UNDERSTANDING AND USING QUALITATIVE METHODS IN PERFORMANCE MEASUREMENT

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Qualitative methods are used in research that is designed to provide an in-depth description of a specific programme, practice, or setting. Three of the possible reasons for choosing qualitative methods are explored in this article: (a) the researcher's view of the world, (b) the nature of the research questions, and (c) practical reasons associated with the nature of qualitative methods. Different types of qualitative research methods are practiced in educational and psychological research out of which, the paper showcases seven strategies Ethnographic research, Case study, Phenomenological research, Grounded theory, Participative inquiry, Clinical research and Focus groups. Qualitative evaluation methods are an essential part of the range of tools that evaluators call upon in their practice. Since the 1970s, when qualitative evaluation methods were first introduced as alternative to the experimental/quasi-experimental paradigms, the philosophical underpinnings and methodological requirements for sound qualitative evaluation have transformed the evaluation profession. Debates continue about the relative merits of positivistic and constructivist approaches to evaluation, but many evaluators have come to the view that pragmatically, it is desirable to mix qualitative and quantitative methods. More specifically the present paper examines the need for understanding and using qualitative methods in performance measurement.

KEYWORDS: Qualitative Methods, Performance Measurement.

INTRODUCTION

Qualitative methods are used in research that is designed to provide an indepth description of a specific programme, practice, or setting. Qualitative research is multi-method in focus, involving an interpretive, naturalistic approach to its subject matter. This means that qualitative researchers study things in their natural settings, attempting to make sense of, or interpret, phenomena in terms of the meanings people bring to them. Qualitative research involves the use and collection of a variety of empirical materials – case study, personal experience, introspective life story, interview, observational, historical, interactional, and visual texts- that describe routine and problematic moments and meanings in individuals' lives. (Denzin & Lincoln, 1994, p.2)

The key words associated with qualitative methods include complexity, contextual, exploration, discovery, and inductive logic. By using an inductive approach, the research can attempt to make sense of a situation without imposing pre-existing expectations on the phenomena under study. Thus, the researcher begins with specific observations and allows the categories of analysis to emerge from the data as the study progresses.

Three of the possible reasons for choosing qualitative methods are explored in this article: (a) a researcher's view of the world, (b) nature of the research questions, and (c) practical reasons associated with the nature of qualitative methods.

a. A Researcher's View of the World (Interpretive/Constructivist View)

Guba and Lincoln (1994) state that a person's view of the world should influence his or her choice of methods. Thus, they distinguish between using qualitative methods within a post positivist (they use the term conventional) paradigm and using them within the interpretive/constructivist paradigm. If researchers accept the ontological assumption associated with interpretive/constructivism that multiple realities exist that are time and context dependent, they will choose to carry out the study using qualitative methods so that they can gain an understanding of the constructions held by people in that context. Guba and Lincoln also identify qualitative methods as the preferred method of researchers working in the interpretive/constructivist paradigm.

b. Nature of the Research Questions

The nature of the research question itself can lead a researcher to choose qualitative methods. Patton (1990) identifies the following types of research questions for which qualitative methods would be appropriate.

1. The focus of the research on the process, implementation, or development of a programme or its participants.

- 2. The program emphasizes individualized outcomes.
- 3. Detailed, in-depth information is needed about certain clients or programs.
- 4. The focus is on diversity among, idiosyncrasies of, and unique qualities exhibited by individuals.
- 5. The intent is to understand the programme theory that is, the staff members' (and participants') beliefs as to the nature of the problem they are addressing and how their actions will lead to desired outcomes.

c. Practical Reasons

Patton (1990) describes another basis for choosing qualitative methods that is rooted in pragmatics associated with these methods rather than in the nature of the research questions themselves. He notes that the choice of qualitative methods might be appropriate under three conditions.

First, because many educational and psychological programmes are based on humanistic values, the intended users of the research may prefer the type of personal contact and data that emerge from a qualitative study.

Second, qualitative methods may also be chosen when no acceptable, valid, reliable, appropriate quantitative measure is available for the desired outcomes of a programme.

A third reason for choosing qualitative methods might be to add depth to a quantitative study. For example, in survey research, respondents commonly indicate their answers by circling a number on a Likert-type, 5-point scale. Follow-up interviews can be used to determine the meaning attached to their numerical ratings (Lopez & Mertens, 1993).

