

CHANGING PERSPECTIVES IN THE ISSUES OF GENERALISABILITY, VALIDITY AND RELIABILITY AS APPLIED TO THE QUALITATIVE RESEARCH PARADIGM

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ABSTRACT

This concept paper addresses the changing perspectives with regards to the issues of generalisability, reliability and validity within the framework of the qualitative research paradigm. The three concepts were viewed as the exclusive preserve of the quantitative research methodology, a branch of research diametrically opposed to the qualitative research paradigm. The paper sets off with the conceptual framework beaming at the quartet concepts of qualitative research, generalisability, validity and reliability. As the discourse progresses, coming in for attention is the discussion on how qualitative research can embrace the issues of generalisability, validity and reliability. Conclusions and recommendations gleaned from the discourse inevitably hinge strongly on the argument to encapsulate the three concepts in all phases of the qualitative research paradigm.

Keywords: Generalisation, validity, reliability, research, qualitative research, paradigm, triangulation, research methods, mixed methods, methodology.

INTRODUCTION

The focal point of this concept paper is to make a departure from the widely held and traditional standpoint that the issues of generalisation, validity and reliability are not expected attributes of qualitative research, (Wainer & Braun, 1998). Consequently, the discourse that follows attempts to highlight the applicability of the three topical issues alluded to above within the context of the qualitative research methodology.

Statement of the problem

The traditional school of thought rested upon the assumption that generalisation, validity and reliability had no place of honour within the parameters of qualitative research. However as frontiers of knowledge broadened in recent times, changing perspectives have attested to the growing significance and relevance of the three concepts at all phases of qualitative research. It is against this background that this treatise is set to explore the applicability of generalisation, validity and reliability in conducting qualitative research.

Objectives

A number of key objectives provided the bedrock for this concept paper. Thus the following objectives guided the forthcoming discussion:

- To give a conceptual outline of: qualitative research, generalisability, validity and reliability.

- To demonstrate how qualitative research methodology can embrace the concept of generalisability.
- To articulate the applicability of validity in qualitative research.
- To argue the case for application of the concept of reliability in the qualitative research paradigm.
- To propound conclusions and recommendations that bear on to the application of generalisability, validity and reliability in improving the overall lustre of qualitative research.

CONCEPTUAL FRAMEWORK

This section examines the quartet concepts: qualitative research, generalizability, validity and reliability as applied to the qualitative research paradigm.

The qualitative research paradigm

Less, (1995) aptly shows that the qualitative research paradigm is used if research is attempting to find meaning of or understand the experience of a given situation to a group or individuals. It is the diametric opposite of quantitative research, which is preoccupied with casual determination, prediction and generalisation of findings. By contrast qualitative research seeks illumination, understanding, trustworthiness and credibility of findings in relation to similar situations. Strauss and Corbin, (1990p.17) argue that, broadly defined qualitative research means ‘... any land of research that produces findings not arrived at by means of quantification.’ The above point underpins the descriptive nature of this research paradigm. To this end qualitative research is designed to reveal a target audience’s range of behavior and the perception that drives it with reference to specific topics or issues. In its most ideal type qualitative research seeks to understand an individual’s perception of the world (i.e truth) from his or her frame of reference, (Glaser & Strauss, 1967). One of the brand tag that distinguishes qualitative research from other research methodologies is its ability to: as (Patton, 2001) reveals, produce findings arrived at from real world settings where, ‘phenomenon of interest unfold naturally.’ This view is also corroborated by Robson, (1995).

According to Flick, (2005), the qualitative research paradigm is markedly differentiated from other research models in terms of the following epithets:

- The initial nature of questions it addresses.
- Not so much interested in the technical construction of hypotheses.

Its methodological framework with regards to:

- Design selection.
- Population parameters.
- Sampling strategy.
- Instrumentation.
- Settings for data collection.
- Data collection procedures.
- Data collation, presentation, interpretation and reporting procedures.

Attendant issues with regards to:

- Generalisability,
- Validity and
- Reliability.

