

UNIT 4 REPORTING AND EVALUATING IN QUALITATIVE RESEARCH

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4.0 INTRODUCTION

No research is complete without having detailed information of the results or achievements in form of reports of the research survey conducted by the researcher. After the collection of data, the researcher needs to analyse, evaluate and then report data in an organised and systematic way. The reports thus generated not only helps in understanding the basics behind certain events, objects, behaviours or practices; it also serves as a source for scope of future research. The present unit tries to discuss the systematic ways in which research interpretations are evaluated and reported by the researcher. It also will emphasise on the practical implications of evaluation and presentation of such reports basically in qualitative research.

4.1 OBJECTIVES

After completing this unit, you will be able to:

- define and describe the meaning of evaluating, interpreting and reporting data in qualitative research;
- explain the steps of evaluating or analysing of data in qualitative research;
- enumerate the steps in preparing report in qualitative research;
- analyse the Strategies of data interpretation in qualitative research;
- list the contents of research report; and
- explain the do's and don'ts in evaluating, interpreting and reporting data in qualitative research.

4.2 CONCEPT AND MEANING OF EVALUATING OR ANALYSING OF DATA IN QUALITATIVE RESEARCH

After collecting of data through various techniques or methods of research, the researcher tries to find out a solution to a problem, behaviour or uncertain environment. Such a solution or conclusion can be reached only with the help of systematically analysing or evaluating the data or information gathered and then organising the analysis and interpretations in form of reports. Once the data has been collected with the help of questionnaires, interviews, focus groups, or whatever, the data needs to be analysed or evaluated.

The concept of evaluation in qualitative research refers to an attempt to understand the extent to which the information collected helps in providing an answer to the pre planned aims and objectives or goals of the research. The researcher tries to evaluate the information, on basis of which he or she tries to understand the reasons, justifications or predictions of certain objects, behaviours, incidents or practices of the existing world. Evaluation helps in providing an insight to the problems or aims and goals of the research.

4.3 STEPS OF EVALUATING OR ANALYSING OF DATA IN QUALITATIVE RESEARCH

The process of evaluating the collected information or the data follows a systematic step. The researcher tries to organise and give meaning to the collected information in such a way, so that there is less chance of bias or confusion. With the help of systematically evaluating a data, the researcher can find several answers, purpose and also unveil several facts of the variables, events, behaviour or practices under study.

Following are the steps of the process of evaluating data:

- i) Reading the overall collected data
- ii) Categorising the collected data
- iii) Naming or labeling the categories
- iv) Identification of the causal relationships
- v) Recording or filing the data

Let us take up each of these steps and explain.

- i) *Reading the overall collected data:* Firstly, the researcher tries to go through the details of the information collected through various sources (for example- interviews, video tapes, audio tapes, observation and so on). This step helps in getting as much information as is required regarding the variables which the researcher selects for studying.
- ii) *Categorising the collected data:* From the collected information, the researcher or the analysts sorts relevant information, which may have a direct or indirect effect on the behaviour, objects, events or practices selected for the study. After sorting the data, the researcher categorises similar information under various categories or themes, as for example, the researcher may

categorise the information into concerns, suggestions, strengths, weaknesses, similar experiences, program inputs, recommendations, outputs, outcome indicators, and so on .

- iii) *Naming or labeling the categories:* The third systematic step in evaluation process of the research is labeling the sorted and categorised themes, for example keeping all the information of suggestions under the category of propositions.
- iv) *Identification of the causal relationships:* With the help of categorising and labeling of information, the researcher gets an idea of the direction or flow of information. This helps the researcher or the analysts to discover patterns, or associations and causal relationships amongst the categorised themes. For example, if most people of the sample under study belonged to the same geographic area, we may state that people if live in that area may have a certain problem. Or, most people of the sample under study belonged to same salary strata, then we would state that because they all have the same salary strata they are not adequately motivated. These patterns or associations of the themes are done on the basis of the experience of the responses of the sample and experience of the researcher during the study.
- v) *Recording or filing the data:* Once the patterns of relationships are analysed, the analysts need to keep a track or record of the same. These records or files serves as a guide for future reference, while the similar sample is being studied.

4.4 CONCEPT AND MEANING OF INTERPRETING OF DATA IN QUALITATIVE RESEARCH

Interpretation of data refers to summarising the findings of the data analysis in such a way that it provides useful information related to the goals of research. The researcher or the analysts attempts to put the information in the form of a viewpoint. For example, the researcher may compare the findings of the results with what was expected in the beginning stage.

