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Qualitative and Quantitative Approaches to Rule of Law Research

July 2016

Written by:

Kristina Simion

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Note:
All opinions stated in this Practitioner's Guide have been made in a personal capacity and do not necessarily reflect the views of particular organizations. INPROL does not explicitly advocate policies.

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ABOUT THE AUTHOR

Kristina Simion is the facilitator of INPROL's Rule of Law Research Forum.

She previously worked for Folke Bernadotte Academy, the Swedish Agency for Peace, Security, and Development. Her work there involved both qualitative and quantitative research projects on rule of law promotion. Kristina has also worked as a research officer at the Australian National University as part of a global research project that explores rule of law practitioners' backgrounds and experiences.

She is a coauthor of research reports, practical tools, and academic articles on rule of law. Originally from Sweden, Kristina holds an LL.M from Stockholm University, where she specialized in law and development, customary justice, and comparative law. Currently, she is completing her PhD at the RegNet School of Regulation and Global Governance, Australian National University.

GLOSSARY

Accidental, or convenience, sampling: A type of sampling that involves finding people who are easy to access, such as people on the street or participants at a rule of law training course.

Case study: A qualitative research approach that seeks to collect detailed information about a particular participant, a small group, or an organization that is observed in a real-life setting to understand the social phenomena the group or organization reflects.

Coding: An analytical process used by researchers to categorize data in order to facilitate analysis of it.

Descriptive statistics: Statistics that summarize a current dataset of quantitative data.

Descriptive quantitative research: A type of research in which participants are measured once to provide a descriptive account or to establish a relationship between variables. Descriptive data is often collected through questionnaires or surveys.

Document analysis: The collection and analysis of both secondary and primary sources.

Ethnography: A qualitative research approach that focuses on a specific group or culture and its characteristics. Ethnographic research seeks to generate understanding through an "insider's point of view" during long-term engagement in a specific field setting.

Expert sampling: A type of sampling that involves the researcher assembling individuals with experience and expertise in a particular area to discover their views on an issue.

Experimental quantitative research: Research in which the researcher introduces an intervention in order to study its effect and establish causality between the intervention and the effect.

Hypothesis: A testable statement, speculating on the outcome of the research, that directs the research.

Interview protocol: A series of questions that the researcher asks a person being interviewed.

Inferential statistics: Statistics used to draw conclusions about an additional population outside of a dataset of quantitative data.

Literature review: The process of reading, analyzing, evaluating, and summarizing scholarly and other materials about a specific topic. The results of a literature review may be compiled in a research design, feature in a report, or form part of a research article, thesis, or grant proposal.

Nonprobability sampling: A nonrandom sampling strategy often divided into two types: *accidental, or convenience, sampling* and *purposive sampling*.

Operationalization: The process of defining how a concept or idea will be measured, thus making it easier for others to replicate the research and carry out statistical analysis of the results.

Participant observation: A data-collection method that is useful for detecting the dynamics of interactions, behaviors, and relationships during events.

Probability sampling: Any sampling strategy that uses random selection of research participants.

Purposive sampling: A type of sampling in which research participants are selected for study with a specific purpose in mind. For example, they might be selected because of their occupation (e.g., judges, police officers, or lawyers). Two useful subcategories of purposive sampling include *snowball sampling* and *expert sampling*.

Qualitative data analysis: A type of analysis that involves the researcher interpreting (rather than calculating) observations, words, and symbols in the data, which consists of written texts.

Qualitative research methodology: The methodology applied when the researcher is interested in information that relates to understanding aspects of social life and generating words rather than numbers.

Quantitative data analysis: A type of analysis in which the researcher converts the collected data into numerical forms so that the data can be analyzed statistically.

Quantitative research methodology: The methodology applied when the researcher is interested in collecting numerical data that can be analyzed by mathematical means.

Questionnaire: A document consisting of questions that is used to collect data.

Randomized controlled trial: A study in which people are allocated at random (by chance alone) to receive one of several interventions. Through randomized controlled trials, the researcher can compare participant groups and measure the degree of change occurring as a result of an intervention.

Research design: A plan that lays out why and how research will be conducted.

Research ethics: The application of fundamental ethical principles in relation to the research.

Research hypothesis: See *Hypothesis*.

Research methodology: The overall framework and process that guides the researcher to the type of information (data) sought, and that identifies the methods needed to gather the information.

Research methods: The set of procedures or "tools" used to collect qualitative or quantitative information (data).

Research participant: Someone who participates in the research—for example, by being interviewed or observed or by answering a questionnaire.

Research question: The main question that the research sets out to answer.

Sampling: The process of selecting units—for example, specific people—from a broader population of interest.

Saturation: A concept used in qualitative research to imply that data has been collected to the point that further collection generates no new or relevant information.

Simple random sampling: A type of sampling that involves obtaining a list from which the researcher generates random numbers. This form of sampling is too small to enable the researcher to draw broad conclusions.

Snowball sampling: A type of sampling in which the researcher locates a few research participants and asks them for the names and contact information of other, similar individuals (potential participants) who might join the study.

Stratified random sampling: A type of sampling used to mitigate the underrepresentation of simple random sampling. Stratified random sampling enables the researcher to divide the population into different subgroups and then randomly select the research participants proportionally from those

subgroups. The researcher then uses simple random sampling within the different subgroups.

Triangulation: A concept used in qualitative research that refers to the data having been collected from different points (using different methods and sources) to achieve *validation*.

Validation: Validation of data is achieved when data is obtained from various sources and through different methods and produces overlapping results.

Variables: The characteristics of a person or thing (for example, gender or age) that differ between the persons or things that the researcher wants to collect information about. These are characteristics that can be measured.

I. Introduction

Conducting high-quality research is an essential element of the design and evaluation of rule of law programs for conflict-affected settings. It is also a useful way of enhancing a practitioner's personal information needs. Conducting rule of law research, however, can be overwhelming for the practitioner who has little previous experience. Where do you start? What components do you need to factor into your plans? What kind of research do you need to conduct?

Research can be guided by a methodology[1] that is qualitative, quantitative, or a combination of the two. Qualitative research provides insights into various aspects of social life, and generates words as data for analysis. In qualitative research, emphasis is placed on peoples' feelings, perceptions, and experiences in order to explore and understand "the meaning individuals or groups ascribe to a social or human problem."[2] Researchers interested in exploring a problem or topic in-depth can employ a qualitative methodology, especially when the perspective of a certain group of individuals cannot be understood or experienced by using statistical analysis or desk study research.

In contrast, a quantitative methodology generates numbers for analysis and provides both a systematic overview of the subject being researched, and comparisons across large groups of people. In quantitative research, statistical means are used to objectively measure things that can be illustrated with graphs or charts.[3] Results from quantitative research are often described as being "generalizable" across groups of people (e.g., inmates, offenders, or judges) or phenomena (e.g., assault, corruption, or drug use), or across time. The results can be used to generalize concepts widely, predict results, and investigate causal relationships.[4]

Consider the example of a practitioner who wants to improve access to justice in a particular region, and who thus needs to understand the current situation in that region. A quantitative study could reveal what percentage of a group of people (out of the total population in the region) has access to justice (e.g., 25 percent). However, if the practitioner wants to understand why some people do not have access to justice and what their experiences are when they try to access justice, research using a qualitative methodology would be more suitable.

Both forms of research can be challenging in any environment, but those challenges multiply and intensify in a conflict-affected environment, where access to research participants (i.e., the people participating in research) may be difficult, information may be scarce and difficult to evaluate, and the researcher may find it hard to travel because of security risks.

These difficulties must be accepted, however, because qualitative and quantitative methodologies are extremely valuable tools, helping practitioners to better assess and understand a rule of law problem or the complexities of a specific setting. Such understanding can lay the basis for rule of law interventions that are rooted in sound evidence and responsive to local community interests, aspirations, values, and demands. With rule of law interventions continually critiqued for being planned on the basis of inadequate research and information, and for producing unsatisfactory results,[5] this Practitioner's Guide provides a practical tool for rule of law practitioners wishing to develop their knowledge of qualitative and quantitative methodologies.

The guide assists the practitioner in structuring research by clarifying common research terminology and concepts, and outlining the steps involved in designing and implementing qualitative and quantitative research. It draws on existing knowledge of research methodologies and their associated "methods" (i.e., the tools for gathering the required information).

Each methodology has its own distinctive set of components for planning, preparing, collecting, and analyzing data. In practice, however, a rule of law practitioner is likely to consider both qualitative and quantitative methodologies and methods simultaneously—for example, by first distributing a questionnaire with multiple-choice questions about access to justice, and then following up with in-depth interviews. Reflecting this reality, this guide does not look first at one methodology and then at the other; instead, it offers a combined overview, looking at both methodologies in each of the four phases of the research process: research design, preparing for data collection, data collection, and finalizing research.

This does not mean that this guide is a guide in "mixed methods" or methodologies. From a "traditional" research perspective, a "mixed" approach involves more than just combining the two methodologies and methods. A mixed approach is also controversial in some circles, because the quantitative and qualitative research methods have long been considered as standing in stark contrast to each other. Most researchers use a mixed approach only when it constitutes an effective way to answer a research question, and when they do employ such an approach, it requires its own specific research design. With this in mind, practitioners interested in trying a mixed methods approach may also want to explore literature that discusses in detail the specific issues to consider in relation to mixed methods research.[6]

The guide draws on existing theory of methodology and methods to provide an overview of different research approaches and associated methods for data collection. It also pulls from other research institutions and rule of law organizations that have conducted practical rule of law-related research in conflict-affected countries. It cites online sources (mainly university

webpages) that provide some of the best summaries of research components. All sources have been chosen based on their accessibility and relevance for rule of law practitioners in the field.

The guide has benefitted from two queries posted on the INPROL Rule of Law Research Forum: one asked what practitioners should consider when undertaking rule of law research; the other asked about the realities of conducting field research when working in conflict-affected countries. The thoughtful and comprehensive answers given by INPROL members to these queries have been incorporated into this guide.

Throughout the guide, a hypothetical research example focusing on women in the Afghan police force and on international rule of law assistance is used to exemplify and demonstrate some of the steps of research design, preparation, implementation, and finalization.

The following four sections of the guide examine in turn four phases of the research process. The next section, section 2, provides guidance on the initial design phase of qualitative and quantitative research, examining a series of steps that should feature in a sound research plan. Section 3 discusses how to prepare for implementing research by creating research tools and finding research participants. Section 4 explores how to carry out (implement) qualitative and quantitative research (data collection). Finally, section 5 explains what should happen in the concluding phase of research, including how to analyze collected data and disseminate research findings to a broader audience.

Figure 1: The Life Cycle of Policy Development

Research Design	Preparing for Data Collection	Data Collection	Finalizing Research
•Identify a Research Topic and Problem •Formulate the Research Question and Hypothesis •Choose a Research Methodology •Define the Significance of the Research •Find and Use a Theory •Carry Out a Literature Review	•Find and Select Research Participants •Operationalize Quantitative Research Questions and Variables •Create and Pre-Test a Questionnaire •Create and Pre-Test an Interview Protocol •Prepare Translators, Interpreters, and Research Assistants for their Work	•Document Analysis •Participant Observation •Interviewing •Using Questionnaires •Deciding When to Stop Collecting Data	•Prepare, Code, and Analyze Data •Write Up Research Findings •Disseminate Research

II.   Research Design

This chapter provides guidance on *research design* by describing the main steps needed to produce a research plan useful for later research implementation.

