

On Qualifying Qualitative Research: Emerging Perspectives and the “Deer” (Descriptive, Exploratory, Evolutionary, Repeat) Paradigm

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Abstract This article presents the use of the qualitative research method and the challenges that this form of research imposes along with the increasingly systematic reluctance experienced by doctoral students and their chairs. Increasingly, doctoral students are opting for the qualitative approach over that of the traditional quantitative methodology. The qualitative method is an evolutionary process that addresses the phenomenon being investigated and must show a connection to the question or questions being explored. Within this approach, data collection and analysis often lead to additional questions or findings. The article presents examples of the process for developing the evolving concepts from the interviews of the participants. Additional research is needed to transform this process. This article acknowledges the overall approach for doctoral students and other novice researchers to embrace the qualitative research method within the evolutionary structure.

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Introduction

The qualitative research method has become an increasingly popular option among doctoral students over the past decade. This is due, in part, to a greater interest in exploring a new phenomenon or further exploring one that has not been fully vetted in the intellectual community (Barbour and Barbour 2002). While the qualitative dissertation count has been on the rise, there still exists a very narrow view of this method from the perspective of the dissertation chair. A propensity exists to quantify every aspect of the qualitative inquiry from forcing the inclusion of descriptive data to establishing an appropriate number of research questions and interview questions. While the aforementioned may be appropriate, one question still remains “how far is too far”? Change is not always welcome, but knowledge is power and as researchers, it is important to establish a deeper understanding of the nature of qualitative designs so as to be effective when chairing dissertation committees, serving as methodologists, or teaching our students. This deeper understanding is relational to how the doctoral student as a researcher can develop their innovative entrepreneurial spirit while conducting their research. Establishing a problem begins with knowledge production, a concept at the basic research level for the doctoral student. Knowledge production has two phases explained by Gibbons et al. (1994) and is more intricate than describing how tacit knowledge and explicit knowledge are related. The authors stress the importance of the integration of knowledge production through the understanding of the distinction between the two modes of knowledge. Mode one presents knowledge production as a system of communication which is a traditional way of viewing scientific exploration. However, mode two knowledge production is more globally represented within a broader perspective of application. This broader perspective is viewed with more complexity and is evolutionary. Knowledge production as Gibbons et al. (1994) describes has application dissemination throughout society and is “socially distributed knowledge” (p. 4).

Using the framework of knowledge production from mode 2, the doctoral student plans research after the development of the problem statement based on the phenomenon under study and has the insight or foresight to see a wider application of his or her results. Additionally, it is helpful to establish a detailed description of what a qualitative study looks like and how it looks distinctly different from its quantitative counterpart (Roulston and Shelton 2015).

The purpose of this article is to provide a contemporary position of qualitative inquiry that is applicable to all qualitative designs. In short, it is important to understand how to inculcate research in practice, not just in the classroom. All qualitative research is evolutionary and exploratory (Putney and Green 1999). Every action taken by the researcher should be driven by an acute understanding of these characteristics. As the novice researcher prepares to conduct qualitative research a connection between the phenomenon being studied and the initial research question must be made. Detailed plans must also be provided for data collection and data

analysis. Once the above plans have been described within the context of the study being proposed, a developed understanding of how the process continues to a complete saturation of the data and evolution of the study to its findings can be made. Once those findings have been established the researcher's final objective is to address how those findings can influence social change in society. Another concern for the researcher is the conditions that provide application of their research within the field of education, and how their research is used to also change the economic terrain of the country or the world. This concept is elaborated by Carayannis and Campbell (2011) who use Gibbons et al. (1994) knowledge production Mode 1 and 2 to create mode 3 transforming mode 2 that presents a transdisciplinary linear representation, rather than what Carayannis and Campbell (2011) have identified as a nonlinear cycle of describing knowledge and the interrelationship of universities, entrepreneurial research, and innovation. Mode 3 is an intricate system of knowledge creation and diffusion using the university research and researcher as the impetus for a multidimensional level to establish a new paradigm for understanding knowledge production. Carayannis and Campbell (2011) developed and projected a new set of assumptions and beliefs to create a paradigm shift (Kuhn 1970) in understanding knowledge production and its application for the progress of societies.