It may also be a comparison or description in context of the standardised products, services or goals. Or it may simply be an explanation of the achievements and accomplishments. The interpretation may also be in a simple way of SWOT analysis (that is, analysing the strengths, weakness, opportunities and threats) of the research conducted.

While interpreting the data, it is suggested that the researchers should summarise the findings in such a way that it would not only help the group under study but also provide an opportunity for the other researchers to conduct the related research in a better and more efficient way. It is also taken care that the interpretations are summarised in such a way that the findings can be justified later on in the process of reporting. The findings should also have a proper support of the relevant literature review.

Self Assessment Questions

Choose the correct alternative.

- 1) Which of the following best differentiates evaluation from interpretation?

- a) Interpretation requires more conceptual and integrative thinking than data analysis.
 - b) Interpretation involves computerised analysis of data.
 - c) Evaluation is explanatory and interpretation conceptual
 - d) Evaluation involves conceptualisation but interpretation does not.
- 2) Which of the following describes the nature of qualitative data interpretation?
- a) Reflection
 - b) Integrative
 - c) Explanatory
 - d) None of the above

4.5 STRATEGIES OF DATA INTERPRETATION IN QUALITATIVE RESEARCH

There are various ways in which data can be interpreted or summarised. Few of them are:

(i) Making a final list, (ii) Elaborate narratives, (iii) Use of matrices.

The researcher may summarise the labeled categories and also code them and prepare a final list of findings which can further be explained in the later stage of forming reports.

Elaborate narratives

The researcher can also give meaning or elaborate the findings from the data collected through interviews, recordings and discussion.

Use of Matrices

A matrix is a type of chart which contains words and it looks like a cross table. The researchers may use matrices if they need to compare different groups or data sets on important variables, presented in key words.

For example if the researcher wants to compare the number of girls and boys of a school who are using a cosmetic product of a company, then he may represent the information in form of the following matrix—

Table: Matrix indicating age group and gender

Age Groups	No. of boys	No. of girls
>15 yrs	45	48
>20 yrs	11	13

Figure: Matrix on introduction of a cosmetic product among students of different age groups

Flow chart

A flow chart is a diagrammatic representation of boxes containing variables and arrows indicating the relationships between these variables.

When analysing the number of boys and girls of different age groups using the product as in the above example, it can be represented in form of the following figure

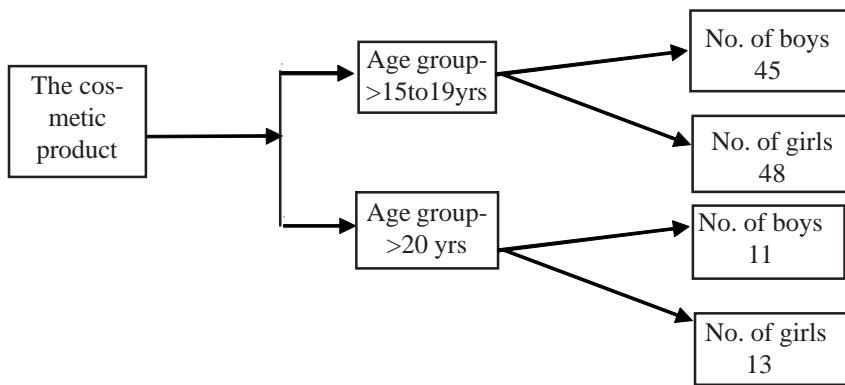


Fig.: A flow chart on introduction of a cosmetic product among students of different age groups

4.6 CONCEPT AND MEANING OF REPORTING OF THE DATA IN QUALITATIVE RESEARCH

Preparing a report of the findings of the research conducted is the ultimate challenge to the researcher or the analyst. Reporting of a data refers the ultimate discussion of the interpretations and findings backed by relevant support of relevant literature and the reasons behind such findings.

4.7 STEPS OF PREPARING A REPORT OF THE DATA IN QUALITATIVE RESEARCH

While preparing the final report of the research conducted, the researcher needs to be very cautious and least biased. The reports can be represented in an organised way, only if the following steps are followed by them, viz., (i) Preparation of the content of the report (ii) Review and discussion of the report (iii) Preparation of the executive summary (iv) Scope of future research.

i) Preparation of the content of report

Even before starting the procedure of writing down the report, the researcher needs to formulate the findings according to the need and requirement of those for whom the report is intended to. For example, the researcher has to create the scope and content of research on basis of the funders / bankers, employees, clients, customers, the public, etc. for whom the research was being conducted.

ii) Review and discussion of the report

The researcher then needs to review and also discuss the interpretations and results with the people on whom the research was conducted.

iii) Preparation of the executive summary

The researcher then prepares an executive summary (that is, a summing up of the conclusions and recommendations). The summary may contain the description of the organisation people, event, and practices under study. It also contains an

explanation of the research goals, methods, and analysis procedures; listing of conclusions and recommendations; and any relevant attachments. If required, the summary may also include the details of questionnaires, interview guides which have been used by the researcher.

iv) *Scope of future research*

On basis of the over all research conducted, the analyst also prepares a list of areas which may be studied further. Such scope acts as a research plan which can be referred when a similar research is conducted in the future.

