

Incorporating Client Perspectives into Indigent Defense Research: A Guide for Practitioners

A Project of the NLADA

Defender Research Consortium

The National Legal Aid & Defender Association (NLADA), founded in 1911, is America's oldest and largest nonprofit association devoted to excellence in the delivery of legal services to those who cannot afford counsel. Among its key strategies, NLADA works to expand the defender community's capacity to utilize research and data through information, training, and technical assistance. This work has been guided by the Defender Research Consortium, a convening of practitioners and researchers interested in building a body of research that helps defenders make evidence-based and data-driven decisions that improve criminal justice policy and public defense systems nationwide.

Prepared by Kirstin A. Morgan, Reveka V. Shteynberg, Rebecca Ackerman, and Cynthia G. Lee National Legal Aid & Defender Association © 2018. All Rights Reserved. Supported by a grant from the Open Society Foundations



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Introduction

by Marea Beeman, NLADA

Why bother conducting research into clients' perspectives of representation they receive from indigent defense providers? Because, of course, clients are essentially the customers of public defenders and private assigned counsel. Any business striving to deliver quality services relies on understanding and responding to customer opinions. Similarly, the medical field relies directly on patient feedback to deliver quality care.

In recent years, defender organizations in the U.S. have given more attention to the importance of providing client-centered representation. There are many definitions of "client-centered" representation, but basically the term encompasses four broad principles: 1) client loyalty, 2) duty to zealously advocate the client's cause, 3) thoroughness and preparation, and 4) client communication. With heightened emphasis on client-centered practice, defender programs want to know if they are delivering on these principles. And, more and more, defender leaders are embracing research as a powerful tool to assess what is going on in their program, and to help them take data-informed measures to making improvements. However, while being responsive to client perspectives is important to many defender programs, capturing those perspectives is not something for which they are always equipped or trained. This paper seeks to provide guidance to help defender programs capture and assess client feedback as they strive to fulfill their ethical obligations to clients while also improving clients' outcomes and justice system experiences.

Academic research in the field of indigent defense has made rapid advances in recent years.² Meanwhile, projects such as the National Legal Aid & Defender Association's (NLADA) Defender Research Consortium (DRC) and the U.S. Department of Justice Bureau of Justice Assistance's Innovative Solutions in Public Defense Initiative have encouraged defense practitioners to undertake research on their own, through partnerships with researchers and by creation of tools to support research projects (see resources listed in Appendix F). This guide is a direct outgrowth of NLADA's three DRC gatherings, held in December 2015 (Baltimore, MD), July 2016 (Detroit, MI), and September 2017 (Las Vegas, NV).³ At the Las Vegas meeting, a work group including several researchers and one chief defender discussed ways that defender programs could be supported to undertake meaningful research into client perspectives.⁴ This guide was created by that work group in the months following their initial meeting. It is intended to be of value to any indigent defense program seeking to learn more about how it is doing from its clients' perspectives.

NLADA extends a great deal of gratitude to the authors of this guide, each of whom generously volunteered their time to produce it.

¹The Bronx Defenders are notable exceptions. They have been conducting client experience research since 2001, have sought to systematically improve their survey instruments and methodology, and have shared their findings with other defenders and researchers. The authors and NLADA wish to thank the Bronx Defenders and New York County Defender Services for allowing their experiences and research to be highlighted in this guide.

² Illustrative of this trend is the growth in indigent defense-centered research projects presented at the annual meeting of the American Society of Criminology (ASC). Since 2014, the Indigent Defense Research Association has coordinated a special "conference within a conference" featuring indigent defense research projects at the ASC meeting, and in 2016 and 2017 it grew from one day to two full days of back-to-back panels.

³ At each gathering, approximately thirty participants, including researchers, defenders, social workers, paralegals, analysts, technologists, and others, met to discuss ways to increase and improve research about indigent defense systems. Highly interactive, the meetings featured workgroups that tackled topics such as ethical concerns in indigent defense research, improving defender program analytics capacity, and how defender programs can put "quality indicators" into place to assess system performance.

⁴ Kirstin A. Morgan, Reveka V. Shteynberg, Rebecca Ackerman, Cynthia G. Lee, Gary Pearlmutter, and Michael Mrozinski.

Report Roadmap

This paper guides readers through the core administrative and planning phases involved in designing and conducting a research project. It is organized into chapters that track the phases of research planning and process:

Table 1: Research Planning and Process Phases			
Phase 1	Getting started		
Phase 2	Developing goals: Identifying the purpose of the study		
Phase 3	Selecting the data collection method		
Phase 4	Designing the instrument		
Phase 5	Sampling strategy		
Phase 6	Collecting the data		
Phase 7	Analyzing the data		

The report's appendices contain reference materials that should be of value to anyone developing their own research project. In Appendix A, case studies are shared about recent experiences of two New York City defender organizations, the New York County Defender Services (NYCDS) and the Bronx Defenders (BxD), in undertaking research into client perspectives. Appendices B, C, and D provide synopses of published research on attorney-client satisfaction, doctor-patient satisfaction, and customer satisfaction. Appendix E provides specific examples of types of research questions, plus synopses of published customer satisfaction research. Appendices F and G include lists of resources by helpful categories. Finally, Appendix H provides a glossary of research terminology referenced throughout the guide.

Chapter 1: Getting Started

This guide provides a roadmap for conducting research without the assistance of an external research partner. Although working with a researcher has many advantages (which we discuss below), as more defender organizations work to build in-house research capacity, internally run research is becoming more common. It is our hope that this guide will provide you with a clear understanding of how to undertake one particular type of defender research: client perspectives.

What Is Research?

Research, according to the Google dictionary, is "the systematic investigation into and study of materials and sources in order to establish facts and reach new conclusions." For this guide, we focus on how to conduct a systematic investigation into client perspectives and experiences in order to answer certain questions you may have regarding those issues. Several different methods of achieving this goal are discussed, both quantitative and qualitative:

- **Quantitative** research is that which involves the collection of quantifiable (i.e., countable) data that can be used to make statistical inferences. Examples of methodologies commonly used include closed-ended surveys and interviews, and existing data that can be coded and statistically analyzed (such as the information found in arrest reports).
- **Qualitative** research involves the collection of narrative or explanatory data that can be used to provide in-depth explanations of phenomena and to provide context for quantitative findings. Examples of commonly used methodologies include open-ended interviews and surveys, focus groups, case studies, analysis of archival information such as newspaper articles or social media, and ethnographic research.

The two types of research can be, and often are, used together in a single study. For example, surveys may employ both closed-ended (quantitative) and open-ended (qualitative) questions, which would then require multiple analytic approaches.

The three most commonly used methods for studying client perspectives are focus groups, interviews, and surveys (closed- and/or open-ended). The latter is most often quantitative, while the former two are most often qualitative. These three specific methods are discussed in more detail in the *Selecting a Data Collection Method* section. The rest of this section provides an overview of the benefits and costs of working with an external researcher as compared with conducting the research using only resources internal to your agency or organization.

Who Will Conduct the Research?

Start by asking, who will conduct the research? There are several options, and your choice will likely depend on the in-house capacity of your agency to undertake research, the availability of professional researchers in your area, and financial resources available (both internal and external) to conduct the research on a continuing basis. There are pros and cons to partnering with a researcher or conducting the study internally. Below we discuss each and present the issues you should consider when deciding which model best fits your organizational and practical needs and constraints.

Working with an Outside Researcher

The decision to partner with a researcher will likely be based on the resources and research expertise you have within your organization, agency, or jurisdiction. A research partner can bring the resources (time, money, and people) necessary to successfully complete a research project. For many defender agencies, this allows them to take on research projects they would otherwise be unable to manage using only internal resources. Below, we discuss the factors you should consider in selecting a research partner. It is key to do this early on in the project design process. That way, your research partner can be involved throughout the entire process, gaining contextual knowledge by learning about your agency, local court culture, and any other factors that may impact client perspectives in your jurisdiction.

Partnering with a researcher allows you to benefit from his/her substantive and methodological expertise, as well as the aforementioned resources s/he can bring to a project. In return, the researcher will usually expect to be allowed to publish from the data, while keeping the site and participant identities confidential. While this motivation is generally

universal among researchers, as discussed in the next section, different types of researchers have different goals.

Each partnership is unique, but can generally be defined by the dispersion of responsibility between the partners and the partnership's longevity. The type and amount of work your research partner does is up to you to decide in discussions with the partner(s), and can vary from the researcher conducting the

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entire study and providing you with results, to having them work on a consulting basis to create or review instruments or to complete analysis of data collected internally.

The other factor, longevity of the partnership, has to do with how long you want to and can partner with this researcher. It is advisable to begin with one limited project, see how the partnership works out, and then progress to new projects if both partners are amenable. In some cases, beneficial practitioner-researcher partnerships have continued for years or even decades. The most important issue we consider here is how to structure the partnership in terms of workload and responsibility, goals, and resulting analysis and research products.

Who Is a Researcher?

The term "researcher" can imply many things: university professor, non-profit research organization, graduate student, consultant, etc. Table 2 below provides a breakdown of different types of researchers. Levels of experience and knowledge will vary, thus it is important to get a clear understanding of the person's prior research experience as well as their substantive and methodological knowledge before committing to a partnership. Prior research experience ideally will have involved data collection using similar methods to those we discuss in this guide — surveys, interviews, or focus groups — as well as analysis and publication of that data. Methodological expertise allows the researcher to work with you to ensure the data collected can answer the questions you have and provide valuable analyses, reports, and data to your agency and/or other stakeholders you may share findings with.

Table 2: Types of Researchers			
Researcher Type	Advantages of Partnership	Primary Motivations	
Academic faculty	Can access university resources, financial support, and research assistants; likely to have proven record of successful research projects	Publish articles or books for professional advancement; consult; obtain grants to study and publish on topics of interest	
Research organization	Successful at obtaining grants and can dedicate multiple researchers to the project	Obtain grants to study and publish on topics of interest	
Consultant	Paid by their clients to work for them, thus they do not expect anything other than their (typically flat rate) fee	Obtain contracts to undertake work on behalf of the client and fund their business	
Doctoral student	Can access university resources and will often work in exchange for use of data in their dissertation	Obtain data for their dissertation; publish and/or obtain grants or experience for professional advancement	

A research partner should also exhibit substantive expertise in terms of extensive knowledge of courts, indigent defense, and legal culture in the U.S. We advise against simply heading straight for the statistics department at your local university — it is very rare that anyone in those departments will have the substantive knowledge necessary to design and implement a meaningful project on client perspectives. For example, a lack of understanding of pretrial decision processes and how they are made may result in a researcher thinking that being released under supervision is essentially the same as being out on bail, and as a result coding and analyzing them as the same outcome. Alternatively, someone who has extensive knowledge of the law (e.g., a law professor) may seem like a logical choice, but if they do not

If approaching researchers at a university, look in criminal justice/criminology, political science, sociology, legal studies, and other related departments.

have experience conducting social science research, they will not be able to properly conduct the necessary data collection or analyses that are required for valid results.

If approaching researchers at a university, look in criminal justice/criminology, political science, sociology, legal studies, and other related departments. Faculty and

non-academic researchers with experience in these disciplines are more likely to have both the methodological and substantive expertise you will want in a research partner. Both types of expertise can be preliminarily assessed by looking at a researcher's CV (curriculum vitae, an academic resume) or publication record, or through an interview with the potential research partner in which you ask about their substantive and methodological knowledge and how they would design your specific project.