Therefore, applying Carayannis and Campbell's (2011) new paradigm for knowledge production, when doctoral students designate a problem in education, business, health sciences and the like, they use tacit knowledge to verify a problem in their area and use scientific experimentation in the form of qualitative methodology to present a multidimensional innovative approach to problem solving. The student's research becomes a change agent in producing new knowledge and application in areas for society's transformation.

The qualitative research question should be written to provide for a deep exploration of the problem being studied. Open-ended and broadly poised, the qualitative research question will guide every other aspect of the study, to include the data collection and data analysis. This study will include how the initial research question relates to the phenomenon being studied which sets the background for an exploration of the phenomenon, how data may be collected and analyzed to partially (or fully) describe the phenomenon and the potential for generating additional research questions in consideration of the data collected and analyzed.

The Identification of the Phenomena and Research Questions

Qualitative inquiry according to Birchall (2014, p. 1) "quite effectively, allows the researcher to explore meaning, interpretations, and individual experiences." Within that context of inquiry in identifying a central phenomenon, qualitative research encompasses multiple analyses that contribute to the final conclusion to address the research question. Regardless of the subject matter, the identified phenomenon is presented as a problem that investigates the lived experiences of participants in the proposed study. The foundation for knowing that the research questions generated present a phenomenon originate from the philosophical underpinnings of Husserl (1982) who theorized that the essence of an individual's experience framed their perceptions and became the impetus for establishing order in their world. It is

important to note that phenomena that are chosen as problems to address in research are based on philosophical or theoretical ideas related to human knowledge (Berglund 2007). One of the goals of a doctoral students' research is to participate in the knowledge sharing and extension of the research data. Some universities require doctoral students to articulate how their data results influence social change or impact society. The impact they must discuss addresses the factors of their research and how it may alter and influence the ecosystem of their particular business, industry, or educational products, services, or paradigm.

The researcher's questions must be articulated early in the development of the research plans. While all studies begin with a research problem, a discussion of this is tangential to the purpose of this article. As the researcher considers how to best elucidate the phenomenon of the study, it should be clear that a well-thought out phenomenon leads to an exploratory research question. Thus, one key consideration would be how to best wordsmith the phenomenon so that it is appropriately broad but equally clear to the reader regarding subject matter material. While the phenomenon should be a concept in broad terms, it should be descriptively defined so that the reader has a clear picture as to what the phenomenon looks like. Simply put, the phenomenon must be operationalized within the context of the proposed qualitative study. In order to fulfill the task of identifying the phenomenon, the researchers must look at the current knowledge base they have and reflect new knowledge regarding the exploration of the phenomenon in consideration. The process of exploring phenomena is what Drucker (1985, p. 107) refers to as "knowledge-based innovation which is the 'super-star' of entrepreneurship." The course of the researcher's task in operationalizing the phenomenon is based on tacit knowledge which is the impetus for innovation. Drucker (1985) explained that the researcher's innovation is a combination of knowledge, lived experiences, and a creative curiosity of what is missing in the society, the economy, government, industry, business, and education. Those factors are catalysts to deciding on not only what needs to be investigated, but how the researcher's investigation can be entrepreneurial and contribute to change (Carayannis and Campbell 2011). Drucker (1985) noted that historically the concept of innovation resulting in entrepreneurship began by individuals reflecting on current situations with his example of Comte de Saint-Simon developing "the theory of entrepreneurial bank, the purposeful use of capital to generate economic development" (p. 109) the precursor to financial capitalism.

A move toward an exploratory (and evolutionary) research question cannot be made until a full understanding of the phenomenon has been achieved. It can be said that the phenomenon is the point of departure for qualitative inquiry. While quantitative studies are supported by numerical data, statistical formulas, and the generation of and testing of hypotheses, these strategies do little to assist the qualitative researcher in interpreting observable data that have been collected. The qualitative phenomenon is supported and documented by experiential perspectives that cannot be quantified. However, a parallel to quantifying data within the qualitative research design includes a process of using different data sources and collecting multiple pieces of information. After the choice of purposefully sampling participants who have knowledge regarding the phenomenon, the researcher will study interviewing these participants for their lived experiences in the field are the

