AN ANALYSIS OF QUALITY CRITERIA FOR QUALITATIVE RESEARCH

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ABSTRACT

There is general consensus as to what constitutes quality and rigor in quantitative research however the issue of quality and rigor in qualitative research is contentious. The purpose of this paper is to provide a brief overview of research quality criteria in quantitative research before presenting an analysis of quality frameworks for qualitative research. The paper presents the three main stances taken in quality criteria for qualitative research as a means to exploring this complex issue. The paper not only argues for the need for qualitative management researchers to embed the chosen quality frameworks within the writing of the research but takes this one step further by arguing for explicit self reflexivity within the process and products of qualitative research.

Keywords: qualitative research; quality criteria; rigor; trustworthiness; postgraduate research training

A common question in academia and the ANZAM research community is: “What constitutes good research?” The concept of rigour is often referred to along with theoretical and methodological robustness when reference is made to making some form of evaluation or critique of research as process (act) and research as product (publication). Andrews and Halcomb (2009, p. xvi) define rigor as “The thoroughness, accuracy, confirmability and ethical soundness of all aspects of a study’s design”. It is of great interest to note an editorial in a recent issue of the Academy of Management Journal (2011, Volume 54, Number 2), titled: From the Editors The coming of age for qualitative research: Embracing the diversity of qualitative methods. The two Associate Editors, Pratima Bansal and Kevin Corley who wrote the piece conducted a review of the qualitative research published in the Academy of Management (AMJ) journal from 2001 to 2010. They “applaud the important strides made on the qualitative frontier, recognize some strong norms are emerging in the research being published, and encourage more diversity in the qualitative research appearing in the AMJ” (Bansal and Corley 2011, p. 233). The Editors go on to discuss aspects of rigor and the reporting of qualitative data and provide very interesting statistics on the qualitative research
being published in the AMJ for that period. For example six of the last eight papers awarded AMJs “Best Article Award” were based upon qualitative data.

This paper will discuss the commonly agreed criteria for judging quantitative research before presenting the three positions or stances taken in judging quality in qualitative research followed by the eight “Big-Tent” criteria developed by Tracy (2010). The paper will conclude with some insights into the implications this has for the research training and capacity building of qualitative business and management researchers.

QUALITY FRAMEWORKS IN QUANTITATIVE AND QUALITATIVE RESEARCH

This section of the paper will trace the quality criteria developed for quantitative research traditions before presenting the quality criteria utilised by qualitative research and the three main positions or stances in relation to quality criteria for judging the rigor of qualitative research.

Quality criteria in quantitative research

It would appear that a majority of the discussion on quality frameworks in quantitative research is implicit, rather than explicit and is often referred to in the products of research as part of the stages of the research process (e.g., sampling and measures). Most research methods textbooks will refer to the concepts of validity and reliability which are rooted in the positivist and quantitative traditions of “scientific method”. The commonly agreed to criteria for judging quantitative research is listed and defined in Table 1.
Bryman, Becker and Sempik (2008) in a study on the use of quality criteria across quantitative, qualitative and mixed methods research in social policy research in the UK, noted that there is an absence of consensual agreement between qualitative researchers as to what criteria can be used to assess qualitative research. They stated, “...the rise of qualitative research over the last 25-30 years represents one of the reasons for the growing interest in research quality criteria because it is widely assumed that whereas quality criteria for quantitative research are well known and widely agreed, that is not the case for qualitative research” (2008, p. 262).

Rolfe (2006) estimates there are three broad stances in the literature that reports on the quality of qualitative research:

(1) qualitative research (QUAL) should be judged according to the same criteria as quantitative research (QUANT);

(2) qualitative research (QUAL) should be judged using its own criteria (Lincoln and Guba 1985); and

(3) the appropriateness of any predetermined criteria for judging qualitative criteria (QUAL) is questioned (Rolfe, 2006; Sandelowski & Barroso, 2002).

Some types of qualitative research have developed their own quality criteria. For example, in reference to grounded theory, Charmaz (2006) proposes four quality criteria for judging
grounded theory. The paper will now present the examples of positions taken in the three stances on quality criteria for qualitative research identified by Rolfe (2006).