Research design involves creating a plan for the specific directions the research will take in relation to data collection and analysis. A research plan usually consists of the following steps, each of which is explained in detail in this section:

- Identify a research topic and problem
- Formulate the research question and hypothesis
- Choose a research methodology
- Define the significance of the research
- Find and use a theory
- Carry out a literature review

Early and careful attention to these design steps can save time and resources by avoiding confusion as to where the research is heading after it has started. However, not all research projects follow a neat, step-by-step process. The steps as outlined here amount to an idealized overview of the process of research design, but in practice most researchers will consider the different steps simultaneously, as some will be overlapping or iterative, and also make changes to the design as the research is carried out. As a general rule, there is much less room for adjustment later on in quantitative research than in qualitative research.

A. Identify a Research Topic and Problem

Broadly defining a topic at the start of the research can provide a frame of reference throughout the course of the research process, helping the researcher to stay on track. A research topic can be defined in a short and comprehensible sentence—for example:

- Interactions between international rule of law practitioners and local communities
- Women in the Afghan Police Force
- Drug use in prisons
- Police violence at the village level
- Informal justice mechanisms and property rights
- The International Criminal Court
- Access to justice in international law

The topic should not be plucked from thin air but should be based around a "research problem"—something that the researcher sets out to solve.

Defining the research problem can be more challenging than coming up with a topic, because the problem should be unique and a researcher should not duplicate the work of others. The problem also needs to be researchable (i.e., available resources should support research of the problem) and be important (to the researcher and to others). A research problem can be identified in various ways:[7]

- Observing a practical problem (e.g., local rule of law staff are being treated badly by their foreign colleagues, which makes it harder to reach development objectives)
- Identifying a gap in the literature (i.e., the topic has received little or no attention from other researchers)
- Noting that different researchers or organizations say different things about the same topic (i.e., there are conflicting research results that require clarification)
- Recognizing the need to research a particular marginalized group (e.g., a minority ethnic group) to promote awareness of its situation or needs
- Interviewing other practitioners about new directions for research and how to make research findings more relevant to practice[8]
- Adopting an interdisciplinary perspective

Practical Research Constraints: Duplicating Research

In a conflict-affected or development setting, practical constraints can lead different organizations to carry out research on the same topic. Sometimes, the practitioner may be instructed by his or her superiors to carry out research that has already been done by another institution. One INPROL member posting anonymously to the Network's Rule of Law Research Forum notes that this is not an uncommon problem in the rule of law field, and offers the following advice:

> *It's important to make sure that your research is not duplicative. Before starting, researchers should look around and see what has been done before, and consider how your research can build on existing information: Is it doing something differently, collecting new information, etc.? This sounds simple, but most people who do this kind of work can attest that there are too many duplicative research projects.*

One way of avoiding duplication is to apply different methodologies to the same problem. For example, in one conflict-affected country, two international donors commissioned identical research projects. The two

different implementers only realized this when they began designing their research. To avoid entirely duplicating each other's work, one implementer concentrated on quantitative methodologies, supplemented by some qualitative information, while the other implementer focused on qualitative case studies, with quantitative information supplementing the case studies. The result was two complementary studies highlighting both qualitative and quantitative aspects of the problem.

Identifying a Gap in the Literature

For most practitioners, knowing if there is a gap or conflict in rule of law literature requires knowledge of previous research. An initial online search can be helpful to establish if the topic is understudied. Such a search can create a better understanding of what types of resources on the proposed topic are already available. Digital libraries can also be helpful in this regard.

Reading journal articles and books on rule of law development may also help the practitioner identify a gap in the literature or discover that a specific topic is hardly represented at all. For example, the practitioner may recognize that there are no practical handbooks within a specific field (such as trial monitoring handbooks on administrative procedures), although there are many in related fields (such as trial monitoring handbooks on criminal procedures), and subsequently decide to conduct research to develop just such a handbook.

Identifying a Research Problem: An Example

A foreign rule of law practitioner is working for a nongovernmental organization (NGO) in Afghanistan. In the field, several international rule of law organizations are working on streamlining gender and human rights in the criminal justice sector. A large part of their rule of law development approach consists of recruiting women to the Afghan police force and then providing them with on-the-job training.[9]. While these international organizations are claiming great success for their development activities, the practitioner observes frustrations among the female police officers, especially in relation to the training approaches.

The practitioner finds this interesting and significant and therefore decides to carry out further research on the complexities of foreign development actors and their interactions with women in the Afghan police force. This practical problem inspires the practitioner to formulate a broad research

> *topic, "Women in the Afghan police force and international rule of law assistance."*

B. Formulate the Research Question and Hypothesis

Once a research topic and problem have been designated, the next step is to formulate a research question and/or a hypothesis to guide the research. Research questions are used for both methodologies whereas hypotheses are used for quantitative research.

For both methodologies, the research question is the question that the research sets out to answer. The research question should be formulated out of the research problem; in other words, answering the research question should provide solutions to the problem.

Formulating research questions is something researchers often struggle with.[10] A common problem is research questions that are too broad in focus. Research questions that are too complicated or uninteresting to the researcher are also common. It is important to develop the skill of stating research problems clearly and concisely through a research question, because that question will guide the research through to its end. Defining the research question makes the broader research topic or problem narrower and manageable. Research questions should be formulated in a way that allows the researcher to be surprised by the answer (i.e., the answer to the research question should not be obvious at the outset of the research).

Poorly focused or defined research questions can spell failure for a research project. Without clarity and precision, the risk exists that the researcher will collect a large amount of information that does not in fact address the initial research problem. Unfortunately, it is not uncommon to encounter practitioners in the field who seem to carry out research without having a defined research question. One reason for this may be a failure to devote enough time to developing a research methodology design at the beginning of the project.

Ideally, a researcher will begin by "scoping"—talking to people knowledgeable in the field—and then, based on the information obtained, will design the research question. Inventing research questions once the research is already underway is unlikely to lead to rigorous research, but making research questions dynamic is a good idea, as is adjusting them slightly during the course of the research.[11]

A researcher should think about what makes a question answerable. Often, people wonder what they should do about a problem; for example, they might

ask themselves, "How should we do rule of law development interventions more effectively?" This is a practical question that is difficult to turn into a research question. A good research question is one that can be answered by looking at the existing world: looking to things as they currently are, rather than to things as they might be, could be, or should be. Instead of asking how rule of law interventions should be more effective, one should ask questions such as how specific groups of people (e.g., women in the Afghan police force) are responding to existing interventions (e.g., police training provided by foreign rule of law practitioners) or how they regard a proposed new policy (e.g., using only women as police trainers). Similarly, consider the example of converting the question. "How do we improve the impact of rule of law interventions in Afghanistan?" (a question that asks what could be done or what should be done) could be converted to "What is the difference in counterpart responses to EU and US rule of law programs in Afghanistan?" The latter question asks how things are being done and how well they are being done.

Some Tips for Designing Qualitative Research Questions

As qualitative research uses words (rather than numbers) and is interested in finding out things about people's feelings and perceptions, qualitative research questions often start with "what?" or "how?" as opposed to "why?" to encourage a complex answer rather than a simple "yes" or "no."[12]

When formulating qualitative research questions, the most common strategy is to formulate one main question and a number of subquestions. The main question is supposed to be the "broadest question" possible to ask in your study, and all subquestions should help you answer the main question.[13] This comes with the caveat, as mentioned above, that the research question should not be too broad.

> ### *Formulating the Research Questions: An Example*
>
> *The practitioner formulated the topic "Women in the Afghan police force and international rule of law assistance" and now needs to narrow the topic down through a main research question. She devise the following:*
>
> - *How do rule of law assistance initiatives by international actors affect women in the Afghan police force?*
>
> *She also formulates several subquestions that relate or link back to the main question:*
>
> - *What do women in the Afghan police force think about international actors' rule of law activities?*

> - *What do women in the Afghan police force think about international actors' work methods?*
> - *How do women in the Afghan police force interact with foreign rule of law practitioners?*
> - *What do women in the Afghan police force think about their interactions with foreign rule of law practitioners?*
> - *How do women in the Afghan police describe foreign rule of law practitioners?*

Some Tips for Designing Quantitative Research Questions and Hypotheses

Quantitative research questions differ according to whether the researcher seeks to measure research participants once to provide a descriptive account or to establish a relationship between variables (this approach is known as "descriptive quantitative research"), or the researcher wants to introduce an intervention in order to study its effect and establish causality between the intervention and the effect (this is known as "experimental quantitative research").[14] (These two approaches are explained in detail below; see page 18-20 and table 2.) In descriptive quantitative research, a research question is often used, whereas in experimental quantitative research, a hypothesis is more common.

For example, a descriptive quantitative research question describes or quantifies the variables being measured. Variables are the characteristics (for example, gender or age) that will differ between the things that the researcher wants to collect and measure. A variable is something that changes and that can be measured, manipulated, or controlled. Descriptive quantitative research questions commonly start with words such as "How much?" "How often?" "What percentage?" and "What is/are?" and they usually focus on only one variable and one group.[15] They will include information on the target group being measured and the variables the researcher is interested in, for example:

Question:	How often do women in the Afghan police force feel discomfort at work?
Variable:	Feeling of discomfort at work
Group:	Women in the Afghan police force

Question:	What are the most important factors that influence the career choices of women in the Afghan police force?
Variable:	Factors influencing career choices
Group:	Women in the Afghan police force

A research hypothesis provides a clear indication of the researcher's intention and can serve as an addition to the quantitative research question.[16] A research

hypothesis used in quantitative research constitutes "a tentative explanation that accounts for a set of facts and can be tested by further investigation."[17]

The purpose of the hypothesis is to have a clear framework and guide when collecting, analyzing, and interpreting data. The researcher thus creates a statement when speculating on the outcome of the research and this statement is the hypothesis.[18] A hypothesis provides a testable statement and therefore helps direct the research.

For example, a researcher who wants to find out which of two training approaches for women in the Afghan police force is most effective might develop this hypothesis: "An interactive learning approach for women in the Afghan police force leads to better learning outcomes."

A good hypothesis is clear and only includes one relationship at a time—for example, the relationship between interactive learning approaches and learning outcomes. The hypothesis should be stated as simply as possible, be capable of being tested through observation, and be consistent with the current knowledge that it attempts to extend.

C. Choose a Research Methodology

Once the research question or hypothesis has been formulated, the researcher needs to consider in more detail what methodology will best answer the research question, and then select that methodology. As already mentioned, research methodologies largely fall into two different categories, qualitative (using words) and quantitative (using numbers). Each methodology in turn has various research methods (the "tools") to collect information or data (these are described in section four).

Qualitative Research Methodology

In qualitative research, emphasis is placed on peoples' feelings, perceptions, and experiences in order to explore and understand "the meaning individuals or groups ascribe to a social or human problem."[19] Qualitative research often involves fieldwork, during which the researcher observes and records events related to the research participants as they normally and naturally occur or behave.[20] Qualitative research provides the researcher with the flexibility to interact and engage with research participants, and is useful in discovering their opinions and perspectives. Consider the example of the practitioner with the research topic "Women in the Afghan police force and international rule of law assistance." If the researcher is interested in talking to female police officers (the research participants) to find out about their life stories and their personal feelings and opinions, a qualitative research methodology is most suitable.