first piece. Another source of data collection the researcher uses is field notes as verification for information. These notes are personal accounting of the researcher's detailed reflection of each interview. Another piece that is described in the literature (Bogdan and Biklen 2007; Hesse-Biber and Leavy 2011; King and Horrocks 2010) is the participants' contribution of artifacts. If participants choose to show the researcher information to clarify their interview conversation, the material is referred to as an artifact. Some researchers use the term triangulation however, Bogdan and Biklen (2007) do not advocate using the term triangulation, and rather the researcher should specify the particular type of multiple sources. Yeo (2007, p. 230) conducted a qualitative study specifically in the area of knowledge economy among a cross section of businesses throughout the world. His study generated information through multiple sources that included "interviews, document review, and participant observation" and reinforced the use of the term triangulation.

The problem statement is a key element of any research study. Without a problem, as established through a thorough review of the literature, there is no potential for a study to become realized. Once the problem has been identified with documentation, the researcher develops research questions which are usually written to globally address the problem. The researcher must consider the best avenue by which to conduct the study based on the development of the research questions. That is, the method and design must be determined with case study, life histories, phenomenology, ethnography, grounded theory, and narrative. These qualitative designs all use an interview approach, either one to one or collectively known as focus groups.

The most important reason for using a qualitative design is to delve deep into the problem with a rich thick description of addressing the problem that isn't answered using a survey or questionnaire. Also noted is the research question that usually is phrased with a why something is questioned or how the topic area is questioned. It is important that the research question and the qualitative design approach are perfectly aligned. Once the qualitative method has been selected the researcher will need to determine exactly what phenomenon is being studied. As the individual researches the topic there is a chance that there is little to no research conducted.

Consider Comer's (2009) dissertation entitled *Puppetry as an Instructional Practice for Children with Learning Disabilities: A Case Study*. The phenomenon in her study was the use of puppetry as an instructional tool when working with children with learning disabilities. At the onset of this study, Comer conducted an exhaustive literature search to identify what research has been conducted in the area of puppetry as an instructional tool. There was no prior research in this area where the use of puppetry was offered as a curriculum approach to helping children understand their socialization in the classroom or their engagement in their relationships among their peers upon which Comer could further build. She quickly determined that her study would be entirely exploratory as original research. This is an important determination as many decisions are now out of reach of the researcher. At this point, one decision is clear. Comer knew that she would need to employ the qualitative method. Comer learned one lesson early in her doctoral program. That is, the wand chooses the wizard. Simply, the study's method is based on two important items. First, the researcher needs to ensure that access to certain

data can be made available for use in the study. Second, the existing literature should direct the researcher to data that already exist or identifies prior studies to support further research. As part of the research process students need to look for patterns of evidence in the literature. These two key elements will effectively guide the researcher to selecting the best research method to drive the study.

Comer's decision to use qualitative research methods definitely led to innovative results. The advantage Comer had was there was little to no research in the literature that addressed her problem. Consequently, Comer was adding to the body of knowledge and filling a gap in the literature. She could then take her innovative research and extend the concepts she learned to a wider audience of society. With the increase of children with learning disabilities needing to be accepted in society, Comer would bring her data, on interactive responses, innovation, and entrepreneurial skill to a broader audience that would help society see the benefits of employing children with learning disabilities. Teachers were not her only audience, but business employers could now hire children with handicapping conditions because these children using puppets as a means of communicating, now had better communication skills, and understood their disabilities so they knew what they could and couldn't accomplish in a work-related setting. Her data also discussed the children's sense of freedom to realize their ability to be successful and strive to have knowledge they could contribute to the workforce. These results definitely impact the economy and support business productivity.

Another example of directing the research is Murray's (2008) dissertation question on how being a servant leader contributes to world peace. Her purpose was to examine servant-leadership as a new approach to understanding human relationships as they apply to the productivity of self-improvement for performance in the competitive 21st century. This concept of world peace was not addressed in the formulation of her original research questions, but the data presented by the participants acknowledged the strength of servant leadership resulting in a movement toward world peace. Her innovative data results included factors of interdependency of people, businesses, and community, the impact of volunteerism, and the interconnectedness of power in viewing the world as a servant leader. Her study filled a gap in the literature and added to the body of knowledge because the literature did not present the specific factors especially addressing the advantage of viewing the people of the world as servant leaders.