**Stance 1: QUAL research should be judged by QUANT criteria**

Neuman (2006) goes to great lengths to describe and distinguish between how quantitative and qualitative research addresses validity and reliability. “Qualitative and quantitative researchers want reliable and valid measurement, but beyond an agreement on the basic ideas at a general level, each style sees reliability and validity in the research process differently” (Neuman 2006, p.189). In reference to qualitative research Neuman makes the following statement: “Most qualitative researchers accept the basic principles of reliability and validity, but rarely use the terms because of their association with quantitative measurement. In addition, qualitative researchers apply the principles differently” (Neuman 2006, p. 194).

Johnson (1997) has developed a set of criteria for qualitative research which maintains the use of the term and concept of validity:

1. Descriptive validity: *factual accuracy of the account as reported by the qualitative researcher*

2. Interpretive validity: *the degree that the participants’ viewpoints, thoughts, intentions, and experiences are accurately understood and reported by the qualitative researcher*

3. Theoretical validity: *the degree that a theory or theoretical explanation developed from a research study fits the data and is, therefore, credible and defensible.*
Johnson (1997) goes on to provide thirteen strategies to promote QUAL research validity and these are listed below:

- Researcher as detective
- Extended fieldwork
- Low inference descriptors
- Triangulation (data, methods, investigator and theory triangulation)
- Participant feedback
- Peer review
- Negative case sampling
- Reflexivity
- Pattern matching.

Others argue against applying traditional QUANT criteria to QUAL research:

*Scientific discipline or rigor is valued because it is associated with the worth of research outcomes and studies are critiqued as a means of judging rigor. Qualitative research methods have been criticized for lack of rigor. However, these criticisms have occurred because of attempts to judge the rigor of qualitative studies using rules developed to judge quantitative studies. Rigor needs to be defined differently for qualitative research since the desired outcome is different (Burns & Grove, 2005, p. 55).*

This brings the discussion to the position taken in the second stance towards quality criteria in qualitative research.
Stance 2: QUAL research should use QUAL criteria

Generally speaking qualitative researchers tend to prefer the term trustworthiness as opposed to rigor. This term is derived from the “…researcher’s presence, the nature of the interaction between researcher and participants, the triangulation of data, the interpretation of perceptions and rich, thick description…” (Merriam, 1988, p. 120). Andrews and Halcomb (2009, p. xvii) define trustworthiness as, “the degree of confidence that the researcher has that their qualitative data and findings are credible, transferable and dependable”. Trustworthiness was a term proposed by Lincoln and Guba (1985) and is often referred to as a ‘goodness of fit’ criteria which parallels the term rigor in quantitative research. Lincoln and Guba (1985) devised a set of four criteria upon which to determine the trustworthiness of qualitative research: credibility; transferability; dependability and; confirmability.

Credibility (in preference to internal validity) is one of the most important factors in establishing trustworthiness and is about determining how congruent the findings are with reality. Transferability (in preference to external validity/generalisability) requires the researcher to provide sufficient data and context to enable the audience to judge whether the findings can be applied to other situations and contexts. Dependability (in preference to reliability) refers to having sufficient details and documentation of the methods employed so that the study can be scrutinised and replicated. Confirmability (in preference to objectivity) refers to ensuring that the study’s findings are the result of the experiences of the informants rather than the preferences of the researcher(s) and can be achieved through an audit trail of the raw data, memos, notes, data reduction and analysis.
Bryman et. al. (2008, p. 266) make the point that the Lincoln and Guba criteria are not “universally accepted as appropriate criteria for qualitative research ...however, the Lincoln and Guba criteria have the advantage of parsimony and they are frequently referred to in the literature”. Table 2 documents the ways in which qualitative researchers can ensure the four criteria for qualitative research outlined by Lincoln and Guba (1985), can be met.

As mentioned earlier in this paper some qualitative research methods and designs have developed their own criteria for judging the quality and rigor. Charmaz (2006) proposes four quality criteria for judging grounded theory: credibility; originality; resonance; and usefulness. Others have focused on the research process in qualitative research. Lincoln (1995) developed philosophical criteria, Creswell (1998) developed procedural criteria and Richardson (2000) developed participatory and advocacy criteria. A summary of these three sets of criteria are presented in Table 3.