Some limitations of qualitative research methodology include its personal focus (i.e., depending on the personal characteristics of the researcher, different conclusions could be made), the risk of encountering ethical dilemmas while interacting with research participants, its time-consuming and potentially costly nature, and the difficulty of validating and probing the data.[21]

Within the framework of qualitative research methodology, several research approaches can be applied. Two of the most common ones are case study and ethnography.[22] These are similar insofar as they explore research participants' feelings and perceptions, but the approaches differ in terms of the extent of field engagement they involve and the ways in which data collection methods are applied.

Qualitative Research Approaches: Case Study and Ethnography

The *case study approach* "refers to the collection and presentation of detailed information about a particular participant, a small group or organization"[23] observed in a "real-life" setting to understand the social phenomena the group or organization constitutes.[24]

To undertake a case study, it is necessary to have an idea of the "social phenomena" the researcher wishes to explore. Examples of social phenomena include the prevalence of corruption among lawyers, the use of drugs in prisons, the view of rule of law donors that is held by a group of people, and the working procedures of a rule of law NGO or a court. A case study then isolates the small group that represents the social phenomena (for example, women in the Afghan police force).[25] This selection is called the "case" and should be defined, narrowly, when planning and designing the research.

Carrying out a case study requires that the researcher collects documents to analyze and interviews research participants over the course of a few months during visits to a specific field setting. In some disciplines, researchers can carry out case studies without field research, interviewing participants by telephone instead of in-person.

The *ethnographic approach* usually focuses on a specific group or culture and its characteristics. The researcher studies "the shared patterns of behaviors, language, and actions of an intact cultural group in a natural setting over a prolonged period of time."[26] Ethnographic research seeks to generate understanding through an "insider's point of view" by using several sources of data collection, but primarily through participant observation during long-term engagement in a specific field setting.

In addition to using participant observation, ethnographers can apply "targeted" data collection strategies through interviews with participants.

Moreover, researchers can collect data from other sources, including artifacts, government reports, and newspaper and magazine articles. Secondary academic sources are used mainly "to 'locate' the specific study within an existing body of literature."[27]

Carrying out ethnographic research requires the researcher to spend a long time in the field with the research participants, often learning the language of the specific setting. One challenge of this is the necessity to become a "participant" in the researched setting, in order to understand it fully, while at the same time remaining in the role of a detached "observer" and researcher.[28]

Table 1. The Chief Differences between Case Study Research and Ethnographic Research

Case Study Research	Ethnographic Research
• An in-depth analysis of a particular instance, event, individual, or group	• The art of describing a group or culture
• Can be carried out in as little as two months	• Requires a prolonged time in the field (at least a year)
• Mainly uses interviews	• Mainly uses participant observation (interviews are used as an additional technique)
• Outward-looking (asks "how" and "why" questions)	• Inward-looking (attempts to uncover the tacit knowledge of the research participants and their culture)

Quantitative Research Methodology

In quantitative research, statistical means are used to objectively measure things. Therefore, quantitative methodology is mainly interested in numbers that can be illustrated with graphs or charts. Within the framework of quantitative research methodology, several research approaches can be used. Two of the most commonly employed approaches are descriptive research and experimental research.

As noted earlier, results from quantitative research are often described as being more "generalizable" than qualitative data, and can be used to predict outcomes and investigate causal relationships. A well-known example of quantitative research in the rule of law field is the "World Justice Project Rule

of Law Index," which attempts to quantify and measure the level of rule of law in countries around the world.[29]

Consider again the example of the practitioner with the research topic "Women in the Afghan police force and international rule of law assistance." If the researcher is interested in getting statistical data revealing how many women in the Afghan police force are frustrated with foreign rule of law training initiatives, a quantitative methodology will be suitable. Quantitative research can reveal, for example, the factors contributing to frustration or satisfaction, and quantify the views held by women across age, educational, and ethnic groups. These factors can then be compared and differences detected in frustration or satisfaction in relation to, for example, age. This means that the research can discover if there is an association or relationship between variables (e.g., age and level of frustration), and if so, say something about this association or relationship (e.g., its strength, direction, or statistical significance).

Thus, variables are a key aspect of quantitative research. Variables are the characteristics that will differ between the things that the researcher wants to collect and measure (for example, gender or age). A variable is thus something that changes and that can be measured, manipulated, or controlled. Variables typically fall within two broad groups: "categorical," which are descriptions of groups or things (e.g., hair color, ethnicity, voting preference); and "numerical" (e.g., number of deaths, amounts of money in bank accounts). Variables are often referred to as either "independent" (i.e., they do not depend on other factors) or "dependent" (i.e., they depend on other factors). For example, test scores for students at a high school can depend on certain factors (such as teaching style and level of student engagement) and therefore constitute a "dependent" variable, whereas the age of the students is independent of other factors and is therefore an "independent" variable. The variable or variables in a research study are determined by what the researcher is measuring and thus what he or she will ask.

Quantitative research does not measure only things that are already expressed in numerical form (e.g., age, average income, numbers of years in prison) but also things that the researcher transforms into numerical form through the use of, for example, a survey or by coding key words in documents or interviews and then counting their reoccurrence.[30] An example can be found in a study interested in exploring the patterns of United Nations peace operations and their rule of law-focused activities in Africa between 1989 and 2012.[31]

Quantitative research is often described as generating more accurate results than qualitative research, and allowing for more objectivity (the researcher usually keeps a distance from research participants). It is also regarded as a field of research that employs prescribed procedures to ensure validity and reliability. Often, results from quantitative research can be replicated, and

then analyzed and compared with similar studies, which is almost impossible with the results of a qualitative study.

However, quantitative methodologies do have their limitations. For example, statistical data can miss important contextual details and information on human attitudes, feelings, and perceptions. Also, the static and rigid approach taken in quantitative research can result in an inflexible process of discovery.

Quantitative statistics are often presented as "truths" and are easily communicated through stories and conversations. Statistics, however, can be easily manipulated or wrongly calculated, resulting in data that gives an inaccurate account of what is "true." With many actors in the development field using statistics as an advocacy tool, it is important that the researcher learns how to scrutinize and question available statistics and how to carry out research in a robust and responsible manner so as to mitigate the risk of generating faulty data.[32]

Using quantitative research to make comparisons across categories and over time can also present difficulties. For instance, one rule of law research effort encountered problems comparing quantitative data generated in two surveys separated by just two years because the first survey was conducted face to face, while the second survey was conducted over the phone. In some cases, researchers have nonetheless drawn broad comparisons between, for example, country perceptions of justice by using quantitative research results that have been collected in different ways by various organizations.

Quantitative Research Approaches: Descriptive Research and Experimental Research

In descriptive quantitative research, participants are measured once to provide a descriptive account or to establish a relationship between variables. Descriptive research may include a large amount of participants to ensure a generalized relationship between variables (e.g., a survey of court users in a region). Consequently, descriptive data is often collected through questionnaires or surveys (usually covering a large, randomly selected cross-section of people but sometimes involving a smaller sample) with closed-ended questions (i.e., questions that can be answered by "yes," "no," or "I don't know"), or with multiple-choice questions. Data can also be collected through documentary methods, such as participant or event observations, or through interviews, and then formatted to suit the questionnaire. Presentation of data involves the use of descriptive statistics in the form of graphs and charts.[33]

The process of collecting descriptive quantitative data is often referred to as "conducting a survey" or "survey research," and many researchers (both quantitative and qualitative researchers) use the word "survey" as a synonym for "questionnaire." However, the more accurate use of the word "survey" is in

reference to the whole research process of examining something, with the questionnaire being one of the "tools" used in conducting a survey.[34]

Table 2. The Chief Differences between Descriptive and Experimental Quantitative Research

Descriptive Quantitative Research	Experimental Quantitative Research
• Research subjects are usually measured only once	• Research subjects are measured before and after an intervention
• Establishes relationships between variables	• Establishes causality
• Large number of participants	• Purposive or randomized selection of participants
• Uses a research question	• Uses a hypothesis

In experimental quantitative research, the researcher introduces an intervention in order to study its effect and establish causality between the intervention and the effect.[35] This approach allows the researcher to "prove" that if one event occurs, a certain outcome happens. In practice, the researcher selects research participants (the sample), who are randomly allocated (see section 3 on 'Preparing for Data Collection') to a group, and exposes those groups to a specific intervention. The outcomes of the experiment are then measured.

Say, for example, that the researcher wants to discover which of two rule of law training strategies for women in the Afghan police force is more effective: training sessions that use group assignments, role play, and discussions, or a more traditional lecturing approach. Experimental research allows the researcher to compare the performance of two or more groups that are subjected to the different training strategies.

One way of doing experimental research is through "randomized controlled trials."[36] A randomized controlled trial is a study in which people are allocated at random (by chance alone) to receive one of several clinical interventions. One of these interventions is the standard of comparison or control. The control may be a standard practice, a placebo ("sugar pill"), or no intervention at all. Through randomized controlled trials, the researcher can compare participant groups and measure the degree of change occurring as a result of an intervention. Two groups are used, where one is given a treatment and the other one is not, during the same period of time. The group that does not

receive the "new" treatment is called the control group. Traditionally, this type of research has been used in medical research, but it is increasingly being used within the social sciences and by development actors to measure the "impact" of development interventions. The biggest challenge in using it in this way is randomizing across different cultures and groups.

In a randomized controlled trial, the independent variable is the feature that is specific for the group but that differs between the two groups (e.g., the way the training is conducted) and the dependent variable is the score developed to compare the performance of the groups (e.g., an identical test taken by both groups at the end of the training course).[37] Therefore, key for carrying out experimental research is that there is a way to measure the results from the two different training strategies (for example, through test and exam scores).[38] Thus, by analyzing the test results through statistical means, the researcher can determine if the intervention did or did not have the effect originally set out by the hypothesis.[39]

There are limits to the validity of such an experiment. For example, participants in the group that is not receiving the new type of training may consider the old type (e.g., lecturing) preferable, and may try harder in their studies to prove that this is the case.[40] The researcher is unable to control such a "confounding variable."[41]

Also, randomizing across different cultures and groups is a complex process. The control trial needs to be randomized but at the same time equivalent in all aspects except for the intervention aspect. This means that groups of participants in the different training courses need to be similar in terms of academic background, ethnicity, gender makeup, language proficiency, level of literacy, and so forth. The trainers also need to be equivalently experienced and educated. The only thing that can differ between the groups is the teaching method employed.[42]

> ### Choosing a Research Approach: An Example
>
> *The practitioner has now learned that there are many different research approaches and types of research that can be used to explore the practitioner's interest in women in the Afghan police force and international rule of law assistance.*
>
> *The practitioner considers the possibility of carrying out a quantitative study, and designs a questionnaire to send out to all female police officers in the country. As female police officers are few, the practitioner thinks it might be possible to get them all to answer the questionnaire, which would provide a good statistical basis for the results. However, the practitioner soon realizes that it will be difficult to administer a questionnaire across the country, because she is based in Kabul and cannot travel to certain regions.*

Also problematic is the lack of official lists of officers that contain mail or e-mail addresses, which makes it difficult to reach police officers. The practitioner also realizes that it would be difficult to acquire an in-depth understanding of these women's perceptions and feelings through a questionnaire.