Murray's research can be operationalized by teaching managers the essence of servant leadership as a practice in society in business, industry, government, and education contributing to world peace. Servant leaders can change relationships in organizations striving for world peace while sharing their power and influence. There is a great advantage in the long term effects of modeling servant leadership principles. Her research can be the impetus of how the roles of servant leaders affect global decisions around the world.

It is critical to underscore the importance and value of exhaustively searching the literature for current and scholarly articles relevant to the study being proposed. The objective of searching the literature is twofold. First, Comer needed to know if there were studies that related to her research question, and second, how those studies were incomplete regarding the question she posed. The purpose of conducting

research is to add the study data to the body of knowledge and to fill a gap in the literature. That is the purpose of all studies, so that new information and knowledge can be brought forth in any discipline. Otherwise, studies would just repeat and duplicate previous research which will not present any new knowledge on the subject.

All research studies must lean on moral and academic probity. While academic fraud is generally limited to plagiarism issues, it is also important to avoid using one's standing as a doctoral student or active researcher to imply that a study is research worthy when current and scholarly research has exhausted the proposed problem. This digression is not without purpose. As the novice researcher begins to connect the dots in putting a quality research study together, emphasis should be placed upon how all elements come together to form the proposal and, ultimately, the dissertation. While the focus here is the phenomenon, this could not cogently exist without an understanding of the connection between the research question, phenomenon, the research problem, and the research method. Additionally, these components should all flow from a deep and judicious review of the relevant literature. As the novice researcher acquires skills in research methods, library research, and synthesizing the literature, these important abilities will increase the researcher's proficiency as a competent investigator. The research process is an important one, as such, it is critical to emphasize the value of understanding the research process so that the novice researcher is able to replicate any study as needed. The purpose of dissertation research is to give doctoral learners an opportunity to develop the skills necessary to become an independent researcher and possibly teach research, not merely for the purpose of achieving a PhD.

Becoming a researcher implies that the doctoral student is aware of how the results of their data can extend the phenomenological study by examining additional perspectives that could lead to new outcomes. Once the phenomenon has been addressed and the research questions have been answered, it is the responsibility of the doctoral student to include limitations of the study that resulted from the data analysis. These limitations may be in the form of additional research questions for further study for other students to examine or conclusions of the current study that further evaluate and investigate the phenomenon. For example, in Yeo's (2007) study of knowledge economy across three regions, the twelve themes were categorized as global concepts. "Water shortage, in San Joaquin, California, lack of safe water in Ennis, Ireland, and water treaty in Singapore, resulted in the theme of Industrial Infrastructure" in the study (Yeo 2007, p. 230). He related his results to the problems and uncertainties of each area and the need to be cognizant of technology changes within each region. A suggestion for further research was to delve into policy changes related to the need of each region, but examine how the administration in each area would approach the problem. Another doctoral student could then develop new research questions separately, to address the economy and technology for each region related to their infrastructure. Also, Yeo (2007) discussed an extension of his study based on the Influence Impact Model, he used, which could generate new themes.

At the onset of qualitative research, there may be only one phenomenon being proposed; however, as the study advances and data are collected other phenomena

may surface and be considered too valuable to overlook. When the researcher is confronted with this gift, two possibilities exist. The researcher may either consider the emerged phenomena too tangential to be included in the current study or the researcher may decide that it would be careless to not include the additional phenomena as he or she assist in further framing the direction of the study. Since it is clear and well documented (Hesse-Biber and Leavy 2011; Maxwell 1996; Merriam 2009; Simons 2009) that the qualitative researcher is the instrument in qualitative research (even in doctoral research), only the researcher can determine the added value of additional phenomena (Cruz 2015). While this may be a controversial notion, such decisions must remain in the hands of those that have become most intimate with the data collected and analyzed, the principal investigator (Cruz 2015). Again, the evolutionary status of qualitative research is the basis of the research method regardless of the design. This is why research plans are developed and presented so broadly, to allow for freedom to adjust and edit throughout the data collection and analysis processes. As the initial phenomenon is fully developed the focus can then be placed upon research question development, fully aligned with the previously developed research elements.

