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Qualitative Research and the Generalizability Question: Standing Firm with Proteus

Abstract
Qualitative studies are tools used in understanding and describing the world of human experience. Since we maintain our humanity throughout the research process, it is largely impossible to escape the subjective experience, even for the most seasoned of researchers. As we proceed through the research process, our humanness informs us and often directs us through such subtleties as intuition or 'aha' moments. Speaking about the world of human experience requires an extensive commitment in terms of time and dedication to process; however, this world is often dismissed as 'subjective' and regarded with suspicion. This paper acknowledges that small qualitative studies are not generalizable in the traditional sense, yet have redeeming qualities that set them above that requirement.

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Abstract

Qualitative studies are tools used in understanding and describing the world of human experience. Since we maintain our humanity throughout the research process, it is largely impossible to escape the subjective experience, even for the most seasoned of researchers. As we proceed through the research process, our humanness informs us and often directs us through such subtleties as intuition or 'aha' moments. Speaking about the world of human experience requires an extensive commitment in terms of time and dedication to process; however, this world is often dismissed as 'subjective' and regarded with suspicion. This paper acknowledges that small qualitative studies are not generalizable in the traditional sense, yet have redeeming qualities that set them above that requirement.

Introduction

Changes do not transpire recklessly within the scientific research world. The roots of traditional research, which has become known as empiricism and positivism, dates back to the sixteenth century (Gale, 1979) and continues to direct traditional scientific inquiry. In 1970, Kuhn proposed the concept of specific paradigms, suggesting that there can be more than one set of basic beliefs, or 'paradigms' about what constitutes reality and counts as knowledge (Kuhn, 1970).

Paradigms provide philosophical, theoretical, instrumental, and methodological foundations for conducting research and, in addition, provide researchers with a platform from which to interpret the world (Morgan, 1983). The empirical paradigm holds assumptions based on the supposition that an external world of objects exist, that the assumptions "can be measured independently of one another, that these objects are lawfully interrelated, and that the relationships are mediated by a real force in objects that is called causation" (Cook, 1983, p. 78). Using scientific objectivity allows researchers to stand at a distance and derive knowledge through empirical
study. In this way, "the knower can be completely differentiated from the known" (Allen, Benner, & Diekelmann, 1986, p. 25).

The approach of measuring and quantifying phenomena as distinct and analytically separate is at the heart of quantitative inquiry and allows inferences to be drawn about the whole from the analysis of its parts. Reality is conceptualized as two-dimensional and explained by cause-and-effect relationships. This "way of knowing" is deductive and emphasizes observing truth as a singular objective reality.

The qualitative paradigm aims to understand the social world from the viewpoint of respondents, through detailed descriptions of their cognitive and symbolic actions, and through the richness of meaning associated with observable behavior (Wildemuth, 1993). In this paradigm, which rejects both a cause-and-effect construct and universal laws devoid of any sociohistorical context, the separation between researcher and respondent is diminished (Munhall, 1989).

Kemmis (1980) asserts that the true value of non-experimental research lies in its connection to the real world, its ability to describe actions in their social and historical contexts, and its ability to rationally critique these descriptions.

Central to the qualitative paradigm is the belief that people assign meaning to the objective world, that their valued experiences are situated within a historical and social context, and that there can be multiple realities (Benoliel, 1984; Tesch, 1990). I embrace the conviction that realities cannot be studied independently from their contexts, and I affirm the position that qualitative methodology is legitimate and valuable, possessing distinctive characteristics that make it ideal for many types of investigations, including nursing education and practice.

Stake (1974) discusses a form of knowledge delineated by Polyani (1958), termed 'tacit' knowledge, and which is contrasted to propositional knowledge. I believe the understanding of these two types of knowledge prepares the stage for understanding the 'generalizability' of qualitative studies. Propositional knowledge constitutes all interpersonal shared statements and differs from tacit knowledge which may also dwell on shared statements and events, but it is more importantly the knowledge gained from experience with interactions as well as experience from propositions and ruminations about them.

