The IDM Manual

a guide to the IDM (Interactive Domain Model) Best Practices Approach to Better Health

♦ Research & Evaluation ♦

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IDM Manual sections:

- ♦ **Basics**
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Other IDM resources of interest:

- ♦ **IDM Best Practices Road Map for Coaches**
- ♦ **Best Practices Check-In Forms**
- ♦ **IDM Computer Program**
- ♦ **IDM Best Practices peer-reviewed journal article**

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- ♦ **The *IDM Manual* is also available from <www.utoronto.ca/chp/bestp.html>.**
- ♦ **Egalement disponible en français de <www.opc.on.ca/francais/nosprogrammes/centre/projets/ meilleurespratiques.htm>.**
- ♦ **See also <www.bestpractices-healthpromotion.com>.**

The IDM Manual

The IDM (Interactive Domain Model) Best Practices Approach to Better Health

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- The *IDM Manual* is written from the perspective of health promotion and public health practitioners of all types and at all levels. That is, "we" refers to program implementers (front-line staff and managers), policy and decision makers, and researchers.
- **IDM** refers to Interactive Domain Model.

> **Quotes** are from focus groups and meetings or key informant interviews and discussions.

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RESEARCH AND EVALUATION IN BRIEF

The practice domain is the application of our vision and analysis of the environment; it is also a reflection of our underpinnings. Research, including evaluation, is one of the sub-domains of the practice domain. The degree of consistency of our research and evaluation processes and activities with our health promotion or public health underpinnings and understanding of the environment helps determine what kind of impact we have in our chosen health promotion or public health areas. Carrying out ongoing research and evaluation increases the effectiveness of our responses to our health-related issues and to our organizational issues by allowing us to (a) reflect on the work we have been doing and (b) try out new ways of doing things to see if they might work better.

Research and evaluation involves the identification of: issues of concern (i.e. research and evaluation questions), measurable or observable objectives and indicators, data sources, and methods for obtaining data. It also involves collecting and analyzing data, summarizing or synthesizing results, making recommendations, and disseminating and applying findings.

In order to be consistent with and to reflect our underpinnings and understanding of the environment it is important to consider not just *what* we do in our research and evaluation practices, but *how* we do it (e.g. are our chosen processes and activities as empowering and capacity building as we would like them to be).

The processes required to support research and evaluation activities may include: assessing, visioning, planning/revising, evaluating/reflecting, relationship building, skill sharing/capacity building, coordinating/co-operating, decision making, communicating, documenting, and managing resources.

COMPARISON OF APPROACHES, DESIGNS & METHODS

This section attempts to clarify issues related to health promotion and public health research. To this end, this section discusses research paradigms, designs, and methods, describing relative strengths and concerns so we have a better sense of:

- choices to make when we undertake research ourselves
- how to assess the research of others

Keep in mind when reading this section that from the perspective of this Manual:

- There are many types of research, and evaluation is as important as any of them; when research is referred to in this section, this includes evaluation.
- We need to focus our health promotion/public health research on organizations, other groups, and communities, as well as on individuals.
- Our values and beliefs are important to consider when choosing a research approach (whether "traditional" or "participatory action").
- No research design is innately superior to any other; rather, some designs are better equipped than other designs to answer certain kinds of questions (in other words, the design should follow the question).
- While there is a great deal of emphasis these days on "effectiveness" in health promotion/public health, questions about effectiveness are not the only questions we need to answer; also important are questions about which factors affect a particular issue, questions about the "what" and "why" of people's environments, behaviours, emotions, and beliefs, and questions about how to develop and improve a program.
- Both qualitative and quantitative methods can be used with any of the major categories of research designs (though not perhaps with specific sub-types).