Another option is to conduct an ethnographic study. But the practitioner recognizes the difficulty of obtaining access to the women's daily work place in order to observe participants.

A better option, the practitioner decides, is to conduct a case study of female police officers in the Kabul area, because she will be able to interview the women outside of their work place to get an in-depth understanding of their perceptions and feelings. Moreover, she will also be able to collect documents and participate in a training course by using the connections she has established within the rule of law development community in Kabul.

D. Define the Significance of the Research

The next step in the research design is to define the research's significance. This is a vital step of research, because it relates back to the selection of the research problem, which should address an important issue, help solve that issue, and not duplicate existing research. By identifying and defining the significance, the researcher can better convince himself or herself, as well as stakeholders, as to why the research is worthwhile.

Some initial questions to consider when assessing significance include:

- Why is it important to investigate the research problem?
- Why is the research problem a research priority?
- Is the research really needed?
- How does the research link to other knowledge?
- Why is the research important to our understanding of the world?
- What new perspective will the researcher bring to the research?

Another practical way to think about the significance of the research is by describing how its results might be used and communicated to different key stakeholders. Questions asked in such an assessment include:

- What contributions will the research make?
- Will the results from the research be of value?
- What use might the final research have for others in this field or for the general public?

- Where will research findings be shared once the project is complete?
- How might the research findings inform policymaking?

Defining the research's significance can also help mitigate a common research constraint: getting local decision makers, communities, and research participants to buy into the research process. Formulating and voicing the significance of the research gives these various actors a clearer idea of how the research can benefit them. Also, it helps lay out the researcher's responsibility; he or she must ensure that that the research can in fact offer the promised benefits.

Defining the Significance of the Research: An Example

The rule of law practitioner knows that the research topic "Women in the Afghan police force and international rule of law assistance" is understudied and is based on a practical problem that she has observed in the field. Even so, she finds it difficult to define exactly why the research is needed (i.e. why it is significant).

After some thinking, the practitioner realizes that the research problem is important because it relates to misconceptions around gender approaches in development, differences in knowledge and understanding between work cultures, and the efficiency and sustainability of rule of law assistance. Thus, the practitioner identifies that the research will accomplish the following:

- *Contribute new insights to the policy and practice of international rule of law assistance*
- *Provide an understanding of gendered aspects of international rule of law assistance*
- *Voice Afghan opinions of international rule of law assistance*
- *Furnish insights to the Afghan Government's plans for developing a competent and diverse police force*
- *Demonstrate the usefulness of international rule of law assistance, and police training in particular, that is based on careful assessments of the country context, thereby contributing to the work of rule of law organizations in the field*

E. Find and Use a Theory

In both qualitative and quantitative research, theory can be used to guide the collection and interpretation of data and to propose explanations for the research observations and findings. In quantitative research, researchers often

test theories as an explanation for answers to their questions. In qualitative research, the use of theory can either be generated by the research ("theory building") or it can provide a "lens through which" researchers view the research problem.

Theories provide complex and comprehensive conceptual understandings of how societies work, how organizations operate, and why people interact in certain ways. They are formulated to explain, predict, and understand phenomena, and in many cases, to challenge and extend existing knowledge. Theories give researchers different "lenses" through which to look at complicated problems and social issues, focusing researchers' attention on different aspects of the data and providing a framework within which to conduct their analysis.[43]

To find a suitable theoretical framework, the researcher starts by examining the research problem and question. The researcher reviews relevant literature to find out how scholars have addressed related research problems and questions, and to identify existing theories that may explain the phenomenon the researcher wishes to study.[44]

The researcher then selects a theory (or theories) that relates to, and that might explain, the research problem. Theory should help the research process and not complicate it. Researchers sometimes use several theories to help explain a research phenomenon, and the theory chosen at the outset may change as the research progresses and the researcher discovers new theories.

Existing theory can be found in the rule of law field (e.g., rule of law and economic development theory) or "borrowed" from another field, such as anthropology, economics, international relations, or sociology (e.g., conflict theory and feminist theory).[45] Using theory from other fields is often referred to as "interdisciplinary research."

By connecting and integrating different academic disciplines and perspectives, interdisciplinary research can address real-life rule of law problems in creative ways and solve problems that are too complex or vast to explain with the help of a single discipline. Interdisciplinary research is rarely easy to conduct, because it tends to require more time, effort, and imagination than research conducted within a single discipline.[46] It also poses the risk of encouraging a researcher to create a research approach that is too unwieldy to carry out in complex environments.

The way in which a rule of law researcher can borrow theories from other fields is illustrated by the work of Dzenan Sahovic,[47] who uses cultural theory (based on the work of the anthropologist Mary Douglas) to critically assess rule of law policies implemented by international peacebuilding missions. Sahovic describes how cultural theory can enable a mapping of relations, behaviors, and cultural biases held by various rule of law actors. By classifying the

strategies, behaviors, and attitudes of individual peacebuilding missions in postconflict environments into four sociocultural types drawn from cultural theory, Sahovic argues that in most cases the sociocultural types of the mission and the sociocultural setting of the postconflict society do not correspond to each other. These culture clashes, he concludes, help explain "the misunderstandings, conflicts and failures of internationally driven rule-of-law policies in war-torn societies."[48]

Another example is Vivienne O'Connor's use of change management theory (which has often been employed in leadership studies, psychology, conflict transformation, studies of social change and social entrepreneurship, and quantum physics but is seldom used in the rule of law field) to assess how change occurs and how it can be effectively facilitated by both domestic and international rule of law practitioners.[49] O'Connor suggests that the "research and practice from these disciplines is directly applicable to rule of law change efforts taking place in conflict-affected countries."[50]

F. Carry Out a Literature Review

An important step of research design is the literature review, which the researcher conducts to learn in detail what has been written about a research topic. This task involves reading, analyzing, evaluating, and summarizing written material.

The purpose of the literature review is to systematically show what is already known about a topic as well as to identify theories and ideas that can help the researcher understand the topic. In both qualitative and quantitative research, the literature review is done before starting the more practical aspects of data collection in order to ensure that the research is not investigating or measuring something that has already been sufficiently researched.

> ***"Time Well Spent:" Advantages of Conducting a Literature Review***
>
> *Nathan Willis, a member of INPROL's Rule of Law Scholars' Network, describes how he tackles a literature review.*
>
> > *Standing currently in academia, I would suggest that time spent undertaking an initial literature review is time well spent. While there are differing depths one may dive to in relation to literature reviews, a preliminary review may be a helpful starting point. Of course, this requires access to databases and a good library (or the ability to make requests for materials through a library). In terms of databases, without fail, I always search HeinOnline.*

Once I have accessed materials, I then look at the footnotes/bibliography of those materials and seek access to material that strikes me as foundational, key, or interesting.

Having usually already chosen a "headline" topic [i.e., a research topic] to get this far, and when approaching an academic article, I would ask some fundamental questions while reading the materials which I have gathered: Why does this matter? Who has considered this before? From what perspective? What is missing? What was not considered? What could be considered more deeply? What do I have to say about this? What do I know that isn't included here (an area where practitioners could certainly flourish)? How could I substantiate my knowledge (what evidence could I present?) in what I write? Who would be put at risk by what I write? What do I need to do to protect those at risk?

It seems to me that, at times, both practice and academia may reflect the voices of the advantaged—or those with voice. So I often ask: Who's [sic] voice hasn't been heard here? How can I add their voice to the literature, to the conversation?

Search for Rule of Law Resources

The first step in a literature review is to search for material to review. Knowing where to find the right resources for rule of law research can sometimes be a challenge. There are many places to start a search, some more obvious than others. Having a clear idea of what to look for (especially by having a well-defined topic) will make the search process more effective.

By using the research topic and related key concepts (see the concept map in the text box below), the researcher can identify terms to search for. A well-organized search process involves the following five steps:

- Identify the key concepts, synonyms, and subject terms for your search objective
- Consider the types of information sources required to answer the research question
- Select the search tools most suitable for the information sources needed
- Enter, revise, and develop search statements using search techniques
- Organize the results for later use

To begin with, the research topic or some of the topics related to the research (e.g., "women in the Afghan police force," "police training in Afghanistan") can be Googled. These are already sufficiently detailed and specific that they will

not generate the thousands or even millions of results that a search on Google of, say, "access to justice" or "rule of law interventions" will generate.

A Google search will leave out many useful academic resources (e.g., dissertations and theses, books, and journal articles) unless perhaps the search is done using Google Scholar (scholar.google.com). Therefore, a further step would be to search for the term in a broad social science database, such as ProQuest or ProQuest Dissertations and Theses,[51] and a legal database such as HeinOnline[52] or Lexis Nexis.[53] One limitation is that access to research databases is often restricted, and thus they may not be an option for practitioners unless they are close to a well-equipped university or local libraries. Open access options include the Social Science Research Network (SSRN) and the Central European Journal of International and Security Studies (CEJISS). The Directory of Open Access Journals, Open Access Journals Search Engine (OAJSE), African Journals Online, Pandora, and Hong Kong Journals Online also provide access to open access academic journals through a search function and categorization under specific topics.

It may also be useful to visit the websites of rule of law organizations, professional blogs, and online forums, all of which may provide updates on issues of concern in the field.

Read and Evaluate the Literature

When reading through new literature, start with general, well-known, and up-to-date sources on the research topic. Reading and evaluating literature is usually more productive when done with discipline and purpose (i.e., the researcher consciously thinks about how the reading can contribute to the research, and takes notes).[54]

When reading a book, article, or dissertation, start by skimming the literature: note topic, structure, general reasoning, type and scope of data, and bibliographical references. Then go back and skim the preface and introduction, try to identify main ideas contained in the work, and identify key parts of the article or key chapters in books. Ask yourself:

- What are the definitions of the topic?
- What are the main ideas related to the topic?
- What are the major debates, issues, and arguments related to the topic?
- What are the key questions and problems that have been addressed in the literature?
- Are there any important issues that are not been addressed in the literature?

While reading the literature, it is always important to evaluate the credibility of the source of the information. As one INPROL member commented, researchers need to know how to evaluate information provided in some donor reports, because those reports may be disputed by countries or governments that the information purports to derive from. The lesson to be gained from this insight is that research involves a careful evaluation of information that is not based on first-hand data collection by the researcher.

Other useful questions to ask yourself while going through sources include the following:

- Are the references of high quality and sufficiently documented so that the reader can find the original sources?
- Is the information accurate?
- Has the author presented his or her analysis objectively and critically, minimizing bias and misrepresentation?
- Do the author and the source of information have authority and widespread impact? [55]

Asking these questions will help determine if sources are relevant, reliable, and of high quality.

One way to avoid trusting information that might be inaccurate or slanted is to find out something about who or what authored and published the work that presents that information. (Who is the writer working for? What is the agenda of the organization publishing the report?) Academic journals and authors should also be scrutinized.

Moreover, the quality of information may differ. Things to be conscious of when evaluating information include the following:

- Information in press reports will typically have undergone less scrutiny than information in academic articles and books.
- Publications that have not gone through a peer review process (i.e., have not been assessed by experts) are not as authoritative as peer reviewed documents.
- Sources that provide incomplete references may not be reliable
- Reports generated by organizations, lobby groups, or corporations describing their own work may be biased.
- Research that is incomplete or published in a modified version should be regarded with suspicion.
- Information that is not written in a critical and objective style (e.g., works that use emotionally charged language or do not present alternative evidence or theories) may be unreliable.[56]

Summarize and Critique the Literature

There are several ways to structure the writing of a literature review. Sources can be organized chronologically (with the most significant and "classic" studies in the area noted) or according to topics or themes.

