Four Components of a Manuscript Reporting Qualitative Empirical Studies: A Brief Overview

Maria S. Plakhotnik and Tonette S. Rocco
Florida International University, USA

Abstract: Publishing in scholarly journals is challenging due to a high manuscript rejection rate. One third of the rejection rate can be attributed to poor organization (McKercher, Law, Weber, Song, & Hsu, 2007). This paper discusses four components of reporting qualitative empirical studies to guide researchers in developing a logical manuscript.

“Research is central to the development of any field of study” (Merriam & Simpson, 2000, p. 1). To contribute to a field of study, research needs to be presented at conferences or meetings and, ultimately, published in peer-reviewed journals to reach wider national and international audiences. Sharing research results with scholarly audiences is the final and focal point of research (American Psychological Association [APA], 2001). Publishing in scholarly journals also helps both experienced and novice researchers to establish and advance their academic careers, for example to receive promotions and achieve tenure-track positions (Chisholm, 2007). However, publishing in scholarly journals is a challenging and stressful process due to high, up to a 90%, manuscript rejection rate (McKercher et al., 2007). One of the core deficiencies in submissions that lead to such a high rejection rate is poor manuscript organization. Specifically, poor organization contributes to up to one third (34%) of the manuscript rejection rate (McKercher et al., 2007). On the other hand, manuscripts that are organized in a clear, logical, and coherent manner “spare readers a distracting variety of forms throughout a work and permit readers to give full attention to content” (APA, 2001, p. xxiii).

Publishing in scholarly outlets is particularly challenging for qualitative researchers. Unfortunately, many perceive qualitative research as less rigorous than quantitative and, therefore, less publishable (Rocco, 2003). One way to increase rigor and, hence, publication chances is to present results of a qualitative empirical study in a clear and logical manner. Therefore, the purpose of this paper is to discuss four components of manuscripts reporting qualitative empirical studies to guide researchers in the development of a logical and coherent manuscript. The four major components include: (a) introduction, (b) method, (c) discussion, and (d) implications.

Introduction

The purpose of the introduction section is to frame the study or to “set the stage for the entire study” (Creswell, 2003, p. 73). This frame should be well-organized and logical and challenge the readers to read further, comprising only a few pages of the manuscript. To accomplish this purpose, the introduction section is divided into two main parts or subsections: the research problem and a literature review or a framework (see Figure 1).

Research Problem

The research problem subsection guides the reader from (a) the background to a problem (b) through to the specific problem that the study is set to address to (c) research questions that guide the study.
Figure 1. Subsections of the Introduction

Background to the problem. The research problem opens with a background to the problem written in one to three paragraphs. The background to the problem situates the study in a broader context, for example, historical, national, or international. Because the background opens the manuscript, it should also “hook the reader” (Hacker, 1998, p. 34), provoking interest and making the study relevant or important to the reader. To hook the reader, background can include staggering statistics, paradoxical or unusual facts, a surprising analogy, a quote, or other tools that engage the reader. Background to the problem can be written in a less inductive format and start with a researcher’s narrative or experiences or a story (Creswell, 2003).

Problem statement and purpose. The background to the problem is usually followed by one to three paragraphs that formulate the problem statement. The problem statement points to a phenomenon, concept, issue, or dilemma that needs to be investigated (Creswell, 2003). Although the background to the problem might point to broad social issues, the problem statement focuses on a specific gap in knowledge that will be addressed in the study.

The problem statement is usually followed by the study’s purpose. Problem statement and purpose statement are separate elements of a manuscript with different functions and, hence, should not be confused. Although a problem statement identifies a gap in knowledge about an issue or phenomenon, a purpose statement points to “what needs to be done” to address the gap (Merriam & Simpson, 2000, p. 19). The purpose statement should be considered “the most important statement in an entire research study” (Creswell, 2003, p. 87) and the first step in a study design (Patton, 2002). A good purpose statement in a qualitative study starts with a signaling phrase, for example, “the purpose of this study is.” and includes the phenomenon, research design, participants, and location (Creswell, 2003).