The more responsibility you expect the research partner to have for the project, the more experienced and knowledgeable that researcher should be. We recommend working with a university professor or independent researcher with a Ph.D. and proven record of successful research projects for most partnerships — this provides some guarantee of high quality research. Advanced Ph.D. students who are in the dissertation phase of their program can also provide the needed expertise and resources for a project, and will likely be willing to trade their work in exchange for data for their dissertation. Master's students and undergraduate assistants can be helpful, but need supervision and detailed instructions, which is why researchers often employ them to assist on research projects rather than as a research partner. You can also request research assistants from local universities, something we cover in the next section.

Researchers can apply for grant funding from government agencies or universities, a valuable resource that can increase the reach of your research project. This is something worth considering if your agency lacks the financial resources to commit to data collection and analysis. There is no guarantee when applying for funding, but partnering with a researcher (particularly one who has successfully obtained grants before) opens up the possibility of outside funding for the research, which in turn can increase the availability of two things most often in short supply: time and people. University faculty and non-profit organizations often have access to research assistants in the form of undergraduate and/or graduate students.

Finally, a big advantage of working with professional researchers is the proper IRB (Institutional Review Board) and human subjects' protections they provide for the research participants. Research conducted through a university must be approved by the IRB, whose job it is to provide ethical and regulatory oversight to ensure research participants are protected from harm. This provides your clients, and office, with increased safeguards when asking clients about sensitive topics, including open court cases.

All of this leads to an important question: how should you go about contacting potential research partners? There are several ways to do this. One option is to directly contact faculty at local universities, all of which keep an updated list of faculty and their research experience on the university website that would allow you to identify researchers with the necessary expertise for your project. And if a certain faculty member is not interested or able to partner with you, they may be able to introduce you to other faculty or advanced Ph.D. students who are interested and qualified for the work. Another option is to contact research firms or consultants in your area, explain what you are looking for in terms of a research partner, and ask about scheduling a time to chat. If you do not know any local firms or consultants, faculty can often direct you to those organizations.

Potential Concerns in Research Partnerships

There are some possible downsides to working with a research partner, including the required coordination and data sharing with a third party, which can bring up confidentiality concerns. It is essential you have frank and detailed talks with any potential research partners about participant and site confidentiality, data storage and security, and what the researcher plans to do with the data for research publication purposes. Researchers who secure federal grants can obtain a federal privacy certificate, which protects the data from any legal challenges to gain access. Unfortunately, there is simply not enough federal funding for every project, thus we encourage you to work with your research partner to ensure data security, particularly as s/he will expect the right to publish findings in return for his or her work. One loophole to these privacy concerns that some public defender offices have used is to hire, as an unpaid intern, someone from the research team (often a graduate assistant), who then becomes the only

outside researcher to interact directly with identifiable data and clients. This protects identifiable data from legal challenges based on the attorney-client privilege (which extends to all internal staff), but should still be accompanied by a signed agreement that the researcher will only disseminate data in the aggregate.

Another issue to consider is the often-busy schedules of researchers, in that they may take longer to complete the project than you would like. That said, the quality of that research will very likely be higher than if you conducted the project using only internal resources due to the expertise and time commitment of your research partner, thus this is not necessarily a strong argument against working with a researcher. Regardless of who conducts the study, quality research takes time, thus quick results should not be expected. Timing concerns related to budget and grant funding cycles often delay the start of research by months, so be prepared for slow going at first.

While it is rare, even after vetting possible partners, you can end up working with a researcher who does not perform well. Problems could include non-responsiveness or improper data collection practices, both of which should result in terminating the partnership at your discretion. Should this unfortunately happen, do not be discouraged from working with researchers in the future, as the vast majority possess integrity and a commitment to ethical research.

Running a Research Project on Your Own

Above we outlined several reasons why partnering with a researcher can help get your project off the ground. While this guide is primarily dedicated to how to run a research project from within your agency or office, without a research partner, it should prove useful for anyone doing client perspectives research. There are many reasons you may choose this route, but the most common are that there is no researcher interested or available, there are internal resources available to fund and manage the project, and security and confidentiality concerns tied to involving an outside party in data collection. Time restraints may also be a concern, and while internally managed research may begin sooner than that managed with a research partner, quality research still takes a sizeable investment of time to complete.

Whatever the reason you decide to move forward with the research on your own, it is worth considering trying to build long-term research capacity in your agency. NLADA's *Building In-House Research Capacity Toolkit*, created in conjunction with the North Carolina Office of Indigent Defense Services (NCIDS), is an excellent resource that can serve as a guide for building that capacity. Even if you cannot commit to such a long-term research focus, the toolkit is a useful reference in case circumstances change. Assuming you are focused on the project at hand (researching client perspectives), this guide will walk you through the process of planning, implementing, and analyzing a research project, all within the context of practical resource limitations and organizational concerns.

The next chapter begins assuming you have at least tentative organizational permission and support to conduct the research. If you have not yet received permission, follow the steps below, working to develop and present your project to the person(s) and at the time you deem best — no one knows the dynamics of your office or jurisdiction better than you.

Chapter 2: Developing Goals

The best place to start is to ask yourself what you want to learn from clients and how you want to use that information — the goals of the research. Undoubtedly, you will have some idea already of goals, but before formalizing plans, we recommend getting input from staff and attorneys in your office or jurisdiction (assigned counsel attorneys may be worth consulting) on what they would like to learn from clients, as well as concerns they may have about the research.

Attorney and Staff Buy-In

Prior research suggests defense attorneys are likely to express concern over the confidentiality of information shared by clients and over the potential to use the data to track attorney performance. Meeting with attorneys and staff at the start of the project allows their concerns to be addressed upfront. In turn, you can explain that the purpose of the research is to understand client perspectives in the aggregate, not to single out individual attorneys, support staff, or clients. Common uses or goals of client perspectives research include designing better client feedback tools, identifying possible gaps in services, understanding the collateral consequences clients view as most important (and ways to address them), providing information to attorneys and staff, and informing hiring and organizational goals. Ultimately,

the ways you plan to use information from the research will be tied to your larger research questions; as such, when you generate your research questions, you should keep these goals in mind.

These meetings also provide an opportunity to find out what people in your office would like to know from clients. The benefits of this are twofold: you obtain buy-in from all parties by listening to their concerns and ideas, and you may develop new goals based on insights from people with different perspectives than your own. While you need not feel obligated to include every question

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or goal in the final project design, the information provided will allow you to gauge areas of conflict between clients and attorneys or support staff, general attorney and staff thoughts on the clientele, and the need (or lack thereof) for client perspectives research. Indeed, some attorneys or staff may tell you that talking to clients will only prove how little clients understand about what their attorneys do and court processes. One way to address this sentiment is by recognizing that although some clients have misunderstandings and preconceptions about the system and public defenders, this project will provide a unique opportunity to identify specific areas of client misconceptions. In turn, that may allow you to address those issues and better provide correct information and/or challenge stereotypes.

To obtain buy-in from attorneys and staff while developing goals for the project, we suggest using focus groups and/or individual interviews. There are pros and cons to each method, which are summarized here, and discussed in more detail in the next section on data

collection. Focus groups require less time since you can talk to multiple people at once, but louder participants tend to dominate the conversation and direct the discussion. Individual interviews take longer, but allow for each person to express their own concerns and ideas without the influence of group effects. If individual interviews are not feasible, you may choose to do focus groups, but consider including a brief survey (with open- and/or closed-ended questions) so that individuals can generate responses individually to ensure that all ideas are heard. Based on the dynamics and resources of your organization, you should decide which option(s) work best to gain buy-in and suggestions from others in your organization regarding the projects goals and purpose.

Goal Development

This is also a good time to think about organizational or program goals as they relate to the research. Some of these may be the same as those discussed above, such as creating better client feedback tools or informing hiring priorities. Others may include providing data for funding applications or budget reports, developing attorney training, or working towards a holistic defense model. Consider integrating these goals into the research design as you advance the project. Once you have developed a clear and concise set of goals, be sure to share with attorneys and staff so they can see how you have integrated their concerns and suggestions into the project. The total number of goals will vary, but try to be realistic about what you can accomplish with your current resources. You can keep a list of goals for future projects, while deciding which are most important to focus on now based on staff and attorney feedback and organizational priorities. In the case study in Appendix A, you can see how the two offices, which have different organizational cultures, had different goal development processes — NYCDS took a top-down approach, whereas BxD's process was attorney-led.

Goal-Based Research Question Development

Finally, you will want to develop specific research questions based on the finalized goals. These are not questions you will ask clients; instead they are the questions that you want the data to be able to answer and that will guide the development of data collection instruments and questions for clients. Each question should be specific and address a clearly defined issue. Broad questions such as "What do clients think about their attorney(s)?" are less helpful when developing questions to ask clients. Instead, break out the broad question into specific issues you want to ask about, such as attorney-client trust, misconceptions about court processes, or areas of attorney-client conflict. Examples of research questions include:

- Do clients trust their attorney(s)?
- What factors matter most to clients in developing trust in their attorney(s)?
- What misconceptions do clients have about court processes?
- What do clients define as the most important aspects of the attorney-client relationship?
- What do clients feel their attorney(s) could have done better?

Ideally, you want to develop no more than two or three research questions per goal. This will keep the scale of the project manageable and allow you to create data collection instruments that can be completed in a reasonable amount of time. From these research questions, you can then develop specific questions to ask clients during data collection, as discussed in detail in the *Designing the Instrument* section.

Chapter 3: Selecting a Data Collection Method

Once you have defined your research questions, the next step is to select a data collection method by which to answer these questions. The choice of method will depend on several factors, including the research questions themselves, the resources and expertise at your disposal, and the timeline for your research project. Although it might be ideal to incorporate multiple methods of data collection into your project, in practice, time and resource constraints may limit you to a single method of data collection. Three methods of data collection frequently used in research on client perspectives include surveys, one-on-one interviews, and focus group interviews. Surveys collect primarily quantitative data, whereas interviews and focus groups result in qualitative data. Please refer to Appendix G for resources that further discuss the advantages and limitations of each of the three methods, as well as how to implement them.

Surveys

A survey is a series of questions designed to collect specific, often quantitative data. The same questions are asked of all respondents in the same way. Surveys may be administered in person, over the telephone, in writing, or through the internet. Most survey questions are closed-ended and permit a limited range of responses, such as multiple-choice answer sets or scales.

Some surveys also incorporate open-ended questions that allow respondents to express their opinions in their own words or to explain or elaborate upon their responses to closed-ended questions. A survey consisting entirely of closed-ended questions will produce quantitative data; a survey that also includes open-ended questions will also produce qualitative data. The specifics of question creation are discussed in the next section, *Designing the Instrument*.

Advantages

Surveys are a very popular method because they tend to be relatively quick, simple, and economical to administer. Even if a professional researcher is recruited to design the survey and analyze the survey data, the survey may be administered by trained defender office staff, graduate students, or interns.

There are other advantages to using surveys. Quantitative data from closed-ended survey questions are simpler and less labor-intensive to manage, analyze, and interpret than qualitative data obtained through interviews or focus groups. Responses to several closed-ended survey questions about a single concept can be combined into a single, easily interpretable scale (discussed more in the *Analyzing the Data* section). Closed-ended survey questions give clients no opportunity to reveal identifying information, making it relatively easy to maintain client confidentiality. A survey is also easily deployed at multiple times or places, creating many measures of the same concepts over time, and is therefore well suited to performance measurement. Due to their wish to include as many clients as possible in data collection, both BxD and NYCDS chose closed-ended surveys, which are a common approach for resource-limited organizations.

Limitations

One limitation of survey research is that it may produce "fragmented" data — in other words, it may be difficult to explain or contextualize the results because participants are not asked to explain why they felt a certain way or chose a particular response. This can lead to some confusion during the analysis and interpretation phases, as you may be unable to explain certain patterns in the findings. For this reason, as we explain in the next section, we recommend including at least a few open-ended questions to allow clients to explain their responses.

