family, community, society, culture and nature”* (p.8).

*Spiritual intelligence- According to Zohar and Marshall, Spiritual intelligence as to identify the life as ‘meaning’, purpose and values that connects the meaning of peoples’ activities and intellectual capabilities that deals with the question of human existence.*

*Cindy wiggles worth defines spiritual intelligence as the ability to act with wisdom and compassion, while maintaining inner and outer peace, regardless to the circumstances.*

### **3.5 Limitations of the Study**

The most obvious limitation of this study is the relatively small number of participants. Although the perspective, in-depth program and process provides sufficient insight into the field, the research design itself does not aim at generalizing applications to all teachers. Another significant limitation is the researcher’s personal gap in motivating participants to keep continuity with the participants’ diary and reflective logs and some methodological limitations owing to the researcher oscillating between different methodological paradigms.

### **3.6 Role of the Researcher**

As researcher was responsible for implementation of all the facets of the study. In the initial of the study, the role of the researcher was to identify the concept of spirituality and drawing indicators of spiritual intelligence as a construct. Researcher was constantly engage in developing the programme to enhance the spiritual intelligence of the samples. Researcher has maintain the record of all the collected information in the form of field diary, reflective logs, google forms summary so as to arrive at an understanding of the concept undertaken for the study. Through the research endeavour role of researcher is facilitator. As facilitator researcher has develop rapport with the samples, making them participate in the activities,

facilitating them in doing the tasks assigned, helping them through the journey.

### **3.7 Personal Interest**

In qualitative research the personal values of the researcher are acknowledged as an important piece in the process (Corbin & Strauss, 2008). The researcher is a principal of one of the B.Ed. colleges in the city and an ardent believer of God and a spiritual person. Being a teacher educator myself, my understanding of the challenges of school education and therefore of teachers' stress became handy in developing rapport with the participants. Education and spirituality both being my passion drove me to the field. However, as a researcher, I took utmost care in not allowing personal biases to interfere with the data sets. Being mindful of my profile and the influence it could have on teacher participation and responses, I took special care to suspend any preconceived notions or biases that would influence how I interact during the program, how I conduct interview, ask questions, analyse and interpret data from responses.

During the interviews I was constantly aware of the need to pose questions in the most neutral manner possible and to carefully monitor my response to their responses. Writing my reflective journal also included bracketing personal opinions especially belief system that at times overlapped with the neutral thought process.

### **3.8 Theoretical Sensitivity**

Strauss and Corbin (1990) developed a concept called theoretical sensitivity as a way to assess a researcher's capacity to engage in grounded theory study:

*Theoretical sensitivity refers to a personal quality of the researcher. It indicates an awareness of the subtleties of meaning of data...[It] refers to the attribute of having insight, the ability to give meaning to data, the capacity to understand, and capability to separate the pertinent from that which isn't (p.4).*

Theoretically sensitive researchers always ask question to data. This research contained data from participants/field and data from literature. It also contained data from the participant diaries and researcher's reflective journal. Researcher was theoretically sensitive enough to be able to interact with background experiences, the participants and the collected data, while discerning the pertinent from that which was not and exploring themes as they emerged. At the same time the researcher was interacting with the data and categorizing.

### 3.9 Selection of the participants and their profile

Being at one of the Teacher Education Institutes, I have a good network with schools across the city of Gandhidham, Kutch. I telephonically got in touch with schools and purposefully zeroed on to *Atmiya Vidhyapeeth, Gandhidham* owing to the willingness and support of the management and the principal of the school. My second step was to select my participants/respondents based on their willingness and commitment to be a part of the entire research journey.

The selection of the participants began with a staff meeting where they were oriented to the purpose of the research, the broad objectives, expectations from them, the time required and their role throughout the journey of research. This was to give them a sufficient understanding and choice, if they wanted to continue for the program or leave. The researcher used a small video followed by engagement with some of the existential questions like:

- Why do we suffer?
- What is our life's goal?
- Are we all happy?
- Is our happiness permanent?
- What do we do to make our happiness permanent?
- Do negative feelings like jealous, anger, ego and hatred affect us?
- Do positive feelings like love, care, compassion, forgiveness sooth us?