Research questions. The purpose is further “refined” (Creswell, 2003, p. 88) into research questions. Creswell (2003) suggests formulating two types of questions: a central question and several related sub-questions. The central question mirrors the purpose statement in a question format. Sub-questions should flow from the central question and represent aspects of the central question. No formula can determine the number of questions needed in a qualitative study. Too many questions might lead to a loss of focus in a study (Miles & Huberman, 1994); too few questions might limit the researchers’ ability to address the study purpose. Creswell suggests using one or two central questions and five to seven sub-questions. Miles and Huberman do not
recommend using more than a dozen questions. Research questions can appear after the purpose, just before method or early in the method. Wherever research questions are placed, the relationship of the research questions to the purpose and problem must be evident.

**Review/Framework**

The introduction section also includes a review of relevant empirical, theoretical, and/or conceptual works in a form of a literature review, a conceptual framework, or a theoretical framework. The literature review and conceptual and theoretical frameworks share five functions: (a) to build a foundation, (b) to demonstrate how a study advances knowledge, (c) to conceptualize the study, (d) to assess research design and instrumentation, and (e) to provide a reference point for interpretation of findings (Merriam & Simpson, 2000). All five functions are not necessarily fulfilled by the review or framework in each manuscript, but often they are, and the functions would be the same whether the form used is a literature review, theoretical framework, or conceptual framework. In a literature review or conceptual or theoretical framework, a case is built for the importance of the study through a presentation and critique of the concepts, terms, definitions, models, and theories found in a literature base and seen through a particular disciplinary orientation. The terms *literature review*, *conceptual framework*, and *theoretical framework* have often been used interchangeably by researchers. Although these three forms of review of relevant literature share similar functions and relationships to other parts of manuscripts, they each represent a distinct type of review and should be labeled and used appropriately (see Rocco & Plakhotnik, 2009).

A theoretical framework involves the presentation of a specific theory, such as systems theory or self-efficacy, and empirical and conceptual work about that theory. Merriam (2001) describes the theoretical framework as “the structure, the scaffolding, the frame of your study” (p. 45). The structure comes from the author’s disciplinary orientation and the literature related to the topic and theory under investigation. Although a theoretical framework is used when investigating a specific theory, a conceptual framework is made up of theoretical and empirical work relevant to the manuscript’s purpose where the purpose is not to further investigate a specific theory. Qualitative research often explores areas that are understudied and searches for emergent theory (Creswell, 2003). When searching for emergent theory, therefore, a conceptual framework is important for situating the study. The author must demonstrate the importance of the study by defining the main ideas and the network of relationships between them (Becker, 1998). A conceptual framework grounds the study in the relevant knowledge bases that lay the foundation for the importance of the problem statement and research questions. Therefore, theory may not be guiding the study but concepts are. As part of the introduction section, the purpose of the literature review is to determine if a topic is researchable, to report the results of closely related studies, and to establish the importance of the current study in relationship to previous studies (Creswell, 2003). The literature review might be seen as casting a broad net around an area to explore the topic. The net should include presentation of the history or chronology of the manuscript’s main idea. In a history, the author should acquaint the reader with the major authors’ writing in favor of or in opposition to the main idea and the state of the current empirical research (A. L. Wilson & E. R. Hayes, personal communication, May 24, 2002).