Another limitation is the fact that statistical analysis of quantitative survey data requires larger sample sizes than qualitative interviews or focus groups, which in combination with the tendency toward low response rates may make it difficult to obtain a sufficiently large sample. Strategies for increasing participation rates include administering the survey in the courthouse or attorney's office, while clients are physically present and may be motivated to participate out of strong feelings surrounding a case that is still pending or has just concluded. A shorter survey will increase the likelihood that interested clients will have the time to complete it on the spot. Incentives such as gift cards or cash payments have also been shown to increase participation among some populations.

Survey research is also vulnerable to several forms of bias. One of these is nonresponse bias, in which potential respondents are more likely to answer the survey if their feelings are either strongly negative or strongly positive, skewing the survey results towards the extremes. Likert-type scales, which are used to ask participants to rate their perspectives based on a number scale, are vulnerable to central tendency bias, in which respondents avoid selecting extreme responses even if those extreme responses most accurately represent their feelings.

Interviews

An interview involves a series of open-ended and follow-up questions asked orally by a researcher to prompt detailed and explanatory responses from participants. Interviews are widely used in qualitative research and come in several varieties. In a structured interview, the interviewer asks the participant a series of preplanned questions using a fixed script. In a semi-structured interview, the interviewer asks some preset questions but also incorporates follow-up questions based on each participant's responses. In an unstructured interview, the interviewer begins with general goals but does not follow a script, instead allowing the participant to guide the interview structure. The unstructured interview format is less commonly used than the structured and semi-structured formats.

Most interview questions will be open-ended to elicit detailed responses, but you can also include closed-ended questions to allow for the development of scales. We recommend recording audio of interviews if possible, as this will allow you to focus on engaging with the participant during the interview instead of feverishly taking notes on everything s/he says. Quality handheld audio recorders can be purchased for less than \$50, and the recordings allow you to transcribe the interview and preserve the client's exact words.

Advantages

Interviews require a smaller sample size than surveys to produce useable results and tend to produce richer detail and contextual information, which may allow you to more fully understand clients' concerns and perspectives. In other words, a survey might tell you that many clients feel their attorney(s) communicated effectively, but an interview can tell you

what "effective communication" means to clients and what specific communication strategies are most effective. Interviews do not require any statistical knowledge to analyze, and the methods to analyze qualitative interview data are infinitely easier to learn for non-researchers. Finally, interviews can provide useful insight into how clients develop various opinions and attitudes, which in turn can be used to develop meaningful and efficient surveys for larger-scale data collection.

Limitations

Interviews are more labor-intensive to administer than either surveys or focus groups because they involve long one-on-one interactions between researcher and participant. A much greater level of skill and experience is required to administer interviews effectively than is necessary to read off closed-ended survey questions to clients. If you plan to conduct interviews, you will need to identify and train several people in qualitative interviewing techniques. Resources listed in Appendix G provide more details on good interviewing techniques (which are a very different skill set than that required for attorneys to interview clients), which generally involve becoming comfortable with the questions (especially sensitive ones) and being an engaged listener who asks thoughtful and necessary follow-up questions to elicit further explanations.

Responses to open-ended questions may contain confidential or identifying information, making it more challenging to maintain client confidentiality.

It may also be difficult to attract participants as a result of the time required to participate, particularly if you are not offering any incentives. In practice, most researchers have found that in-custody clients are more willing to participate in interview research than out-of-custody clients.

Focus Groups

Rather than conducting individual interviews, the researcher may opt to conduct interviews and/or surveys with one or more focus groups consisting of people with knowledge of the topic of the research. The average size of a focus group is four to six people, although they can range as large as fifteen people. In a focus group interview, participants can hear and respond to the perspectives of other participants, although there is no push for participants to agree with each other or come to a consensus. Focus groups can also involve surveys, given before or after the group interview, to elicit individual responses and quantitative data.

Advantages

Focus group interviews can allow researchers to obtain the perspective of a larger number of participants with a smaller time investment than individual interviews. In an hour, you can gather the perspectives of five or six people, as opposed to a single participant in an individual interview. This efficiency can enable you to increase your sample size, which in turn may broaden the types of clients who participate and the range of information you collect. Focus groups also allow participants to develop their thoughts in dialogue with other people knowledgeable about the topic, which can elicit more nuanced feedback than you would get in a one-on-one interview.

Focus groups also provide an opportunity to collect quantitative survey data, which can expand your options for analysis later on.

If you do both interviews and surveys at your focus groups, we recommend keeping the surveys very short (no longer than five minutes) to prevent fatigue. As with individual interviews, you can also audio-record focus groups (which we recommend doing), preserving the maximum amount of data and clients' exact words.

Limitations

Focus groups present greater logistical challenges than individual interviews or surveys. It may be difficult to arrange a time and place that is convenient to all participants. If some participants do not attend as scheduled, the group size may be inadequate. Scheduling multiple focus group interviews, providing refreshments or a meal, and offering participation incentives such as gift cards may help to mitigate these issues.

The necessary structure of focus groups (i.e., clients having a face-to-face discussion about their experiences with their attorneys and cases) makes it far more difficult to ensure client confidentiality as compared with surveys or interviews. The best safeguards are to ask focus group participants not to disclose their names or other identifying information during the interview, and to conduct focus groups only with clients whose court cases have reached a disposition. It is also essential that the interviewer appear neutral to the participants to elicit the most candid and complete responses. Thus, we recommend having the focus groups administered by office staff rather than attorneys.

Finally, the dynamics of focus groups present special challenges to the interviewer. For example, a single participant with a strong personality or an extreme perspective may dominate the conversation. Less assertive or outgoing participants may become unwilling to speak up or disagree with others in the group, which means your data will be skewed to include only the perspectives of the more outspoken clients. A skilled and experienced facilitator can help to ensure that all participants have the chance to express their experiences and opinions, but as with interviewing, this requires training. We recommend that either a trained facilitator is brought in or that an in-house researcher/employee receives training in facilitation before conducting focus groups or interviews.

Incentives

Many researchers use incentives to encourage participation in surveys, interviews, and focus groups. Although incentives are not required, they provide a tangible means of acknowledging participants' investment of time and effort. The type and value of the incentive may vary according to the time and effort required of the participant. In general, the more time and effort required, the more desirable the incentive needs to be. For a brief survey, an entry into a raffle for a gift card may be sufficient. Meals or refreshments are frequently provided at focus group interviews, as well as entry into a raffle. For individual interviews, which can often last an hour or longer, a gift card or cash may be the most appropriate incentive. For in-custody clients, it may not be possible to offer any incentive beyond the opportunity to speak with the interviewer, although you can usually transfer money to these clients via online or on-site vendors for a small fee.

When deciding what type of incentive to offer, consult prior research to learn about effective strategies and speak directly with others who have done client perspectives research on their experiences. For example, the Bronx Defenders found that providing pizza at focus groups was not a sufficient incentive to ensure high response rates (see Appendix A for the BxD client perspectives research case study). You should also consider the specific client population and its needs in designing incentives. For example, if offering gift cards, be sure the type of gift

card is likely to be meaningful and useful to your participants. Additionally, some researchers have found that lower income participants prefer cash incentives.

Data Collection Platform Selection

Your data collection approach — by telephone, via e-mail, via mail, or in person — should be selected on the basis of your research question as well as time and budgetary limitations. An approach involving multiple platforms may net more participants, but the data may not be comparable across platforms. Generally, we recommend in-person data collection; for interviews or focus groups, this option is strongly preferred due to the interactive nature of the participation, although interviews may be conducted over the phone or via videoconferencing. Surveys can be performed on any of the four platforms, but in-person will still get you the largest response rate and the highest quality data.

A phone survey may allow for more distractions and less buy-in from participants, whereas inperson surveys or focus groups usually result in more attention directed to the interviewer and the topic of the study. Many defender clients' phone numbers change often: the Bronx Defenders found that over half of a random sample of clients no longer had the same phone number a few months after case disposition (see Appendix A for their client perspectives research case study). The limitations of e-mail surveys are even more extreme: they are limited to those individuals for whom you have valid e-mail addresses, who have access to the internet, and the researcher has no control over the possible distractions or interruptions while the client completes the survey. Direct-mail surveys tend to have some of the lowest response rates as a result of disinterest, change of address, and the hassle of mailing a response, even if the respondent is provided with a pre-addressed stamped return envelope.

If you choose to use e-mail, postal mail, or phone survey approaches, you should be prepared to send several spaced-out reminders, including the full survey instrument in each communication by mail or e-mail. Regardless of the method you choose, be sure you are able to reach a representative sample of clients, or at the very least a large enough sample of clients to fulfill sample size needs. For more information and a direct comparison between mail, email or web-based, telephone, and in-person paper surveys on measures of response rate, speed, cost per completed survey, anonymity, ability to clarify survey questions and responses, and administrative bias, see references in Appendices F and G.

Chapter 4: Designing the Instrument

This chapter provides a detailed guide for designing an efficient and useful instrument for data collection. "Instrument" is a generic term used to describe a measurement device, such as a survey or interview guide. Even brief interviews and focus groups, which may exclusively involve oral questions and responses, require a written document outlining the study protocol and the specific questions organized in general order or clustered by topic.

When looking for existing sample questions and instrument designs to guide you, you will want to start by exploring prior research on client perspectives and experiences. However, depending on your research questions, you may want to expand your search beyond prior client perspectives studies and consult doctor-patient and customer/consumer service satisfaction research. A few specific studies in each category are listed and detailed in Appendices B-D, and additional references are listed in Appendices F and G.

Work Smarter, Not Harder: Don't Recreate the Wheel!

There is no need to spend time, money, or resources creating your own questions from scratch when someone may have already done it for you! It is perfectly acceptable, and actually encouraged for replication purposes, to use pre-existing questions and tools from other studies. Many researchers will include the questions they posed to participants in their publications, but if they have not, it is fine to e-mail to request the instrument or sample questions. We have summarized in Appendices B-D (and mention briefly below) some of the main defendant/client, consumer/customer, and patient satisfaction themes present in questions and responses. We present the general categories and question types, which can guide you in brainstorming additional specific questions should you need them.

By borrowing from prior research, you can also benefit from questions that have already been pilot-tested. And if you choose to share your results (e.g., via law reviews, NLADA, or even peer-reviewed journals with a researcher co-author), you will also be helping in the effort to replicate research and provide more understanding of how questions translate in different areas and across different populations. If necessary, you can alter the base questions as needed to fit the specifics and unique aspects of your jurisdiction, client population, and/or project goals. In addition to consulting published work, you can also consult researchers and/or indigent defense providers who have already conducted a similar study. Most researchers and providers will be more than happy to share their data collection experiences (and possible pitfalls) and questions they used to study client perspectives, so do not be afraid to ask.

Basic Principles to Consider

There are some basic principles to keep in mind while constructing or selecting questions for your instrument:

- Surveys, interviews, and focus groups should be as short as possible.
- Questions and response options should be worded clearly and at an appropriate literacy level so that individuals with only some high school education can understand them.
- Questions should include clear time periods and services for clients to reference (such as "for your last case only," "in your first communication with your attorney," "in general," or "overall").