Participants were then given a choice to decide if they wanted to continue with such an engagement. All male members from the staff were the first ones to leave; this was followed by working mothers, who expressed their inability to be part of the program owing to their family responsibilities. With this I was left with total of 14 candidates. Of which one got married and left the institute, one had serious medical emergency and could not continue and two others owing to family responsibilities could not continue further. So the total number of participants that continued throughout the journey was ten.

The teacher participants that continued with the researcher for the entire research journey was diverse in the sense that they belonged to different caste and class background with 1 to 5 years of teaching experience in the age group of 25 to 30 but homogenous in the sense that it was an all-female and all theist group. Only two of the ten were married and rest was single.

### **3.10 Data Collection**

Qualitative research involves the collection, analysis, and interpretation of data that are not easily reduced to numbers. These data relate to the social reality and the concepts and behaviours of people within it. Different methods are used in qualitative research. For the current research a combination of interviews, Focus Groups, participant diaries and reflective journals were used for data collection. Combination of two or more data collections methods, for instance interviews followed by diary writing or in some cases diary writing followed by interview helped data triangulation and thus enhanced the credibility of the study. In fact irrespective of the data collection method applied, the researcher felt that keeping a diary during the study, with reflections on the process (e.g. regarding method and participant selection) and the role and influence of the researcher added 'reflexivity' to the entire process and increased the credibility of the research.

In qualitative research design the data collection actually starts at the stage of identifying the field and selection of the participants. For me this started in October, 2015 and while the documentation of data, analysis and interpretation gets completed with the research report writing, my engagement with the field and with teachers still continues. This I see as the attribute of qualitative research design that whole heartedly engages the researcher with the field.

The data collection was done personally by the investigator in phases.

**Phase I :** The phase one included identifying the field for study, developing rapport with the participants, understanding their perception of self-efficacy and spirituality and orienting them on the program, its scope and worth in their roles as teachers.

**Phase II:** In the phase two a program was constructed to enhance the spiritual intelligence of the sample group. This program was validated by the experts in the area of Education and revised based on the required changes.

**Phase III:** In the phase three the program was implemented for a period of six months (detail of which will be shared in chapter 3 on findings). Every session was followed by a discussion and a feedback on the activity as also a weekly record of the gradual changes that happened throughout the week and a reflective dialogue on it before proceeding.

**Phase IV:** In phase four the effect of the program was studied in terms of the participant feedback, their diaries, reflection, and its effect on self-efficacy. While qualitative research provides us scope to learn about what you cannot see and explore alternative explanations for what you see. The two constructs ‘spirituality and self- efficacy’ that the researcher was exploring through the research cannot be seen. However this study offered an opportunity to define, describe its characteristic and explain what was seen in terms of the behavioural changes observed in the participants as articulated by them.

### **3.11 Tools and techniques of Data Collection**

#### **Interviews**

Interviews were a major research method for data collection, both before, during and after the program. In fact before the program it was a FGI (Focus Group Interview) to understand the perception of the teachers on spirituality and self-efficacy. Due to the abstractness of the topic, relatively homogenous character of the group and this being the first session it was felt that a more natural environment -just as in real life (Casey & Krueger, 2000) would be required so as to open a ground for learning and interaction. While the focus of the research was to study the existing status of spirituality, it also dealt with improving the spiritual intelligence and study its effect on self-efficacy. Thus in the first case it required the researcher to be a neutral person without influencing the participants thoughts, views, feelings and beliefs while in the second case it required to influence and question their thoughts, beliefs, feelings and actions (Denscombe, 2007). This was one more reason the researcher uses FGI.

**Reflective Journals** as a researcher I made my experiences, feelings, thoughts and opinions visible and an acknowledged part of the research process through keeping reflective journals and using them in writing up research. While on one hand I took utmost care to bracket personal values and assumptions in research to make it more objective; on the other hand made an attempt through conscious acknowledgement of those values by writing self-reflective journals that facilitate ‘reflexivity’ whereby journals are used to examine “personal assumptions and goals” and clarify “individual belief systems and subjectivities” thus bringing in individual values and beliefs (Ahern as cited in Russell & Kelly, 2002, p.2).