Debates rage in health promotion/public health about the nature and role of research — sorting through these debates to assess what we as practitioners do now (rather than waiting till after all the dust has settled, which might be a long ways away) is not always easy. In addition, people view health promotion/public health research from a number of different perspectives. As a result, some of the opinions in this section are likely to be contentious. This section is not meant to provide definitive answers, but rather a starting point. While the opinions

" we emphasized that evaluation is a kind of research and that there are other kinds of research as well. Our definition served to cover all manner of paradigms, all manner of methodologies — for example a researcher might conduct a systematic literature review, or could design all kinds of projects such as double blind RCTs, or conduct an ethnographic study (tag along with someone for six months of their life and write an intimate description), or conduct a needs assessment, outcome evaluation, etc."

in this section have been carefully considered, thinking and dialogue are ongoing, which means opinions will likely change as time goes on.

research paradigms

The nature of our underlying beliefs concerning research — our research paradigm — will in part determine which research approaches, designs and methods we are most comfortable with or think are most appropriate. For example, a paradigm which clearly distinguishes between researcher and researched, assumes a knowable and objective reality, and places a high value on professional expertise, is probably best suited to a traditional approach, an experimental design, and quantitative methods. On the other hand, a paradigm which views researchers and researched as participating partners who can learn from each other, assumes there is not one but many realities, and places a high value on lived experience, would likely best suit a participatory action approach, descriptive observational design, and qualitative methods. Of course, there are many other paradigms, and sometimes paradigms overlap. In addition, what is best suited to a paradigm is not always as clear cut as presented in the previous examples. It is important to identify our paradigm and related underlying beliefs in order to make our choices of approach, design and methods consistent with them, or at least understand why we are not being consistent. We also need to be open to at least understanding and considering other paradigms.

"because there is such a strong foundation in that health and medical paradigm, a paradigm that reflects logical positivism – an apparent world of fact, singularity, certainty, predictability, cause and effect – it can be difficult [in health promotion] to establish credibility for research conducted in more recent traditions that value experience and the complex and often contradictory meaning that people attach to facts"

research approaches

Two basic approaches to consider for health promotion/public health research are: traditional and participatory action (see table below). Either can be used with any research design and any research methods.

"participatory action research methodology is critical to health promotion practitioners because it's a way for the community to identify their own issues around a problem, it's got community building, capacity building, personal empowerment...even evaluation should be participatory"

	description	requirements	strengths	cautions
Traditional	♦ a team of professional researchers identify the research question, develop the methodology to answer the question, and collect and analyze the data ♦ there is a clear distinction between the researchers and the research "subjects"	generally, basic requirements are: ♦ high quality research designs, methods and tools ♦ people with adequate knowledge and skills to do the research ♦ a population willing to be studied, or access to data already collected ♦ adequate resources to carry out the research	♦ a well-designed study carried out by skilled researchers can be useful if it meets a particular need for information ♦ a relatively small group of skilled researchers with well-defined roles to manage and conduct the research help make the research process efficient ♦ great credibility is given to well-designed research carried out by professional researchers	♦ a common complaint is that researchers "take" and don't give back; that is, the communities hosting the research don't benefit from the research ♦ research carried out by researchers who have not involved key stakeholders in the research process runs the risk of being irrelevant to the stakeholders, not understood by them, and/or ignored by them
Participatory Action	♦ researchers work with key stakeholders to identify the research question, develop the methodology to answer the question, collect and analyze the data, and plan how to address the results ♦ the distinction between the researchers and the researched is blurred	basic requirements are: ♦ high quality research designs, methods and tools ♦ people with research knowledge and skills willing to share skills and knowledge with those who may not have them ♦ key stakeholders who want to participate and are willing to learn research knowledge and skills if they don't have them ♦ good participatory processes in place to	♦ research results will be relevant to stakeholders, well understood, and likely to be acted upon ♦ a great deal of capacity building occurs, with researchers and stakeholders learning from each other ♦ unexpected insights into the research question develop because of the involvement of a diversity of perspectives ♦ bridges the gap between research and practice	♦ likely to be time-consuming and "inefficient" because of the large numbers of people and range of diversity involved ♦ may lack credibility because of preconceptions of lack of rigour and a different perspective on objectivity ♦ because many stakeholders will not initially have a research background, particular attention needs to be made to ensure they

	description	requirements	strengths	cautions
		facilitate diverse groups working together (e.g. decision making, communication, conflict resolution) ♦ adequate resources to support participation by diverse groups ♦ adequate resources to carry out the research		gain the required skills and knowledge through the participatory action research process in order to fulfil their research roles adequately

research designs

Research designs fall into two main categories: experimental (including quasi-experimental) and observational (including analytic and descriptive). Sometimes designs are combined resulting in a less clear distinction.

