

# How to Critique Qualitative Research Articles

Cheryl Forchuk and Jacqueline Roberts

The critique of qualitative research requires the use of different standards and criteria than are used for quantitative research. The great diversity of available qualitative methods can make evaluation or critical appraisal difficult for consumers of research who are less familiar with these methods. The current paper suggests that the following guidelines be used when a qualitative research paper is being examined: the topic must be appropriate for qualitative enquiry; the specific qualitative research method chosen must "fit"; the literature reviewed should be consistent with the method chosen; there should be ample description of informants or participants, context, and researcher; appropriate methods for information gathering and information analysis should be employed; the conclusions should be sound; and, the research must have some importance and relevance.

Comment critiquer les articles de recherche qualitative: La critique de la recherche qualitative exige l'utilisation de normes et de critères différents de ceux utilisés pour la recherche quantitative. L'énorme diversité des méthodes qualitatives disponibles peut rendre l'évaluation ou la critique difficile pour des «consommateurs» de recherche qui n'ont pas l'habitude de ces méthodes. Le présent article propose que les lignes directrices suivantes soient respectées lorsqu'une recherche qualitative est examinée : le sujet doit être adapté à une étude qualitative; la méthode de recherche qualitative spécifique choisie doit convenir; la documentation étudiée doit être compatible avec la méthode choisie; la description des informateurs ou des participants, du contexte et du chercheur doit être abondante; on doit employer les méthodes adéquates pour la collecte d'information et pour son analyse; les conclusions doivent être sensées et la recherche doit revêtir une certaine importance et une certaine pertinence.

Research must be read with a critical eye. Guidelines for examining quantitative research methodologies have been documented (Brown, 1991; Sackett, Haynes, & Tugwell, 1985), but similar guidelines for qualitative studies are not as numerous. This led the authors to devise a set of guidelines suitable for students in an undergraduate nursing program and to clarify some of the purposes and elements of qualitative research. Health professionals who are unfamiliar with the purposes and appropriate standards of qualitative research may also be ill-equipped to critique it. It is therefore hoped that these guidelines might also introduce them to qualitative methods.

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### Literature Review

Knafl and Howard (1984) suggest that critique of a study is based on the match between its purpose and the other elements of the study. Difficulties in understanding and evaluating qualitative research stem from confusion over its underlying nature and purposes. Leininger (1985b) defined qualitative research as that which "...refers to the methods and techniques of observing, documenting, analyzing and interpreting attributes, patterns, characteristics, and meanings of specific, contextual or gestaltic features of the phenomena under study" (p. 5). Cobb and Hagemaster (1987) suggested that it includes: attention to the social context; understanding the social world from the participants' point of view, and is primarily inductive. The major data collection techniques cited include interviewing, participant observation, examination of personal documents and other printed materials (p. 138). These authors also pointed out that quantitative and qualitative analysis differ in that the former is generally presented numerically and the latter narratively.

There is some debate within nursing and other disciplines as to whether quantitative and qualitative methods should be categorized as completely distinct and incompatible (Leininger, 1985b; Moccia, 1988; Parse, Coyne & Smith 1984; Phillips, 1990), or as simply different choices or points on a continuum, and compatible for combined use (Cobb & Hagemaster, 1987; Denzin, 1970; Goodwin & Goodwin, 1984; Reichardt & Cook, 1979; Tripp-Reimer, 1985).

Qualitative research includes a vast array of methods and designs. Each method reflects a different tradition (Jacob, 1987) and is reported in a unique format. Knafl and Howard (1984) suggest that the absence of a standard format for reporting makes it difficult for even the methodologically sophisticated reader to assess the validity of a qualitative study.

According to Parse et al. (1985) qualitative research assumes that the understanding of a phenomenon is possible only through understanding the whole rather than parts of the whole. Phillips (1990) suggested that reality is viewed as dynamic, acausal, and inherently subjective. Criteria used to evaluate qualitative research must take this into account. To use qualitative research rather than quantitative research is to choose an open-system rather than a closed-system perspective; relative and contextual knowledge over absolute knowledge; and understanding and explanation of phenomena rather than prediction and control of them (Moccia, 1988 p. 8).

To critique qualitative research findings, Morse (1991) suggested that the entire article should first be read to assess it for significance. The research must contribute to the development of knowledge in that particular area. The

reviewer should evaluate how the research contributes to the quality of theory development; assess the methods used and review ethical standards.