Self Assessment Questions

Fill in the blanks

- 1) A flow chart is a diagrammatic representation of
- 2) Reporting of a data refers the ultimate discussion of the and findings
- 3) A matrix is a type of

4.8 CONTENTS OF RESEARCH REPORT

Since the research reports are not only a descriptive summary of the over all findings, they also act as a guide for future research in similar areas, the documentation of the report is very crucial and sensitive. The report should have a record of enough information which can be easily understood and followed as and when required. There are several ways in which the contents of a report is prepared. One of them can be discussed as follows:

1) *Title Page*

The first page of the report contains the details of the topic of the research as well as the name of the organisation that is being, or has a product/service/program that is being researched as well as the date.

2) *Table of Contents*

After getting done with the title page, the researcher prepares the list of contents of the research work and their page numbers.

3) *Executive Summary*

Then the report contains an executive summary or abstract of the research and its findings. It is usually a one-page, concise overview of findings and recommendations of the research conducted.

4) *Purpose of the Report*

The purpose of the report shows the aims and objectives of the research. It also shows the details of the type of the research (qualitative or quantitative) that was used by the researcher.

5) *Contextual background of the research target*

This topic shows a historical background of the people/ event/ practice/ program/organisation under study. It also mentions the problem that needs to be studied and also the over all goals of the research as well as the suggested outcomes of the research. The topic also shows what questions are being

answered by conducting the present research. This section may also involve the relevant literature review which was done by the researcher.

6) *Methodology*

The section of methodology deals with measures and procedures used for conducting the research. Basically it contains the following details:

- i) Sample: It represents the number of sample which are being used from the total population for the research study.
- ii) Scales used: The details of the instruments and questionnaires which are being referred for the concerned research are mentioned in this section.
- iii) Type of data collected: The details of the types of data (for example- interviews, questionnaires, recordings, observations etc.) are also mentioned in the methodology section.

7) *Results and findings*

This section deals with the analysis of the data collected. It discusses the results and findings of the research.

8) *Interpretation and Conclusion*

This section deals with the interpretation and discussion of the findings of the data analysed. On basis of the interpretations, the results are concluded. The conclusion section shows how the result is significant and to what extent is it helpful to the research targets and other researchers.

9) *Limitations of the study or research*

This section consists of the restrictions of limitations of the findings. It shows how and under which conditions the results can be generalised.

10) *Recommendations and implications*

The researcher recommends suggestions and implications of the study conducted.

11) *References*

The researcher acknowledges the authors, books, studies and journals which were helpful in providing relevant literature review for the research conducted.

12) *Appendices*

The last section of the research report contains the various sources (like questionnaire, company forms, case studies, data in tabular format, testimonials) which were analysed and used by the researcher.

4.9 DO'S AND DON'TS IN EVALUATING, INTERPRETING AND REPORTING DATA IN QUALITATIVE RESEARCH

While evaluating, analysing and reporting the data, the analyst needs to be cautious regarding the following do's and don'ts –

Do's:

The researcher should take full care and always try to include the following aspects while processing the data.

- 1) The analyst should be clear, specific and describe the sample populations
- 2) The analyst should code the data for their convenience in processing the data.
- 3) The analyst should frequently use diagrams, flow charts or matrices for conveniently summarising and explaining the data.
- 4) The analyst should draw conclusion on basis of the present study and other related study in the similar field.
- 5) As and when required, the analyst should develop policies for further evaluating or confirming the (qualitative) data in order to prove their validity.

Don'ts

The researcher should take full care and always try to exclude or avoid the following aspects while processing the data:

- 1) The analyst should not depend fully upon the research design selected as no research design is perfect on its own.
- 2) The analyst should not interview about only the successes, the failures can also provide significant information to them.
- 3) The analyst should not completely depend upon questionnaires, as much of the information can only be available through observations and interviews.