When writing about the literature one has read, it is important to be not only descriptive but also critical (in the sense of weighing the strengths and weaknesses of a work and offering a fair-minded critique). The literature review needs to evaluate the soundness of the analysis and the extent to which conclusions are well supported with firm evidence.

<div align="center">*   *   *</div>

Once the researcher has completed the literature review, the research design phase of the research process is also completed. The next step is to prepare for data collection.

III. Preparing for Data Collection

Prior to data collection, the researcher has to conduct preparatory work in selecting and finding research participants; creating data collection tools and pre-testing them; and preparing for translation, interpretation, and research assistance.

A. Find and Select Research Participants

When designing the research, the researcher will have gained an idea of what participants will be included in the research (e.g., female police officers in Afghanistan, prisoners in Liberia). At this stage, when preparing for data collection, the researcher will have to select research participants. This section provides an overview of how to search for and find research participants (whether individuals or organizations) through a process known as "sampling."[57]

The purpose of sampling is to select a representative "sample" from a population of interest so that, by studying the sample, the research will generate results that can be generalized to the wider population**.**[58]

Researchers use sampling regardless of whether they are using a qualitative or quantitative research methodology and irrespective of their particular research approach. For example, an ethnographic study involving only a few individuals, a survey seeking statistical data from organizations, and a randomized controlled trial to evaluate a rule of law training initiative carried out in different rural locations will all use sampling.

The sample will be selected by strategies that are referred to as either "nonprobability" (also called "nonrandom") or "probability" (also called "random").

In qualitative research, nonprobability sampling is more common, because qualitative researchers seek quality and deep understanding of the research phenomena. Nonprobability sampling is primarily used to select information-rich samples; consequently, every individual within the total population will *not* have an equal chance of participating.[59]

In quantitative research, probability sampling is more common, because quantitative researchers seek statistical validity. Probability sampling typically samples a large number from a population, and every individual within the total population has an equal chance of being included in the sample.

Nonprobability (Nonrandom) Sampling Strategies

Nonprobability sampling is often divided into two types: "accidental/convenience sampling"[60] and "purposive sampling." Accidental or convenience sampling involves finding people who are easy to access, such as people on the street or participants at a rule of law training course. When using such sampling, the researcher must be very aware of the limits of generalizing the results to a wider population.[61]

"Purposive sampling"[62] occurs when research participants are selected for study with a specific purpose in mind. For example, they might be selected because of their occupation; they might, for instance, be judges, police officers, or lawyers.

Two useful subcategories of purposive sampling include "snowball sampling"[63] and "expert sampling." Snowball sampling can be the best method when it is difficult to locate or access individuals to study (e.g., drug users or other groups involved in illicit or illegal behavior, marginalized groups that risk persecution for speaking about their experiences).[64] In snowball sampling, the researcher locates a few research participants and asks them for the names and contact information of other, similar individuals (potential participants) who might join the study.[65] For example, if the researcher manages to talk to one or two female police officers in the Afghan police force, they are likely to be able to refer the researcher to other female police officers that can be recruited to the study. A useful question to ask is: Who else like you/in the same position/with the same experience should I talk to? This process continues until the researcher has managed to recruit an adequate sample size or until all contacts have been exhausted.

In expert sampling, the researcher assembles individuals with experience and expertise in a particular area to get these experts' views on an issue.[66] This could be a good way to carry out a study on a topic when it is difficult to get access to certain individuals, for example, political prisoners. Interviews could then be carried out with experts from organizations that work on issues related to political prisoner (for example, Amnesty International).

In nonprobability sampling, the issue of sample size is not easily determined. The need for a detailed description of a phenomenon (which is the main purpose of qualitative research) makes it necessary that samples are small, but small samples do not permit generalization to a larger population. However, the aim of qualitative research is not to generalize but rather to have a complete understanding of a particular situation without losing sight of the whole.

When determining sample size for qualitative studies, it is important to remember that there are no hard and fast rules and that qualitative research is

flexible. However, it is useful to consider how large the sample needs to be to allow for the identification of consistent patterns. Some researchers say the size of the sample should be large enough to leave "nothing left to learn." In other words, you might conduct interviews, and after the thirtieth one, realize that there are no new concepts emerging. Also important to consider is how large a sample must be to in order to assess an appropriate amount of diversity or variation that is represented in the population of interest.

In nonprobability sampling, it may be useful to create a sampling matrix, as illustrated below (see table 3), where the selection criteria for the sample are inserted. The selection criteria should answer the question: Why is the participant relevant for the study? A sampling matrix may be included as an appendix in the final research report or article after careful consideration of respondents' anonymity. Some researchers include a sampling matrix "washed" of all identifiable data that is not central for understanding why the participant was relevant for the study. In our research example, information to be left out includes name, address, workplace, and the name of the organization the individual has interacted with. If the sample is small, even age and ethnicity may identify the research participant and such details are therefore better left out of the matrix.

Table 3. An Example of a Sampling Matrix

Age	Nationality	Ethnicity	Years in the police force	Type of rule of law actor interacted with
31	Afghan	Pashtun	5	INGO
45	Afghan	Hazara	4	NGO
25	Afghan	Uzbek	1	Military

Probability (Random) Sampling

As mentioned, some research approaches such as quantitative research require a random sample. The key is to set out procedures that ensure that the units in a population have equal probabilities of being selected. Random sampling often involves computerized models and can be a complex process. Therefore, a sampling expert should be consulted if the research involves randomized controlled trials or the large-scale distribution of a questionnaire (e.g., a nationwide household survey).

The process of sampling starts with a population. This is the group the researcher is interested in "generalizing" (i.e., making conclusions about a population) and, therefore, the group from which the sample is drawn. As an example, consider that the researcher wants to generalize women in the Afghan police force between the ages of twenty and forty years. Developing a sampling plan will be difficult unless there are accurate lists available of police

officers; even if they are available, it can be difficult to develop a national sample across urban areas if those areas are difficult to access. This is when the researcher needs to distinguish between the population the researcher wants to generalize to (the "theoretical population") and the one that is accessible to the researcher (the "accessible population"). When the researcher has identified these populations, it is necessary to obtain a list of the accessible population or to draw up a plan for how to contact the accessible population. This list is called the "sampling frame" and it includes the sample that consists of a subset of a population. It is from this subset that the researcher tries to recruit research participants.

There are different strategies for random sampling. "Simple random sampling" involves a less complicated form of sampling, but not the most statistically efficient form. The process of simple random sampling involves obtaining a list (a sampling frame, as described above) from which the researcher generates random numbers. This can easily be done with the help of an Excel spreadsheet by inserting the details from the list obtained into the spreadsheet and using the Excel formulas to generate a random sample. This form of sampling is too small to enable the researcher to draw broad conclusions.

Consider, for example, that the researcher wants to assess what the users of a court think about the court's quality of service over the past year. To construct the sampling frame, the researcher will have to go through court records and identify every client over the past year. From this list, the sample will be drawn (for example, 100 clients out of 1,000). The sample can easily be drawn by using a spreadsheet (such as one created in Microsoft Excel) that generates a series of random numbers.[67] This form of sampling, however, can result in a sample size that is so small that it "misses" subsets within the wider population; for instance, the sample may include few or no members of a minority group, which will then not feature in any analysis as the sample.

To mitigate such underrepresentation, a stratified random sample can be used,[68] because it enables the researcher to divide the population into different subgroups and then randomly selects the research participants proportionally from those subgroups, through simple random sampling. Consider the example that the population of clients of the court can be divided into Pashtun, Hazara, and Uzbek ethnic groups, and that the Hazara and Uzbek are underrepresented visitors to the court. A researcher using simple random sampling would not get many responses from the minority groups, but the use of a stratified random sample would ensure that the researcher achieves representation of the minority groups.[69]

Gain Access to Research Participants and Settings

Within the context of sampling, "access" refers to the "ethical and academic practices used to gain entry to a given community for the purposes of conducting formal research."[70] The most important issues to consider in relation to access are to do no harm and to conduct oneself according to ethical standards of research practice.

To gain access, the researcher may have to go through community or organizational lines of authority, consider cultural or religious factors, and speak to tribal elders or other community leaders. Various recruiting strategies will have to be considered—for example, telephone calls, personal visits, sending emails or formal letters, or a combination of these.

It can be difficult to find local research participants willing to engage in the same topics to the same depth that the researcher wants to explore. Working with local participants normally involves trying to dispel myths that the work is useful not just for the entity that commissioned the research, and assuaging fears that the research is a form of spying on the community. The researcher will have to be prepared to describe the study to potential participants and explain why it is of significance to them or a broader audience.

Building up a list of the right contacts can be challenging and also merits caution. Contacts beget contacts but can also produce selection bias. For example, in selecting key informants, it is difficult to know if the researcher is being informed only by those who are most accessible. "Gatekeepers"—individuals who can be used as an entry point to a specific community—can help the researcher obtain access.[71] However, as one INPROL member suggested, when doing field research it is hard for the researcher to know if a gatekeeper is introducing the researcher to those people whom the researcher most wants to listen, or to those who are most accessible or are readiest to give their time to attend a focus group or a discussion.

> ### Ethics in Research
>
> *Observing research ethics is a key component of research that involves human participants. Participants could face physical, legal, or political risks for discussing issues of rule of law. Data collection should always involve a relationship of trust and open communication between the researcher and the participants about what information may be appropriate to use and what is not. If a researcher wants to find out about, for example, local perceptions of justice, the researcher needs to be confident that his or her presence in the field interviewing local participants does not put them at any serious risk.*

Key measures that are used in relation to the protection of research participants include the following:

- *Voluntary participation: individuals should never be coerced into participating in research.*
- *Informed consent: prospective research participants must be fully informed about the procedures and risks involved in research and must give their consent (the researcher can provide the participant with an "informed consent" form to be signed, or, alternatively, read the information to the participant and get an "oral consent") to participate in the research prior to beginning their involvement in the research.*
- *Participant confidentiality: participants must be given guarantees that identifying information will not be made available to anyone who is not directly involved in the study unless the participant agrees to reveal certain information (e.g., their profession or age).*
- *Risk of harm: researchers must never put participants in a situation where they might be at risk of harm (either physical or psychological) as a result of their participation in the research.*
- *Data accuracy and integrity: data should be reported and represented accurately, and never be fabricated or manipulated.*
- *Data protection: personal names and characteristics must be erased from written or tape-recorded files and replaced with codes or numbers. If the data is saved on a computer, the computer should be stored safely and be protected by a password. In some countries, the researcher might want to refrain from sending interview protocols via email.*

Guidelines for researchers who interact with research participants can be found in the American Sociological Association's Code of Ethics, which sets forth the principles and ethical standards that underlie sociologists' professional responsibilities and conduct.[72]

Key principles that feature in this code include the following:

- *A. Professional competence: strive to maintain the highest level of competence by recognizing your expertise, undertake tasks for which you are qualified, undergo ongoing education, make use of suitable resources to ensure competence in your activities, and consult with other professionals when necessary.*
- *B. Integrity: be honest, respectful, and fair to others, acting in ways that inspire trust and confidence, and do not make statements that are misleading, deceptive, or false.*
- *C. Professional and scientific responsibility: show respect for other researchers even when you disagree with them, behave ethically, and consult with colleagues to avoid unethical conduct.*

> - *D. Respect for people's rights, dignity, and diversity: respect the rights, dignity, and worth of all people; do not tolerate any forms of discrimination; be sensitive to cultural, individual, and role differences, acknowledge the rights of others to hold values attitudes and opinions that differ from your own.*
> - *E. Social responsibility: be aware of the professional and scientific responsibility to the communities and societies in which you live and work, and make new knowledge public in order to contribute to the public good in these societies and communities.*

B. Operationalize Quantitative Research Questions and Variables

If using a quantitative methodology, concepts in the quantitative research question or hypothesis have to be translated into measurable variables before data can be collected. This happens through "operationalization," which specifies how a concept will be measured. To take one example:

> Before measuring the concept of 'violent crime' a researcher must decide what are indicators of violent crime and then specify how these indicators will be counted. . . . For instance, many would argue that assaults level 1 (the lowest level of assault) contain many acts which many would not really see as indicators of the concept of 'violence'. The United States government, for example, does not include this kind of assault in their measure of crime.[73]

Thus, operationalization turns concepts and ideas into things that can be measured. It "determines how the researchers are going to measure an emotion or concept, such as the level of distress or aggression. Such measurements are arbitrary, but allow others to replicate the research, as well as perform statistical analysis of the results."[74]

For instance, if we propose the hypothesis "interactive training approaches for women lead to better learning outcomes," we also need to define what we mean by "women," "learning outcomes," and "better" if we are to measure the extent to which the learning outcomes for women are better.

The researcher has already narrowed down "women" to mean the sample group; "better" can be defined as better understanding or a better test score. Each sample group (if a randomized controlled trial is being carried out) can receive the same training approach or different ones so that learning outcomes can be analyzed through a test at the end of the training. Alternatively, the researcher might use a questionnaire asking the female police officers about their preferred training methods and which one they think leads to better understandings.[75]

C. Create and Pre-Test a Questionnaire

If data is to be collected through a questionnaire, that questionnaire will have to be created and prepared before research implementation can begin. A questionnaire typically consists of many questions, primarily used to collect quantitative data.

A questionnaire can include both closed-ended and open-ended questions. Closed-ended questions are answered by choosing a response (e.g., "Yes" or "No," or one of the options on a list of multiple choices, as depicted in the examples below). Open-ended questions require respondents to fill in an answer in their own words. For example, the questionnaire might invite respondents to "Please describe your impression of the United Nations police officers working in this area." The written answer can be transformed into numerical and measurable data by the researcher or used for complementary qualitative analysis.

Creating a good questionnaire that enables the collection of clear responses as basis for statistical analysis can be complicated. A common problem among researchers is creating questions that are not clear enough.[76] Badly worded questions and response categories can result in them being misinterpreted and incorrectly answered. Consider the examples of questions and responses from three pieces of research from rule of law organizations in table 4.[77]

Table 4. Examples of Questions and Response Alternatives in Questionnaires

	Justice Needs in Indonesia 2014: Problems, Processes, and Fairness	*A Handbook for Measuring the Costs and Quality of Access to Justice*	*Users' Guide for Assessing Rule of Law in Public Administration*
Question:	"How did the legal problem affect your life?"	"Was the procedure fair?"	"Please indicate to what extent: You have access to the latest laws, regulations and instructions in your area of work."

Response categories:	-Hardly affected me negatively -Just a little bit -Moderately -Very much so -The negative effect was severe	-Not applicable -Very small extent/not at all -Small extent -Moderate extent -Large extent -Very large extent/completely	-Not at all -Small extent -Large extent -Very large extent -Don't know

A common mistake that contributes to unclear questions is constructing questions that have multiple parts. A useful rule of thumb is to never include the word "and" when constructing a question,[78] because this results in what is referred to as a "double-barreled" question. An example is: "Should the European Union spend less money on their rule of law missions and instead spend the money on agricultural development?" People responding to this question may agree with the entirety of the statement, agree only with only the first or the second part of the statement, or disagree with the entire question. However, it would not be possible to provide a clear (Yes/No/Don't know) answer. One respondent might think that the European Union should stop funding rule of law missions, but spend the money elsewhere (not on agriculture). Another might want the European Union to continue the rule of law mission, but also spend more on agricultural development.

Another example can be found in a recent justice survey conducted in Mali,[79] which contained double-barreled questions such as "Do you think that it is likely that the Truth, Justice and Reconciliation Committee can promote national reconciliation and lasting peace in Mali?" This question implies that "national reconciliation" and "lasting peace" are the same thing, even though some respondents may view them as two different issues. When it comes to analyzing data collected using double-barreled questions, researchers will likely be hard-pressed to draw conclusions. Equally important is to avoid double-barreled responses. For example, when asking "What motivates you at work?" the researcher should not make "Friendly colleagues and pleasant environment" a possible response, because it measures two things, friendly colleagues and pleasant environment.

The structure and format of the questionnaire are equally important. When creating a questionnaire, follow this wise advice:[80]

- Include clear instructions so that respondents understand what type of questions will be asked in the questionnaire and why they are suitable respondents
- Refrain from abbreviated words, because they can be confusing to the respondent and may be interpreted incorrectly
- Give each question its own line so that the questionnaire is uncluttered and a respondent can tell at a glance where each question begins and ends

- Leave ample space between questions on each page
- Provide clear instructions on how respondents are expected to mark their response (e.g., check a box, fill in a box, circle a letter)
- Leave equal spaces between all response choices

One INPROL member noted the importance of exhibiting particular care when designing questions that touch on sensitive subjects. To avoid creating tension or hostility, consult with local actors to identify potentially controversial questions. When researchers have not adequately vetted their questions, mistrust between the researcher and research participant can arise, leading to inaccurate information that undermines the value of the research. Similar suggestions are made in the World Bank's guide to household surveys, which points out that it is imperative to consider potential political sensitivity around the content of a questionnaire and whether specific questions, or the very asking of certain questions (e.g., questions pertaining to justice), may trigger actual or latent conflicts.[81]

Before implementing the questionnaire, it is advisable to review and pre-test it by first having it reviewed by experts on the topic or the field of practice, then asking a small group to pre-test the questionnaire by filling it in, and doing a final check for errors or unclear questions and response categories.[82]

If the questionnaire is to be administered with the help of research assistants (often referred to as "enumerators" when they collect questionnaire data), they must be trained before data collection begins. Training may cover practical subjects such as how to administer the questionnaire, how to fill in questions, and how to employ various survey techniques, as well as issues of research ethics, security in the field, and the protection of research participants.

D. Create and Pre-Test an Interview Protocol

If the researcher is planning to conduct interviews as part of the data collection, an interview protocol will often be created before entering the field. An interview protocol consists of the questions that the researcher asks the person being interviewed.

To create an interview protocol (see the example below), the researcher needs to consider carefully what type of information is needed from the research participants in order to answer the research questions. Most interview protocols start with some background questions; these provide important information for analysis while giving time for the respondent to feel comfortable about being interviewed. Background questions may begin with a very broad inquiry, such as "Please tell me about your background," and then continue with more specific and follow-up questions.

Good interview questions are open-ended and not leading, and encourage the interviewee to talk comparatively freely (i.e., they should not be answerable with a "yes" or a "no") so that the researcher can obtain not only the kind of information he or she was anticipating but also unexpected information. A question such as "Tell me about your experience with the justice system" meets these criteria. Only one question should be asked at a time.

Poorly designed questions give the respondent the chance to respond with "yes" or "no" (e.g., "Do you think the justice system has treated you fairly?"), lead the respondent (e.g., "Is it true that you were treated badly by the justice system?"), or confront the respondent with multiple questions (e.g., "What do you think about the justice system and the judge who was present in your case? Do you think the judge acted fairly?").

Designing good interview questions takes time. A researcher should pre-test questions on colleagues or friends before conducting interviews with research participants in the field. If research assistants will carry out interviews, those assistants should be given opportunities to pre-test the questions on one another, thereby acquiring some interview experience as well as becoming better aware with the content and the order of the questions.

Interview Protocol: An Example

Project: Women in the Afghan police force and international rule of law assistance

Date _____
Time _____
Location _____
Interviewer _____
Interviewee _____

Statement to Be Read by the Interviewer to the Interviewee:
   Thank you for your participation in this project that explores women in the Afghan police force and international rule of law assistance. The approximate length of this interview is one hour. I will be taking written notes if that is OK with you. These handwritten notes will be transcribed onto my laptop computer and then destroyed. The file on my laptop will be protected with a password, and all information in that file that could be used to identify you will be removed. The confidentiality of your response is guaranteed.

Interview Questions:
1. Please tell me about your background.
2. How did you end up working for the police force?

> *3. What does your family think about the work that you do?*
> *4. In your work, have you ever come in to contact with an international organization working on rule of law assistance?*
> > *— Tell me about your interactions with that organization.*
> *5. How did you experience your interactions with rule of law practitioners from other countries?*
> > *— Could you say something more about this?*
> *6. What is your view of the training activities that international rule of law organizations are providing at your workplace?*
> > *— Can you please give an example of a training activity that you did not appreciate?*
> *7. Is there anything else you would like to tell me?*
> > *8. Is there anyone else like you/in your field that I should talk to?*

E. Prepare Translators, Interpreters, and Research Assistants for Their Work

In many cases, translators, interpreters, and research assistants are vital to the research process. The researcher may need a translator to translate questionnaires or interview questions, interpreters to help conducting interviews, and research assistants to conduct door-to-door visits to complete questionnaires. In some cases, the same individual may serve all these roles. One INPROL member points out that translators, interpreters, and research assistants sometimes also serve the function of mitigating a researcher's tendency to apply external norms to local situations and to use language that is too complicated and too technical for research participants.

Preparatory training for translators, interpreters, and assistants in the research topic and ethics of research implementation is advisable. For the translation and interpretation process to flow smoothly and to collect useful data, the translator and interpreter need to understand the research topic and questions asked. The World Bank's guide to conducting household surveys explains the kinds of problems that can arise in relation to translation:

> Survey respondents may have difficulties understanding questions, particularly the carefully worded, nuanced questions common to many justice surveys—land "ownership," for example, can mean very different things to villagers, politicians, and investors. Careful instruction should be given during the enumerator training as to the boundaries for translation. Clear rules must be defined as to whether the interviewer is allowed to re-phrase the question or to translate it into the local dialect, with the recognition that both are potential sources of interviewer bias in the finished data. In some surveys, while the questionnaire itself is produced in the main language, local

translations for key terms or concepts are provided either in the questionnaire or in a companion interviewer manual.[83]

The researcher must be comfortable working with the assistants she or he has hired, and they must be comfortable working in the cultural contexts where the research will take place. For instance, in a research project focused on the Afghan police, the translator must be comfortable with interviewing police officers.

IV. Data Collection

Having finalized preparations for data collection, the researcher is now ready to go into the field and implement the research plan. This section explains common qualitative and quantitative data collection methods, and describes how the data collection methods are carried out. It provides an idealized overview of how data collection happens. In reality, rule of law practitioners tend to work in complex environments and face several practical research constraints, including a lack of resources, of time, and of access.