### *Leininger's Criteria*

Leininger (1990), among others, described criteria for evaluating qualitative research. These were built on the work of Lincoln and Guba (1985) and include the following:

1. *Credibility* – the truth value or believability of the findings, particularly to the informants;
2. *Confirmability* – direct evidence from the informants, including mutual agreement;
3. *Meaning-in-context* – the the specific interpretations fit within broader understandings of the lifeways or experiences;
4. *Recurrent patterning* – the tendency for themes to recur in sequence or regular patterns. This includes the concept of consistency;
5. *Saturation* – this occurs when there is redundancy and no new themes arise as more information is collected; and
6. *Transferability* – consistency or similarity over settings.

### *Parse's Standards*

Parse and colleagues (1985) suggested standards that can be used to evaluate the conceptual, ethical, methodological, and interpretive dimensions of a qualitative study:

1. Substance or soundness of ideas supported by appropriate evidence;
2. Clarity, including logical precision and organization; and
3. Integration, which includes the unified presentation of the study as a whole.

### *Guidelines for Qualitative Research*

The authors of the current paper offer the following seven guidelines for assessing qualitative studies.

*The research domain, topic and/or question must be specified, and the appropriate research design selected*

The usefulness of any research study must be evaluated within the context of the author's purpose. A clearly stated purpose will help the reader formulate realistic expectations. Qualitative research can serve various purposes, including: generation of theory, conceptual rendering of an area of interest, empirical grounding for quantitative research, and description of a point of view. Thus, it can be used to develop instruments, illustrate meanings, sensitize readers, or conceptualize phenomena. All study procedures and interpretations must be in keeping with the stated purpose.

The research question reflects the underlying assumptions and beliefs of the researcher. For example, it is unlikely that a researcher who believes in acausality, would be interested in causal questions. It is also helpful to know what precipitated the study, and important to know what the research domain of inquiry is in order to determine if a particular qualitative method is appropriate.

Rather than numerical data, qualitative research generates narrative that reflects on the whole rather than the parts. For example, a study based on Parse's theory of human becoming, would include a belief in irreducible wholes and the client's perspective as the only meaningful point of reference. A research question evolving from this perspective might be "What is the lived experience of being away from home?" and the domain of inquiry could be the experience of hospitalization. This could be appropriately studied with a phenomenological approach or Parse's methodology based on her theory. A question inappropriate for qualitative study would be: "What is the relationship between job satisfaction, frequency of sick time used, and blood pressure?" This question leads to a focus on quantification, and particular variables.

It is commonly believed that preliminary studies on a topic must be of a qualitative nature and that quantitative studies are more appropriate once more is known. This misunderstanding does not take into account the different beliefs and assumptions of each methodology. A descriptive quantitative design can be used when little is known about a topic, and a qualitative design may be appropriate when there is a great deal of research within a domain of inquiry, but little on the subjective experiences. The researchers' choice of paradigms should be influenced by their personal beliefs, the nature of the desired result (numbers or meanings), and the depth of understanding and description required from subjects/participants (Smith, 1984).

*The research method must be described and rationale given for its use*

Many different qualitative research methods have been developed. For example, phenomenological research reflects a tradition of philosophy that emphasizes the human experience and meaning. Scientific and humanistic data are generated by studying the desired information from the perspective of the research participant. Thus, it is important to know if the researcher studied the phenomenon from the perspective of the participant and actively engaged the participants (Brockopp & Hastings-Tolsma, 1989). An example of phenomenological research in nursing is Parse's method (Parse, 1987; Parse, Coyne & Smith, 1985).

Ethnographic research evolved from anthropology. It is a holistic inquiry into the lives of people to understand their ways of living and the meanings they attach to such things as activities, events, knowledge, and artifacts. It

involves the collection and analysis of data about an individual or group under natural conditions. The investigator is immersed in the study process in an effort to fully understand the behaviour and its subsequent impact on society (Brockopp & Hastings-Tolsma, 1989). Spradley (1980) clarifies that ethnography means "learning from people" rather than "studying people" (p.3). Ethno-nursing has been developed by Leininger (1985a; 1985c; 1987) as a nursing methodology evolved from ethnography.