Development of the Initial Research Question

Just as the research problem establishes the need for a study and the phenomenon clarifies that which is being studied, the research question guides the way. Without a well-stated research question, a study will lack structure and organization. It is important to point out that a quantitative study begins with a very narrow focus as there are specific and detailed key concepts that are being studied. A quantitative study is possible in these cases as there has already been plenty of exploration leading up to the study. That is, qualitative inquiry has paved the way toward quantitative research. In consideration of this understanding, a quantitative study will begin with a set of questions and that will generate answers and add to the theoretical knowledge base.

Qualitative inquiry should be treated considerably differently than the quantitative method. In qualitative research, the question for study is phrased with and investigation of why the phenomenon occurred or how the phenomenon is perceived by the participants that have specific lived experiences in the subject area of the research. They are interviewed with open-ended questions unlike conducting quantitative research studies that focus on answering Likert Scale questions. In both quantitative and qualitative research studies the researcher locates a gap in the literature where there is a subject matter problem. Likely, the research problem cannot be addressed with assessment data or standardized instruments that will assist in addressing a research problem. The research is truly and purely exploratory.

As was mentioned previously, the very nature of qualitative inquiry is evolutionary. Concepts are addressed as the data evolves. A well-developed qualitative study should begin with a clear concept of the problem to be addressed only through in-depth interviews with participants who understand the problem. Creating more than one research question can focus on extending the evolutionary status, but the rationale for limiting the number of research questions provides the

basics for evolving data. Only at this point can the researcher determine if additional questions need to be written for a deeper understanding of the concepts. Regardless of the decision, it lies with the researcher or team of researchers to decide.

Since the qualitative research question is exploratory and evolutionary, it should be written as such. So as to maintain an exploratory and evolutionary nature, the research question should be written as “how” or “why”. Applying this precedent will ensure the qualitative nature of the research study be maintained. The research question that begins with How and Why is also focused on an interview approach with the research participants who will share their lived experiences regarding the problem addressed. Additionally, the study will be better equipped to generate additional research questions as new data are collected and analyzed; however, there is another important reason to develop quality qualitative research questions. That is, the research question provides direction for the research as data are collected.

Let's return to Comer's (2009) dissertation. The phenomenon in her study, as previously stated, was the use of puppetry as an instructional tool when working with children with learning disabilities. Her initial research question was, *How does the use of puppetry as a holistic constructivist pedagogy for instructional practice promote engagement and participation in children labeled as learning disabled?* The way in which this question was initially phrased allowed the researcher to explore the phenomenon without preconceived notions or rely on any assumptions that the researcher may have had. Moustakas (1994) explained that the procedure of researchers bracketing their bias about the problem or subject area is a self-reflection to address the issue of preconceived notions which is usually done prior to data collection. Simply, this single research question enabled Comer to fully explore her research topic and simultaneously allow it to fully evolve. The self-reflective process is also explained by Cruz (2015) who used herself as the instrument for elaborating on the evolution of her data.

Data Collection and Analysis

Data collection and analysis occur concurrently in qualitative research. There is no end to the amount of data that one may collect and analyze until saturation of the data occurs. However, the probing aspect of the questions contributes to how the data evolves. The characteristic of being evolutionary is the inherent nature of this method. There are varied methods by which one may collect qualitative data to include individual interviews, focus group interviews, field notes, and artifacts provided by the participants. The selection of appropriate data collection strategies and procedures is much more dependent on the selected qualitative research design. For example, in phenomenological studies, the use of focus group interviews is much less common. In fact, phenomenological studies are much more dependent on individual interviews and less dependent on other forms of data collection.

The data collection and analysis processes should occur concurrently. That is, as data are collected, they are analyzed and themes will emerge that may determine the direction of next steps. Not uncommon, themes may begin as properties and then move to categories or vice versa as appropriate during the data collection, analysis, and organizational processes. The researcher must remain patient as the data

appropriately situate and become grounded as a primary theme (category) or sub-theme (property). Prior to beginning the collection and analysis of qualitative data, it is prudent that the researcher has clearly determined how data are to be analyzed (Koch et al. 2014). While thematic analysis is the most commonly used form of qualitative analysis, eidetic analysis is also gaining a foothold in the qualitative research community. Thematic analysis seems to be more prevalent in case study or basic qualitative designs while eidetic reduction (or analysis) is developing acceptance in phenomenology (Wertz 2010).