The data collection methods typically associated with qualitative research methodology include document analysis, interviews (individual or through focus groups), and participant observation.

The data collection methods typically associated with quantitative research methodology include distributing questionnaires and measuring interventions by conducting a randomized controlled trial. Using a questionnaire is significantly less complicated than conducting a randomized controlled trial. This section summarizes issues to consider when implementing a questionnaire.[84] If the researcher has to conduct a randomized controlled trial, he or she should seek assistance from an expert.[85]

This section provides an overview of some common data collection strategies and discusses the appropriateness of each of those strategies:

- Document analysis
- Participant observation
- Interviewing
- Using questionnaires

A. Document Analysis

Document analysis includes the collecting of both secondary and primary documents. These could include a vast array of document types, ranging from rule of law donor reports to minutes of donor meetings, laws and regulations, maps, personal and public letters, transcripts of speeches, and organizational memos. In qualitative research, collecting and analyzing documents is used to inform and understand the research context.

Collecting any documented material that seems relevant for the research is advisable. For example, the researcher may find significant insights or valuable information in the diary notes of a female police officer describing her experience of interacting with foreign rule of law practitioners, or a donor report that is not public but that outlines planned training activities for the Afghan police force.

A researcher can collect documents in many different ways, such as asking individuals for documents (e.g., at an interview when specific documents or reports are being mentioned), emailing rule of law organizations with requests for documentation, or attending workshops or seminars where written documentation is distributed.

B. Participant Observation

Participant observation is a data-collection method that is useful for detecting the dynamics of interactions, behavior, and relationships during events, such as meetings, rule of law workshops, dialogues, interactions outside or inside a court house or police station, and public demonstrations and speeches.[86]

As a method, it enables the researcher to describe existing situations using the five senses (sound, sight, touch, smell, and taste). From participant observation, the researcher can learn about the

> "physical, social, cultural, and economic contexts in which study participants live; the relationships among and between people, contexts, ideas, norms, and events; and people's behaviors and activities—what they do, how frequently, and with whom."[87]

Participant observation takes place in locations that have relevance to the research questions (e.g., a court room). The researcher approaches participants in their own environments, instead of having the participants come to the researcher.

Gaining access to some environments (e.g., a police station, a training center) may require obtaining permission (legal, institutional, or cultural) before beginning observations. Hiring or partnering with someone who is more familiar with the research environment and can facilitate these processes may assist the researcher.

The researcher will usually try to visit an environment or attend an event discreetly. If possible, the researcher should take detailed and objective notes while in the process of observing; if that is not possible, the researcher should write down his or her recollections as soon as possible after the observation.

Ideally, people or events should be observed at different times of the day and on different days of the week. People's behavior should be observed in different settings or locations, because behavior can be influenced by contextual factors.

> ### *Research Ethics in Participant Observation*
>
> *As a general rule, for participant observation to be ethical, it should not be carried out without the knowledge of research participants (i.e., the people being observed by the researcher). However, in some cases it will be impossible to carry out the observation if its purpose is revealed. Family Health International's Data Collector's Field Guide recommends that when conducting participant observation, researchers should be:*
>
> > *discreet enough about who you are and what you are doing that you do not disrupt normal activity, yet open enough that the people you observe and interact with do not feel that your presence compromises their privacy. In many situations, there is no reason to announce your arrival at the scene; in many others, however, it is essential that you openly state your identity and purpose. You should always alert relevant gatekeepers (community members in positions of official or unofficial authority) as to your presence and purpose. You should never be secretive or deliberately misleading about the research project or your role in it. If someone asks directly what you are doing, always provide a truthful response, using your judgment to gauge how exactly to handle a given situation. Be open, polite, and cognizant of your position as a guest or outsider.[88]*

C. Interviewing

Conducting interviews with individuals or groups of individuals (the "interviewees") is a common method of collecting data. Interviews can take a variety of formats, and are usually described as being either one of the following, or a mix thereof:

- *Structured*: The interviewer (who is usually the researcher) follows the prepared interview protocol, asking the same questions to every interviewee. The interviewer often takes notes or tape records the interview. Few questions are open-ended.
- *Semistructured*: The interviewer follows the prepared interview protocol, but departs from it, when necessary and appropriate, to ask follow-up questions or to clarify certain answers. The interviewer often takes notes or tape records the interview.
- *Unstructured*: The interviewer has no interview protocol, but usually does have a plan as to what subjects to focus on. The interviewer often takes notes or tape records the interview. The interview consists mainly of open-ended questions.
- *Informal*: The interviewer has no interview protocol and talks to people in the field, outside of a formal interview setting. The interviewer does not take detailed notes (except perhaps for jotting

down a few brief notes) and does not tape record the interview; instead, the interviewer tries to recall as much as possible of the conversations when writing up the notes as soon as possible after the conversation.

- *Focus Groups*: A focus group leader asks semistructured questions to a group of interviewees. (See below for more details.)[89]

The Practice of Interviewing

Several practical aspects of interviewing, especially in a more formal setting, should be considered in advance of conducting the interviews. These considerations are important for ethical reasons, for making the interview run smoothly so that the researcher can get as much valuable information from it as possible, and for making both the interviewer and interviewee feel comfortable during the interview.

How to find research participants to interview is explained in the previous section of this guide. At this stage of the research process, the researcher has to schedule the interviews. The location should be in a location where the interviewees (and the researcher) will be comfortable. Some interviewees may feel at risk as a consequence of participating in an interview. The risk can range from the fear of losing one's job to suffering physical harm. Conducting the interview in a place where the research participant feels secure is therefore paramount.

Before starting an interview, the researcher should introduce himself or herself and the project to the interviewee. One INPROL practitioner notes that a common research mistake is failing to explain the purpose of the project. For example, when conducting research on trust between a community and the security sector, failing to highlight the purpose of the project may lead the police to assume that you are collecting information to be used against them, while the community will assume you are collecting information on behalf of the police. Such misapprehensions may lead both sides to give misinformation.

It the researcher is using a tape recorder, the interviewee must be asked for, and must give, permission for the conversation to be recorded. The researcher should then explain how written or tape recorded records of the interview will be handled and the ethics standards that govern the research. Some researchers tape record their interviews while some rely purely on written notes. The decision of how to record an interview should depend on the sensitivity of the issue being researched, and especially concern for the safety of the research participants. The researcher should have a good understanding of whether or not tape recording is suitable before starting data collection, but should nonetheless remain flexible. Tape recording an interview with a judge or law professor, for example, might not be an issue if the judge or professor is not worried about losing his or her job or being targeted in other ways for

speaking candidly. Victims of violence, however, might well be afraid of speaking to someone about their experiences. Sometimes, even taking written notes can be sensitive, and the researcher has to rely on memory and write down as much as possible after the interview.

In giving his or her consent to be interviewed and for the interview to be used by the researcher in a particular way, the interviewee should have the option of signing a written consent form or of giving his or her oral consent.

When asking questions, it may become apparent that the interviewee does not understand them fully. At such points, the questions should either be skipped or modified to avoid making the interviewee feel uncomfortable while still collecting relevant data. One INPROL practitioner comments:

> "A related mistake researchers often make is assuming interviewees understand the questions in the same way as the researcher. Even where an interviewee is highly educated or works in a similar field [to the researcher], language, culture, and other barriers can mean researchers and interviewees do not share a common understanding a question's meaning. It's important to always keep in mind the strong possibility that your questions will be misinterpreted and prepare all those involved in a project to explain the questions in clear, simple terms."

Objectivity as a researcher is more difficult to maintain in practice than in theory. Thus, when conducting interviews, it is important to be flexible and dynamic, an attentive and humble listener, and not to insert one's emotions and feelings into the interview. Such behavior does not preclude the researcher from asking follow-up questions or explaining to the interviewee which subjects are of most interest and relevance for the research.

Giving interviewees enough time to answer questions is important. Failing to allocate sufficient time for and between interviews may cause the researcher to rush through the interview and leave with incomplete answers. The researcher should not, however, seek to prolong an interview if the interviewee is eager to finish the interview quickly.

Convening a Focus Group

A focus group is a form of group interview in which a "moderator" (i.e., a discussion leader, who is often the researcher or a research assistant) asks questions to a group of people and facilitates a guided discussion. A focus group is similar to a group interview and can be more effective than a series of individual interviews in terms of cost, time, and breadth of information collected. Other advantages of using focus groups include flexibility and ability to generate quick results (one group generates the views of many participants in the same time). Additionally, a focus group might reveal information that is

difficult to obtain from individual interviews—for example, dynamics within a group, comparisons that focus group participants make between their experiences, or the level of consensus on a particular topic.

Participants in a focus group are usually selected based on their relevance and relationship to the topic under study (i.e., they are part of a purposive sample) but they can also be randomly sampled. A focus group typically consists of between six and ten individuals, though there is no hard and fast rule on size.[90]

As focus groups are a type of group interview, they may include structured or semistructured questions, depending on what level of discussion the researcher wants to stimulate. The moderator reads the questions out loud to the group. The same ethics and practical considerations that apply to individual interviews apply also to focus groups.

The level of the moderator's involvement will vary from low to high depending on what seems suitable in the specific context.[91] For example, if the discussion between focus group participants is lively and centered on the research topic, the moderator may not want to intervene; if the discussion is listless and off subject, the moderator may need to step in and repeat or rephrase questions in order to get the conversation going. However, too much probing from the moderator may offend participants, especially those who feel uncomfortable contributing to a group discussion. (Such feelings of discomfort might also be important information for the researcher to capture.)

The moderator should be aware of areas of discussion that are contentious and, if not managed, might lead to conflict within the group. Moderating a focus group requires a flexible and humble, but also a disciplined moderator.

The discussion should be recorded either electronically or in writing. A common challenge is keeping track of who is speaking and when. Having several researchers attend and take notes can help reduce this problem. In light of the fact that focus groups provide data in the form not only of responses to questions but also of interactions among participants, it is important to record nonverbal behavior such as an angry looks or other body language. When video is used to record the discussion, notes should still be taken in case nonverbal interactions occur out of camera shot. As with all interviews, informing participants about if and how the discussion will be recorded and obtaining their written or oral consent to participate in the interview is essential.

D. Using Questionnaires

Questionnaires are commonly used as a tool for data collection in quantitative research.[92] They may cover a large random selection of people who have been through a sampling procedure, as described in the previous section. However,

in some cases, researchers carrying out qualitative research will distribute a questionnaire to a purposively selected sample of research participants to obtain quantifiable information (see note 6 on page 58 for sources pertaining to "mixed methods").

Questionnaires are used and distributed with the aim of encouraging high response rates and thus minimizing nonresponses. In order to ensure a high response rate, the researcher needs to consider if there are adequate time and resources to use the questionnaire at a scale and level of professional quality sufficient to generate useful and useable data. Issues to consider include access (e.g., an online questionnaire is not a good idea in a setting where Internet access is limited) and security (e.g., can the researcher safely travel to certain places to get responses, and will respondents be safe in responding to the questionnaire?). [93]

Among the various ways of distributing a questionnaire are mail, on-site visits, and email. If the questionnaire is distributed by mail, the researcher not only has to obtain addresses of where to send it but also has to take steps to encourage respondents to mail it back once they have completed it. In the absence of direct interaction between the researcher and respondent, there may be little incentive for people to fill in the questionnaire. Good practice suggests that a well-written and attractive questionnaire, personalized correspondence, and repeated mailings may increase the response rate. In a conflict setting, the postal service may not be functioning well, which makes distribution via mail challenging.