**Criticisms of qualitative research**

Qualitative research has been criticized and regarded with suspicion and hostility, within the nursing profession and elsewhere, because its general characteristics remain poorly understood and consequently its potential remains underdeveloped.
(Adelman, Kemmis, & Jenkins, 1980; Sandelowski, 1986). A familiar criticism of qualitative methodology questions the value of its dependence on small samples which is believed to render it incapable of generalizing conclusions (Hamel, Dufour, & Fortin, 1993; Yin, 1984, 1993, 1994). Those researchers forcefully argue for the value of every single study providing that parameters are guided by the goals of the study, and have met the established objectives. Yin (1989) asserts that general applicability will result from the set of methodological qualities of the study, and the rigor with which the study is constructed. Attention to such rigor may serve to offset some of the criticisms of qualitative research as a 'soft approach' utilizing subjective procedures that provides corresponding weak explanations (Morse, 1989).

Qualitative studies and generalizations

Despite the many positive aspects of qualitative research, studies continue to be criticized for their lack of objectivity and generalizability. The word 'generalizability' is defined as the degree to which the findings can be generalized from the study sample to the entire population (Polit & Hungler, 1991, p. 645). I suggest that while qualitative studies are not generalizable in the traditional sense of the word, nor do they claim to be, that they have other redeeming features which makes them highly valuable in the education community. Partial generalizations may be possible to similar populations, but I feel that even this should not be a primary concern of qualitative research. According to Adelman, Jenkins, and Kemmis (1980), the knowledge generated by qualitative research is significant in its own right. The authors argue that, while the aggregation of single studies allows theory building through tentative hypotheses culled from single findings, the generalizations produced are no less legitimate when about a single finding. I caution researchers to bear in mind the goals of the study when evaluating the quality of research reports. Problems related to sampling and generalizations may have little relevance to the goals of the study and the reality of the situation. In many situations, a small sample size may be more useful in examining a situation in dept from various perspectives, whereas a large sample would be inconsequential. The goal of a study may be to focuses on a selected contemporary phenomenon such as child abuse or addiction where in-depth descriptions would be an essential component of the process. In such situations, small qualitative studies can gain a more personal understanding of the phenomenon and the results can potentially contribute valuable knowledge to the community.

Stake (1980) counters the claim that single qualitative studies are not an adequate basis for generalizations. He is speaking specifically about case studies and makes the claim that they can be a preferred research method, especially in fields such as education and social work. Few laws have been validated in those fields, and Stake recommends that inquiry be directed toward gathering information that has practical and functional uses rather than the cultivation of persistent pedantic laws (Stake, 1980, p. 70). He
further suggests that such methods may be in conceptual harmony with the professional reader's experience and thus be a natural basis for generalization (p. 64).

In addition to concerns about generalizability, qualitative methodology is rebuked because studies are often difficult to replicate. Future researchers may not have access to the same subjects, and if other subjects are used, results may differ. Subjects (respondents) may openly communicate with one researcher and remain distant with others. The aim, then, is on producing research that can inform and enhance reader's understandings.

Stake (1980) believes the most effective means of adding to understanding is by preparing research reports that speak to the reader through words and illustrations. Reports should be prepared in such a way as to resemble natural experiences attained in ordinary personal involvement. He further claims that objective and scientific studies do an inadequate job of acquainting man (he is speaking of humankind) with himself and argues that research methods needs to capitalize upon the natural abilities of people powers to experience and understand.

Yin (1994) is concerned with rigor in non-experimental research, and while he concludes that studies do not require a minimum number of cases, or randomly select cases, he cautions researchers to work with the situation that presents itself in each case in structuring the best possible study that can be adequately described in the research report. Qualitative study lends itself well to this task.

A major strength of the qualitative approach is the depth to which explorations are conducted and descriptions are written, usually resulting in sufficient details for the reader to grasp the idiosyncracies of the situation.