STRATEGIES FOR QUALITATIVE RESEARCH

Many different types of qualitative research methods / strategies are practiced in educational and psychological research. In fact, Tesch (1990) identified 26 different types in her analysis. Rather than discuss all 26 types, I have chosen to focus on 7 strategies. These are:

- 1. Ethnographic research
- 2. Case study
- 3. Phenomenological research
- 4. Grounded theory
- 5. Participative inquiry
- 6. Clinical research
- 7. Focus groups

The first six of these are described in the Handbook of Qualitative Research

(Denzin & Lincoln, 1994), and thus, their inclusion is based on the rationale that they represent the "state of the art" in educational and psychological qualitative research. The seventh strategy i.e., Focus Groups, is in some ways a "horse of a different colour" in that it might be viewed more as a data collection technique than as a qualitative research strategy. However, it is emerging as an important strategy, especially in evaluation research.

i. Ethnographic Research

Tesch (1990) identifies ethnography as the most common type of qualitative method used in educational and psychological research. Ethnography can be defined as a research method designed to describe and analyse practices and beliefs of cultures and communities.

Ethnographic research is guided by theory, either an explicit anthropological, psychological, or educational theory or by an implicit personal theory about the way things work (Fetterman, 1989). In ethnography, the researcher must be willing to abandon or modify a theory that does not "fit" the data. The focus of ethnography is to understand the culture from an emic (insider) and etic (outsider) perspective. Culture can be defined as the behaviour, ideas, beliefs, and knowledge of a particular group of people. Thus, ethnographic research typically includes a study of the group's history, geography, kinship patterns, structures (i.e., the social relations between group members), rituals, symbols, politics, economic factors, educational and socialization systems, and the degree of contact between the target and mainstream cultures.

ii. Case Study

Some authors view the case study as one type of ethnographic (interpretive) research that involves intensive and detailed study of one individual or of a group as an entity, through observation, self-reports, and any other means (Langenbach, Vaughn, & Aagaard, 1994; Tesch, 1990). However, Yin (1994) points out that case studies are not identical to ethnographic research. Because of this distinction and the important role that case studies have played in educational and psychological research, methodological issues related to case studies are explored in more depth in this article.

To study a case, Stake (1994) recommends data collection of the following types of information:

- The nature of the case
- · Its historical background
- $\bullet \quad \text{Other contexts, such as economic, political, legal, and aesthetic} \\$
- $\bullet \quad \text{Other cases through which this case is recognized} \\$
- Those informants through whom the case can be known.

The process of making comparisons with other cases is often left to the reader of the case study who comes to the report with pre-existing knowledge of similar and different cases. Stake warns readers not to lose that which is unique about this case in an effort to find similarities with other cases. Some people view case study methods as leading to scientific generalizations, but Stake emphasizes the intrinsic interest in each case as being important.

Yin (1994) recommends starting a case study by developing a research design. He identifies the following steps in the development of the case study design:

- 1. Develop the research questions: Yin suggests that "how" and "why" questions are especially appropriate for case study research. Oakes and Guiton's (1995) guiding research question asked. How do educators frame-tracking decisions for high school students? They had two sub questions:
 - a. What are the effects on students' course taking of educators' judgments about what courses are best for students, students' and parents' choices, and the constraints and opportunities inherent in schools' own cultures and the larger social and political context?
 - b. What factors contribute to the racial, ethnic, and social class patterns of curriculum participation?
- 2. Identify the propositions (if any) for the study: Propositions are statements akin to hypotheses that state why you think you might observe a specific behaviour or relationship. All case studies may not lend themselves to the statement of propositions, especially if they are exploratory. However, Yin (1994) says the researcher should be able to state the purpose (in lieu of propositions) of the study and the criteria by which an explanation will be judged successful.
- 3. Specify the unit of analysis: Specification of the "case" involves the identification of the unit of analysis. Some cases can be more complex and harder to define than an individual for example, a program, an organization, a classroom, a clinic, or a neighbourhood. Researchers need to base the design on either a single case or multiple cases and establish the boundaries as clearly as possible in terms of who is included, the geographic area, and time for beginning and ending the case. Once the case has been identified, the unit of analysis can then be described within the context of the case. One unit of analysis may be selected or several.
- 4. Establish the logic linking the data to the propositions: Yin (1994) suggests that researchers attempt to describe how the data will be used to illuminate the propositions. Oakes and Guiton (1995) analysed student

- handbooks, course descriptions, and master schedules and conducted onsite observations and interviews. To ensure the validity of their findings, they used standard triangulation procedures throughout the study.
- 5. The criteria for interpretation of the findings should be explained: No statistical tests are typically appropriate for use as a criterion for case study decisions. Oakes and Guiton (1995) used their data to reject a simplistic, unidimensional view of curriculum offerings and student assignments. They found it necessary to integrate the various unidimensional theories (e.g., human capital theory) to understand the interplay of structural, cultural, and political factors.

