

How to use qualitative research evidence when making decisions about interventions

health

This guide has been developed to help people working in health promotion and disease prevention to make better use of qualitative research evidence. Qualitative research can provide valuable evidence and information to guide your decision making about interventions, policy and practice.

What is qualitative research?

Qualitative social research investigates the relationships between individuals and the institutions and society in which they live (Daly et al. 1997) using a diverse range of approaches. It includes research methods that capture naturally occurring data in real-life contexts, including participant and non-participant observation, document analysis and discourse and conversation analysis. It also includes research methods that generate their own data through a reconstruction or retelling of views or behaviours via interviews and focus groups.

Qualitative methods are usually employed in naturalistic settings, rather than the contrived environments of controlled trials or social surveys.

The goal of most qualitative social research is to capture – as closely as possible – the understandings, interpretations and experiences of ordinary people in their everyday lives and environments (Denzin & Lincoln 1994).

What are the key features of qualitative research?

Key features of qualitative research include:

- concern with the *subjective* experience of participants
- commitment to viewing and sometimes explaining phenomena *from the perspective of those being studied*
- awareness and consideration of *the researcher's role and perspective*
- naturalistic inquiry in the *real world* rather than in experimental settings
- concern with *social processes* at the level of individuals, groups and organisations (such as the experience of a cancer diagnosis for all involved)
- *inductive* rather than deductive analytical processes (that is, broadly deriving theories or findings from empirical research data rather than forming a hypothesis that is then tested with empirical research).

What are the main characteristics of qualitative research?

Qualitative research:

- collects and analyses data mainly (although not exclusively) in the form of words and images rather than numbers
- involves prolonged immersion in, or contact with, the research setting
- uses a flexible (emergent) research strategy

- uses non-standardised, semi-structured or unstructured methods of data collection that are sensitive to the social context of the study
- captures detailed, rich and complex data
- is committed to retaining diversity and complexity in the analysis
- respects the uniqueness of each case as well as themes and patterns across cases
- pays attention to categories and theories that emerge from data rather than sole reliance on *a priori* concepts and ideas
- offers an understanding of how people interpret health and disease and make sense of their health experience (for example, their experience of living with diabetes, receiving treatment for cancer or being recruited into a screening program).

What methods are used for qualitative research?

Qualitative research methods include:

- case studies
- direct observation and description of people's activities, behaviours, actions and interactions (including the study of material culture, such as graffiti, garbage, cemeteries, media and so on)
- in-depth interviews and/or open-ended interviews with individuals or groups
- focus groups
- participatory or action research
- narrative research
- content analysis of material from organisational, clinical or program records, personal diaries, official records or publications and written responses to questionnaires.

When should I use qualitative research?

Qualitative research can be used to:

- direct and inform policy and program development
- assist in program design
- provide an explanation for people's behaviours and decisions
- understand why, how and under what conditions programs and policies work or fail to work.

Can qualitative research determine the effectiveness of a program or policy?

Qualitative research can provide a detailed understanding of the observed impacts and outcomes of a program or policy. It cannot *quantify* the impact of programs or policies or define their effectiveness or outcomes. However, qualitative research can provide valuable information to answer questions such as: *How is the program or policy working? Under what circumstances does the program or policy work? In what ways and for which types of people is the program or policy working? (And what do we mean by 'working' anyway?)*

Can qualitative and quantitative research methods be combined?

Qualitative and quantitative research methods can be effectively combined in mixed-methods designs to generate understanding of complex issues and cross-verify information. Combining qualitative and quantitative methods can maximise the strengths of each method and compensate for any limitations.

Combining the strengths of qualitative and quantitative research methods is ideal for assessing interventions for health promotion and disease prevention.

Combinations of qualitative and quantitative designs can be used to:

- develop quantitative methods and instruments or tools. In this case, the qualitative methods are exploratory and used *before* the quantitative methods. For example, it is common to conduct focus groups before developing a structured questionnaire.
- provide contextual data to improve the validity and cultural specificity of survey instruments and provide an explanation and interpretation of quantitative findings. For example, a survey can be used to identify what cultural groups have least access to public hospital-based antenatal care. Then qualitative methods can be used to explore the perceived reasons for poor access to this service among identified groups with the lowest access rates.
- interpret qualitative findings. For example, a qualitative community forum identified that elderly community members have poor access to healthy food options. A quantitative data collection tool, such as a survey, can then be used to establish whether this problem is localised or spread across a large geographical region and identify the key access issues (such as transport, cost, mobility issues and so on).
- cross-validate evaluation and/or research findings by combining the two approaches. For example, in the case above, the evaluators could select a group of elderly people and simultaneously conduct focus groups and a closed-items survey and compare the survey findings with the focus group findings.
- elaborate on the context in which epidemiological and clinical research findings occur. For example, experimental and quasi-experimental research explains the link between tobacco use and lung cancer; a qualitative researcher would then interview smokers to find out why people continue to smoke despite the negative health effects.