In an attempt to make research designs more useful for health promotion/public health, the following discussion of each design includes, in addition to individuals as participants, the possibility of organizations (e.g. schools, service clubs, workplaces) and communities (including geographic communities such as neighbourhoods and cities and non-geographic communities such as groups united by a common interest) as participants. Studies may include as participants individuals only, organizations only, communities only, or a combination of individuals, organizations and communities:

- A study with individual participants examines data unique to the individual level (which can in some cases be aggregated to produce population level data) such as existence of a disease, response to an intervention, emotions, and beliefs.
- A study with organizational participants examines data unique to the group level such as degree of conflict or consensus, available resources, and decision-making processes.
- A study with community participants examines data unique to the community level, such as degree of income equity, degree of social support, culture, and political and economic systems and structures.
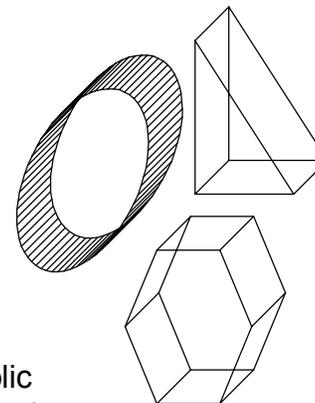
Which design is appropriate for which questions?
- **effectiveness** questions (how well do specific initiatives or interventions work to address our selected issue): *RCT, before-after with control group and/or time series*
- **etiology** questions (which factors influence our selected issue): *cohort, case control, case series*
- **context** questions (what is the nature of the physical, socio-political and other environments for our issue and our work, including challenges and resources): *prevalence, environmental scan*
- questions about **people** (re. particular issues and/or processes or activities, how do people act and feel and why do they act and feel that way): *prevalence, narrative, descriptive explanation*
- questions about our **program** (how do its components fit together and what can we do to make them fit better): *program profile* and *experimental designs* (re. outcomes)
- **theory** questions (what explanation or set of concepts can we develop for something that is currently an enigma to us): *theory building*

In general usage, experimental and analytic observational designs are equated with quantitative methods; descriptive observational designs are generally equated with qualitative

methods. However, there is no reason why qualitative and quantitative methods can't be used with any design (and, in fact, they sometimes are); to the contrary, there are good reasons to mix methods if we are to learn as much as possible from any chosen design. (Certain sub-types of design categories, however, may be weighted towards one or the other.)

Experimental designs are often used to test efficacy or effectiveness of an intervention. (Efficacy is how well something works in an ideal situation and effectiveness is how well it works in a real-life situation.) Experimental designs involve:

♦ a planned intervention
♦ control of a relatively small number of selected factors (independent variables) which are analyzed with respect to their impact on or relationship to other factors (dependent variables)
♦ random assignment of study participants into intervention and control (comparison) groups which are compared after the intervention has been introduced
♦ (frequently) testing of a hypothesis (e.g. related to cause and effect)

The randomized control trial (RCT) is the major example of an experimental design (see table below).

	description	requirements	strengths	cautions
Randomized control trials (RCTs)	♦ participants for the study (individuals, organizations, or communities) are randomly selected and randomly assigned either to an "intervention" group or to the "control" group ♦ members of the intervention group(s) participate in, or are the recipients of, an intervention or "activity," which can range from	♦ a large enough pool of potential participants from which to make a random selection ♦ participants similar enough to make possible intervention and control groups that are comparable in composition ♦ variables that are identified as potentially having an impact on the issue and question and which can be accounted	♦ random selection and assignment eliminate a large part of potential bias: we know that the intervention group wasn't "stacked" with individuals, organizations or communities more favourably predisposed to show improvement or positive change with or without the intervention than those in the control group	it is difficult to conduct RCTs at the community level because: ♦ there are few comparable communities (e.g., matched pairs of communities) to randomly assign to experimental and control conditions ♦ usually, a large number of (often unrecognized) variables are involved in community situations,