In case study research, theory development is one essential part of the design phase. Yin (1994) defines theory as an understanding (or theory) of what is being studied. The literature review is an excellent source for the identification of appropriate theories to guide the case study design.

iii. Phenomenological Research

Phenomenological research emphasizes the individual's subjective experience (Tesch, 1990). It seeks the individual's perceptions and meaning of a phenomenon or experience. Typically, phenomenological research asks, What is the participant's experience like? The intent is to understand and describe an event from the point of view of the participant.

The feature that distinguishes phenomenological research from other qualitative research approaches is that the subjective experience is at the centre of the inquiry.

Holstein and Gubrium (1994) emphasize the key characteristic of phenomenology as the study of the way in which members of a group or community themselves interpret the world and life around them. The researcher does not make assumptions about an objective reality that exists apart from the individual. Rather, the focus is on understanding how individuals create and understand their own life spaces. They identify phenomenology as the philosophical base for interpretive research strategies such as ethnomethodology and conventional analysis, which have at their core the qualitative study of reality-constituting practices. In ethnomethodology, the analysis focuses on describing how individuals recognize, describe, explain, and account for their everyday lives. Conversational analysis is one example of ethno-methodological research that examines the sequential organization of topics, management of turn taking, and practices related to opening, sustaining, and closing a conversation.

iv. Grounded Theory

Grounded theory was developed by Glaser and Strauss and can be

described as "a general methodology for developing theory that is grounded in data systematically gathered and analysed" (Strauss & Corbin, 1994, p. 273). The defining characteristic of grounded theory is that the theoretical propositions are not stated at the outset of the study. Rather, generalizations (theory) emerge out of the data themselves and not prior to data collection. Thus, the emergent theory is grounded in the current data collection and analysis efforts.

Because the initial or emerging theory is always tested against data that is systematically collected, this approach to research has been called the constant comparative method. It was created explicitly for the purpose of developing theory based on empirical data. On the basis of the viewpoints expressed by participants in the research, researchers accept the responsibility to interpret the data and use it as a basis for theory generation. The constant comparative method calls on the researchers to seek verification for hypotheses that emerge throughout the study (in contrast to other qualitative approaches that might see this as the role of follow-up quantitative research). Although Strauss and Corbin (1994) view grounded theory as a general method, applicable in quantitative and qualitative studies, their greatest impact has been in qualitative research.

The key methodological features include the following:

- 1. The researcher needs to constantly interact with the data; ask questions designed to generate theory and relate concepts. Make comparisons, think about what you see, make hypotheses, and sketch out mini frameworks to test ideas.
- 2. Use theoretical sampling that is, select incidents for data collection that are guided by the emerging theory; as you ask questions of your data, you will begin collecting data that will help you fill in gaps in your theoretical formulation.
- 3. Use theoretical, systematic coding procedures; conceptualize how the substantive codes relate to each other as hypotheses to be integrated into a theory. Strauss and Corbin identify three types of coding decisions (open coding, axial coding, and selective coding).
- 4. Ask questions of your data that allow you to depict the complexity, variation, and nature of the relationships between variables in your study. Strauss and Corbin provide guidelines for increasing theoretical sensitivity, such as sitting with your data and asking questions such as, Who? When? Where? What? How? How much? and Why?

v. Participative Inquiry

Reason (1994b) discusses the emergence of a worldview that emphasizes participation as a core strategy in inquiry. Reason identifies

two approaches to participatory research that differ in their fundamental assumptions of the role of the researchers and the influence of power on the researcher-participant relationships. These are:

- 1. Cooperative Inquiry: Cooperative inquiry is based on the importance of self-determination, and thus, all people are involved in the research as co-researchers. They contribute to the decision making through "generating ideas, designing and managing the project, and drawing conclusions from the experience, and also co-subjects, participating in the activity being researched" (Reason, 1994b, p. 326). The methodological implications of cooperative inquiry include the following:
- a. Co-researchers identify a research problem and procedures that they want to work on together.
- They implement their research procedures in everyday life and work.
- c. They review and interpret the data and draw conclusions for change in practice or need for additional research.
- 2. Participatory Action Research (PAR): PAR emphasizes the establishment of liberating dialogue with impoverished or oppressed groups and the political production of knowledge. Fals-Borda and Ralman (1991) note that PAR is rooted in the culture of the common people, and they describe the role of the researcher as a change agent who embraces the concerns of oppressed people. The methodological implications arise from the need for dialogue between the more formally educated researcher and the cultural knowledge of the people. As in cooperative inquiry, the focus is on the people's participation in setting the agenda, participating in the data collection and analysis, and controlling use of the results. However, PAR emphasizes the use of methods that allow the voices of those most oppressed to be heard.