- Use common language and avoid jargon or abbreviations.
- Avoid so-called "double-barreled questions," which touch upon more than one issue but only allow for one response, by limiting each question to one idea or concept (e.g., "Was your attorney friendly and courteous?" measures two different concepts and should be two separate questions: "Was your attorney friendly?" and "Was your attorney courteous?").
- If data collection is conducted in more than one language, make sure that the translated questions are comparable with the English ones.
- Use differently worded questions, if feasible given instrument length limitations, to measure the same idea to ensure responses are not a product of how the question is asked or possible misunderstandings (e.g., "How did you feel about the plea bargain you accepted?" and "Were you satisfied with the outcome of your case?").
- When including questions about a specific characteristic or action (e.g., "How trustworthy was your attorney, on a scale of one to five?"), you should also include a question about the importance of that issue to the client (e.g., "On a scale of one to five, how important is it for you to trust your attorney?") to ensure that you are accurately weighing the importance of certain responses (e.g., the two questions above, in combination, may suggest that, on average, even though clients have little trust in their attorney they also do not think that trusting their attorney is important).
- Consider including both closed- and open-ended questions in the instrument, each type matched to your specific research questions and project goals.
- When writing questions, you should use a logical order and place similar questions together, avoid words that provoke bias or emotional responses, and place easier questions first and sensitive questions later in the survey.
- Keep questions standardized if you will be conducting multiple waves of data collection to compare results over time.

Question Clarity

There are some general issues to consider regarding participants' interpretation of questions. Specifically, remembering what happened is often easier when people are asked about concrete events as opposed to their general thoughts and attitudes on something. In addition, you should consider all of the possible ways in which clients might interpret the question you are asking so as to avoid confounding response possibilities. If you are using closed-ended questions, make sure they are specific; if you are using open-ended questions, start with the general and then narrow the focus with specific follow-up questions. For example, asking "Did you have a good relationship with your attorney?" is a great starter question, but will likely net a wide variety of responses and issues raised by clients. You will therefore want to follow up with concrete contextual and event-based questions, such as "Did your attorney answer your questions during that jail visit?" or "Can you explain why you felt she was not being courteous at that time?" You should also check that the questions, including follow-ups, are geared towards the goals and research questions guiding the project. If the data you gather cannot answer your research questions, then all will be for naught.

Response Validity

One of the top concerns raised regarding self-reported data pertains to respondent honesty. Specifically, do clients tell the truth? Yes, most in fact do tell the truth. Participants can certainly keep things from the interviewer that they do not wish to discuss, but prior research suggests that blatant lying is very rare, particularly if the participant sees some advantage to telling the truth. Specific to client satisfaction and experience, participants will likely perceive

the research as an opportunity to share their story, a perception that may be furthered if you share with them that their participation can help improve the services offered to future clients. Further, there are ways to encourage honesty and full disclosure. Clients will feel safest if anonymity and confidentiality are built into the study design; the best way to do that is to never ask the participant their name (or make it clear you are not recording their name if you do know it) and instead to assign them a random number (e.g., Study Name-001). Interviews also allow for easier detection of possible lies; it is incredibly difficult to keep up an extravagant fiction during an in-depth interview involving general open-ended and specific follow-up questions about each issue raised, thus most people will not bother lying (see Weiss, 1994 for a detailed discussion of this issue).

Instrument Length

Regardless of the data collection method(s) you employ, your instrument should be as short, yet comprehensive, as possible. The longer it is, the less likely that people will take the time to complete or even begin the survey, since people tend to be busy and have short attention spans. Indigent clients in particular have stressful demands on their time and attention, and usually will not look at a survey that is longer than one or two pages, especially if they are not being offered any financial incentive to do so (there are some exceptions to this, which are discussed in the *Sampling Strategy* section). If a survey is printed on the front and back of a single sheet, many people will not realize they should flip the page over, so make sure to indicate that the survey is two pages long. Providing longer responses can cause fatigue, so a survey with a large proportion of open-ended questions should have fewer questions than one consisting primarily of closed-ended questions.

Generally, paper surveys administered in person should take between 5 and 15 minutes to complete, telephone surveys between 5 and 20 minutes, and online and mail surveys between 5 and 10 minutes. Interviews and focus groups can be as short as 10 to 15 minutes or as long as 45 to 90 minutes, but tend to run on the longer side since they involve open-ended questions and attempts to understand the reasons behind client responses. Most interviews are not productive beyond the 90-minute threshold, and longer interviews become an imposition on the client's time. Pilot-testing the instrument can provide an estimate of how long each survey, interview, or focus group will take, and allows you to shorten the instrument if necessary.

When considering how many question to ask, we recommend that you do not try to cover more than three overarching questions (domains) during focus groups. Ideally, each overarching point should contain no more than three to five sub-questions or issues to be covered during the focus group. Surveys and interviews may provide more flexibility in the number of questions, but we recommend designing them to be within the time limits suggested above. The importance of pilot testing to determine average instrument completion time cannot be overstated for surveys and interviews.

Drawing from Attorney-Client Perspectives Research

As noted above, rather than starting from scratch, you should first refer to the existing research on attorney-client perspectives and experiences, as well as existing information regarding instruments and research protocols, when designing your own instrument. In Appendix B, we summarize the approaches several studies have taken in attorney-client research. Specifically, we identify 1) the authors of the research; 2) the purpose of the study; 3) the question types, categories, and questions asked; and any relevant findings or implications.

We recommend that you at least briefly look through examples of each type of article while creating your instrument. For example, even though you may not be focusing on juvenile clients' perceptions, you may find that the questions asked of juveniles and how they are phrased are a better fit for your project than a seemingly more relevant reference. In addition, this will allow you to get the full breadth of questions you may want to ask, which you can then narrow according to your larger research questions. Although this will require a bit more legwork on the front end, reviewing as many of these studies as possible can actually help you save time and provide you with tips and tricks you might otherwise only learn in the midst of data collection. If you are short on time to review research, one option is to have an intern assist in summarizing the research design, data collection methods, and instruments from each study and putting them into a spreadsheet for your easy use. We recommend doing a few examples yourself so the intern knows exactly what you expect.

Doctor-Patient and Customer Service Satisfaction Research

Much of the existing attorney-client satisfaction research has roots in doctor-patient and customer service satisfaction research. Since the medical field has been the most readily applicable research base for comparison with the services provided by legal professionals, there is little doubt why so much of the early research by practitioners examining client perspectives has used doctor-patient satisfaction research as a template of sorts. Specifically, doctor-patient satisfaction research offers question themes (also called domains) that are transferable to the research questions for which practitioners want client perspectives; examples of the types of domains and question categories in doctor-patient satisfaction research, as applied to research on client perspectives, can be found in Appendix C.

Similarly, research on customer satisfaction offers an even larger body of applicable research to draw from. At its core, a survey of defendant client perspectives is a measure of service satisfaction, so it makes sense that you may want to consult customer service satisfaction research toolkits. In particular, the King County Measuring Customer Satisfaction report is one of the more widely referenced and client-applicable customer service satisfaction research resources. A summary of the questions asked by category, as applied to client perspectives research, is provided in Appendix D. You can begin with the general issues on which the questions focus and adapt them to the specific needs of your project and indigent defense client perspectives.

Designing Questions: Types and Examples

Ideally, once you have reviewed the existing research, you will hold one more focus group with attorneys and office staff and another with a group of clients to identify the most important and relevant research questions for your organization. However, resources are often limited, so you may choose to skip this initial step as you should already have feedback from the initial focus groups or interviews completed during the *Developing Goals* phase. You should resist simply gathering "a list of twenty interesting questions"; instead, you need to refer back to your research questions as the framework for creating specific measures to include in your instrument. For each research question you have developed, you will need to create specific operationalized measures. That is, you need to create specific questions to ask clients that can provide you information to answer your research questions.

For example, to measure clients' satisfaction with case outcomes you might want to know: original charge, final charge, sentence elements, perspective on plea deal process, any prior court involvement, client expectations versus actual outcome, collateral consequences of

sentence, and client relationship to victim, if applicable. See Appendix G for a list of studies that provide additional information and examples regarding step-by-step instrument and performance measure construction. Measures should then be formulated into specific questions to ask the client, such as "What was the original charge at arrest/arraignment?" or "How do you feel about the plea bargain you accepted?" each designed to elicit responses that answer one or more research questions.

The examples above are quantitative and qualitative questions, respectively, and as discussed earlier in this guide, they will net you different types of information. Be mindful of the information you are hoping to obtain as you select the questions to include in your instrument, as well as how long each will take to be fully answered. For example, a survey with open- and closed-ended questions will feel shorter if you put the closed-ended questions up front. And although in many studies it makes sense to limit open-ended questions due to time constraints, a few such questions on important topics can provide new information and levels of detail not available from closed-ended questions.

The most common survey question types include fixed-alternative multiple-choice questions, fill-in-the-blank short response questions, and scale questions (e.g., yes/no, yes/no/maybe, and Likert-type scale). Interviews tend to involve more open-ended questions, starting with general questions and moving to specific follow-ups, while focus groups often involve a combination of types. It is important to reiterate that when constructing your questions, you should pay special attention to wording and avoid questions that ask about multiple issues or concepts, particularly for closed-ended questions (see the subsection on *Basic Principles to Consider* for additional considerations). For each type of question discussed below, example questions are provided in Appendix E and information regarding analysis and interpretation is provided in the *Analyzing the Data* section.

Fixed-Alternative Multiple-Choice Question

Fixed-alternative questions provide multiple choice answer options. These types of questions are good when there are a few simple possible reply options (e.g., race, gender, ethnicity, highest level of education).

Fill-in-the-Blank Short Response Question

Short response questions prompt participants to provide brief descriptions of up to a few words (e.g., date of birth, original charge, address). Short response questions are good when there are too many options for a multiple choice fixed-alternative question.

Likert Scale

The Likert scale, where 1 is considered the lowest rating and 5 is (typically) considered the highest rating, is one of the most widely used survey research approaches. There are three main five-level Likert response types: Satisfaction, Agreement, and Time (see Appendix E for examples of each type). We recommend using scales with an odd number of values so that there is a neutral option; scales with even numbers force respondents to choose between either a positive or negative option that may not reflect their actual opinions. Scales with more than five options can be confusing and more difficult for respondents to use.

You may also want to include a "Not Applicable" option so that respondents can still complete the survey while also acknowledging that the question does not apply to them (e.g., if you ask

about experience with probation and the client was never on probation). If the respondent indicates that the question is not applicable, the response for that individual would not be included in the overall analysis. You can assign numeric values to these statements in your instrument to make it easier to analyze and interpret responses (e.g., 1 = strongly disagree through 5 = strongly agree).

Open-Ended Questions

The best open-ended questions ask about a specific issue, but are phrased so they influence the participant's response as little as possible. They focus on a specific concept such as attorney-client trust or outcome satisfaction. But instead of asking if a client agrees or disagrees that their attorney was trustworthy (like the above closed-ended questions), an open-ended question will be phrased more like "Did you trust your attorney?" or even "How did you feel about the attorney that represented you for this case?" From there, you will want to follow up with probes about specific issues and events based on how the client responds to the general question. It is a good idea to include some follow-up questions in the instrument, while still preparing to ask follow-ups specific to each person's responses. The goal of openended questions is to provide detailed information and explanations about the issues asked, as opposed to closed-ended questions which strive for comparability across people and time.

For a full list of the references for designing instruments, organized by overarching categories, you should consult Appendices F and G. NLADA's Defender Research Library also has many free publications and abstracts you can access (see https://defenderresearch.legal/).

Identifying Information

Ideally, studies should be done in such a way that information about both the participant and their attorney(s) is masked (called a double-blind study). This way, since participants will not be asked to report names of specific attorneys, they can respond freely and not fear possible retribution if they happen to have other ongoing cases or have any reason to think they may need representation from that attorney in the future. The simplest way to achieve this is often to ask clients to not reveal their names or the names of their attorney(s). If the specific research questions do not allow this (e.g., if only one attorney works in the court in which the client's case was heard), you should at the very least conduct a single-blind study that keeps client names anonymous, while also removing court names or other such information from the data to prevent identification of specific attorneys. If you do know client names up front (e.g., you must know the names of incarcerated persons to have them brought to consultation rooms by jail or prison staff), you will need to reassure clients that this is for administrative purposes only and no individual responses will be reported back to attorneys or attached to specific comments. When sharing results of the study, you should only report results in the aggregate so that specific clients cannot be pinpointed by cross-referencing date of birth, race, charges, etc. Simply put, you should build client confidentiality into the data collection instrument.