	description	requirements	strengths	cautions
	medication to counselling to public policy ♦ members of the control group (that is, the comparison group) do not participate in or receive the intervention being studied (though they may receive a different intervention) ♦ RCTs often involve "blinding," that is, the people measuring the results don't know who belongs to the intervention or control groups, and/or participants don't know to which group they have been assigned	for	♦ experimental blinding (where possible) reduces potential bias: people measuring results won't be inclined to be more or less rigorous in their measurements according to preconceptions because they don't know who belongs to which group, and participants won't change according to what they think might be expected of them if they know they are in the intervention group ♦ having a control group to compare to the intervention group helps assess whether any improvement or change was due to the intervention or not ♦ if sampling (e.g., random selection) is done properly, it can be assumed that the findings of the RCT are generalizable (i.e. applicable) to others from the population sampled	whereas an RCT is able to consider only a limited number of potentially impacting variables ♦ blinding is nearly impossible in community-based studies in addition: ♦ withholding an intervention from one group when there is reason to expect it is helpful is unethical; however, this can be addressed by staggering stages, for example, the control group will receive the intervention after a period of time ♦ results of RCTs conducted under closely controlled situations may not apply to real life situations ♦ due to the small number of variables considered, potentially important variables may be ignored ♦ outcomes and relationships that are not looked for won't be

	description	requirements	strengths	cautions
				found ♦ the emphasis on outcomes means that the role of processes (in contrast to outcomes) might be ignored

Quasi-experimental designs also involve a planned and controlled intervention but do not include randomization. They may or may not include a control group. The before and after study is a common type of quasi-experimental design (see table below).

	description	requirements	strengths	cautions
Before-after study	♦ participants are not randomly selected ♦ results from an initial baseline reading or pre-test are compared to the results after an intervention has been introduced (to individuals, organizations or communities) ♦ a variation is to take "readings" or do "tests" not just at beginning and end of the intervention but at several points before, along the way, and after ♦ a control or comparison group may be lacking	♦ a strong knowledge and understanding of all the other factors which may have influenced the final result in addition to the intervention ♦ good initial readings	♦ can be done on a small scale ♦ requires fewer resources than many other designs ♦ is adaptable to a number of issues and situations	♦ the possibility of bias needs to be accounted for when assessing results ♦ it is very difficult to distinguish which factors have caused which effects; however, use of a comparison group, taking multiple readings, and knowledge and consideration of other factors increases the chances of trustworthy findings, especially if measured differences are large

Observational designs, in contrast to experimental designs, do not involve a planned and controlled intervention. In an observational design, naturally occurring events or situations beyond the researchers' control are observed and analyzed. Observational designs roughly fall into two categories (see "analytical observational" and "descriptive observational designs" below), although there may be some overlap between these designs.

Analytic observational designs, similar to experimental designs, usually involve a relatively small number of factors (i.e. variables), which are analyzed to identify relationships among them, such as potentially causative factors for a condition or situation. Most, but not all, are hypothesis based, participants are often selected randomly, and there may or may not be a control group. (See table below for examples of analytic observational designs.)

	description	requirements	strengths	cautions
Cohort	♦ a group of individuals, organizations or communities with something in common (e.g. a particular demographic characteristic and/or a particular condition) are studied for a specific time period (generally years) ♦ the focus is on differences which result according to exposure or non-exposure to a particular variable that is not experimentally controlled (e.g. smoking, mercury, a medication, team-building exercises, a policy) ♦ most cohort studies are prospective (i.e. from	♦ effects which are discernible ♦ generally a large sample of participants (depending on the size of the population of interest) ♦ for prospective cohort studies, a long period of follow-up time in order for effects to develop ♦ for retrospective cohort studies, good records in order to obtain the needed data	♦ retrospective cohort studies can be conducted with fewer resources than other kinds of studies ♦ prospective cohort studies allow enough time for effects to develop ♦ both can determine multiple effects of a factor	♦ the lengthy period of time required for a prospective study involves a long commitment and a large pool of resources ♦ records may be incomplete and memories faulty with retrospective cohort studies ♦ if only one exposure variable is looked at, synergistic effects with other potential causative factors may be missed (e.g. by itself factor "a" may not produce an effect, but together with factors "b" and "c" it will)

	description	requirements	strengths	cautions
	the present on) but can also be retrospective (i.e. what happened in the past)			
Case control	♦ retrospectively compares study participants (individuals, organizations, or communities) who exhibit a particular condition (the "case" group) to participants who have similar characteristics but do not have the condition (the "control" group); the study documents differences and similarities occurring after a defined period of time ♦ in contrast to the cohort study which starts with a factor and then looks to see what effects it has, the case control study starts with the "effect" and then looks to see what might cause it	♦ good records in order to obtain the needed data ♦ access to the selected study participants	♦ can be done with small numbers of participants ♦ can be completed relatively quickly ♦ can look at multiple potential causative factors	♦ the original assessment of whether the participant is a case or a control may be difficult to verify ♦ records may be incomplete and memories faulty
Case series	♦ a number of cases (individuals, organizations or communities with a particular condition) are collected and described with respect to the	♦ access to records with good data	♦ relatively simple and inexpensive ♦ particularly useful when investigating a rare condition ♦ easy to apply to community-level	♦ records may be incomplete ♦ it is important that the characteristics of the condition be similar for each case

	description	requirements	strengths	cautions
	results of an intervention or exposure		research	