Thus, such research might take the form of community meetings and events that allow the oppressed people to tell their own stories, to reflect on their communities, and to generate ideas for change.

vi. Clinical Research

Clinical research actually comes from the application of qualitative methods to biomedical problems (Miller & Crabtree, 1994) because of the close parallels between investigating the physician and the therapist-client relationship. Clinical research design was developed to adapt to the peculiarities of trying to understand a problem within a

clinical context. Miller and Crabtree suggest that clinical qualitative research should investigate the physical, behavioural, cultural, historical, social, emotional, and spiritual ramifications of the following questions:

What is going on with my body?

What is happening with my life?

Who has what power? (p. 342)

Through the use of in-depth interviews and participant observation, the researcher can come to understand the multiple forces that influence the effectiveness of different types of therapy.

Clinical research methods were developed to provide an additional avenue for understanding the efficacy (or non efficacy) of prescribed treatments based on inclusion of the variables in the patient's everyday life. Much medical research is conducted using randomized designs that try to control or eliminate extraneous effects of everyday life. However, the physician who treats patients needs to prescribe treatments that take these variables into account. Clinical research uses qualitative methods to account for the effect of variables such as having young children to care for, restrictive insurance policies, or workers' compensation laws.

vii. Focus Groups

Focus groups can be viewed as a data collection method or as a strategy for research. Focus groups, in essence, are group interviews that rely, not on a question-and-answer format of interview but on the interaction within the group (Morgan, 1988). This reliance on interaction between participants is designed to elicit more of the participant's points of view.

Using focus groups as a research strategy would be appropriate when the researcher is interested in how individuals form a schema or perspective of a problem. The focus group interaction allows the exhibition of a struggle for understanding how others interpret key terms and their agreement or disagreements with the issues raised. They can provide evidence of ways that differences are resolved and consensus is built.

Systematic variation across groups is the key to research design with focus groups. Examples include composing groups that vary on different dimensions:

- $1. \ \ Variation\ in\ the\ ordering\ of\ questions\ that\ the\ groups\ discuss.$
- 2. Variation in terms of characteristics such as age, ethnicity, gender, or disability.
- 3. Using homogeneous groups versus heterogeneous groups (Warning: Hostility can result from bringing together two groups whose lifestyles do not normally lead them to discuss a topic together.)

4. Comparing responses of individuals who are brought back for more than one group (i.e., the same group meets several times together).

The group is considered as the unit of analysis; therefore, the researcher must decide how many groups to have. This is the determinant of the degree of variability that will be possible. In market research, generally, no new ideas are forthcoming after three or four groups. Morgan (1988) concurs that only a few groups are necessary when the research is highly structured and exploratory; however, he recommends using six to eight groups if the goal is a detailed content analysis with relatively unstructured groups.

CONCLUSION

Qualitative evaluation methods are an essential part of the range of tools that evaluators call upon in their practice. Since the 1970s, when qualitative evaluation methods were first introduced as an alternative to the then orthodox experimental/quasi-experimental paradigm, the philosophical underpinnings and methodological requirements for sound qualitative evaluation have transformed the evaluation profession. Debates continue about the relative merits of positivistic and constructivist approaches to evaluation, but many evaluators have come to the view that pragmatically, it is desirable to mix qualitative and quantitative methods.

Although performance measurement has tended to rely on quantitative indicators to convey results, there are alternatives that rely on qualitative methods to elicit performance stories from stakeholders. In settings where data collection capacities are very limited, qualitative methods offer a feasible and effective way to describe and communicate performance results.

REFERENCES

- Denzin, N. K. (1994). The art and politics of interpretation. In N. K. Denzin & Y. S. Loncoln (Eds.), Handbook of qualitative research (pp. 500-515). Thousand Oaks, CA: Sage.
- Denzin, N. K., & Lincoln, Y. S. (1994). Strategies of inquiry. In N.K. Denzin & Y. S. Lincoln (Eds.), Handbook of qualitative research (pp. 199-208). Thousand Oaks, CA: Sage.
- Denzin, N. K., & Lincoln, Y.S. (Eds.) (2000). Handbook of qualitative research (2nd ed.) Thousand Oaks, CA: Sage.
- Fals-Borda, O., & Ralman, M. A. (Eds.). (1991). Action and Knowledge: Breaking the monopoly with participatory action research. New York: Intermediate Technology/Apex.
- Fetterman, D. M. (1989). Ethnography: Step by step. Newbury Park, CA: Sage.