It is noteworthy to mention that, validity and reliability transcend all phases of the research cycle. However, contingent upon the extent of validity and reliability of the research process, a trade off must be struck between these issues and generalisability of research results. Hence in the forthcoming section, this paper examines the nexus between qualitative research and the above attendant issues. In concluding this section it suffices to acknowledge that the ontological and epistemological foundations of qualitative research are grounded in the following fields: sociology, psychology, anthropology and social and behavioral sciences, (Denzin, 1978).

The Concept of generalisability

Generalisability is defined as the degree to which findings can be generalized from the study sample to the entire population or is the ability to apply theory resulting from the study sample to the entire population or universally, (Maxwell 1992). Most studies if not all, are meant to study a specific issue or phenomenon in a certain population or ethnic group of a focused locality in a particular context, hence generalisability of qualitative research findings is usually not an expected attribute. However, with the rising trend of knowledge synthesis and emergence of dynamic research models evaluation of generalisability of qualitative research findings has become increasingly pertinent. Consequently, generalisability in qualitative research is gaining prominence in scenarios where findings from one study can be generalised to another under similar theoretical and the proximal similarity model, where generalisability of one study to another is judged by similarities between the time, place, people and other social contexts. (Maxwell, 1992). In concluding this section it suffices to point out that articulating the issue of generalisability of findings has gained serious ground as the call for universal application of research findings has grown louder with respect to all forms of research methodologies. Hence due to changing perspectives generalizability has abundantly become an issue in qualitative research.

Concept of Validity

As alluded to earlier, validity as a construct transcends all phases of the research cycle, with qualitative research methodology included. Thus validity in qualitative research means the extent to which data is plausible, credible and trustworthy, and can be defended when challenged (Maxwell, 1992). However, in assessing validity of qualitative research, challenges can emanate from the ontology and epistemology of the issue being studied. In order to assess these concerns then, qualitative research essentially looks at the appropriateness of tools, processes, data and generalisation. In the quest to ensure validity of a study, the qualitative researcher must ascertain whether: processes, results, conclusions and the subsequent generalisations are valid for the sample and context. The foregoing attest to the changing perspectives on the qualitative research landscape, where validity has become a central issue in this research paradigm.

Concept of Reliability

Stenbacka, (2001) reveals that reliability refers to the extent to which results are consistent overtime and an accurate representation of the total population under study. If the results of the study can be reproduced under a similar methodology, then the research instrument is considered reliable. In qualitative research, reliability refers to the exact replicability of processes and results. Essence of reliability for all forms of research paradigms lies with the expected intrinsic quality of consistency. It must, however be noted that a margin of

variability is tolerated in qualitative research provided that the methodology consistently yield data that is ontologically similar, but may differ in scope, but still confined to the same context. As is evident from the foregoing, the argument for the need to embrace reliability in qualitative research appears to be gaining ground.

Embracing generalisability in the qualitative research paradigm

There is a serious debate about the applicability of generalisation in qualitative research. The traditional standpoint represented by inter alia, (Lincoln and Guba, 1985; Malcom 2002; Strauss and Corbin, 1999 etc) reveal three hardline positions against the case for generalization in qualitative research as espoused below:

- i. The only generalisation about qualitative research is that there is no generalisation.
- ii. The argument is that human interactions have always multiple meanings and forbids generalisation.
- iii. Yet other critics bring in the central logical argument, that a complete inductive proof of general sentence is not possible. In sync with the above assertions, Hearly & Perry, (2000), add that, generalisation is not the main purpose of qualitative research.

The foregoing represents the old school of thought with regards to the applicability of generalisation in qualitative research. However changing perspectives reveal that traditional ways of thinking about generalisability are inadequate. While generalisability was usually viewed as not an expected attribute, due to the rising trend of knowledge synthesis from qualitative research, evaluation of generalisability becomes pertinent. Thus all forms of research carried out under the auspices of qualitative research methodology have to embrace the generalisability issue as a critical component. Below are excerpts of how lustre can be added to qualitative research for it to embrace the component of generalisability.