**Method**

The method section of a qualitative study should include information on these subsections: a conceptual framework, sample, data collection, data analysis, with integrity measures and data management integrated into sample, data collection, and data analysis where appropriate (see Figure 2).
Conceptual Framework of the Method

In the method section, authors need to provide a rationale for design decisions and to ground the rationale in the extensive body of qualitative inquiry literature concerned with the specific type of qualitative method used. Many methods sections and abstracts describe the study simply as “a qualitative study.” Qualitative is neither a type of study nor does qualitative inquiry have a single unified theoretical orientation. Some maintain it is a paradigm or a way to see the world encompassing diverse orientations. Just as the overall manuscript has a framework built on literature, theory, or concepts, so does the method section. For example, Denzin and Lincoln (1994) discuss 6 interpretative paradigms, while Patton (2003) differentiates among 16 theoretical traditions within qualitative research. Each of them has roots in certain disciplines and aim at answering different questions. Therefore, authors should clarify for the reader the appropriateness of the qualitative interpretative paradigm or theoretical tradition to the research questions and to the study’s conceptual framework. In this section, the author describes why a specific method is the most suitable for the study being reported.

Sample

In qualitative empirical studies, samples can be composed of people, behaviors, events, or processes (Marshall & Rossman, 1995). Patton (2002) refers to 11 types of samples, while Onwuegbuzie and Leech (2007) identify 22 sampling schemes. Regardless of what sampling typology is used, researchers need to provide information on sampling decisions. The type of sample should be named and the rationale for the type of sample needs to be articulated. The process and criteria used to select critical cases or stratified random, for example, need to be discussed; demographic information about the participants should be included. Further, although Patton (2002) clearly states, “There are no rules for sample size in qualitative inquiry” (p. 244), this does not mean that no information is necessary on the size of the sample or the rationale for the sample size. The information and rationale should relate to the research problem, purpose, and research questions (Morse, 2007; Onwuegbuzie & Leech, 2007). This information increases the reader’s ability to understand the relationship between the participants, the data being discussed, and the usefulness of the findings to other situations and contexts.

Data Collection

Qualitative data comes from participants/people, observations/fieldwork, and documents (Patton, 2002) and “uses methods that speak to quality, that is, nuances, perceptions, viewpoints, meaning, relationships, stories, and dynamic changing perspectives” (Swanson, Watkins, & Marsick, 1997, p. 89). Data can be people focused or structure focused as in projects, programs,
and organizations, or oriented towards time (e.g., critical incident) or geography (See Patton, 2002). When discussing data collection, it is insufficient to report, “interviews were conducted.” Wengraf (2001) discusses lightly, moderately, and heavily structured depth interviews. For each type of interview, specific design decisions need to be made (see Gubrium & Holstein, 2001). Different types of interviews can impact the relationship of the respondent to the interviewer and produce different types of data changing the nature of the findings (See Kvale, 1996; Wengraf, 2001). Details on data collection tools should include item development, number of items, item topics, and design changes (if any) were made after beginning the process. In some cases, reporting the instrument items, categories, or a sampling of items may help the reader understand the process. Details should also be provided on the actual data collection process: instrument distribution, interview time, location, and whether audio or video-recorded.

**Data Analysis**

In simple terms, to analyze data means “to draw valid meaning” from data (Miles & Huberman, 1994, p. 1) that consists of data reduction, data display, and conclusion drawing and verification. Data reduction occurs when coding data chunks, clustering, memoing, searching for themes, simplifying data into categories, and comparing the themes and categories. Data display “is an organized, compressed assembly of information that permits conclusion drawing and action” (Miles & Huberman, 1994, p. 11). Types of data displays include outlines, matrices, graphs, charts, and networks. During conclusion drawing and verification, the researcher makes decisions about which patterns, explanations, configurations, and propositions observed from the beginning of the data collection process have meaning in terms of the conceptual framework and the practical implications to the field (Miles & Huberman, 1994). Verification of these conclusions should occur throughout the process. More formal approaches include asking colleagues to review the conclusions, replicating the study with another data set, or returning to the literature. Researchers need to report how data were reduced, analyzed, and interpreted and provide a rationale for specific data analysis tools or methods. The decisions need to be grounded in the inquiry literature.

