

Guidance on Social Science Research Methods

How can I select the best social science research method for my project?



Photo credit: Shannon Smith, "Fish Tacoma!"



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Introduction

The social sciences use a diverse toolkit of instruments or methods to examine the human dimensions of fish and wildlife management, habitat, and conservation. For example, if you are interested in learning more about private property owners' shoreline management behaviors, anglers' gear preferences, underrepresented communities' landscape values, or even public trust of agency decisions, the social sciences offer a range of instruments that can help. Not every instrument is suited well to address every question, problem, or topic, as every tool has distinct attributes, strengths, and weaknesses. Non-social scientists and social scientists alike often rely on one method, or another based on familiarity, experience, expertise, or feasibility; however, methods and approaches should be chosen based on whether or not they are appropriate to the questions or problems being asked in the first place. Social scientists are trained to understand a diversity of instruments and can determine what instrument or approach is the best fit for a given project. Not all social scientists are trained the same, nor are they trained in every method or approach; however, many have an understanding of shared methods across fields. Instruments tend to fall under quantitative or qualitative methods. While methods are often affiliated with quantitative or qualitative framing, most methods are flexible.

Common Approaches

Quantitative methods are characterized by deductive research approaches aimed at verifying or disproving theories or hypotheses. Quantitative methods involve measurable variables and testing relationships among variables in order to reflect causal relationships, correlations, or statistical patterns.

Qualitative methods are characterized by inductive research approaches (although not always) aimed at learning about social phenomena, generating meaning, and building understanding. Qualitative methods lead to a depth of understanding about a given topic or question and helps further describe, explore, and explain.

Mixed-methods (sometimes referred to as multiple methods) involve collecting, analyzing, and integrating quantitative and qualitative data within the same project. Mixed-methods research is intentionally designed to integrate both types of approaches and data. There are multiple types of mixed-methods research designs with differing purposes. Mixed-methods often leads to the ability to comprehensively understand complex relationships and identify patterns.



Common Methods

Tables 1 and 2 below provide a non-exhaustive list of different social science methods and their strengths/weaknesses, respectively. These tables are intended to help select the best social science research instrument for your project. The information provided is limited but includes methods commonly used in natural resource management (Connelly and others 2012; Wilson and others 2018). The information does not illustrate the full list of potential methods nor the full complexity of any given method or approach; however, the information can help determine the best next steps in project method selection or overall research project design. If you would like more information or would like to discuss potential methods, please contact the agency Conservation Social Scientist at: David.Trimbach@dfw.wa.gov.

Table 1. Commonly Used Social Science Methods and Definitions¹

Method	Type	Definition
Focus Groups	Qualitative And Quantitative	Facilitated discussions or a form of interviewing among a small group (e.g., 6-10 persons) of purposefully selected participants focused on a shared topic.
Participant Observation	Qualitative and Quantitative	A field research approach allowing the researcher to participate for an extended time period in the very situations and among the people under study. Participant observation is a strategic method that places the researcher where their topic takes shape.
Face-to-Face Interviews	Qualitative And Quantitative	A data collection method that allows the researcher to directly engage a participant in-person. The researcher uses conversation to generate data.
Mail Survey ⁱ	Quantitative	A data collection method that relies on mailing physical surveys (or even links to web-based surveys) to participants. Mail surveys have long been a standard social research tool. Dillman’s Total Design Method is one frequently used approach to mail surveys that emphasizes improved response rates.
Web-based Survey	Quantitative	A method that uses web-based or online surveys to collect data from participants. Web-based surveys traditionally rely on specific survey software programs requiring some technical expertise and internet access among participants.
Phone Survey	Quantitative	A method that uses telephone surveys to collect data from participants. Phone surveys are often conducted by organizations with large teams trained and experienced at a fairly rapid pace.
Secondary Data Analysis	Quantitative	A method that entails the analysis of pre-existing survey or other data previously collected by another researcher or source for a different purpose. Secondary data sources often include government agencies.
Community-based Participatory Research (CBPR)	Quantitative and Qualitative	A collaborative research approach that equitably includes participants (e.g., organizations, individuals, and communities) in all elements of the research process. CBPR emphasizes community relationship building and various forms of engagement.
Content Analysis	Quantitative and Qualitative	A method for systematically examining texts and documented communications. Content analysis relies of noninteractive and nonliving data that exists independent of the research (e.g., archival data or other textual data sources).