- A degree of generalisability can be achieved by ensuring that the research report is sufficiently and comprehensively detailed for the reader to be able to judge whether or not the findings apply to similar settings.
- Generalisability may be enhanced by choosing a research site on the basis of typicality, or using multisite methodology. The researcher must be immersed in the setting so as to elicit a thick, or rich description.
- Some scholars advocate combining qualitative research with quantitative measures of populations, purposive sampling and theoretical sampling, thus combining sampling strategies may be used within a single method research design.

Also to achieve generalisability of qualitative research outcomes more or less of the following adaptations can be made within the ambit of mixed methods approach.

- Quantitisation of qualitative data ie by collating/ counting recurrent themes in qualitative data to give legitimacy to conclusions/ generalizations.
- Leedy, (1985) advocates for the concurrent triangulation strategy, involving assessing complementary qualitative data from within the sample i.e use of quantitative survey instruments to augment interview data.
- Drawing on data that comes from outside the purposive sample: using national or large sample survey data on related topics for the purpose of identifying the population to which a finding can or cannot be made.
- Multiple case studies revealed that generalisability is applicable and possible from the qualitative research paradigm through replicability of findings across several populations using same methods to generate same findings. Thus findings can be extrapolated to broader group beyond the initial one or two cases.
- Generalisability is also possible on basis for theory building through the inductive approach by depicting patterns of behavior among or across multiple and potentially

contrasting research target groups. Conclusions can be made about factors underlying those behavior patterns across a range of scenarios to make predictions and thereby generalise.

- In qualitative research generalisation is possible of the receiving audience's perceptions. For instance relevance and generalisability of findings from a purposefully selected sample to similar groups in an intended audience may be recognized for its credibility by researchers.

In wrapping up this section it suffices to say reflective theory, guided selection of cases and stepwise broadening of case basis are central procedures for generalisation from single cases under the framework of qualitative research.

Articulating the component of validity in the qualitative research methodology

Some qualitative researchers have argued that the term validity is not applicable to qualitative research. Creswell and Miller (2000) suggest that validity is affected by the researcher's perception of validity in the study and his or her choice of paradigm assumption. Contributing to the same debate Stenbacka (2001) concluded that the concept of validity should be redefined in qualitative research. Against this background of viewing validity as a construct amenable to quantitative research exclusively, many authors, (Best & Kahn, 1993; Abagi, 1995; Borg & Gall), argue that there is need for some kind of qualifying check for qualitative research to satisfy the condition of validity. However validity as applied to quantitative research is not fixed or universal concept but a contingent construct inescapably grounded in the processes and intention of particular methodologies.

The conventional and lexicographic meaning of validity is the extent to which a test or instrument measures what it purports to measure. Changing perspectives in the field of research have ushered in new conceptualisations of the term validity. Thus when viewed from the qualitative research paradigm, validity according to Lincoln and Guba (1995) refers to appropriateness, trustworthiness, quality, rigor, credibility of tools, processes and data. They further argue that if the above elements are meant to differentiate between a 'good' and 'bad' research then validity is inextricably linked with qualitative research. A close fit exists between validity and generalisability. Maxwell (1992) identifies generalisability as one of the 5 types of validity, emerging from qualitative research methodology. Thus in the quest to articulate the component of validity in qualitative research, the following must be taken account of:

1. Descriptive validity to do with factual accuracy.
2. Interpretive validity to do with understanding the perspective of the group under study.
3. Theoretical validity ie the fit of data with and theoretical explanation.
4. Evaluative validity- to do with application of an evaluation framework.
5. Internal and external validity to do with whether results of a study are generalisable within or beyond the initial group, setting, context or time.

From the above it can be observed that generalisability aligns with or operates on other features of validity. The validity criteria as a function of quality control in qualitative research encapsulates:

1. Checking appropriateness of research questions to meet desired outcome.
2. Ensuring the choice of appropriate research methodology for answering research questions
3. Choice of valid design.
4. Checking whether sampling and data are appropriate.

5. Ascertaining if results and conclusions are valid for the sample and context.

Due to changing perspectives in the domain of mainstream research, the validity criteria has become pertinent in all research paradigms. In resonance with this idea Patton (2001) states that validity and reliability are two factors which any qualitative researcher should be concerned about, while designing a study, analyzing results as well as judging the quality of a study.