How can qualitative research help with decision making?

Qualitative research methods can support decision making by:

1. directing and informing policy and program development
2. assisting in program design
3. considering individual health decisions, actions and impacts
4. directing and informing policy and program evaluation.

1 How can qualitative research direct and inform policy and program development?

Qualitative research can inform both the *content of a program* and the *development of policy*. It is particularly useful in understanding **why**, **how** and **under what conditions** policies, programs and projects work or fail to work.

Qualitative research assists policy making by identifying:

- the context in which the policy or program operates and what this means for the design, development and likely success of the policy or program
- how the policy is delivered and experienced on the ground
- what impacts particular policies have and which aspects of the policy contribute to those impacts
- why the policy only works for some people or in some circumstances.

Example

A qualitative research project was conducted with focus groups of newly arrived refugees to investigate their knowledge of vitamin D and inform the development of a public health education program about the importance of vitamin D to health. Previous quantitative research had determined that these refugees were deficient in vitamin D. The research discovered that this population group understood the importance of vitamin D, but the SunSmart 'Slip, Slop, Slap' campaign had frightened them into avoiding the danger of the Australian sun (Paxton 2009). This research was utilised by the Cancer Council to revise the current sun exposure policy guidelines to be relevant for darker skinned people as well.

2 How can qualitative research assist in program design?

Qualitative research can be used to address the most challenging aspect of designing public health programs.

Qualitative research can assist in identifying and determining how to change forces in the community that cause or contribute to the problem in the first place.

Valuable information can be gained by consulting stakeholders (including service providers and community members) about:

- the barriers for addressing risk factors
- the kind of interventions that will encourage those at risk to change their behaviour
- strategies that might stabilise the at-risk population.

3 How can qualitative research help us to understand individual health decisions and actions?

Qualitative research studies can provide robust evidence that identifies why people behave the way they do and display risk-taking behaviours.

Example

Interviews of women with hepatitis C, conducted to understand their health-seeking behaviour, discovered the concept of 'bad blood'. The research identified that these women experienced negative attitudes from their health professionals upon their diagnosis of hepatitis C.

The women described feelings of being a lower class citizen and not being worthy of health care because of their IV drug use. Most had not received advice about the importance of a healthy lifestyle to maintain their health.

During consultations, many general practitioners had physically moved themselves away from these women. The women in this study felt stigmatised and unworthy due to their perceived 'bad blood' and were not encouraged or offered strategies to take care of their health.

This research informed a range of GP professional development activities aiming to change GP practice and behaviour when diagnosing people with hepatitis C (Crockett & Gifford 2004).

4 How can qualitative research be utilised in policy and program evaluation?

Qualitative research makes an important contribution to any policy evaluation where what is required is more than just a quantification of users, costs, outcomes or estimated impact. This is particularly important where the policy or intervention is highly process-orientated, where the intention is to effect change through interactions (for example, between a number of stakeholder partnerships or organisational changes) rather than through a one-off event or input.

Combining qualitative and quantitative research in a mixed-method approach can generate a deeper understanding of complex issues and cross-validate research findings (see the section 'Can qualitative and quantitative methods be combined?' above).

Qualitative research contributes to policy and program evaluation by:

- helping evaluators to understand the processes, impacts and outcomes of the policies and programs
- addressing the complexity of a social intervention and examining the multiple layers of policies (such as when issues are poorly understood)
- identifying who is providing the intervention, what decisions and judgements were made and what shaped those decisions
- addressing the personal, structural and environmental contexts of policy (such as where it is important to understand practices in detail)
- drawing out processes, barriers and facilitators of policy interventions (such as when it is important to discover how a scheme was actually implemented and the reasons for deviation, if any, from the original design)
- highlighting the (intended and unintended) consequences of an intervention
- identifying people's values, judgement and choices (for example, what was good or bad about patients' experiences of a smoking cessation group).