Chapter 5: Sampling Strategy

An Overview of Sampling

Limitations on time and resources will likely necessitate collecting data from a sample of clients, not each and every client your office serves. If your sample of clients is drawn correctly, responses should be reflective of clients' perspectives overall. To construct a sample, you will need to identify a section of your client population that is representative of the clients you wish to learn about. Many research projects aim to answer questions about all clients, but some are concerned with the experiences of sub-groups, like women or non-English speakers. Sampling is a way of picking representatives from a population in order to answer questions about the entire population.

There are two main types of sampling: probability (also called representative) sampling and non-probability (also called non-representative) sampling. Within these categories are several different sampling methods researchers use. While non-probability is most common for client perspectives research in general, probability is more often used in quantitative research, whereas qualitative sampling almost always relies on non-probability sampling.

There are two main types of probability sampling — random and stratified sampling — and three main types of non-probability sampling — quota sampling, purposive sampling, and convenience sampling. Non-probability sampling generates findings that are less generalizable and thus technically less desirable than probability samples, although by no means unacceptable. As a matter of practicality, the most common sampling methods for this type of research are convenience sampling and purposive snowball sampling. For definitions of each of these sampling methods, consult the glossary in Appendix H; for more in-depth discussions, consult the literature in the research design and sampling methods/questions categories in Appendices F and G.

Sampling Strategies and Limitations

If your goal is a truly representative sample, then every client during an established time period should have an equal chance of being sampled and/or you should have a fairly large sample. If clients do not have an equal chance of being selected to participate (which involves randomized sampling of addresses or names, for example), then selection bias will be introduced. Chances are good that you will be relying on a convenience sample, which means that there is selection bias, both in terms of who is invited to participate as well as in who chooses to complete the study. Selection bias of some sort is present in all types of samples, but it is important to be aware of the bias specific to your research so that you can acknowledge such implications during the analysis phase. To be clear, selection bias does not necessarily undermine your research or findings. Many of the studies we cite in this paper relied on convenience or purposive sampling strategies due to resource and practical limitations. We are simply saying you need to know the limitations such a strategy introduces, particularly when presenting and interpreting findings.

To understand sampling limitations and selection biases, you should keep track of basic information about those who are asked to participate but either refuse or do not complete the study so that you can understand whether there are any systematic differences between the people agreeing and those declining to participate (e.g., if sampling at disposition: approximate age, gender, race, disposition, sentence, etc.; and if sampling at arraignment: age,

gender, sex, initial charges, decision regarding bail/release/remand, etc.). This information will track the selection bias introduced through non-random sampling.

If you do not plan to begin data collection immediately, we urge supervisors and administrators to prepare ahead of time by asking attorneys to routinely update addresses on client case folders and/or in the case management system so that this information will have a higher likelihood of being up to date (at least for a recent sample of clients) when data collection begins. The fact remains that some sampling issues and biases are unavoidable and inherent in research on client perspectives because many defenders' clients frequently change addresses and phone numbers, often several times within the span of a case. Because of this, a convenience sample may be the most feasible; for example, asking clients to participate in the

study immediately following their case disposition precludes the need to obtain follow-up contact information from case files and ensures updated contact information exchanges if participation will not occur immediately.

A convenient and more easily accessed client population are those who are incarcerated either during the pretrial phase or after sentencing. Although incarcerated clients may be a good place to start, their perspectives may vary quite a bit

Generally, people who are either very satisfied or unsatisfied will be the ones who want to share their experiences the most, so keep this in mind when interpreting results since individuals who are adequately satisfied may choose not to participate.

from those of non-incarcerated clients, so it will be important to survey non-incarcerated individuals as well (unless your objectives are limited to incarcerated clients' perspectives). Generally, the easier you make it for clients to participate, the more likely they will be to participate and the less time it will take you to get a large enough sample (e.g., people have varying work schedules, so you may increase participation by offering opportunities at different times of the day and week).

The larger the sample size, the more likely it is that sample responses truly reflect those of the population. However, we acknowledge that with limited resources (budget and time), you may need to prioritize and gather enough data to fulfill a minimum sample size requirement. Generally, people who are either very satisfied or unsatisfied will be the ones who want to share their experiences the most, so keep this in mind when interpreting results since individuals who are adequately satisfied may choose not to participate. None of these limitations are necessarily bad things: convenience sampling is common in this type of research due to the limitations imposed in locating and gaining participation from clients. Be prepared to approach many more clients than you need to meet sample size requirements. For many studies, a response rate of 20-30% is considered respectable, so do not become discouraged if you realize that you need to approach ten clients to recruit only two or three participants.

Sample Size

A common research process question is: how large must my sample be to yield useful results? There is no definitive answer for the sample size required for surveys, interviews, or focus groups. The target sample size will depend on several factors, including the study aims, resource availability, caseloads in your jurisdiction, and the statistical analysis plans for the

data. Qualitative surveys consisting of open-ended questions, focus groups, or interviews require a smaller sample size than surveys consisting primarily of closed-ended questions. If you plan to conduct statistical analysis of your data, then you should conduct sample size calculations (often done using computer packages such as G*Power or online sample size calculators, e.g., see https://www.surveysystem.com/sscalc.htm or http://www.research-advisors.com/tools/SampleSize.htm). However, if you have little experience with statistics and sample power, you should consult a researcher with statistical knowledge (see Appendix F for reference texts).

Although it may seem like discussing analysis strategies prior to collecting your sample is backwards, the reality is that the number of clients you survey, interview, or include in your focus groups is dependent on the level of information you want to know and how many variables are included within each question. As any experienced researcher will tell you, rather

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than collecting all of your data and then realizing you did not collect enough or that you could have collected less, you should figure out how many participants you need based on the analysis you plan to do.

The general rule of thumb for statistical analysis is to have a minimum of 20 to 30 participant responses per cell, depending on the scale of measurement (nominal, interval, ordinal, or ratio) you are

using for the dependent variable.⁵ For example, if you want to compare male and female clients on their response to a yes/no question, you will end up with four cells: yes males, yes females, no males, and no females. Statistical comparisons should only be run on this data if each of the four cells contains at least 20 people. Technically, most statistical analysis can be performed with as few as five participants per cell if the scale of measure is nominal, though this will limit the power of statistical tests and therefore what you can meaningfully infer from the results. With a dependent variable measured on an interval or ratio scale, you should have at least 30 responses per cell.

For example, to analyze the average score on a Likert-type question about "overall satisfaction with the case outcome," you would need about 30 participants. However, if you want to compare male and female responses, you will need a total of 60 participants, half male and half female, to yield a minimum of 30 responses per cell. If you want to know the difference in average case outcome satisfaction between males and females who were in pretrial custody, you will need to break the sample up into four groups: males who experienced pretrial detention, males who did not experience pretrial detention, females who experienced pretrial detention, and females who did not experience pretrial detention. You would need a total of 120 participants, including 30 participants in each cell: 30 (male pretrial) + 30 (male no pretrial) + 30 (female pretrial) + 30 (female no pretrial). That is, you would need 60 males and 60 females, where half of the males and females experienced pretrial detention and half did not. Thus, the sample size and statistics will vary based on your research goals and questions and the categories you want to sample on (e.g., charge type/level, client demographics, court, sentence type, disposition type).

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⁵ Consult Appendix H: Glossary for definitions of the following terms: variable, cell, nominal, interval, ratio, and ordinal.

If you plan to use mostly in-depth open-ended questions, such as for focus groups or interviews, then you will not need nearly as many participants (15 to 20 participants total is considered a good minimum), though the exact number will still depend on your goals and research questions, including any comparisons you plan to make. For example, an interview study that hopes to compare responses of English and non-English speakers should ideally involve 30 to 40 participants to allow for meaningful comparison. All of this goes to say that before you begin collecting data, you should first carefully assess the number of participants you need to answer your research questions, including any breakdowns on the basis of particular characteristics. Before constructing your sample, you should refer to at least a few resources on best sampling practices (see Appendix F).

Chapter 6: Collecting the Data

This chapter provides a detailed guide for the process of collecting the data, starting with some important decisions regarding when, where, and how you will collect the data. These decisions can be made in any order, but as they will likely impact one another you should consider them together. And of course, these decisions will also be impacted by which data collection methods you chose and how you designed your instrument.

Timing of Data Collection

Whether you approach clients while the case is still open, immediately after it is disposed of, or at some point after their case is closed, will depend on your goals and research questions. The timing of data collection will also have certain implications for interpretation of your findings and confidentiality concerns. Having multiple points of data collection throughout a case is ideal and will allow you to document the progression of client responses throughout case processing; however, this is rarely possible due to limited resources and the added difficulty of gaining client participation at multiple points.

If you are only able to collect data from a small sample, then conducting your study after the case has closed may be most ideal for a few reasons. First, you can ask about every aspect of the case and the totality of the attorney-client relationship. Second, clients may be more honest since they will not fear attorney retaliation or a decrease in advocacy in their current case. Third, you can attempt to gauge the impact the disposition and sentence outcomes have on clients' perceptions of their attorney(s). Finally, asking clients about closed cases provides additional safeguards since information they provide cannot be used against them in that case.

The timing of the study after case completion can also have implications for interpretation of findings. Specifically, if you survey clients immediately after their case is closed, you may be measuring their heightened perceptions and be missing their digested reflections, but their recollection of events will likely be good. If you conduct the study within a few weeks to a few months after their case has closed, you will be able to capture clients' perceptions after they have had the ability to reflect, but they may no longer remember specifics. Regardless of when you speak with clients, it is suggested you use specific events to help them remember what happened or how they felt at that specific time (e.g., "What did your attorney do at your arraignment?"). There is some research to suggest that clients interviewed while serving their sentence may respond differently when asked about the fairness of that sentence depending on whether they are closer to the end or beginning of their sentence. For example, some clients may be angrier about the outcome when they are first sentenced, but as the end of their time approaches, they might make peace with the sentence and give you a more favorable opinion of the outcome.

Pilot Testing Your Instrument

The essential step of pilot testing (pre-testing) before launching your instrument to your full sample of clients serves two functions. First, if you are uncertain of the types of questions to ask, you can conduct preliminary focus groups or interviews with clients to find out what general issues matter most to them. Second, a pilot test using a small number of clients can help ensure that the order and wording of questions flow smoothly and that the questions make sense. It is recommended that pilot tests are completed by at least four to five participants, depending on the instrument's length and question complexity. You should include questions at the end of the pilot test instrument asking participants to share which

questions, if any, were unclear or confusing. You can also give them the option to suggest questions or changes to questions. You can then use this feedback to adjust your instrument to fix any problems before data collection begins in earnest.

Depending on how many changes are required, we recommend doing a second pilot test with the revised instrument. Ideally, when conducting the pilot study, you should follow the same procedures that will be used in the main study, as this will highlight potential problems such as confusing questions or low participation rates. If resources for pilot testing are unavailable, a secondary option, although not ideal, is to update the instrument as you obtain participants. You would complete a round of data collection with four to five participants, analyze the data, and then make changes to the instrument, repeating this process after every four to five participants until you are satisfied with the instrument. Obviously, the downside to this is that the instrument may constantly change, making comparing and interpreting the data much more difficult.