Descriptive observational designs attempt, from objective and/or subjective perspectives, to identify the details of past or current conditions, feelings, experiences, behaviours, perceptions, and ideas, and to highlight what these mean for us as individuals, organizations, or communities. There are no control groups and rarely are there formally identified hypotheses to be confirmed or refuted; in a descriptive observational design, initial hypotheses (if any) are subject to change as the study continues. In addition to a strong descriptive component (e.g. this is what has happened, this is how things are in the current situation, this is how people feel, this is what communities value), there is also an explanatory, understanding, or insight component (i.e. what are the layers beneath the top layers, what thoughts or feelings underlie a particular statement, what things previously unnoticed are in fact playing a role; why do people act in certain ways, why do certain dynamics exist in certain organizations or communities). Whereas experimental and analytic observational designs deal with a limited number of discrete variables, descriptive observational designs often approach their question more holistically with an intent to understand the complexity of life situations. There is sometimes overlap between descriptive observational designs.

	description	requirements	strengths	cautions
Prevalence (cross-sectional) study	♦ the prevalence of a particular condition is determined (prevalence is how many at one point in time exhibit a condition) ♦ generally prevalence rates are categorized by groups (e.g. for individuals/populations, according to demographic features such as sex, age,	♦ a good survey instrument ♦ willing participants	♦ a relatively simple design to execute ♦ results can be compared across time, by repeating the study	♦ results can only indicate correlations, not causality among variables ♦ if the measure for each variable is taken at only one point in time, it is difficult to have confidence regarding the nature of the relationships among variables — which may occur intermittently

	description	requirements	strengths	cautions
	income, ethnic background; if the study involves organizations or communities, categorization could be by size, amount of expenditures, focus or composition) ♦ prevalence studies often examine inter-relationships among factors that are thought to be causally related			rather than constantly, and which may require time to produce effects
Environmental scan	♦ describes the current status for individuals, organizations or communities, for example with respect to needs and wants, resources and capacities, challenges and opportunities, political, economic and psychological factors, attitudes, feelings and ways of understanding, climate, geography and pollution levels	♦ access to participants, and to organizational and/or public documents ♦ a broad understanding of what makes up the environment ♦ knowledge of context	♦ provides a starting place for planning initiatives, and a context for interpreting study results and program outcomes	♦ focusing on just one aspect of the environment, e.g. needs, without taking into consideration other important aspects, e.g. capacities, can give a skewed picture ♦ assessing which details are important is not always easy ♦ identifying perspectives, for example with respect to what constitutes a good political system (if it is relevant), assists readers to judge conclusions accordingly
Narrative	♦ focused on a specific individual, organization or community, or on a particular event ♦ identification and	♦ an ability to hear, understand and reflect what others are saying from their perspective, while being aware of	♦ produces insights, that might otherwise might have gone unobserved, which can be applied to processes, activities and	♦ the "interpretive lens" used in analysis varies from researcher to researcher; the use of participants' own words