**Demands for justification**

The ultimate aim of qualitative research is to offer a perspective of a situation and provide well-written research reports that reflect the researcher's ability to illustrate or describe the corresponding phenomenon. One of the greatest strengths of the qualitative approach is the richness and depth of explorations and descriptions. Kemmis (1980) contends that non-experimental research must be prepared to meet two types of demands of justification: those concerned with the truth of findings, and those concerned with researcher accountability. In addition, he cautions researchers to beware of the 'attitudes' they will encounter from the empirical community. The first part of the attitude is scientism, which is described as the belief that one school of scientists claim to hold the keys to truth. Problems arise when such a group demands justification from other groups in forms that cannot be satisfied, such as asking the research group to provide guarantees which will reassure everyone that the
conclusions reached in a study are not merely sound but certain. Another aspect of the 'attitude' is the appeal (from the group that holds the truth-keys) that their authority is logical and is also a form of a priori truth. They demand that justifications be framed in their own approved forms. Such attitudes can do much to undermine the self-confidence of novice researchers.

The mission of qualitative research, as I understand it, is to discover meaning and understanding, rather than to verify truth or predict outcomes. This is a puzzlement to many who are wedded to the quantitative research approach, and I often find myself feeling like a mythical Proteus, determined to 'resume my usual form and tell my truth'. Quite recently, a seasoned nurse researcher, hearing my research proposal, told me that it wouldn't be difficult to turn it into a quantitative study 'with some clout'. I managed to hold a strong picture of Proteus in my mind.

As qualitative research is based on its own specific epistemological foundations, it has its own perspective on ways to contribute knowledge to the community and to society. If a measure of 'respectability' can only be acquired by conceeding to the positivist criteria of generalization, then the mythical Proteus will have lost his authentic form.

Naturalistic Generalization

Stake (1980) proposed the concept of naturalistic generalization which is described as a partially intuitive process arrived at by recognizing the similarities of objects and issues in and out of context (p. 69). Kemmis (1974) points out that naturalistic generalizations develop within a person as a result of experience, may become verbalized, and may pass from tacit to propositional knowledge. Naturalistic generalizations have not yet, though, passed the empirical and logical tests that characterize formal scientific generalizations.

According to Stake, naturalistic generalization ensues more commonly from a single study to one that is similar than from a single study to a population. Consequently, it is essential that the research report is properly descriptive because as readers recognize essential similarities to cases of interest to them, they establish the basis for naturalistic generalization.

If not generalization, then what?

Researchers may embark upon qualitative research with different goals in mind. In addition to collecting descriptive information, researchers may choose to use the data collected to support or to attempt to invalidate theories. In nursing research, thick, descriptive qualitative reports are practical ways to communicate the effectiveness of specific therapeutic techniques. Effectively communicated studies involve in-depth
analysis and systematic descriptions of small groups or situations (Becker, 1970), and are holistic, contextual, inductive, and relative (Bradley, 1993). It was through such reporting that the nursing researcher Delores Krieger (1975) introduced the well known technique of "Therapeutic Touch" to the world. Qualitative research has been described by Benoliel (1984) as "modes of systematic inquiry concerned with understanding human beings and the nature of their transactions with themselves and with their surroundings" (p.3).

Holistic by nature, qualitative research is concerned with humans beings in all of their complexities. The design of the study is dependent on the aims of the study, but it always includes an element of time. Contact is personal, lengthy, and there may be multiple meetings with respondents. From my experience, there have been 'aha' moments when I became aware of important components that needed to be examined, but had not been built into the study.

Those who are not familiar with qualitative methodology may be surprised by the sheer volume of data and the detailed level of analysis that results even when research is confined to a small number of subjects. Furthermore, a complete analysis can provide evidence for the relationship among variables and may stimulate additional research questions in the particular area of study.

According to Stake (1980) theory building is the search for pervasive and determining ingredients as well as the makings of laws. The descriptive qualitative study, however, proliferates rather than narrows. One is left with more to pay attention to rather than less. While Stake sees qualitative research as having some utility in theory building, he doesn't see theory building as its best use (p.72). Its ideal use, he contends, is for adding to the body of existing knowledge. Because of the universality of experiential understanding and the compatibility of qualitative research with that understanding, the ideal is to add to the existing experience and humanistic understanding of the reader.