Encapsulating the component of Reliability in the Qualitative Research Paradigm

Stenbacka (2001) argues that since the reliability issue concerns measurements, then it has no relevance in qualitative research. She adds that, the issue of reliability is an irrelevant matter when judging qualitative research. Stenbacka (2001 p552) further contends that, ‘... the concept of reliability is even misleading in qualitative research, if a qualitative research is discussed with reliability as a criterion the consequence is the study is no good.’ It is against this background that this paper is set to discuss the scope for embracing reliability as a critical component of qualitative research. Contrary to the views expressed by Stenbacka (2001), Patton (2001) strongly supports the argument for encapsulating reliability in qualitative research and states that validity and reliability are two factors that any qualitative researcher should be concerned about. Thus the component of reliability has become a categorical imperative due to changing perspectives on the mainstream qualitative research arena.

The critical question is how do we conceptualise and encapsulate reliability from the qualitative research perspective. In this connection, reliability is construed in qualitative paradigm terms such as: credibility, neutrality, confirmability, trustworthiness, consistency or dependability, applicability and transferability (Lincoln and Guba, 1985). The term dependability in qualitative research corresponds closely to the notion of reliability in quantitative research. To improve reliability or dependability in qualitative research Lincoln and Guba (1985) emphasize that:

1. The notion of an inquiry audit, which is used to examine both the process and product for consistency be taken account of.
2. To ensure reliability of qualitative research, an examination of trustworthiness is crucial. Trustworthiness of a research report lies at the heart of issues conventionally discussed as validity and reliability in quantitative research.
3. In qualitative research, the researcher is responsible for setting standards for assessing reliability, in tandem with the ‘... usual canons of good science.’ (Strauss and Corbin, 1990).
4. When all other factors are held constant, normally improving validity of a study inadvertently bears positively on enhancing the reliability of the same study. To this effect Lincoln and Guba (1985 p.316) postulate that ‘since there can be no validity without reliability, a demonstration of the former (validity) is sufficient to establish the later (reliability).’ Patton (2001) also further concedes that in qualitative research reliability is a consequence of validity.
5. Triangulation has risen as an important methodological issue in naturalistic and qualitative research approaches as a gate valve to control bias as basis for establishing robust generalisations, Mathiisen, (1988).
6. Constructionism has also been recommended as an invaluable mechanism for improving reliability and validity of a qualitative study. Constructionism values multiple realities that people have in their minds. Thus to acquire valid, multiple and diverse realities, multiple methods of gathering data are required. Hence engaging multiple methods such as observations, interviews and recordings will lead to more

valid, reliable and diverse construction of realities. As a corollary, credible generalisations are contingent upon the above. Generalisability, validity and reliability if they are to maintain relevance particularly from qualitative research paradigm, they have to be continuously refined to reflect the multiple ways of establishing the truth.

CONCLUSIONS AND RECOMMENDATIONS

Some conclusions and recommendations gleaned from the foregoing treatise are presented below.

CONCLUSIONS

The following conclusions emerged from this concept paper.

- In academic research parlance, the traditional view held was that the issues of generalisability, validity and reliability were not expected attributes of the qualitative research paradigm.
- As frontiers of knowledge broadened, it became a categorical imperative to embrace generalisability, validity and reliability in all phases of the qualitative research cycle.
- The three concepts: generalisability, validity and reliability are interwoven and inextricably linked.

RECOMMENDATIONS

To achieve generalisability, validity and reliability within the context of qualitative research:

- The research report should be sufficiently and comprehensively detailed for the reader to determine whether the results can be extrapolated to similar settings, target populations and other contexts.
- The researcher should ensure quantisation of qualitative data by collating recurrent themes in order to give legitimacy to generalisations.
- The qualitative researcher should use multiple samples, multiple case studies, multiple methods, triangulation, enquiry audit, mixed methods and theory building through the inductive approach.
- To embrace validity the qualitative researcher ought to check for and guarantee congruence between research questions, design selection, instrumentation, sample, results, conclusions and the context.
- To articulate reliability a qualitative researcher ought to take on board the notion of constructionism. This is achievable through the establishment of multiple and diverse realities via the use of multiple methods, multiple samples and multiple settings.

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