On-site questionnaires require the researcher to travel to where the respondents live or work. Door-to-door, on-site household questionnaire distribution may be the only option when a population list is unavailable or people are unable to respond accurately to a questionnaire administered in any other way. Ensuring the safety and security of those distributing a household questionnaire is imperative.[94]

The questionnaire can also be distributed online via various types of dedicated software (e.g., SurveyMonkey) or through email, with the questionnaire sent as an attachment. The response rate to an on-line administered questionnaire may be low. Therefore, it is advisable to establish contact with respondents in advance of distributing the questionnaire; advance notice of exactly when the questionnaire will be sent is also likely to improve response rates.[95]

E. Deciding When to Stop Collecting Data

When collecting quantitative data, the researcher seeks to obtain sufficient data to ensure statistical validity. In other words, data has to continue to be collected until the researcher feels that the whole population can safely be generalized from the data collected, and that key parts of the population have

not been excluded. In collecting qualitative data, best practice suggest that the researcher should look for examples that go against his or her research theory or initial ideas. The researcher should thus look for counterfactual evidence and explore different directions in interviews.

In qualitative research, reference is often made to "saturation" of data. This means that data is collected until no new or relevant information emerges.[96] Another related concept is "triangulation," which refers to the data having been collected from different points (using different methods and sources) to achieve "validation," which is achieved when data obtained from various sources and through different methods produce overlapping results. Another way of checking data for validity is to test findings by presenting them to research participants. This is sometimes called applying "face validity" to the results. A researcher can seek face validity in many ways, such as organizing a seminar or workshop at which the research findings are presented or through meeting in-person with research participants to share findings and get feedback.

However, before research findings can be presented, data needs to be analyzed.

V.   Finalizing Research

This section provides an overview of how to finalize research. The section begins by explaining common approaches to data analysis and transforming the data into findings, then offers guidance on how to write up the research report, and concludes by describing how to disseminate research findings to a broader audience.

A. Prepare, Code, and Analyze Data

Once qualitative or quantitative data has been collected, it needs to be prepared for analysis before any comprehensive data analysis can be conducted. As part of preparing the data, the data has to be "cleaned" to detect and correct errors before the analysis happens. For example, if the researcher is using questionnaires to capture quantitative data, incorrect responses will have to be removed or corrected before the analysis can start.[97] Another vital part of preparation involves setting up procedures for organizing and keeping track of the data. How to best organize the data will depend on the scale of the research; for example, small-scale research for personal information needs will typically not need to be organized as rigorously as a large-scale research project.[98]

The analytical process used by researchers to categorize data in order to facilitate analysis of it is often referred to as "coding." Coding is carried out for data that has been collected through both quantitative and qualitative methods. Once the researcher has coded the data, it has to be analyzed in order to lead to any conclusions and research findings. The nature of the analysis will depend on the questions the researcher is hoping to answer and whether the research is qualitative or quantitative. [99]

Coding and Analyzing Quantitative Data

In quantitative data analysis, the researcher converts the collected data into numerical forms so that they can be analyzed statistically. The analysis falls into two categories of statistics: "descriptive statistics" and "inferential statistics." Descriptive statistics summarize your current dataset, whereas inferential statistics aim to draw conclusions about an additional population outside of your dataset.[100]

Statistical methods are thus used to count, describe, summarize, and compare data.[101] In its most basic form, quantitative data can either be counted (for example, if using a questionnaire) or compared (for example, if analyzing results from a randomized control trial which consists of making a comparison of treatment groups) through basic descriptive statistics. Some examples of basic descriptive statistics include the following:[102]

- Numerical counts, or frequencies: these describe how many responses fit into a category—for example, "twenty-two of the respondents were from Kabul"
- Percentages: these present information as a proportion of a whole—for example, "15 percent of the participants were satisfied with rule of law training activities"
- Measures of central tendency: these tell what characteristics are typical or "average" for the group
- Measure of variability: these describe the spread, or variation, in responses

Usually, basic statistics will be used to explore the main characteristics of the data (e.g., frequencies/counts; percentages; ratios; mean, median, and mode).[103] Thereafter, the data can be reviewed in order to identify patterns—for example, differences or similarities between responses from participants with different characteristics.

Coding of the quantitative data involves turning answers into numbers (e.g., 0 for "no", 1 for "yes", and 2 for "maybe"), so that the data can be understood by the computerized program that produces the final statistics. This type of coding is often done manually by the researcher. Numbers can then be entered into a database (e.g., the Statistical Package for the Social Sciences) or a spreadsheet for analysis.[104] If the questionnaire was administered online via a program such as SurveyMonkey[105] or SurveyGizmo,[106] the data can easily be exported into an Excel spreadsheet without manual coding.

Coding and Analyzing Qualitative Data

In qualitative data analysis, the researcher interprets (rather than calculates) observations, words, and symbols in the data, which consists of written texts.[107] The interpretative process often starts with coding, then categorizing of the data into different themes. The themes will help generate the research findings and, when connected to existing theory, they will support the researcher's theorizing.

Coding starts with the researcher reading through interview or observation notes to look for and mark specific key words or short phrases that are relevant for the research. Examples of key words or phrases from a study of women in the Afghan police force might include "discomfort," "satisfaction," "cultural differences," and so forth. The words or short phrases are called "codes" in qualitative research language and can be usual (things the researcher expected to find), surprising (things the researcher did not expect to find), or unusual.[108] If the researcher has recorded the interviews on audio or video tape, they will have to be transcribed into written format before coding can begin.

Best practice suggests that manual coding be conducted before the notes are imported into a qualitative software program such as Dedoose,[109] Atlas.ti,[110] or QSR NVivo.[111] Notes are imported into these programs in their original format (i.e., without the marking done during coding), which means that the notes have to be marked again, except that this time the coding is done using the software. This process gives the researcher a fuller, more in-depth overview of the data. The computerized programs help keep the data organized and provide an overview of codes.

After coding the data, a researcher is likely to look for themes and patterns in the data, a step that is sometimes referred to as "thematic coding." Through this process, the codes are clustered into broad themes.[112] To do this, the researcher looks at the codes (i.e., key words) and tries to identify any broader themes within them.[113] From the themes, the researcher draws research findings by relating the themes to existing theory and the research question.

B. Write Up Research Findings

Finalizing research involves not only analyzing and disseminating the data collected, but also "writing up" the findings in a final report or other type of publication.

A final report can include the components described in the design phase (methodology, significance, literature review, and so forth) and an explanation of how data was collected. When preparing the final report, the researcher should check for updates in the literature, because new publications may have come out during the research. The researcher should also point out any policy implications and note if the findings point toward future areas of research.[114]

Data can be presented and illustrated in a variety of ways. Quantitative data is typically illustrated with tables, graphs, and charts;[115] qualitative data and textual information can also be illustrated in tables (e.g., a table that vividly juxtaposes different voices—as in table 5 which draws on this guide's running example of researching women in the Afghan police force and their interactions with the international rule of law community—or that displays common opinions of rule of law training activities—as in table 6).

Table 5. Different Perceptions of the Training of Female Afghan Police Officers

Female Afghan police officers	Foreign rule of law practitioners
They never ask us what we want to learn, or what we want to do.	Our training activities are based on careful assessments of the country situation and the identified needs of the police force.
I feel quite uncomfortable to be honest, always being asked to talk more and give my opinion.	They love our trainings!
We can't even understand the trainer's accent. He was from Italy, so hard for us to understand … our English is very poor, I guess.	All our consultants are senior experts. That's the only way to do it; they don't listen to anyone without grey hair.
I was there to learn from a teacher but then they tell me I will be the teacher. I have no experience; I want to be experienced first, like them.	Out "training-of-trainers" approach has been very appreciated and we see how the participants are really growing in their role as trainers.

Table 6. Opinions of Rule of Law Training Activities

Exciting	Exhausting	Too technical	Difficult to understand
Takes too much time away from work	Not relevant	Embarrassing	Social

C. Disseminate Research

When the research is finalized, it may be disseminated to the research participants, the community where the research was conducted, or to a larger audience. In some cases, the research may be distributed only within the organization or agency that conducted or commissioned the study. For example, when the research is intended to help a national government develop a comprehensive strategy for reform, it may be counterproductive to make the data public before internal discussions occur. Irrespective of political considerations, research may not be widely shared because the researcher or the organization for which he or she works may compete with others for funding or prestige and may not want to give rivals access to the findings, which the researcher's organization may regard as proprietary information.

Disseminating the research can be done through oral presentations at workshops or conferences, or by issuing a written report. It can also include sharing the findings with the media or by arranging a seminar in the community where the research was carried out. Social media, such as blogs and Twitter, provide forums for publication outside the formal confines of scholarly publishing; they also offer an avenue through which a wider audience can provide feedback on the research.

A researcher may also submit for publication a book chapter, an encyclopedia entry, a conference paper, or a journal article on a topic related to the research.[116] Publishing practitioner research through an academic journal can be an important step toward bridging the "gap" between rule of law policymakers and practitioners. However, publishing in an academic journal requires detailed preparation and patience.[117] Most academic journals will have "instructions for contributors" that set out the substantive and stylistic criteria for getting an article accepted for publication.[118] Contributions that do not follow the criteria will not be considered. It is general practice to submit an article to only one journal at a time; withdrawing an article for consideration because it has been accepted by another journal is usually considered unprofessional. Often, when submitting the article, the researcher will be required to confirm that it is being submitted to only one journal.

After submission, the researcher will often have to wait several months for the journal's editors, and any peer reviewers they enlist, to review the manuscript. When the journal eventually contacts the researcher, the journal may accept the article for publication as it stands, reject it, or present a list of revisions suggested by the peer reviewers and invite the researcher to revise and resubmit.

VI.   Conclusion

This Practitioner's Guide provides a practical tool for rule of law practitioners wishing to develop their knowledge of qualitative and quantitative methodologies. As practitioners carry out more research, it is important that they understand the fundaments of such research.

Qualitative and quantitative methodologies and methods are valuable tools, helping practitioners to better assess and understand a rule of law problem or the complexities of a specific setting. Such understanding can lay the basis for rule of law interventions that are rooted in sound evidence and responsive to local community interests, aspirations, values, and demands.

INPROL hopes that the insights and material presented in this Practitioner's Guide will help rule of law practitioners address some of the key challenges of carrying out robust rule of law research based on qualitative and quantitative insights, and that it will inspire practitioners' interest in research methodologies and methods more generally.

Enhanced knowledge of how to conduct high-quality research can help practitioners gather better empirical evidence with which to design and evaluate interventions and develop rule of law theory and policy, thereby helping to avoid rule of law interventions that can be critiqued for producing unsatisfactory results.

VII. Notes

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[12] Ibid.

[13] Ibid., 139.

[14] USC, "Organizing Your Social Sciences Research Paper: Quantitative Methods" (library research guide, USC, n.d.), http://libguides.usc.edu/content.php?pid=83009&sid=615867; and Institute for Work and Health, "Cohort Studies, Case Control Studies and Randomized Controlled Trials," http://www.iwh.on.ca/wrmb/cohort-studies-case-control-studies-and-rcts.

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