Reflective journals emerged as important part of poststructuralist research wherein the aim of the researcher is to make the process of data analysis as visible and transparent as possible (Mac Naughton, 2001). Creating transparency in the research process was thus an important consideration, one that I engaged with by drawing on my reflective journals at key points in writing my thesis. My aim was to make my decisions, and the thinking, values and experiences behind those decisions visible, to both self and reader.

### **Field Diary**

Self-completion diaries have a number of advantages over other data collections methods. It is a systematic record with discrete entries arranged by order of date; a type of report and commentary upon events, experiences, thoughts and feelings. Diaries are utilised in qualitative social research to explore the complexities of human behaviour and practice and collect information about a particular topic (Bryman 2012). They however are used under differing methodological umbrellas, for both quantitative and qualitative research (Corti 1993; Duke 2012) and across a range of disciplines. Diaries have many different structures and formats and written reflections, technology nevertheless has created new opportunities for diary keeping (Alaszewski 2006) for example video self-report accounts, blogs and even face book and whatsapp updates on experiences and events have been considered as online versions of diaries (Hookaway 2008; Harricharan and Bhopal 2014).

Using a diary encourages a retrospective account of experience and a reconstruction of practice and provides researchers with possible insights into participants' worlds, a way to begin to understand how events are perceived and understood (Block 1996; Bruner 1993; Kenten 2010). Diaries are most effective when used in combination with other research tools (Crosbie 2006; Duke 2012; Kenten 2010) for example the diary-interview method (Zimmerman and Weider 1977) where the keeping of a participant diary is followed by a structured 'debriefing' interview with the researcher. In this case the diary is used to fill the gaps where researcher observation is not possible; indeed the participant becomes the observer, casting their mind's eye over recent experience, relating their thoughts and interpretations and recounting illustrative excerpts.

**Information Schedule** - It was developed to collect the basic information of the teachers regarding their age, gender, experience, belief in God, technological expertise, basic discipline, educational qualification etc.

**Questionnaire** – A questionnaire was developed for seeking participant feedback on the developed program and included both open and close ended questions.

**Situational Test** - Situational test was developed and given to the participants both before and after the intervention to understand through their responses their feelings, emotions, mechanisms for coping in different life situations, their belief system and their perception about their spirituality and self-efficacy.

### **3.13.0 Data Analysis**

Glaser (1998) asserts that data analysis in qualitative research is cyclical in nature. He describes the process as the five S's: subsequent, sequential, simultaneous, serendipitous, and scheduled. There is no particular or predetermined order to these. "Sequential is what must be done next. Subsequent is what is to be done later as part of current activity" (Glaser, 1998, p. 15). Simultaneous refers to the pieces of the process (collecting, constant comparative analysing, coding, sorting, and writing) that will happen at the same time because the emphasis will continue to change as progress is made toward the final framework. Serendipitous refers to the need for the researcher to be constantly open to surprising new themes and ideas emerging from the data and data analysis. Finally, the project requires an overall rough schedule that sets out periods for "collecting the data, analysing it, sorting memos and writing the product" (Glaser, 1998, p. 15). Thus in qualitative research design data collection and data analysis are concurrent and continuous activities (Johnson & Christensen, 2004) The data collected was from participant diaries, interview transcripts, and researcher's reflective journal. The cyclic process of data analysis continued until October 2018.

The researcher initiated by conducting FGI for the participants to understand their current state in terms of their perception about spirituality, their belief in God, their mechanism to answer the existential questions and also the mechanism to fight stress and sorrows. Further interviews were also conducted to understand their perceived sense of self efficacy and their relationship with their profession. This was followed by the program intervention, during which participants were continuously encouraged to write participant diary reflecting upon their daily thoughts, feelings,

and actions as also reflecting on their daily learning. The researcher also kept a reflective journal all throughout the process of research to keep a daily record and reflection of situations and events, observations and notes. This helped a lot in data triangulation, conducting follow-up interviews, confirming the responses or probing for further understanding. Thus the process of data collection and data analysis unlike quantitative research was not sequential rather happened simultaneously at some times and sequentially or subsequently at others.