**Integrity Measures and Data Management**

Although a separate subheading is not required, integrity measures include methods a researcher uses to verify plausibility or to diminish interference, contamination, or degradation of any part of the research process to strengthen the process. Verification is important because without this step “we are left with interesting stories…of unknown truth and utility” (Miles & Huberman, 1994, p. 11). There is not one right way to establish the integrity of the study. However, whether the standard is generalizability, triangulation, trustworthiness (Lincoln & Guba, 1985), or the use of an audit trail or a panel of experts or an external reviewer (Creswell, 2003), the steps taken and the rationale for the steps must be described. This description might be in a form of several sentences or a separate subsection within the methods section.

Data management concerns that should be addressed include answers to the following questions: How were data collected and stored? Were interviews completely transcribed or were decisions made to eliminate some words or phrases or to paraphrase during transcription? How were transcripts treated? There are other questions that could be asked. These concerns can often be addressed by the addition of a word or phrase within the description of integrity measures taken, data collection, or analysis.

**Discussion**

A good discussion section in an empirical qualitative study includes the presentation, analysis, and interpretation of the data. Relevant literature is included and organized to build on
and support the stated purpose of the paper, clarify, explain, or support the data, and illuminate the data’s meaning. The interaction between the presentation of the data and the existing literature provides new insights, raises unexplored issues, and clarifies further research needs.

Wolcott (1994) suggests considering each detail in terms of relevancy and sufficiency. Are the data relevant to the account, theme, model, or emergent theory being discussed? Are the data presented sufficient to support the analyst’s contention that a theme, model, or emergent theory exists? Are the data treated consistently throughout the discussion in terms of writing style and technical considerations? If data chunks are attributed to certain participants by a pseudonym, is this done each time? In addition, is the discussion of data through comparison to the literature done in a similar fashion throughout?

“With qualitative data one can preserve chronological flow, see precisely which events led to which consequences, and derive fruitful explanations” (Miles & Huberman, 1994, p. 1). Discovering new integrations, generating new or revised conceptual frameworks, nurturing emergent theory or models: all this and more is possible. These possibilities are lost on readers when data presentation and interpretation are given little thought. Data can be presented thematically, as cases or reconstructed cases, as stories or in other forms. When presenting data thematically, the literature should be integrated into the discussion of the theme. If cases or stories are presented intact, they should be followed by an examination of the case or story in terms of the conceptual framework of the study. The reader needs information provided by the analyst to understand the study’s importance to the field to make a judgment as to whether successful analysis, presentation, and interpretation have occurred.

**Implications**

Implications for the field is the section of the paper where the author responds to the *so what* question. So what does this presentation, analysis, and interpretation of empirical data or literature contribute to the field? What meaning can be derived from this work for practitioners and scholars? Answering these questions might be troublesome for both experienced and novice researchers. For example, the inability to answer the *so what?* question is the second top deficiency in the manuscript submissions which led to manuscript rejection by reviewers (McKercher et al., 2007).

In some qualitative empirical manuscripts, the field might be mentioned in the beginning or at the end of the manuscript and connections to the field are missing in the conceptual framework and discussion sections. There are different ways to address this. One way is to carefully integrate relevant literature from the field and make connections throughout the manuscript. Another way is to articulate the relationships between the key points being made in the manuscript to the field. Implication sections can include further research questions, implications for practice or theory, and new insights into the topic. One way to enhance the meaning of further research questions is to organize them in a table around themes from the data analysis or literature review (see Stein, Rocco, & Goldenetz, 2000).

**Concluding Thoughts**

The purpose of this paper was to briefly discuss four components of manuscripts reporting qualitative empirical studies to guide researchers in the development of a logical and coherent manuscript. Insufficient attention to the organization of a manuscript results in a high percentage of rejected manuscripts. Unfortunately, this rejection then contributes to the misperceptions that only well known authors are published or certain types of papers are not published because they are not honored by the editors, reviewers, or the field. Authors do not have control over some aspects of the manuscript publication process (Hatcher & Winn, 2008);
however, they can learn about other aspects of research and writing that will improve the quality of manuscripts and increase the likelihood of favorable critiques by reviewers and editors.

References