- Geertz, C. (1973). The interpretation of cultures. New York: Basic Books.
- Glaser, B. (Ed.). (1994). More grounded theory: A reader. Mill Valley, CA: Sociology Press.
- Glaser, B., & Strauss, A. (1967). Discovery of grounded theory. Chicago: Aldine.
- Guba, E. G., & Lincoln, Y. S. (1994). Competing paradigms in qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), The handbook of qualitative research (pp. 105-117). Thousand Oaks, CA: Sage.
- Holstein, J. A., & Gubrium, J. E. (1994). Phenomenology, ethnomethodology, and interpretive practice. In N. K. Denzin & Y. S. Lincoln (Eds.), The handbook of qualitative research (pp. 262-272). Thousand Oaks, CA: Sage.
- Krueger, R.A., & Casey, M. A. (2000). Focus groups: A practical guide for applied research (3rd ed.) Thousand Oaks, CA: Sage.
- Lengenbach, M., Vaughn, C., & Aagaard, K. (1994). An introduction to educational research. Needham Heights, MA: Allyn & Bacon.
- Leong, T.L.F., & Austin, T. J. (2006). The psychology research handbook (2nd ed.). Thousand Oaks, CA: Sage.
- Lopez, S., & Mettens, D. M. (1993 April). Integrating the feminist perspective in educational research classes. Paper presented at the annual meeting of the American Educational Research Association, Atlanta, GA.
- McDavid, C. J., & Hawthorn, L.R.L. (2006). Program evaluation and performance measurement. Thousand Oaks, CA: Sage.
- Mertens, M. D. (1998). Research methods in education and psychology. Thousand Oaks, CA: Sage.
- Miller, W. L., & Crabtree, B. F. (1994). Clinical research. In N. K. Denzin & Y. S. Lincoln (Eds.), The handbook of qualitative research (pp. 340-352). Thousand Oaks, CA; Sage.
- Morgan, D. L. (1988). Focus groups as qualitative research. Newbury Park, CA: Sage.
- Oakes, J., & Guiton, G. (1995). Matchmaking: the dynamics of high school tracking decisions. American Educational Research Journal, 32 (1), 3-33.
- Patton, M. Q. (1990). Qualitative evaluation and research methods. Newbury Park, CA: Sage.
- Patton, M. Q. (2003). Qualitative evaluation checklist. Retrieved August 4, 2004, from http://www.wmich.edu/evalctr/checklist.qec.pdf.
- Pidgeon, N. (1996). Grounded Theory: Theoretical Background. In J. Richardson (Ed.), Handbook of qualitative research methods for psychology and the social sciences. (pp. 75-85). Leicester, UK: BPS

- Pollio, H. R., Henley, T., & Thompson, C. (1997). The phenomenology of everybody life. New York: Cambridge University Press.
- Reason, P. (1994b). Three approaches to participative inquiry. In N. K. Benzin & Y. S. Lincoln (Eds.), The handbook of qualitative research (pp. 324-339). Thousand Oaks, CA: Sage.
- Riessman, C. K. (1993). Narrative analysis. Newburg Park, CA: Sage.
- Shweder, R. A. (1990). Cultural psychology: What is it? In J. W. Stigler, R.A. Shweder, & G. Herdt (Eds.), Cultural psychology: Essays on comparative human development. Cambridge, UK: Cambridge University Press.
- Stake, R. E. (1994). Case studies. In N. K. Denzin & Y. S. Lincoln (Eds.), Handbook of qualitative research (pp. 236-247). Thousand Oaks, CA: Sage.
- Stewart, D. W., & Shamdasani, P. N. (1990). Focus groups: Theory and practice. Newbury Park, CA: Sage.
- Strauss, A., & Corbin, J. (1990). Basics of qualitative research. Newbury Park, CA:Sage.
- Strauss, A., & Corbin, J. (1994). Grounded theory methodology: An overview. In N. K. Denzin & Y. S. Lincoln (Eds.), Handbook of qualitative research (pp. 273-285). Thousand Oaks, CA: Sage.
- Tesch, R. (1990). Qualitative research analysis types and software tools. New York: Falmer.
- Thomas, S.P., & Pollio, H. R. (2002). Listening to patients: A phenomenological approach to nursing research and practice. New York: Springer.
- Valle, R., & Halling, S. (1989). Existential-phenomenological perspectives in psychology: Exploring the breadth of human experience. New York: Plenum.
- Yin, R. K. (1994). Case study research design methods (2nd ed.). Thousand Oaks, CA: Sage.