Thematic analysis allows the researcher to search for and identify themes that emerge from existing transcript data. Themes are not created with literal interpretation, but are generated conceptually. So when Comer (2009) developed her themes from teachers and puppeteers interviews, the category of Essence of Character and property of Understand and Relate to a Variety of Personalities were acquired from several transcriptions. One from Dolly that read, "I gave her a voice, personality, and it was very interesting. I made her have a personality so it became a personification" Dolly was speaking specifically about the essence of the puppet's character representing a person with a handicapping condition. Instead of using only the words from her transcription, it is important as a researcher to analyze the transcriptions creating an in-depth look at the meaning of her interview. Qualitative data is interpretive and aspects of content analysis refer to the depth of meaning in the context of the interviews and not the number of times a word or phrase has been identified.

Themes are not taken at face value and deductions enter into the analysis process; however, some assumptions are made while coding occurs. That is, some interpretations are needed to ensure that themes appropriately match. For example, one participant may refer to (or allude to) clarity while another may reference transparency. In this case, both clarity and transparency can be categorized as the same theme. Eidetic reduction is not limited by linguistic meaning rather it involves expanding the essences of objects and/or acts of consciousness (Husserl 1982). While reviewing, organizing, and categorizing the transcript data, the researcher does not only consider the obvious themes that may emerge but also searches for that which is not explicitly stated though implied. Eidetic analysis is the process of the researcher's engagement with the data from the participants while considering the participant's intuitive sense of knowledge to share and have the researcher's clear understanding of meaning (Hennings et al. 2010). This is particularly useful in phenomenological or ethnographic studies where culture affects the intent of language. As such, in certain situations, eidetic analysis provides yet another tool by which to make sense analyzing transcript data for a deeper understanding of the data. For example: in Kwateng's (2008) dissertation of the inclusion and practice of co-teaching in a special education and general education secondary environment, Kwateng (2008) found that there were two additional categories that did not address the research questions. These categories were derived from the teachers' perspective which related to the process of eidetic analysis. Teacher's expressed student's indecisiveness in their inability to make decisions resulting from student's anxiety and frustration in the classroom. The second category resulted in the realization of the teacher's acknowledgment of student failure due to lack of confidence and

apathy towards doing any classroom assignments. The teacher's knowledge of the student's indecisiveness as well as the teacher's recognition of student failure due to lack of student confidence and apathy were intuitive perceptions based on the teachers lived experiences. The innovated and entrepreneurial approaches to solving these problems could involve collaborating with the students beyond the domains of education to identify confidence and lack of confidence and apathy levels in a non-educational setting. How the students labeled special education navigate in their everyday world and where they may lack confidence or have apathy might assist in their behavior changes inside the educational domain. Students are also members of society and need to know how their academic and personal knowledge may help them contribute to changing how they believe in themselves and changing their behaviors to be more productive and less apathetic. Kwateng (2008) could then expand on his results by identifying future research questions that involve reframing the new data on student's lack of self-confidence and apathy levels in a non-academic setting providing students with innovate ways to change embracing student's new knowledge.

The existence of eidetic reduction (or analysis) as a viable alternative to thematic analysis is prevalent throughout the literature from varying time periods. For instance, Toombs (1987) presented her phenomenological findings on the patient-physician relationship. Even earlier, Haber (1979) discussed how he had used this analytical philosophy 20 years previously working with elementary students in the behavioral setting. In the world of dissertations, Dickens (2000) specifically connected the value of eidetic analyses to Heidegger's conditions of phenomenology and Yorks (1995) defended his dissertation supporting the use of eidetic analysis in his phenomenological study on collaborative inquiry. Sakai (1997), Tober (1982), Cavazos (2016), and Pankow (2014) similarly applied eidetic reduction (or analyses) to their respective dissertation research that spanned across research universities and schools. It is now clear that eidetic analysis has gained an irrefutable foothold in phenomenology.