¹ Singleton & Straits 2005; Bernard 2006; Connelly and others 2012; Leavy 2017; Shackleton and others 2022



Table 2. Commonly Used Social Science Methods with Strengths and Weaknesses²

Method	Strengths	Weaknesses
Focus Groups	Can be created quickly	Cannot generalize findings
	Inexpensive (depending)	Can be misused or misinterpreted
	Entails face-to-face interactions and can allow clarification	Requires facilitation and moderation skills
	Provides ability to deliberate on complex topics	
Participant Observation	Non-intrusive or non-disrupted approach to understanding social processes, group dynamics, and behaviors	Labor-intensive
	Allows for new insights and revision of analysis overtime	Requires highly trained and skilled observation skills
	Allows for studying sensitive issues and specific groups	Has potential of observer bias
	Allows examination of contexts in which change occurs or will occur	Challenging to generalize observations
Face-to-Face Interviews	Allows for lengthy instruments	Can be expensive
	Can include complex questions	Requires trained interviewers
	Allows for clarifying questions and elaboration	Can be time-intensive
	More inclusive compared to other methods (e.g., telephone, web, or mail)	Has potential for interviewer bias
Mail Survey	Can include complex questions	Can be time-intensive
	Allows for respondents to participate at their convenience	Does not allow for clarity or elaboration
	Allows for implementation among a geographically dispersed or place-based group	Can lead to non-response bias
	Provides more privacy and higher likelihood of sharing sensitive information	Can be expensive (depending)
Phone Survey	Can be conducted at a rapid and efficient pace	Questions often need to be brief and easy to understand.
	Often provides higher response rates compared to mail or web-based instruments (but not face-to-face interviews).	May require highly skilled and trained staff willing to work evenings or weekends in order to obtain responses.
	Allows for more control over who are responding participants (e.g., demographic or other group characteristics, if relevant) than a mail survey	Typically, only should take a few minutes per respondent limiting response time and input
	Can be conducted with a geographically dispersed population (across WA)	Must consider potential impact of inclusive or exclusion of cell phones in sample
Web-based Survey	Inexpensive (depending)	Can lead to non-response bias
	Less time-intensive	Can lead to coverage bias
	Can provide quick responses from participants	Sometimes difficult to obtain email addresses for population sample
	Branching or skip patterns can be used to enhance survey question structure and to tailor the instrument to multiple groups	Can exclude populations less likely to use the internet or populations that face barriers to access.

² Singleton & Straits 2005; Connelly and others 2012; Leavy 2017; Wilson 2018



Method	Strengths	Weaknesses
Secondary Data Analysis (use of available data)	Inexpensive (compared to primary data collection and analysis)	May rely on outdated data
	Less time-intensive (compared to primary data collection and analysis)	May be based on flawed study
	Can be used to verify representativeness of new data	May be based on a study that used categories and measures not well-suited for current analysis or purpose
	Allows for research efficiency by targeting knowledge gaps before new original research is needed or implemented	May not produce useful comparisons due to variations in data collection processes
Community-based Participatory Research (CBPR)	Allows for new relationship building, community participation, and knowledge co-creation	Time-intensive
	Can help facilitate trust and rapport building	Community- or partner-dependent
	Emphasizes diversity, equity, inclusion, and social justice as key components (considered best method to address these topics)	Requires heightened awareness and training focused on community engagement, relationship building, cultural competency/sensitivity, and power dynamics
	Allows for understanding problem and complex context at the community level	Requires knowledge and openness to alternative (non-traditional) research paradigms and approaches that may include multiple ways of knowing
Content Analysis	Can be applied with qualitative and/or quantitative data	May not fully capture the complexity or richness of textual content
	Non-intrusive or non-disrupted approach to examining communications	May not fully capture or grasp context of content
	Permits the examination of change overtime	May not permit gauging different or multiple meanings among the textual content
	Provides insights about communication and group relationships	May allow multiple interpretations of content, making hypothesis or theory testing difficult

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¹ Additional information: This guidance document provides a general overview of social science research methods. A method refers to ways of acquiring data (Della Porta & Keating 2008). A methodology refers to how methods are applied to acquire data and includes an overall plan that integrates theory and methods (Della Porta & Keating 2008; Leavy 2017). For the purpose of this document, all information provided has been modified for a practitioner audience. Due to this tailoring, some nuance or complexity may be omitted. For example, while the term survey is widely used, there are differences when used within the social sciences, notably when distinguishing between a survey and questionnaire. A survey is an approach or form of research that involves asking a relatively large group of people questions through a questionnaire, interview, or other tool, while a questionnaire is the actual instrument used to structure questions aimed at obtaining data (Bernard 2005; Singleton & Straits 2005; Preston 2009; de Vaus 2014). While there is a distinction, for the purpose of this document, we use the term survey in a broad and common use sense. For example, a mail survey may also refer to a mail questionnaire or a phone survey may also refer to a phone interview.