### **3.13.1 Constant Comparative Method**

Data analysis in qualitative research also uses what is called the constant comparative method. It is the continual “interplay between the researcher, the data, and the developing theory” (Johnson & Christensen, 2004, p. 383). In this process the participants are listened to continually and thoughtfully, questions are constantly asked of the data, and analysis is compared to previous analysis and researchers. “Whether the material is research data, others’ ideas on it or the literature, it is to be compared to the ongoing data and memos for the purpose of generating the best fitting and working idea” (Glaser, 1978, p. 8). Through coding, sorting and writing the researcher was constantly relating data to ideas, then ideas to other ideas. Throughout the process of constant comparison, it was important to stay self-aware. The researcher had to continually maintain attention on the processes involved (selection of interview questions, reading and reflecting on the participant diaries, reconfirming responses in follow-up interviews, interpreting the reflective journal, coding and sorting), as the process was iterative and the theories were changing and developing (Miles & Huberman, 1994).

### **3.13.2 Coding:**

Coding is a process for assigning units of meaning to information compiled during a study (Johnson & Christensen, 2004). At a very basic level, coding involves taking text or other data, segmenting sentences (or paragraphs) into conceptual categories, and labelling those categories with a term (Creswell, 2003).

**Sorting:** It is about separating concepts, themes, and ideas into categories that emerge from the data obtained through different sources. This sorting would help show important relationships between two or more variables in the research. This required the researcher to move back and forth to data as also to the participants at times and reconfirm.

### **3.13.3 Trustworthiness and Credibility**

In order to maintain trustworthiness and credibility in this study, the researcher took three steps: a) the researcher guarded against researcher bias, b) triangulation was built into the data collection and analysis process, and c) the analysed data was reconfirmed with the participants through follow-up interviews.

While the researcher acknowledged her professional interests in this study earlier in this chapter, she was also careful not to be influenced by her interests. The researcher suspended all pre-knowledge of the substantive area (Glaser, 1992). The researcher determinedly adhered to the data collection process, the coding and the sorting process. When the codes seemed as if they might not produce any cohesive category, the researcher purposely kept any prior knowledge from influencing the sorting. Instead, more data was collected in the form of interviews and literature. Triangulation was built into the data collection process by the researcher “self-consciously” setting out to collect and double-check findings (Miles & Huberman, 1994, p. 267). The interviews were digitally taped wherever required so the researcher could hear the interview again as they transcribed the interview and checked the transcription against field notes. Member checking occurred, once the interviews were transcribed and synthesized. The participants were given a mini-narrative of the impressions the researcher had gathered. At that time, the participants gave clarification or confirmation to the impressions. Once the findings were written in report form, they were shared with the participants. This gave the participants an opportunity to evaluate the major findings of the study, a “venerated practice” in qualitative research (Miles & Huberman, 1994, p. 275). All the ten responded and said they agreed with the findings and provided further reflections on the subject. Not only this researcher was keen to know the effect of the intervention after six months of the program completion and therefore a google form was designed to seek a second round of feedback from the participants through online google form, for which once again all ten of the participants responded. By the use of constant comparison method, the emerging data was constantly seen in light of the existing research work and theories and thus was on auto verification mode.

### **3.14 Conclusion**

This chapter described the methodology that was used in arriving at the findings of the study. The rationale and purpose of the study was outlined, research questions were presented, and the design of the research was explained. Reasons for choosing the research methods were clearly articulated. Finally, the verification process to create trustworthiness and credibility in the study was explained.

Chapter four would now present the findings from the research process. The data collection results, which include data from participant interviews, participant diaries, program details, participant feedback, reflective journal as well as a more thorough literature and analysis.