The Evolution of Additional Research Questions

As previously described, qualitative data collection and analysis occur concurrently. That is, it would be challenging to completely collect all data and then attempt to make sense out of everything. The key premise here is that the researcher is the instrument and can be considered a connection to the participant and the data that is analyzed. For this reason, it is important to minimize any negative influences that may deter the quality of the final results of one's study. One such strategy is to analyze while data are being collected. This allows for the researcher to collect, reflect, analyze, and expand as appropriate. This expansion period is the prime opportunity for the qualitative researcher to make adjustments to the study being conducted, to include developing additional research questions. This process may enter multiple cycles and it is only the researcher that can determine when the study has reached full capacity. While the qualitative study begins with one or two research questions it is quite possible, and in many cases probable, that the study will be complete with four or five research questions.

Some argue that all studies, quantitative and qualitative alike, should begin with all research questions that the study will aim to answer even prior to the data collection beginning and this notion certainly has merit; however, in a qualitative study if one begins with more than one or two questions there are two conceivable issues that could influence the direction of the study. First, it is likely that the researcher anticipates the findings that should not be discovered until the data collection and analysis process has begun. In short, beginning with multiple research questions in a qualitative study could direct the answers and could imply researcher bias. Second, the inclusion of multiple research questions at the onset of the study produces a more controlled environment that inhibits the evolution of data, naturally. That is, the study's findings may very well become contrived. These two concerns certainly co-relate. To avoid these negative consequences it is best to allow the qualitative data to be collected and analyzed without human interference or manipulation. This philosophy is an extension of what is already understood among qualitative researchers. Qualitative researchers serve as the instrument in the study (Peredaryenko and Krauss 2013; Xu and Storr 2012), qualitative research is exploratory (Mansourian 2008), saturation is an important component of qualitative data collection (Fusch and Ness 2015; Guest et al. 2006; Morse 2015; Walker 2012), and member checking is a technique that can assist the researcher in modifying and/or validating the interview data collected (Carlson 2010). These characteristics amalgamate to establish the rich personality of the qualitative method, regardless of the design. In the spirit of what is known about the nature of the qualitative method, proposing research with only one or two exploratory research questions will allow the study to take shape naturally rather than becoming manufactured. This procedure will also provide the researcher with new knowledge production that can influence the circumstances for a deeper meaning in which the data can be used for the greater good of society, the economy, and education.

Conclusion

As one delves into any form of research, whether it is quantitative or qualitative, it is important that a connection is made to the characteristics that represent the type of research being proposed. The nature of the research design and the selected method tell the reader exactly what the intention of the study is and what procedures will be followed during the data collection and analysis processes. Qualitative research, while still broadly defined, should carry with it a certain understanding of specific traits that are indicative of the method by which to create a unique research experience that allows for an exploratory journey to evolve throughout the duration of the study. While quantitative research is concrete, precise, and numerically valued, in the qualitative realm there is a need to become likewise respected through a deeper exploration of the studied phenomena that can only occur with a detailed description of the data collection and analysis process from the participants lived experiences. This understanding of the core components of the method and design being used is the impetus of the phenomenon that is being explored.

The process of developing new research questions for future study expounding on the research phenomenon is a part of the doctoral student's analysis. Student's elaborate on findings within limitations of their study and suggest how additional research on their subject can be addressed. By proposing new research questions after the study is completed, the doctoral student's research can be expanded or even redirected presenting new phenomenon. For example, Lindsey (2003) studied the barriers of knowledge sharing related to aspects of knowledge management which included personal, organizational, and technological barriers. After the data was analyzed, the most prevalent barrier was personal knowledge. Lindsey (2003) believed that future research in relation to the personal reasons that knowledge isn't shared may help understand that there is not one-way knowledge is shared between individuals. The relationship in knowledge sharing based on specific tasks and the hesitation to share based on those tasks needed further study. Lindsey also wanted future research to be directed to different industry specific information.

We owe the research public nothing less than to provide exhaustive results and recommendations that have emerged from our study's findings, which influence society, business, economy, universities, and education. The importance of continuing to conduct qualitative research is to reinforce the value of process through the participants sharing their in-depth experiences.

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