Self Assessment Questions

State whether the following statements are true or false—

- 1) The analyst should be clear, specific and describe the sample populations. ()
- 2) The analyst should interview about only the successes. ()
- 3) Results are concluded on basis of interpretations. ()
- 4) The analyst should avoid the frequent use of diagrams, flow charts or matrices. ()

4.10 LET US SUM UP

On basis of the above discussions, it can be summed up that the quality assessment of qualitative research studies still remains a challenging area. The systematic steps of each procedure in the way of processing the data (that is, evaluating, interpreting and reporting) is equally significant and case sensitive.

The reliability of the report depends upon the selection of good strategies while interpreting the data. The researcher also needs to be cautious with certain do's and certain don't's (pitfalls) while processing the data of the research conducted.

4.11 UNIT END QUESTIONS

- 1) Describe the concept and meaning of evaluating, interpreting and reporting the data in qualitative research?
- 2) Explain the steps of evaluating or analysing of data as well as preparing report in qualitative research?
- 3) Illustrate the strategies of data interpretation in qualitative research?
- 4) What are the basic requirements that are needed to be included as well as avoided while processing the data ?

4.12 SUGGESTED READINGS AND REFERENCES

Miles, MB and Huberman AM (1984) *Qualitative Data Analysis, A Sourcebook of New Methods*. Beverley Hills, CA, USA.: Sage Publications.

Patton, MQ (1990) *Qualitative Evaluation and Research Methods*. 2nd ed. Newbury Park, CA: Sage Publications.

References

Spradly, JP (1979) *The Ethnographic Interview*. New York, NY, USA.: Holt, Rinehart and Winston.

Walker, R (ed) (1985) *Applied Qualitative Research*. Hants, UK: Gower Publishing Company Ltd.

Willms, DG and Johnson NA (1996) *Essentials in Qualitative Research: A Notebook for the Field*. Hamilton, Canada: Mc Master University.

Yin, RK (1984) *Case study research: design and methods*. Beverly Hills, CA, USA.: Sage Publications.

NB: A major source of inspiration for writing this module was Miles and Huberman's book. Section V of this module is a heavily abbreviated and adapted version of their chapter VII.

Donovan, J. Evaluating meta-ethnography: a synthesis of qualitative research on lay experiences of diabetes and diabetes care. *Social Science and Medicine* 2003; 56: 671-84.

Malpass, A. Shaw A, Sharp D, Walter F, Feder G, Ridd M, Kessler D. 'Medication career' or "Moral career"? The two sides of managing antidepressants: A meta-ethnography of patients' experience of antidepressants. *Soc Sci Med*. 2009; 68(1):154-68.

MacEachen, E et al. (2006). Systematic review of the qualitative literature on return to work after injury. *Scandinavian Journal of Work Environment & Health*; 32(4): 257-269.

A qualitative meta-synthesis. *Journal of Advanced Nursing* 2007; 57(3), 227–243.

Attrie, P. Low-income mothers, nutrition and health: a systematic review of qualitative evidence. *Maternal and Child Nutrition* 2005 1(4): 227-240.

Blaxter, M. Criteria for evaluation of qualitative research. *Medical Sociology News* 1996; 22: 68-71.