	description	requirements	strengths	cautions
	examination of the variety of influences, experiences, feelings, perceptions, and events involved in life, in order to make coherent sense of them ♦ in the form of a biography, history or profile, case study, or descriptive summary	one's own perspective and how this might influence interpretation ♦ a knowledge of the broader context for the individual, organization, community, or event, and how that might affect each of them	other aspects of an intervention or initiative ♦ can be done on a small scale ♦ presented in a form that most people can readily understand and respond to	in the narrative helps corroborate the interpretation presented
Descriptive explanation	♦ a specific dynamic, interaction, or experience (e.g. social support, racism, empowerment, poverty) that occurs in a particular setting is described and examined to understand what is happening and why	♦ access to participants and documents ♦ knowledge of context ♦ a clear definition of the dynamic, interaction or experience	♦ can be done on a small scale ♦ may highlight how to change things for the better in different settings	♦ again, participants own words help corroborate the interpretation presented
Program profile	♦ various components of a program are documented and reviewed in order to identify the current situation for each selected component, interrelationships between components, impact of each on the program, and how the program can be improved ♦ components reviewed	♦ access to participants and documents ♦ hearing from all key stakeholders ♦ knowledge of context ♦ sensitivity to nuances ♦ an ability to gain and keep trust ♦ if a group process is used to identify values etc., a defined process for dealing with differences in a constructive way	♦ provides a picture of how the different components link together, e.g. how they support or hinder each other, how they are consistent or inconsistent with each other ♦ provides concrete information for making changes	♦ some stakeholders may not write or speak openly for fear of repercussions or being out of sync with others ♦ interpreting documents may be difficult (e.g. they may be written to promote or protect a program rather than to "let it all hang out," which might threaten the program) ♦ it is sometimes difficult

	description	requirements	strengths	cautions
	could include program values, vision, goals, theories, beliefs, evidence base, analysis of the environment, processes, activities, strategies, outcomes			to identify and encapsulate the different needs, wants and/or beliefs and perspectives of different stakeholders
Theory building	♦ theories are developed based on an examination of data gathered on a particular topic	♦ comprehensive sets of data are gathered to develop a theory with a firm footing ♦ participants with relevant perspectives are consulted to the point of "saturation" (i.e. data is being repeated and nothing new is coming up)	♦ a ground up approach may illuminate concepts that would otherwise not have been thought of	♦ it is important to gather and present enough data to justify the theory

methods

Methods involve data collection and data analysis, which can be either quantitative or qualitative in nature. Some studies use both quantitative and qualitative methods. The data that are collected, and the ways in which they are analyzed, can also be quantitative or qualitative in nature.

Quantitative data include:
- ♦ *interval data:* have no true zero and so there can be no ratio between two numbers (e.g. 20 degrees Celsius is not twice as warm as 10 degrees Celsius)
- ♦ *ratio data:* can be expressed as a ratio (e.g. the income for person or group "a" is only half the income of person or group "b", that is, a ratio of one to two)

Qualitative data include:
- ♦ *nominal data:* any items that can be categorized (e.g. a person with characteristics a, b and c is "male" and a person with characteristics d, e and f is "female")
- ♦ *ordinal data:* items that are ranked (e.g. the worst and best pens)

(See table below for a discussion of quantitative and qualitative methods.)

	description	requirements	strengths	cautions
Quantita-tive	♦ quantitative data collection methods include comparison between pre- and post-tests, tabulation of survey results, and retrieval of administrative records ♦ quantitative analysis methods involve applying statistical procedures to quantitative data, or to	♦ enough numbers, collected in an appropriate fashion, to make quantitative analysis possible ♦ strong sensitivity to and awareness of ethical issues and people's vulnerabilities	♦ can give us the breadth of an issue, that is, "how many," that qualitative methods can't provide ♦ can identify relationships between variables ♦ researchers are generally familiar with quantitative methods	♦ while generalizable to everyone in the population sampled (if sampling is done properly), quantitative results may not be applicable to other populations ♦ the sophistication of different statistical techniques and the complexity of some designs make it

	description	requirements	strengths	cautions
	qualitative data which has been translated into numerical measures; the intent generally is to establish relationships between different variables and to test hypotheses ♦ statistical procedures involve, at the simple end, counting numbers (e.g. this many "x"s and this many "y"s) and calculating the numerical difference between two items, to, at the more complicated end, calculating odds and risk ratios and chi square and statistical regression results ♦ quantitative analysis can be applied to qualitative data (e.g. x% of men compared to y% of women feel empowered) ♦ quantitative methods can be used with any research design			sometimes difficult for non-researchers to assess the quality of quantitative methods or to critique the conclusions based on findings from them ♦ the tendency may be to stay focused on the quantitative results rather than looking beyond to the context and extra dimensions that qualitative results can provide ♦ bias, despite all sorts of safeguards, is still a possibility
Qualitative	♦ qualitative data collection methods include in-depth open-ended interviews, focus groups, passive observation, participant	♦ enough descriptive data, collected in an appropriate fashion, to make qualitative analysis possible ♦ strong sensitivity to and	♦ insights, understanding and information about context that quantitative methods can't provide ♦ can give us the "what," e.g. which outcomes	♦ findings from qualitative methods may or may not be applicable to other situations; this has to be assessed on a case by case basis