Non-English-Speaking Clients

If you serve a large enough non-English speaking population, you should consider translating a written survey and, if at all possible, having bilingual staff carry out surveys, interviews, or focus groups. Using a translator not employed by your agency would require you to consider the same confidentiality and security issues that you would with an outside researcher. To ensure that you can generalize between English and non-English speaking clients, be sure to check that questions are comparable across languages. Make sure that your translator knows the subject at hand and speaks the same dialect as your clients (or knows how to use neutral words). You should also use pilot testing to double-check the same interpretation and comprehension issues as with the English version of the instrument.

Data Collection Location

Where you will collect data, assuming you are doing in-person data collection, can be just as important as when and how. You need to ensure client privacy, while also finding a place that is easily accessible and comfortable to both researcher and client. And naturally this decision depends in part on your data collection method. Surveys can be quickly completed in various places at court or on the street, whereas interviews or focus groups might require a private room for longer periods. Although you can use your agency's office, this is not recommended as locations seen to be associated with government or the criminal justice system may make clients feel nervous about discussing negative experiences. In general, locations that are close to where clients live, that are easily accessible by public transportation or walking, and are not associated with authority will net you larger samples. Suggestions based on prior client perspectives research include public library meeting rooms, community centers, and coffee shops or cafes. The first two are ideal as they are neutral public spaces that can usually be reserved for free or at a low cost, whereas a coffee shop is less private and may require a purchase to use the space. You could also consider using a private room in the courthouse for convenience if you plan to solicit respondents at court, but this is no guarantee of low refusal rates, as the Bronx Defenders discovered (see Appendix A).

Data Storage and Security

The final consideration at this stage is where and how you will store data — NYCDS recognized early on the importance of securing potentially sensitive data and developed a written protocol for how to process and store all data. Assuming you are collecting

demographic information, but not client names, you will still need a secure location for data storage to protect the confidentiality of clients. This will also assuage concerns about the security of client and case information. Regardless of the data collection method you select, data will eventually need to be converted to electronic format for analysis. It is best to do this on a continuing basis while data collection is ongoing to promote data security.

You will want to store paper data, such as original surveys or notes from focus groups, in a locked file cabinet and/or storage room in a secure office. Most often surveys are completed using paper and pen, thus the data should be entered into an electronic data set on a daily or weekly basis. Interviews and focus groups will involve note-taking and/or audio recordings, both of which should be transcribed, again on a daily or weekly basis. Once data has been electronically replicated and its accuracy checked, you should consider destroying original notes, audio recordings, and surveys to further protect client confidentiality. Make sure electronic data is de-identified by assigning each interview, survey, or focus group an identifier made up of letters and numbers with no relationship to identifiable characteristics of the participants.

All electronic data should be saved in password-protected files, stored on a computer without internet access and with password protection, and backed up on a separate external USB or hard drive that is stored in a separate secure location. This will ensure the data is secure and protected against loss. You will need to decide who can access (raw, identifiable) data within your organization, but it is advised to limit the number of people to as few as possible. For example, if you have interns doing data entry (a common approach), they do not necessarily need direct access to all of the electronic data. They can input surveys or transcribe interviews onto a USB drive which they then give to you for transfer and secure storage. Staying on top of electronic conversion of raw data will save you time and stress later in the project, as you will likely be eager to progress to data analysis once data collection is complete.

Chapter 7: Analyzing the Data

The final phase of your research project is data analysis, which transforms the data you have collected into useful, readily comprehensible information. The analytic technique(s) you choose will depend on the type of data (qualitative and/or quantitative) as well as your research questions and goals.

Even if you have collected the data independently, it can be very helpful to involve a research partner in the analysis. A trained qualitative and/or quantitative researcher can help you get the most out of the available data, and can help to guard against misinterpretation and improper inferences. An academic researcher may agree to analyze your data in exchange for the right to publish the results. Graduate students may also be willing to perform data analysis for the sake of experience, as part of an independent study or capstone project, or as interns. Advanced doctoral students may exchange many hours of analysis and report writing work for the ability to use the data for their dissertation. The remainder of this chapter will provide the basics should you plan to analyze the data on your own.

Data Entry and Cleaning

The first step in data analysis is data entry, which puts the data into an analyzable form, and ideally should have begun during the data collection process.

Quantitative Data

This data must be entered into an electronic data set, typically structured so that each row represents an individual participant and the columns (also known as variables) represent the questions or measures. Data sets are commonly created in a spreadsheet application such as Microsoft Excel, then analyzed in Excel or imported into a statistical package such as SPSS, Stata, or R for analysis. It is also possible to create data sets directly in some statistical packages, although it may be easier to create the data set in Excel.

Online survey software will automatically produce a data set;⁶ the data from paper survey questionnaires, however, must be hand-entered into a spreadsheet application or statistical software.⁷ One option is to type the data from each questionnaire directly into the data set using Excel. Another option is to set up a web-based form through which to enter the data, perhaps using an online survey provider and having the client complete the survey on a tablet or laptop (with a Wi-Fi connection, if necessary). Using a web-based form can improve the accuracy of data entry by allowing you to establish validation rules (e.g., certain fields are required, responses must be within a particular numerical range, conflicting responses are disallowed) and by ensuring that each participant's data is entered into the correct row.

After quantitative data is entered into a data set, the data must be "cleaned" to check for accuracy and completeness. This step is essential, as inaccurate data can lead to invalid

⁶ Most online survey sites offer both free and paid options, with the free options limiting you on the number and types of questions, as well as data analysis and visual capabilities. For a range of fee structures, they will provide you practically unlimited assistance with analysis and visual representations of the data. Some of the most commonly used online survey sites include SurveyMonkey, SurveyGizmo, Qualtrics, QuestionPro, and Amazon MTurk. PCMag provides a comparison of online options annually, which may help you select a site.

⁷ There are a few software services that do data capture for hand-completed surveys. One is http://captricity.com/, others include Adobe itself, and an open source library: SDAPS https://sdaps.org/.

conclusions. Data cleaning involves identifying and correcting or deleting inaccurate or missing data. Strategies for cleaning numerical variables include:

- Examining the mean, median, maximum, and minimum values of the variable to look for inconsistencies or odd patterns.
- Sorting the data set on the values of the variable and examining the extreme values
- Using histograms to identify outlying values.
- Using logic rules to identify problematic values (e.g., if your research focuses on clients whose cases were disposed within the past year, a disposition date outside this range indicates the existence of a data entry error or that the client may need to be excluded from the data set).
- Identifying missing values.

When a missing or problematic value of a variable is identified, you will need to decide whether to correct the value, allow the value, delete the value, or delete the entire record from the data set. If the survey was originally conducted on paper, questionable values can be verified against the paper forms. If a variable's value indicates that the client does not meet the requirements for inclusion in the study (e.g., the client described above, whose case disposition falls outside the sampling range), the client's entire record should be deleted from the data set, or the record should be flagged and excluded from all analyses.

Qualitative Data

Data entry of qualitative data includes typing notes and transcribing audio recordings from interviews and focus groups. If you were able to audio record interviews or focus groups, an exact transcription of the recording will provide the richest data for analysis. The use of transcription foot pedals and associated software can greatly speed up and simplify the transcription process. Online transcription services are convenient, but charge by the length of and difficulty in deciphering the recording. They may also pose confidentiality concerns depending on the nature of the responses. Due to limited resources, using detail-oriented interns or graduate assistants is a practical option and something local universities may be able to assist with. We do not advise attempting to analyze directly from audio recordings as you will undoubtedly miss many themes and issues that come up, and may have trouble identifying patterns across interviews.

Handwritten notes will be your main source of data if you chose to not record interviews or focus groups. If this is the case, you will want to write a complete summary of the interview or focus group after each event, while your memory is fresh. You should type up any notes as soon as possible to preserve the data.

Analyzing Quantitative Data

There exists a dizzying array of techniques for analyzing quantitative data. The nature of your research questions will determine which of these analytic techniques you bring to bear on your data. In many cases, simple summary statistics, frequencies, comparisons of means and proportions, and crosstabulations will provide the answers you seek. Graphical displays can also provide an intuitive means of illustrating patterns in your data.

Types of Variables

There are two basic types of quantitative variables: continuous variables and categorical variables. Continuous variables may take on an infinite number of values. For example, age can be considered a continuous variable, even if your data set only records it in years. Categorical variables have a finite number of values. Gender, race/ethnicity, and primary charge are some categorical variables that frequently appear in client data sets, with a numeric value assigned to each category (e.g., Felony = 1, Misdemeanor = 2). Likert-type questions also yield categorical variables (e.g., Strongly Disagree = 1, Disagree = 2, Neither Agree nor Disagree = 3, Agree = 4, Strongly Agree = 5) (see Appendix E for examples of these types of variables).

Commonly Used Analytic Techniques

For some research questions, such as "How satisfied are clients with the quality of attorney-client communication?" a measure of central tendency (mean, median, or mode) provides a simple and direct answer (e.g., "On average, clients rated their satisfaction with attorney communication at 3.6 out of 5."). To describe the variability in client responses to such a question, you can report the standard deviation (for continuous variables) or the frequency of responses in each category (for categorical variables).

To compare responses across two or more groups (e.g., client satisfaction among men versus client satisfaction among women), you can employ statistical tests such as:

- The independent samples t-test (comparing means between two groups),
- The z-test (comparing proportions between two groups), or
- The one-way analysis of variance (comparing means among three or more groups).

These statistical tests are based on the null hypothesis that the means or proportions of the groups do not differ. If your data shows a difference among the values for the various groups that is sufficiently unlikely to have appeared by random chance, the null hypothesis is rejected and there is said to be a statistically significant difference among the means or proportions for the groups. The power of the statistical test, or the test's ability to correctly detect genuine differences among the groups, will be greater in larger samples. A statistically significant result is not always substantively significant: for example, if 50 percent of men and 49 percent of women report that they are very satisfied with the quality of representation, the difference between these two proportions may be substantively meaningless even if it is statistically significant. On the other hand, a large difference that is not statistically significant may have real-world relevance, especially if the sample size is small and the statistical test lacks power.

To analyze the relationship between two categorical variables (e.g., gender and primary goal of representation), you can use crosstabulations, also known as crosstabs or contingency tables. A crosstab is a table in which the categories for one variable define the rows and the categories for the other variable define the columns. Each cell contains the number and/or percentage of records in the data set with the specified pair of values. Row and column totals are usually also included. You can produce crosstabs using statistical software or Excel's Pivot Table function. The Pearson chi-square test provides a statistical test of whether the two variables are independent of each other (e.g., whether gender and primary goal of representation are unrelated) or whether they seem to vary together.

Demographics

A standard practice in survey research is to present summary statistics and frequencies describing the characteristics of respondents in the sample. You may also use summary statistics and frequencies to describe interview and focus group samples. For example, you might report the average, minimum, and maximum age of participants in the sample, along with the percentage of participants in each gender category and racial/ethnic group. Ideally, you would also have this data for clients who were selected to be in the sample but either chose not to participate or were never contacted. This will allow you to explore the issues of selection bias discussed in the *Sampling Strategy* section.

Nominal and Ordinal Data

Variables comprising categorical (nominal) data, such as sex/gender, race, or ethnicity, and those comprising ordinal data such as charge level, sentence type, or measures of attorney performance (e.g., "excellent," "good," "fair," "poor") can be coded multiple ways for data analysis. Sex is often coded as male=0 and female=1, but since there is no logical order to the categories, you could just as easily code it as female = 0 and male = 1. Either way, you should create a "data dictionary" to track how values are assigned for each variable. For other variables, such as race, you may end up combining categories based on your sample. If you have one participant who identifies as Native American, three as Hawaiian, and two as Asian, you may end up creating a single Other category to allow for statistical analysis of race. The goal is to create new categories as needed to facilitate meaningful analysis of the data.