- Booth, A. Cochrane or cock-eyed? How should we conduct systematic reviews of qualitative research? Qual EBP conference, Coventry university, may 14-16, 2001.
- Burns, N. Standards for Qualitative Research. *Nurs Sci Q* 1989; 2(44): 44-52.
- Carlsen, B. Glenton C, Pope C. Thou shalt versus thou shalt not: a metasynthesis of GPs' attitudes to clinical practice guidelines. *Br J Gen Pract* 2007;57:971-8. 14
- Cohen, DJ & Crabtree BF. Evaluative criteria for qualitative research in health care; controversies and recommendations. *Annals of Fam. Med* 2008; 6 (4): 331-39.
- Dixon-Woods, M. Booth A, Sutton AJ. Synthesising qualitative research: a review of published reports. *Qual Res* 2007; 7: 375-421.
- Dixon-Woods, M. Booth A, Sutton AJ. Synthesising qualitative research: a review of published reports. *Qualitative Research* 2007; 7(3): 375-422.
- Dixon-Woods, M. Shaw RL, Agarwal S, Smith JA. The problem of appraising qualitative research. *QSHC* 2004;13: 223-225.
- Dixon-Woods, M. Sutton AF, Shaw RL, Miller T, Smith J, Young B, Bonas S, Booth A, Jones DR. Appraising qualitative research for inclusion in systematic reviews: a quantitative and qualitative comparison of three methods. *Journal of Health Service Research and Policy* 2007; 12: 42-7.
- Edwards, A. Elwyn G, Hood K, Rollnick S. Judging the 'weight of evidence' in systematic reviews: introducing rigour into the qualitative overview stage by assessing Signal and Noise. *J Eval Clin Pract*. 2000 May;6(2):177-84.
- ESRC Research Methods Festival, St. Catherine's College Oxford, 30th June-3rd July, 2008.
- Guba, EG. & Lincoln YS. Fourth Generation evaluation. Newbury Park. CA: Sage. 1989.
- Harden, A. Critical Appraisal and Qualitative Research: Exploring sensitivity analysis.
- Hill, A & Spittlehouse C. What is critical appraisal? *Evidence-Based Medicine* 2003; 3 (2): 1-8.
- Howard, AF, Balneaves LG, Bottorff JL(2007). Ethnocultural women's experiences of breast cancer: a qualitative meta-study. *Cancer nursing* 30(4): E27-35.
- Lincoln, YS, Guba EG. Naturalistic Inquiry, Sage, Newbury Park, CA, 1985 .
- Mays, N. Pope C. Qualitative research in health care Assessing quality in
- Morse, JM, Barett M, Mayan M, Olson K, Spiers J. Verification strategies for establishing reliability and validity in qualitative research. *Int J of Qual Meth* 2002; 1 (2):spring.
- Noyes, J. & Popay J. Directly observed therapy and tuberculosis: how can a systematic review of qualitative research contribute to improving services?
- Noyes, J. Popay J, Pearson A, Hannes K, Booth A. Chapter 20: Qualitative
- Oxman, AD., Guyatt GH. The science of reviewing research. *Annals of the New York Academy of Sciences* 1993; 703: 125-133.

Popay, J. Rogers A, Williams G. Rationale and Standards for the Systematic Review of Qualitative Literature in Health Care. *Qual Health Research* 1998; 8: 341-51.

Popay, J.,& Williams, G. (1998). Qualitative research and evidence based healthcare. *Journal of Research in Social Medicine*,91(Suppl 35), 32–37. qualitative research. *BMJ* 2000;320:50-52. 15 research and Cochrane reviews. In: Higgins JPT, Green S (editors). *Cochrane Handbook for Systematic Reviews of Interventions*. Version 5.0.1 [updated September 2008]. The Cochrane Collaboration, 2008.

Robinson, L. & Spilsbury K. Systematic review of the perceptions and experiences of accessing health services by adult victims of domestic violence. *Health Soc Care Community* 2008; 16(1): 16-30.

Sim, J & Madden S. Illness experience in fibromyalgia syndrome: A metasynthesis of qualitative studies.” *Social Science & Medicine* 2008; 67(1): 57-67.

Spencer, L. Ritchie J, Lewis J et al. et al. Quality in Qualitative Evaluation: a framework for assessing research evidence: a framework for assessing research evidence. Government chief social researcher’s office 2003.

Thomas, J. Harden A, Oakley Am Oliver S, Sutcliffe K, Rees R, Brunton G, Kavanagh J. Integrating qualitative research with trials in systematic reviews. *BMJ* 2004; 328: 1010-1012.

Yu, D. et al. Living with chronic heart failure: a review of qualitative Humphreys A et al. A systematic review and meta-synthesis: evaluating the effectiveness of nurse, midwife/allied health professional consultants. *Journal of Clinical Nursing* 2007; 16(10): 1792-1808.

Websites address

<http://www.qualres.org/HomeGuid-3868.html>

<http://wilderdom.com/OEcourses/PROFLIT/Class6Qualitative1.htm>

http://wps.prenhall.com/chet_airasian_edresearch_8/38/9871/2527218.cw/index.html

http://www.idrc.ca/cp/ev-56451-201-1-DO_TOPIC.html

http://www.idrc.ca/cp/ev-56467-201-1-DO_TOPIC.html

http://www.phru.nhs.uk/Doc_Links/Qualitative%20Appraisal%20Tool.pdf

http://www.joannabriggs.edu.au/cqrmg/tools_3.html.

http://www.joannabriggs.edu.au/pdf/sumari_user_guide.pdf

[http://eppi.ioe.ac.uk/cms/default.aspx?tabid=2370&language=en-US.](http://eppi.ioe.ac.uk/cms/default.aspx?tabid=2370&language=en-US)

[www.cochrane-handbook.org.](http://www.cochrane-handbook.org)

http://www.gsr.gov.uk/downloads/evaluating_policy/a_quality_framework.pdf