Tracy (2010) developed the Eight “Big-Tent” model for quality in qualitative research. Tracy identifies eight key markers of quality in qualitative research: (1) worthy topic; (2) rich rigor; (3) sincerity; (4) credibility; (5) resonance; (6) significant contribution; (7) ethics and; (8) meaningful coherence. She argues that these markers provide ‘a common language of excellence for qualitative research and a useful pedagogic compass ...A conceptualization for qualitative quality that transcends paradigm encourages scholars to reflect on the variety of
crafts available, develop their own style, yet respect and learn from the practices of others’’ (Tracy 2010, p. 849). A summary of the eight “Big-Tent” criteria is provided in Table 4.

<INSERT TABLE 4 HERE>

The third stance or position taken within the qualitative research community rejects the previous two positions and argues that it is inappropriate to have any predetermined criteria to judge a qualitative study.

**Stance 3: Predetermined criteria not appropriate**

Proponents of this position or stance assert validity is achieved through consensus on each individual study rather than by the blanket application of pre-determined criteria and argue for a complete rejection of all predetermined criteria.

Sandelowski and Barroso (2002) and Rolfe (2006) question the appropriateness of any predetermined criteria for judging qualitative research as there is no unified qualitative research paradigm. “We need to either acknowledge that the commonly perceived quantitative-qualitative dichotomy is in fact a continuum which requires a continuum of quality criteria, or to recognize that each study is individual and unique, and that the task of producing frameworks and predetermined criteria for assessing the quality of research studies is futile’ (Rolfe, 2006, p. 304). Rolfe goes onto to assert ‘Whilst the term ‘qualitative research’ might be used accurately to describe methods of data collection, it cannot adequately encompass the full range and diversity of non-quantitative’ methodologies... The search for generic framework for assessing the quality of qualitative research should be abandoned in favour of individual judgements of individual studies’ (Rolfe 2006, p. 309).
CONCLUSION

A key message from this paper aims to convey is that there are several approaches to addressing the quality of research and quality criteria can range from commonly agreed to sets of criteria for mono-method quantitative positivist traditions, to a much more contested terrain within qualitative research. The paper presented the three main stances taken in discussing quality in qualitative research and hinted at quality criteria that has been developed for specific qualitative methodologies (e.g., for grounded theory). Those engaged in the teaching of research methods and/or of building of qualitative research capacity need to be become familiar with these stances. Cassell et al (2009) argue that the processes by which we learn to become effective qualitative management researchers involves learning appropriate research skills and knowledge and their use through three types of processes: reflection, reflexivity and phronesis. Cassell et al (2009, p. 530) argue:

...training needs to take into consideration qualitative researchers’ sensemaking processes around the nature of their work. Becoming an accomplished qualitative researcher is a complex process. It involves engagement with a philosophically diverse field where there are different assessments of quality at play...it also requires us to have the opportunities to reflect, be reflexive and experience being a qualitative researcher in order to learn and develop.

The main insights to be gained from this analysis are: novice researchers need to be aware of this array of quality criteria and they need to acknowledge this when choosing and arguing
for a set of criteria that they apply to their own research and that those in charge with building research capacity in business and management research community be cognisant of this array of criteria and the need to impart this knowledge to postgraduate research students/candidates. The paper not only argues for the need for qualitative management researchers to embed the chosen quality frameworks within the writing of the research but takes this one step further by arguing for explicit self reflexivity within the process and products of qualitative research.
REFERENCES


## TABLES

### Table 1: Quality criteria for judging quantitative research

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Validity</td>
<td>The degree to which a research tool measures what it is supposed to measure</td>
</tr>
<tr>
<td>Reliability</td>
<td>The degree of consistency with which a research tool measures what it is supposed to measure</td>
</tr>
<tr>
<td>Replicability</td>
<td>The same interpretation will be drawn if the study is repeated by different researchers with different respondents following the same methods</td>
</tr>
<tr>
<td>Generalisability</td>
<td>The degree to which we can infer the findings from the research sample to the population</td>
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</table>