Qualitative research illuminates the processes and outcomes of a program for decision-makers; the evaluator acts as a conduit to make the voices of participants heard.

How can I assess the rigour of qualitative research?

To give practitioners and policy makers confidence in the results and applicability of qualitative studies for decision making, the researcher should demonstrate clear sampling criteria, data collection methods, data analysis processes and heed the methodological limitations of the four qualitative study designs, as these have an impact on evidence-for-practice implications (see Table 1 below from Daly et al. 2007). The various features of the four study designs can be used to critically appraise research using qualitative research methods and define the strength of evidence as a basis for decision making and policy generation (Daly et al. 2007).

Reported qualitative research must provide clear links between data analysis and evidence and transparency in the data analysis process.

Table 1 A hierarchy of evidence-for-practice in qualitative research—summary features

Study types	Features	Limitations	Evidence for practice
Generalizable studies (Level I)	Sampling focused by theory and the literature, extended as a result of analysis to capture diversity of experience. Analytic procedures comprehensive and clear. Located in the literature to assess relevance to other settings.	Main limitations are in reporting when the word length of articles does not allow a comprehensive account of complex procedures.	Clear indications for practice or policy may offer support for current practice or critique with indicated directions for change.
Conceptual studies (Level II)	Theoretical concepts guide sample selection, based on analysis of literature. May be limited to one group about which little is known or a number of important subgroups. Conceptual analysis recognizes diversity in participants' views.	Theoretical concepts and minority or divergent views that emerge during analysis do not lead to further sampling. Categories for analysis may not be saturated.	Weaker designs identify the need for further research on other groups or urge caution in practice. Well-developed studies can provide good evidence if residual uncertainties are clearly identified.
Descriptive studies (Level III)	Sample is selected to illustrate practical rather than theoretical issues. Record a range of illustrative quotes, including themes from the accounts of 'many', 'most' or 'some' study participants.	Do not report full range of responses. Sample not diversified to analyze how or why differences occur.	Demonstrate that a phenomenon exists in a defined group. Identify practice issues for further consideration
Single case study (Level IV)	Provides rich data on the views or experiences of one person. Can provide insights in unexplored contexts	Does not analyze applicability to other contexts.	Alerts practitioners to the existence of an unusual phenomenon

Source: Daly et al. (2007: 46)

Where can I find good qualitative research?

Qualitative research forms a small portion of more than two million articles published in biomedical research literature. Variations in indexing practices also necessitate using more than one database and different search filters.

Some journals are specifically devoted to qualitative research, such as *Qualitative Health Research* <<http://qhr.sagepub.com/>>.

Social Science and Medicine (Elsevier) and *Sociology of Health and Illness* (Blackwell) often have reputable qualitative research articles.

The *Australian and New Zealand Journal of Public Health* (Wiley-Blackwell), the *British Medical Journal* <www.bmj.com> and the *Medical Journal of Australia* <www.mja.com.au> publish qualitative research of varying standards.

The Cochrane Collaboration <www.cochrane.org> has a qualitative methods group aiming to develop and support systematic reviews of findings from studies using qualitative methods and their inclusion in systematic reviews of effects.

Refer to the following resources to assess the rigour of aspects of the qualitative study:

- *evidence*:

- a hierarchy of evidence for assessing qualitative health research: Daly et al. (2007)
- a useful checklist is available from the NHS in the UK via the Critical Appraisal Skills Programme (CASP), Public Health Resource Unit < <http://www.sph.nhs.uk/sph-files/casp-appraisal-tools/Qualitative%20Appraisal%20Tool.pdf/?searchterm=qualitative> >.
- *quality of sampling and data collection*: Gibbs et al. (2007)
- *rigour of data analysis*: Green et al. (2007)
- *rigour of focus group analysis*: Willis et al. (2009)

To understand the importance of social theory in qualitative research refer to Willis et al. (2007).

Information on narrative research can be found in the Evaluation section of the Health Promotion website <www.health.vic.gov.au/healthpromotion/steps/evaluation.htm>.

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Further information

Evidence and Evaluation team

Prevention and Population Health Branch

Department of Health
50 Lonsdale Street
Melbourne VIC 3000

Phone +61 3 9096 0393
Fax +61 3 9096 9165

Email: evidence.evaluation@health.vic.gov.au

Availability of this tool

This document is also available in PDF format on the internet at:

<http://www.health.vic.gov.au/health_promotion/evidence_evaluation/cdp_tools.htm>

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