	description	requirements	strengths	cautions
	observation, and document review (reports, articles, journals, letters, minutes, file notes, promotional materials) ♦ qualitative analysis methods involve systematically coding data, organizing and comparing it in order to identify themes and categories, develop theories, describe experiences, develop insights; the intent generally is to gain in-depth understanding and insights into a situation or experience ♦ qualitative methods can be used with any research design	awareness of ethical issues and people's vulnerabilities	matter most to people and therefore are the ones we should be examining, or, variables to examine that are less obvious than others, and the "why," e.g. why did or didn't a particular intervention or initiative work	♦ people generally have less knowledge about how to carry out or to judge the quality of qualitative methods ♦ the tendency may be to stay focused on the qualitative results rather than looking beyond to the scope and extra dimensions that quantitative results can provide ♦ bias is always a possibility

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STEPS IN IDENTIFYING AND SELECTING APPROPRIATE RESEARCH METHODOLOGIES

Four questions relate to the identification and selection of research methods; these questions
are concerned with:

1. the priorities and values that underlie (or are assumed) the research
2. the purpose(s) in undertaking the research
3. the prior expectations (or hypotheses) that might be associated with the research
4. the level of "control" (with respect to possible variables/factors/influences) that is desired in undertaking the research

Employing these four question, in sequence, can serve three important functions:

1. they assist in identifying the range of possible research methods
2. they assist in selecting the most appropriate research methods
3. the assist in assessing the appropriateness of research methods employed by others

Finally, these four questions can be used to develop a template for identifying issues related to
the selection or assessment of research methods (see table below)

Question # 1: What priorities/values are related to the research?

- participation with stakeholders
- scientific "rigour"
- confidence in drawing conclusions from the research/evaluation
- generalizability to other situations
- others

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Question # 2: What is the purpose in undertaking the research?

Development
- to assist in the development of a program etc.
- to identify the factors that underlie, cause, influence the issue
- to explore, clarify, etc., background issues related to (1) people, (2) environments
- other

Assessment
- to assess/test a "theory" or hypothesis
- to assess implementation of program etc.
- to assess the effectiveness or impact of a program, activity, intervention, etc.
- to assess/ understand the processes associated with the program, etc.
- other

↘

Question # 3: What prior expectations are there regarding:
1. What might happen as a result of the program, etc.?
2. What might underlie the program's effects?

A continuum re. expectations:
- a clear set of expectations—that is, a hypothesis that interested in evaluating
- some expectations, but they are not either clearly defined, or not have a great deal of confidence in them
- no expectations—no hypothesis; that is, undertaking "exploratory" research/evaluation

Question # 4: What level of control is being attempted in the research?

1. an attempt being made to exercise control through manipulation of variables/factors, through a controlled intervention/program, etc.—that is, using *experimental* methods?
- "pure" experimental methods (employs random assignment to experimental & control groups)
- quasi-experimental methods (omits random assignment and/or control groups)
2. NO attempt being made to exercise control over variables/factors—that is, using *observational* methods?

SELECTION OF RESEARCH METHODS

TEMPLATE TO IDENTIFY AND SUMMARIZE ISSUES RELATED TO SELECTING APPROPRIATE RESEARCH METHODS

	Experimental	Quasi-experimental	Observational (Analytic)	Observational (Descriptive)
PURPOSE				
Development				
to assist in the development of a program, activity, intervention, etc.				
to identify factors that underlie, cause or influence an issue				
to describe: (1) the "what" and "why" of people's behaviours, emotions and beliefs, (2) the nature of environments (including capacities and challenges), (3) the "what" and "how" of programs (for development and/or improvement)				
to develop "theory", hypotheses				
Assessment				
to assess a "theory" or hypothesis				
to assess implementation of a program, etc.				
to assess the effectiveness or impact of a program, etc.				
to assess the processes associated with program etc.., outcomes/impact				
CHARACTERISTICS				
randomization (selection &/or assignment)				
active intervention				
degree of control				
control group				
role of theory/hypothesis				
generalizability/transferability to other situations				
PRIORITIES/VALUES				
partnership with stakeholders				
scientific "rigour"				
confidence in research conclusions				