Historical research involves the careful study and analysis of data about past events. The purpose is to gain an understanding of the impact of the past on present and future. The reader needs to know if the researcher conducted the study in the natural setting, whether he/she was intimately involved in the data collection process and what attempts were made to establish validity and reliability of sources. The researcher must relate the study to current or future events (Brockopp & Hastings-Tolsma 1989).

Grounded theory was developed by Glaser and Strauss (1967) as a means of studying and analyzing social data for the purpose of explaining selected phenomena. A theory is ultimately generated through inductive and deductive activity. (Artinian, 1986) stated that the purpose of this type of research is to identify the core variable or process (p.17). Glaser and Strauss (1967) added that it is important that the codes and generated theory fit the data obtained from the study. The theory must work (i.e., have explanatory power) and be relevant and modifiable.

Space limitations prohibit the current authors from giving a description of all qualitative research methods. Additional methods include: philosophical inquiry, life histories, ethnoscience, audiovisual methods, holography, critical and constructionist theory, and symbolic interactionism (Leininger, 1990).

*An appropriate review of the literature must be done and referred to when it is relevant to the research*

The literature review should be systematic and include the available literature sources on the phenomenon under study. In phenomenologic studies review of the literature may be withheld until after data are collected. However, with other qualitative methods, such as historical research, the literature review may be an important first step (Cobb & Hagemaster, 1987).

*The study informants or participants, context, and researcher must be described in relevant detail*

The informants or participants, however few, must be described. Adequate sample size is generally determined through saturation and recurrent patterning, whereby the researcher finds that additional participants provide

similar rather than dissimilar information. Therefore, although the required sample size can be estimated before the project begins, it cannot truly be known until data gathering is well underway.

The researcher must say how the study sites were determined and describe the selection of participants and their levels of participation. Opportunistic samples are appropriate and sampling is purposeful, but these must be described in detail (Cobb & Hagemaster, 1987). Particular informants (e.g. expert nurses) can be purposely included for their relevant knowledge or experience. Random selection of subjects for representativeness should not be used for qualitative research. Morse (1986) suggests that the criteria of appropriateness and adequacy be used to evaluate sampling; an appropriate sampling method has a good "fit" with the study purpose (p. 185). The information provided by an adequate sample is of good quality, and complete, and provides sufficient information. Morse considers these factors to be more important than the sample size (p. 185).

The researcher's level of participation – ranging from passive observation to fully active participation – needs to be described. Much of data gathering depends on the researcher skillfully observing, listening, and communicating.

Researchers must maintain a delicate balance between using themselves as research instruments, and ensuring that their views do not bias, lead, or inhibit the participants (Robinson & Thorne, 1988). It is helpful to know what the researcher's credentials and previous experience as a qualitative researcher are when judging the value of a study (Burns, 1989).

Attempts should be made to prevent personal bias from influencing the research process. Toward this end the researcher's preconceptions and perspectives about the phenomenon should be identified prior to gathering data. Another strategy for avoiding bias is to use a consultant, advisor or research team to review the study process (Robinson & Thorne, 1988).

#### *Information gathering and information analysis must be described*

Information may come from various sources, including discussions with participants (recorded in field notes, correspondence, audiotapes and/or videotapes), the observations and experiences of the researcher (e.g. experiential learning, process recordings, the use of symbols, ceremonies, and the structure and content of the environment), and historical records (e.g. documents, photographs, and artifacts).

Information gathering and analysis should be described and the researcher should discuss how these are appropriate for the qualitative approach. Generally a specific method, such as Leininger's (1987) four phases of analysis, could be used to code data and identify key concepts, themes, and patterns.

Ethical considerations need to be addressed such as consent, confidentiality and risks and benefits to participants. It is more difficult to obtain true informed consent in qualitative research because the nature of the investigation can change and evolve throughout data gathering and analysis. Ramos (1989) has suggested that researchers use "ongoing consensual decision-making, where emergent difficulties are discussed openly" (p. 61).

Researchers have an ethical responsibility both to the research participants and to the integrity of the research process (Munhall, 1988; Robinson & Thorne, 1988). Specifically, the researcher should avoid influencing study participants, and help them to recognize the difference between the nurse researcher's clinical and research obligations.

*The researcher's interpretations and/or conclusions must be appropriate and consistent with the database*

According to Leininger (1990), transferability, recurrent patterning, and saturation indicate consistency of study conclusions; credibility, confirmability and meaning-in-context indicate truth value. Although it might not be possible or appropriate to observe all these criteria in one study, Leininger suggests attention should be given to at least one criterion of consistency and one of truth value.