*Source: Andrews and Halcomb (2009)*

### Table 2: Quality Criteria for Qualitative Research

<table>
<thead>
<tr>
<th>Credibility</th>
<th>Transferability</th>
<th>Dependability</th>
<th>Confirmability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prolonged engagement of site</td>
<td>Identical elements</td>
<td>Multiple data collection methods-triangulation</td>
<td>Use triangulation</td>
</tr>
<tr>
<td>Persistent observation</td>
<td>Theoretical/purposive sampling</td>
<td>Practice reflexivity</td>
<td>Practice reflexivity</td>
</tr>
<tr>
<td>Peer briefing</td>
<td>Thick description</td>
<td>Confirnability audit through member checking</td>
<td>Confirnability audit through member checking</td>
</tr>
<tr>
<td>Triangulation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Member checks</td>
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</tbody>
</table>

*Source: Guba and Lincoln (1985)*
Table 3: Summary of 3 sets of standards for evaluating the Quality of QUAL research.

<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>Positionality: text honest and authentic about stance of author</td>
<td>Rigorous data collection- multiple forms of data- extensive-long period field collection</td>
<td>Substantive contribution</td>
</tr>
<tr>
<td>Community: research serves the community in which it was carried out</td>
<td>Consistent philosophical assumptions-evolving design-multiple perspectives</td>
<td>Aesthetic merit</td>
</tr>
<tr>
<td>Voice: participant voices must not be silenced, disengaged or marginalised</td>
<td>Tradition of inquiry</td>
<td>Reflexivity</td>
</tr>
<tr>
<td>Critical subjectivity: researchers heighten self awareness</td>
<td>Starts with single focus on central phenomenon rather than comparison or relationship as in QUANT research</td>
<td>Impact</td>
</tr>
<tr>
<td>Reciprocity: between researcher &amp; those being researched</td>
<td>Written persuasively</td>
<td>Expression of a reality</td>
</tr>
<tr>
<td>Sacredness of relationships: researcher respect relationships a&amp; collaborates on equal terms with participants</td>
<td>Multiple levels of analysis Narrative- unexpected ideas &amp; believable &amp; realistic information</td>
<td></td>
</tr>
<tr>
<td>Sharing privileges: researcher shares rewards with persons whose lives they portray</td>
<td>Strategies to confirm accuracy of the study</td>
<td></td>
</tr>
<tr>
<td>Rigorous data collection- multiple forms of data- extensive-long period field collection</td>
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</table>

Sources: Adapted from Lincoln (1995); Creswell (1998) and; Richardson (2000).
Table 4: Eight “Big-Tent” Criteria for Qualitative research

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Worthy topic</td>
<td>Topic of the research is relevant, timely, significant and interesting</td>
</tr>
<tr>
<td>Rich rigor</td>
<td>Study uses sufficient, abundant, appropriate and complex; theoretical constructs; data and time in the field; sample(s); context(s); and data collection &amp; analysis processes</td>
</tr>
<tr>
<td>Sincerity</td>
<td>Study is characterised by self-reflexivity and transparency</td>
</tr>
<tr>
<td>Credibility</td>
<td>Research is marked by thick description, concrete detail; triangulation or crystallization; multivocality &amp; member reflections</td>
</tr>
<tr>
<td>Resonance</td>
<td>Research influences through aesthetics and presentation; naturalistic generalisations &amp; transferable findings</td>
</tr>
<tr>
<td>Significant contribution</td>
<td>Provides significant contribution: conceptually; practically; morally; methodologically; and heuristically</td>
</tr>
<tr>
<td>Ethical</td>
<td>Considers; procedural ethics; situational &amp; culturally specific ethics; relational ethics and exiting ethics</td>
</tr>
<tr>
<td>Meaningful coherence</td>
<td>Study achieves what it purports to be about. Uses methods and procedures that fit stated goals. Meaningfully interconnects literature, research questions/foci, findings, and interpretations with each other</td>
</tr>
</tbody>
</table>

Source: Adapted from Tracy (2010, p. 840)