

## **Interactive procedures for qualitative inquiry: Reliability and validity checking**

### **Abstract**

In fields from education to social work to anthropology to management sciences (Merriam & Tisdell, 2016) to leadership education scholars and practitioners are conducting qualitative studies. Although qualitative inquiry offers diversity in a plethora of research methodologies, all forms require validation and reliability to support a study's findings. This round table presentation will share examples from a phenomenological dissertation that unutilized innovative strategies for analyzing qualitative work. Specifically, procedures for conducting a data conference and an example of a peer review game will seek to address creative means for approaching reliability and validation strategies.

### **Introduction**

Over the past 50 years, qualitative research methods have experienced a reemergence and expansion increasing in impact and consolidating methods (Polkinghorne, 2005). Qualitative research presents a number of different data collection methods (e.g. phenomenology, grounded theory, ethnography, case studies, narrative, etc.), which results in a variety of data analysis procedures to ensure reliability and validity. As with any research methodology, qualitative analysis requires reliability and validity checking; furthermore, Creswell & Poth (2018) suggest researchers should use more than one reliability and validity strategy in the evaluation of the data. Morse (2015) explains in qualitative inquiry validity is "operationalized" by how well the researcher represent the actual phenomenon and reliability is the ability to obtain the same results if the study were repeated (p. 1213).

The purpose of this roundtable presentation is to share collaborative processes for analyzing qualitative data. An interactive method, known as a data conference, will be presented as a reliability procedure (Braithwaite, Allen, & Moore, 2017) and a peer review validation strategy will be presented as an interactive "game". By the end of the round table presentation, participants will know how to facilitate the two strategies to enhance the reliability, validity and generalizability of research findings.

### **Background**

Regardless of the type research, validity and reliability checking is required to ensure the credibility, trustworthiness, transferability, and dependability of empirical research. Merriam and Tisdell (2016) state, "to have any effect on either the practice or the theory of a field, research studies must be rigorously conducted; they need to present insights and conclusions that ring true to readers, practitioners, and other researchers" (p. 238). Qualitative research provides the reader with a depiction in enough detail to support that the researcher's conclusions are valid. A dispute among scholars on the terms reliability and validity in qualitative research, has resulted in the use of differing terminology to align with philosophical assumptions such as: credibility, transferability, dependability, and conformability; however, the overall concepts of reliability and validity still hold true in supporting qualitative findings.

Creswell (2009) defines *validity* as “the researcher checks for the accuracy of the findings by employing certain procedures” where as, “*reliability* indicates that the researcher’s approach is consist across different researcher’s and different projects” (p. 190). Given the numerous perspectives by qualitative scholars on the use of validity in qualitative researcher Morse (2015) argues, “in qualitative inquiry validity and reliability are often intertwined, with reliability attainment inherently integrated as processes of verification in the attainment of validity” (p. 1213).

The below examples are validation strategies that were used in a phenomenological dissertation. The facilitator will discuss how they implemented a data conference and created a peer review game for thematically analyzing codes.

### **Reliability Example: Data Conference**

Reliability refers to the stability of responses to multiple coders of data sets (Creswell & Poth, 2018). In other words, the ability to obtain the same results if the study were to be repeated. Gibbs (2007) describes several reliability procedures including: checking transcripts for mistakes, maintaining clear definitions of codes, coordinating communication among research team coders, and cross-checking codes by comparing results from other researches. Through this method researches look for intercoder agreement on whether two or more codes agree on codes used in the same passage. Miles and Huberman (1994) recommend coding be in 80% agreement for good qualitative reliability.

An example of using intercoder reliability can come hosting a data conference. A data conference (Braithwaite, Allen, & Moore, 2017) is considered a “collaborative verification strategy that brings together scholars with specialized knowledge of the context, topic, theory, research method, and/or paradigmatic orientation to discuss, question, and assess the research process, analysis, and findings” (p. 1). There are three main parts to a data conference: (a) outlining the data process, (b) inviting scholars to provide constructive feedback, and (c) scheduling a 2-3-hour window to carry out a detailed conference (Braithwaite, Allen, & Moore, 2017). Through a data conference the researcher and collaboration of peer scholars brings together a discussion of the qualitative findings and procedures. Through this process a data codebook can be developed and critiqued and overall findings of the results can be discussed by different researchers.

### **Validity Example: Peer Review Game**

Creswell and Poth (2018) list several methods for validation strategies. They divide their strategies in terms of the researchers lens, participant’s lens, and reader’s or reviewer’s lens. The reader’s or reviewer’s lens includes others beyond the researcher and lists the following strategies: (a) external audits to examine both the process and the produce of the account, (b) generating a rich, thick description which allows readers to make decision regarding transferability, and (c) having a peer review or debriefing the data and research process. Peer review involves seeking an external check of the research from fellow colleagues or subject experts who are familiar with the phenomenon and research methods being used. This is in the same vain as interrater reliability in quantitative research (Merriam & Tisdell, 2016).

To further the data conference reliability procedure, a peer review process will also be presented. An example of a game format will be shared to demonstrate an interactive peer review process. The game consisted of three steps: (a) main in vivo codes from transcripts were listed on notecards, (b) reviewers were asked to condense the codes into major categories or themes, and (c) on new notecards reviewers were asked to give the themes a name and short explanation describing the overall theme. The theme names were further analyzed by the researcher to look for similar patterns in the overall findings. The peer review game instructions were displayed on a main white board in a shared office and left up for one week. This allowed for flexibility in allowing more peer reviewers to complete the coding process.

### **Means for Discussion/Interaction OR Primary Objectives**

This roundtable presentation will outline two interactive strategies for reliability and validity checking in qualitative research. Participants who attend this round table will be able to facilitate a data conference and organize a game method for conducting the peer review process of coding data. Specifically, the roundtable will present:

1. Overview of reliability and validity definitions used in qualitative research. This step will be done to ensure all participants at the round table have the same definition in mind. (2 min)
2. Share a list of validation strategies on a handout (i.e. Creswell & Poth, 2018) and ask participants what methods they have used in the past. (3 min)
3. Present the steps for a facilitating a data conference and provide the Braithwaite, et al., 2017 article. (5 min)
4. Present the steps for creating a peer review game process for coding data with a handout. (5 min)

### **Foreseeable Implications**

Qualitative research methods are growing in popularity. In leadership research, it is important to understand participants/students experiences in their meaning making of leadership phenomena. Analyzing data effectively is necessary to drawing meaningful and accurate conclusions. As Morse (2015) states, “rigor as a concept is an important goal, and rigor is the concern of external evaluation who ultimately determine the worth of qualitative research.” (p. 1213). By sharing advice on validation strategies leadership scholars and practitioners engaging in qualitative work can add credible work to the leadership field.

## References

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