Likert Data

Unlike most categorical variables, the data from Likert questions is not always in a format ready for statistical analyses and may need some re-coding or categorization for analytic purposes. Responses to Likert-type questions may be analyzed individually, or responses from multiple questions that measure different aspects of the same construct (e.g., attorney-client communication) may be combined into a scale. When analyzing responses to an individual Likert-type question, the median or mode should be reported. The frequency of responses in each category provides a measure of dispersion. To create a Likert scale from multiple Likert questions, sum the answers to all component questions for each respondent. For a Likert scale, central tendency is measured by the mean and dispersion by the standard deviation.

If you ask a Likert scale question in the negative, you should reverse the scores when analyzing (1 = 3, 2 = 2, 3 = 1, 4 = 0). For example, in Appendix E, Table 4, questions 3a and 3b are mirror questions of each other. Thus, reversing the coding would make them compatible for analysis.

Regarding interpretation of Likert scale questions, it is important to note that gender research regarding survey responses finds that women are less likely to choose the extreme options (e.g., on an Agreement scale of 1-5, they are less likely to choose 1 or 5 and are more likely to choose the options in the middle). In addition, research comparing attitudes toward men versus women for the same service provided find that women are rated less satisfactory on most criteria (e.g., in a double-blind study where an identical online course was taught by either a woman or man, but half the course was given a male instructor's name and half was given the female instructor's name, students rated female instructors as less satisfactory).

Analyzing Qualitative Data

At the most general level, qualitative data analysis is a process of making sense out of the data from interviews, focus groups, and other qualitative methods. There are a myriad of approaches to qualitative data analysis, including grounded theory, ethnographic analysis, narrative analysis, case studies, and many others. In general, these techniques share an inductive approach to data analysis, which is the process of developing broad themes from specific patterns and observations in the raw data. In contrast with quantitative research, which uses data to test a predetermined hypothesis, qualitative research seeks to use the data to build a theory that explains the phenomenon being studied (e.g., the client experience of legal representation). Qualitative research tends to focus on experiences and meaning of those experiences for each participant, making it particularly well suited to research on client perspectives.

Qualitative data analysis typically involves multiple rounds of two activities: coding (different from the quantitative meaning of the word) and memo-writing. The process we and other scholars recommend is to have at least two or three rounds of coding, punctuated by memo-writing to identify patterns and potential new codes. Coding is the process of identifying

themes within your transcriptions and/or notes that relate to one or more of your research questions. As you read through each transcript, you will identify discrete segments of text (i.e., participant responses), which are often naturally defined by how topics were brought up during the interview or focus group. Then, you will attach one or more codes to each segment dependent on the themes identified within that segment. The goal is to link what the

In contrast with quantitative research, which uses data to test a predetermined hypothesis, qualitative research seeks to use the data to build a theory that explains the phenomenon being studied.

respondent says to the concepts and issues your study is concerned with. For example, if one of your research questions involves the quality of attorney-client communication, you would code each text segment where communication issues were discussed with something like "COMM" or "communicate." A code is simply any word or abbreviation that represents a concept of interest, and they can be formatted however is easiest for the coder.

Codes often evolve during the course of coding, particularly as you discover new themes and need to expand your selection of codes. At the outset, you should develop a base set of codes for the concepts you set out to study. So, for attorney-client relationships you would likely have codes for communication, advocacy, trust, respect, and attorney legal knowledge. Even as early as the first transcript, you may encounter a theme that relates to your research questions, but for which you did not create a code. You will want to create the new code, decide if it should be nested under one of the original codes (e.g., a code for an attorney not showing up to court could be nested under either trust or advocacy, depending on how the client described the incident), and continue coding. When you develop new codes later in the process, you will want to go back through earlier transcripts and look for instances of the newly identified theme.

⁸ If you have non-English qualitative data, you will need to make sure the person transcribing is a fluent speaker, and either have them translate to English for analysis or complete the analysis in the original language.

Coding can be performed manually or using qualitative analysis software such as ATLAS.ti or NVivo, which allow the coder to highlight passages and assign codes. Manual coding techniques include underlining with color-coded pens, writing codes in the margins of printed interview notes, copying and pasting passages of text into separate documents representing codes, and using the comments function in Microsoft Word or OneNote. Analysis software is expensive, and even seasoned researchers often use Microsoft Word (or Excel) to successfully code and analyze qualitative data. You initially code using the comments feature, then take those text segments and copy them into new documents by code. Communication themed segments would all be copied to one document, while advocacy themed segments would go in another. If a segment of text relates to multiple themes, it can be assigned multiple codes, and then copied into all of the appropriate documents.

It is recommended to make one full pass through all transcripts, creating new codes only as absolutely necessary, before stopping to write your first memo. Memos are informal analytic notes to yourself in which you reflect on your code choices and coding process thus far and document any emerging patterns and/or new themes or subthemes. This allows you to step back from the data, consider new codes you may need to implement, and to start identifying patterns that you will later apply to your research questions. Having clarified the meaning of and relationship among the codes, you should then undertake one or two additional rounds of coding and memo-writing until you are able to conclude two things: 1) that you feel you have exhausted your ability to refine and create codes for themes in the data; and 2) that you have identified patterns in the themes that can answer your research questions, or if they cannot answer all your research questions, you have developed (or will develop) hypotheses as to why that is.

Converting Qualitative Data into Quantitative Data

Sometimes it is useful to convert qualitative data into quantitative data for analysis. For example, a qualitative interview might ask respondents, "What did you most want your lawyer to do for you?" While coding the qualitative data, you notice that responses tended to fall into several identifiable categories, such as "Tell my story to the judge" and "Minimize collateral consequences." These responses can be coded into one or more categorical variables in a quantitative data set, where each row or record represents a single respondent. One approach would be to create a single categorical variable for the primary goal of the representation, with a numeric value defined for each category (e.g., "Tell my story to the judge" = 1, "Minimize collateral consequences" = 2). Another approach would be to create a separate variable for each category of responses (e.g., one variable for "Tell my story to the judge" and a second variable for "Minimize collateral consequences," each coded "No" = 0 and "Yes" = 1). The first approach allows you to identify the single most important category for each participant; the second allows you to identify all categories relevant to each participant. After converting the qualitative data into quantitative data, you can apply quantitative analytic techniques to the data. Note that not all qualitative data can or should be converted into quantitative data. This option should only be applied to responses that have clearly defined categories across all respondents.

Chapter 8: Next Steps

The final steps in any research project involve creating reports for various audiences (e.g., internal staff and managers, criminal justice stakeholders in your jurisdiction, and potentially for future grant proposals to expand research capabilities). While report creation is beyond the scope of this guide, the suggestions and information provided herein should prepare you to create quality reports that can assist in meeting project and organizational goals.

We must also share a brief caveat regarding this guide. When conducting research, things sometimes proceed at their own pace, with multiple stops and starts along the way. While this guide is meant to provide an ideal process and best practices, you need not always complete each phase in the order presented. As long as you focus on the integrity of the research design, the eventual product will be worth the time and effort.

We hope that you will continue to engage in research about client perspectives, as the most informative projects involve replication with different client samples and in different time periods, allowing you to track changes in perceptions as they may relate to changes you make in your organization.

Appendix A: A Tale of Two Case Studies — New York County Defender Services and Bronx Defenders

Introduction

Home to more than 8.5 million people, New York City sees almost half a million criminal court cases yearly. Of those 500,000 cases, about 80% of defendants are represented by one of six contracted indigent defense providers. Yearly, almost one million New Yorkers will come into contact with a public defender. This case study is about how two of those contracted providers — New York County Defender Services (NYCDS) and Bronx Defenders (BxD) — have implemented client-focused research to improve their advocacy.⁹

NYCDS is contracted to represent defendants in about 20% of criminal cases in Manhattan (New York County), making it one of smallest public defender offices in the city. It currently employs about 50 attorneys, 4 social workers, and 4 investigators, as well as support staff and management. In contrast to NYCDS, BxD is one of the larger providers in the city, and provides criminal, civil, family, and immigration law services. BxD currently has almost 200 attorneys, 10 investigators, and more than 20 social workers, as well as support staff and management.

These offices are only two providers in the larger city ecosystem, which has seen massive shifts in its criminal justice system in the past two years. At the local and state level, New York has experienced much of the current national trend toward de-incarceration and decriminalization, as well as being in the process of reforming its indigent defense system in the wake of a major 2014 state court case, *Hurrell-Harring v. State*. However, two developments are perhaps most pertinent to this discussion: the national conversation about holistic defense has reached city policy-makers; and the state indigent defense oversight committee (ILS) has been given new authority. In the last few years, oversight organizations on the city and state level have introduced client-focused surveys, both attempting to gauge client satisfaction levels with the court systems.

Leadership at both organizations has realized the necessity of understanding client experience in developing organizational goals. BxD has been doing client research since the early 2000s as part of its commitment to client-centered defense, and has continued to refine its research over time. At BxD, client research is used to inform attorney training and program needs. Encouraged by BxD's work, NYCDS decided in 2016 to do client feedback surveys. It plans to use research findings in deciding on new program foci, staff training, and prioritizing hiring choices.

This case study will look at the experiences of NYCDS and BxD in developing and refining client feedback tools. It will touch briefly on the steps outlined in the paper above before discussing briefly two issues both organizations have encountered: the importance of staff input and clear management goals. It will finish with a brief synopsis of how the organizations plan to use their findings operationally.¹¹

⁹ The authors wish to sincerely thank Amalea Smirniotopoulos for providing detailed information about the almost two decades of experience the Bronx Defenders have with client perspectives research. ¹⁰ 930 N.E.2d 217 (N.Y. 2010).

¹¹ For further information about the work done by BxD, please contact them for presentations on their research. See the list of resources in Appendix F for citation.

Getting Started

Setting Goals

The initial research goals of the two groups were reflective of the differences in organizational culture; however, there are important overlaps. At BxD, client research was an outgrowth of the organizational philosophy of client-centered advocacy, and was a staff attorney-led effort to see if its model of representation was working. Because of its attorney-led nature, the research at BxD has generally been about client satisfaction and how to improve it. While the research was initially designed with the assumption that attorneys knew what led to client satisfaction, over the years, it has become more focused on understanding what specific aspects of representation that drive client satisfaction, according to the clients themselves.

NYCDS, in contrast, has been more top-down in its approach to client research. Because of this, the research goals have been more organizational in nature and more closely align with oversight committee priorities, although they are informed by those at BxD. Primarily, they are to: see how clients view their legal representation; see if there are gaps in service; and see what collateral consequences most affect its clients. NYCDS's research is not currently designed to examine particular aspects of representation that clients view as important; instead, it is more of a census of what services clients need, and what services they receive.

The management goals of the two groups also impacted research decisions. Executive leadership at BxD and NYCDS have generally been interested in using client research to inform the standard decisions of a defense provider, such as hiring priorities, training needs, and opportunities for staff specialization. Because the audience for client research is non-technical, researchers at both groups have needed easily-consumable research findings. This has led both groups toward quantitative research methods, instead of (for the most part) qualitative methods that produce more detailed findings.

The two groups also had an interesting secondary goal, which was to give clients a sense of agency. At BxD, researchers have continued to do surveys, in part to reach a larger number of clients. At NYCDS, client research has an explicit goal of increasing clients' feeling of agency. Thus, both organizations have leaned toward research methods with many subjects, in order to give as many clients as possible the chance to be heard.

Internal Versus External

Initially, both organizations did research internally by default. When BxD and NYCDS started their client research, the projects were seen as small ways to understand client experiences in a slightly more systematic way. Engaging outside researchers was seen as too big of a commitment for these small projects. This has had some positive and negative effects.

By doing its initial surveys with internal resources, BxD was able to capitalize on existing staff excitement about client research and keep up momentum. At both BxD and NYCDS, doing research internally allowed staff with extensive knowledge about indigent defense to shape the research. And at NYCDS, the organization has found that having internal staff doing client research has helped the organization be proactive in addressing staff concerns.