To readers more familiar with quantitative studies, these criteria can be considered as roughly analogous to reliability (consistency) and validity (truth). Writers such as LeCompte and Goetz (1982) have used these quantitative terms to explain similar concepts in qualitative studies. However, Leininger (1990) cautioned that truth values and in-depth meanings will be lost when quantitative criteria are applied to qualitative studies (p. 44).

The process used to discern patterns, themes or relationships from the data, must be described; including how the data were recorded and reviewed. The importance of the identified patterns and the interrelationships should be made clear. Meanings explored must be in the context of the informants' perspectives, and the methods used for this must be discussed. The researcher should indicate whether the findings were confirmed by agreement for classifying, validation from informant group or external consultant, reliability estimates using recurrent patterning of a common theme or other methods. The meaning of the data collected should be discussed and related to the current literature. This includes whether the data found are best highlighted in the context of an existing theory, or whether a new schema needs to be developed (Brockopp & Hastings-Tolsma, 1989).

*The importance and relevance of the research for its intended profession should be addressed*

This is an important part of qualitative research and should help the reader understand the concepts or theories developed. It should provide insight into important professional queries and the significance of the findings to study participants. The authors should link implications and recommendations to the conceptual formulations and discuss how findings might be used.

### Conclusion

These guidelines and the resultant critique of qualitative research can be used to help measure the importance of qualitative research findings. They will help discern whether or not phenomena described, ideas conceptualized or theories discussed are worthy of further consideration and helpful for understanding depth of meaning. A qualitative study should be evaluated within the context of the author's purpose as well as the reader's own interest or purpose (Knafl & Howard 1984).

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## Worksheet for the Critical Assessment of Qualitative Research

(J. Roberts and C. Forchuk)

Article: \_\_\_\_\_

Author: \_\_\_\_\_

What is the research of inquiry or question? \_\_\_\_\_

1. Is the research design appropriate for the research topic or question?

☐ Yes ☐ No

Reasons: \_\_\_\_\_

2a. Was the specific qualitative research method chosen appropriate?

☐ Yes ☐ No

Reasons: \_\_\_\_\_

2b. Was a literature review done and used appropriately?

☐ Yes ☐ No

Reasons: \_\_\_\_\_

3. Were the descriptions of informants/participants, context, and researcher all adequate?

☐ Yes ☐ No

Reasons: \_\_\_\_\_

4. Were information gathering and information analysis both described adequately?

☐ Yes ☐ No

Reasons: \_\_\_\_\_

5. Were researcher's conclusions appropriate?

☐ Yes ☐ No

Reasons: \_\_\_\_\_

6. Was the importance and relevance of the research to the intended progression indicated?

☐ Yes ☐ No

Reasons: \_\_\_\_\_

7. Summary of critique and conclusion

A. Was the research topic discussed?

B. Is there another appropriate approach?

C. What specific purposes were stated?

i.e. discovery, description, conceptualization, understanding, meanings, lived experiences etc.

A. Which qualitative approaches were included?  
i.e. ethnography, grounded theory, phenomenology, historical, life histories, ethnoscience, audiovisual, philosophical, critical inquiry, ethical, symbolic interaction

B. Was rationale for approach given?

A. At what point in the research process was the literature review done?

B. Were appropriate reasons given?

A. Was a clear description of informants and context given?

B. Was relevant information about researcher given?

C. Was researcher's perspective declared early?

A. What sources of information were used?  
e.g. unstructured/semistructured interview, participant observation, historical documents, field notes, record review, personal written accounts, video or audio tapes

B. What analysis method was used?

e.g. identification of key concepts, themes and patterns.

A. Able to follow process from collection of information to development of themes

B. Were whole meanings, experiences examined in context without attempting to reduce the whole to parts?

C. Were meanings explored in context of informants' perspectives? How?

D. How did the researcher confirm findings?

e.g. a) Agreement for classifying; (i) use of external consultant (ii) consensus by research team; b) Use of validation by research participants; c) Saturation of themes; d) Recurrent patterning of a common theme

E. Did conclusions have:

(i) credibility, (ii) confirmability, (iii) meaning-in-context, (iv) recurrent patterning, (v) saturation, (vi) transferability?

How might the findings be used?