**Contributions to nursing education and practice**

The debate has emerged in recent years over whether qualitative or quantitative studies are better suited to advancing nursing practice (Munhall, 1982; Webster, Jacox, & Baldwin, 1981), and there is growing recognition that the qualitative approach is becoming increasingly valuable to both nursing education and practice (Bargagliotti, 1983; Downs, 1983; Goodwin & Goodwin, 1984; Gorenberg, 1983). There is agreement that the most rewarding results do not come from the ability to do extensive generalizations, but rather from the ability to seek answers to how persons or groups make sense of their experiences. Hamilton (1980) asserts that educational phenomena are different from those of the natural sciences; therefore, it is legitimate
to address them with different research procedures. He claims that the value of a study is established by reference to the phenomena it seeks to comprehend and the understandings it aspires to develop. It seems reasonable to agree with Hamilton's assumption in regards to research in the area of nursing education. Such a belief is compatible with the view that educational circumstances are more social than are those of natural science.

Conducting research with people who are dealing with such personal experiences as cancer or addictions and describing such complex, interpersonal investigations are skills that are not possible to investigate with structured instruments. If a researcher were focused on 'measuring' such phenomena, it is likely that she or he would never really come to understand the process that is the real focus of the inquiry. While there certainly is a place for measurement and generalizability in nursing practice and education, it is best reserved for areas that do not require detailed descriptions of vulnerable life experiences.

**Nursing gains from qualitative research**

Nursing and qualitative research share the mutual goals of dealing with subjectivity, describing the complexity of lived experience, and appreciating realities where holism and intuition are valued. Qualitative methodology is, therefore, conducive to research that attempts to understand such human experiences as pain, caring, powerlessness and comfort. Yin (1989), in discussing the case-study approach, stated that "the case study allows an investigator to retain the holistic and meaningful characteristics of real-life events, such as individual life cycles, organizational and managerial processes, neighborhood change, international relations, and the maturation of industries" (p. 14). This description covers the potential range of ways in which the case study approach might be used in nursing. When the aims of research are understanding, extension of experience, and increase in conviction in that which is known, the qualitative study is by far the better choice for nursing and may prove to produce the strongest data (Merriam, 1988).

Recent nursing literature has affirmed the value of small quantitative studies for numerous purposes which includes: describing the evolution of the expert nurse (Benner, Tanner, & Chesla, 1992); understanding meaningful nursing ethics (Parker, 1990); and recognizing the beginnings of political action (Sullivan, 1992). Benner (1984, Benner, Tanner, & Chesla, 1992) described the value of sharing narrative accounts that chronicle advancing understanding of the profession. Other studies report on lived experience and meaning (Leininger, 1985; Munhall, 1989; Silva & Rothbart, 1984); understanding the holistic philosophy of nursing (Baer, 1979; Leininger, 1985; Munhall & Oiler, 1986); the experience of the dynamics of truth
(Tinkle & Beaton, 1983); and the appreciation of novice nurses for continuing education (Yeun, 1991).

Conclusion

Qualitative research, often thought to be pre-experimental, and commonly criticized for its lack of generalizability, is making valuable contributions to the nursing education literature, as well as other professional education literature, despite resistance. I salute the importance of the qualitative method, and believe that, to the extent that it contributes to knowledge and promotes action in the area of the circumstance studied, it is exonerated in the broader framework of social life. As advanced by Kuhn, there is more than one way of knowing, and qualitative research is one such way.

In communicating--or generating--the data, the researcher must make the process of the study accessible and write descriptively so tacit knowledge may best be communicated through the use of rich, thick descriptions. In answering questions, what counts as a question depends to a large measure upon the assumptions made by the interrogator. I have been asked the question, and I wish, like Proteus, to maintain my form and hold my truth.

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