However, having internal staff do client research has led to some problems. Without training in social science methods, the staff doing BxD's first surveys did not realize that their sampling method meant that they could not easily extrapolate their findings to other clients. Additionally — and perhaps more importantly — having client research done internally meant

that the research design process at both organizations focused on the perspective of the attorneys over needs of the client.

To combat these problems, BxD has worked to combine external and internal expertise by partnering with a masters' program at New York University to come up with a new survey tool. In this partnership, NYU students used data from client focus groups to create a survey instrument that asks clients about their experience using validated survey methods and client-driven research questions. In 2017, BxD conducted a survey using this tool, using its own staff. This partnership has allowed BxD to leverage outside researchers' expertise in survey design, while still conducting research in a sustainable manner.

Selecting a Data Collection Method

To facilitate their research goals — easily consumable research results and reaching as many clients as possible — both organizations have used surveys as their primary mode of client research. BxD did its first rounds of surveys in the early 2000s, and continued with sporadic surveys throughout that decade. Beginning in 2011, it began to conduct surveys more consistently. In 2015 and 2016, BxD conducted a series of focus groups with clients to better understand what the clients themselves believe impacted their satisfaction. In 2017, BxD conducted its most recent surveys.

The evolution of BxD's surveys bears mentioning. In the initial rounds, the surveys were created by staff attorneys using questions designed by staff. In 2014, BxD staff leading the surveying decided to use questions adapted from patient-centered medical care surveys, because those questions had been tested and validated. As BxD has changed its survey to become more client-centered through its work in 2015-2017, it has maintained staff involvement, by asking attorneys to help recruit participants and continuing to ask for attorney feedback on research.

Approaching survey design from a different angle, NYCDS's executive director designed the survey tool based on the best practices laid out by the local oversight committee. NYCDS did an initial survey in 2016 with six people, five of whom were incarcerated. In 2017, it refined the survey questions, using the long-form answers some respondents had given. NYCDS expects to do a larger survey in 2018.

Contacting Clients

Determining a Sampling Strategy

Over time, there have been two major influences on the sampling strategies used at BxD and NYCDS. The first is changing research goals. The second is that, as nonprofits, BxD and NYCDS have had severe resource constraints that have impacted the way they sampled clients.

BxD's sampling strategies are an excellent example of the interplay between changing research goals and organizational constraints. When BxD first started doing client research, its interest was in overall client satisfaction, a research question that requires extrapolating survey responses to the overall client population. Optimally, this type of survey would be done with a large, random sample. For its initial surveys, though, BxD did not have staff to coordinate such a sample, or do the follow-up required to get a reasonable response rate. Instead, the first surveys were administered to clients coming through arraignments. This limited the wider applicability of BxD's results, as these clients had only just met their attorney.

As BxD has done more rounds of research, its ability to do client research has improved as it has learned from experience and hired staff with expertise in qualitative and quantitative research. The organization was then able to revisit its research goals and methods to make sure they were aligned. As a result, in 2012, the organization switched to using random sampling for its surveys, in order to reduce bias in sampling. In 2017, the NYU research group was able to get a response rate of 30%, but when doing research internally, BxD has never been able to get response rates higher than 20%. In response to these persistent problems with response rates, BxD focused more narrowly on aspects of client satisfaction that surfaced in the surveys and in focus groups; this reduces the risk of erroneously extrapolating results with a large self-selection bias to the full client population.

The differing research goals have also impacted what population of clients each organization has sampled. Sampling clients with open or recently closed cases has allowed BxD to hear from clients whose memories of their representation are fresh (as well as being easier to reach). In contrast, NYCDS's focus on large service areas and collateral consequences suggested a sample of clients whose cases have reached disposition.

At NYCDS, the interaction between goals and resources is also pertinent. In 2017, NYCDS hired a data scientist with experience creating samples for surveys. This hire, along with the ability to sample former clients, made it possible to study a large enough sample to theoretically have low margins of error and high amounts of confidence. However, the ability to create a large sample does not necessarily translate into capacity to process a large number of surveys, as discussed below.

Data Issues Impact Sampling and Feasibility

Like many law offices, both BxD and NYCDS keep much of their case records in paper folders. This has limited the ability for research staff to survey clients. Both BxD and NYCDS have found that the recorded client contact information is sparse. While staff at both organizations do often update client contact information on the physical file itself, that information has not traditionally been captured in a centralized fashion at either organization. Thus, client contact information can be a few years out of date by the time of the survey. At BxD, survey administrators have found that many clients' recorded phone numbers were out of service or out of minutes. Similarly, at NYCDS, the organization has traditionally not had organizational communication with clients after sentencing, NYCDS did not have clients' post-sentence addresses entered into the case management system. Additionally, BxD surveyors found that the phone numbers recorded in the case management system was often that of a family member, especially for clients incarcerated during the pendency of their case; messages left about the survey did not seem to reach clients.

NYCDS has also found that not having reliable electronic data about client demographics or case details has severely impacted its sampling strategy. As part of random sampling, NYCDS had planned to oversample some segments of the population, either because they are rare (e.g., women) or because their expected response rate is low (e.g., clients with a non-criminal disposition). Unfortunately, data on client demographics had not been collected reliably, nor had nuanced data about trials and hearings. This has meant that NYCDS cannot stratify its sample by most client demographics or case attributes.

Collecting Data

For its initial surveys in 2001, BxD interns gave out a short, paper questionnaire for clients to complete at arraignments. Later surveys were done over the phone, also by interns. For the 2015 focus groups, BxD attorneys invited their clients to the groups, which were held in the court. Most recently, BxD conducted surveys in-person, including sending an intern to Rikers Island to talk with clients incarcerated during the pendency of their case. All surveyed clients had cases that were open or recently closed for which they were represented by a BxD attorney; having internal staff and interns interview clients provided protection for participants and the data.

For its first round of client research, NYCDS had an office administrator do phone interviews with non-incarcerated former clients, in addition to sending paper questionnaires to incarcerated former clients. For both methods, the survey used was identical. While NYCDS has not started data collection for its full survey, it plans to do mailed surveys. Letters will be sent a month before the survey itself, to let clients know about the project. Then, NYCDS will send the survey itself with a short letter reiterating the goals of the survey. Finally, NYCDS will send another survey to clients who have not responded within a month. Because the surveys will be on paper, NYCDS is planning to use a combination of optical character recognition and human data entry to create a data set of survey results.

Challenges in Collecting Data

Unsurprisingly, both organizations have struggled to reach clients in the sample. Beyond the common challenges in contacting indigent people, there are unique logistical issues both organizations encountered. First, justice system involvement often further destabilizes clients' lives, making those clients harder to reach. Second, even when clients are motivated to participate, they must weigh that against the other obligations in their lives, which have already been stressed by being a defendant in a criminal case. Finally, internally to the organizations, logistical issues around physical storage and processing of the surveys have cropped up.

Criminal justice involvement disrupts clients' lives, which has the practical impact of making clients hard to reach. For example, orders of protection often leave clients homeless for the pendency of their cases. Similarly, police commonly confiscate phones as evidence. This instability has been a major issue for both organizations in trying to reach past — and even current — clients.

Court involvement also requires time and money, both of which are in short supply for indigent clients. Taking hours off of work or finding childcare for a day is challenging. For its focus groups, BxD noticed that, for clients whose cases had been called in the morning, many were simply unable to wait for a focus group in the early afternoon. That said, there is one client group that is able to devote time and energy to giving feedback: incarcerated clients. In doing its initial small survey, NYCDS received a near-100% response rate, which is similar to response rates of prior research with imprisoned participants.

Internally, both organizations have had to deal with the practical issues of processing large amounts of potentially sensitive information. Protecting client data is clearly necessary, and both organizations have done this by doing research with internal staff. In collaboration with staff attorneys, NYCDS researchers also determined that there needed to be special care taken with survey data about staff. The organization has developed a process for doing this. First, the organization will limit the number of staff with access to the surveys. Second, it has a

written protocol for the staff members processing surveys, who will be asked to redact any information identifying clients or staff. This should not take much time per response, but with a hoped-for 400 survey responses, the processing time is expected to be significant.

Analyzing Data

Like other aspects of client research, the data analyses used at BxD and NYCDS have been driven by the research goals. As BxD's research goals have changed, its analyses have also changed. While NYCDS has obviously not done analysis on its forthcoming survey, the researchers there used the survey design process to also think about what data analyses would answer the larger research questions posed by the organization leadership.

Initially, BxD was concerned with the percentage of clients who were satisfied. To answer this question, the organization used simple descriptive statistics to look at what percentage of clients were satisfied. In recent years, as research goals have shifted to understanding what aspects of client experiences promote satisfaction, the data analysis used has shifted to methods more conducive of nuanced and detailed results, such as analyzing focus group notes. These findings are shared to staff and leadership via practice group and all-staff meetings.

Much of NYCDS's data analysis is still being planned, but there have been a few decisions worth noting. First, because the leadership team is concerned low response rate will lead to misleading, "Yelp-like" results (i.e., only the most and least satisfied clients will respond), the organization is determining whether to do statistical analysis of the results if the response rate is below standard thresholds. In that case, most of the analysis would be focused on qualitative analyses of the survey question responses.

Discussion

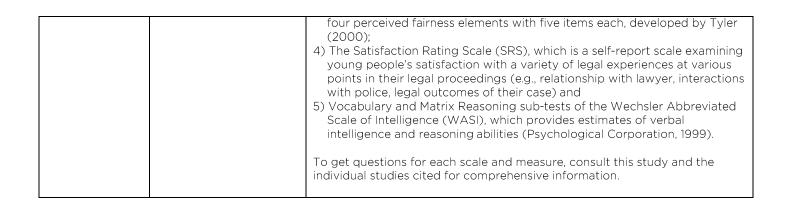
BxD and NYCDS are in very different phases of client research, but their experiences are instructive of two issues in particular: 1) the importance of initial staff input for buy-in, and 2) the necessity of clarifying the management goals before starting. At BxD, early and diverse staff involvement gave staff a feeling of agency over the project, but organizational learning from the initial client research was limited by a mismatch between research methods and management goals. While its initial survey findings were somewhat useful for practice improvement, the attorney-designed surveys and convenience sampling at arraignments meant that many aspects of client experience were not interrogated. As BxD has done more research, it has more closely aligned its research and management goals, keeping client understandings of their own experience at the center of the research process.

At NYCDS, the management goals from the beginning were to use the research results to inform staff development and organizational growth, as well as to empower clients. Unfortunately, due to time constraints, the administration was not able to get staff involved early in the research process. In addition, management goals were not explicitly articulated when announcing the project to staff. This confluence of events meant that staff members were wary of client research; in fact, some staff members were concerned that the research would be used for staff evaluation. Realizing the need for a collaborative research process, executive leadership clarified the management goals of the research. Staff members are now more interested in the possibilities of incorporating client experience research into their practice. As the project continues, NYCDS is hopeful that continued staff involvement will continue to build a positive experience.

As public defenders in New York City and New York State continue to experience rapid change, leadership at both organizations remain committed to understanding client experience through research. With its research to date, BxD has been able to use research findings in staff development, training new staff, and determining hiring requirements. BxD plans to continue using survey results to inform organization decision-making. While NYCDS is still in the planning phases of its research, the organization's leadership is excited to use research findings to inform decisions on new program foci, staff training, and determining priorities for hiring.

Appendix B: Examples of Attorney-Client Perspectives Research

Author(s)	Study Purpose	Domains, Themes, & Questions
Boccaccini and Bodsky (2001)	Asked incarcerated clients about the ideal criminal defense attorney perspectives	 Their results revealed three characteristic categories: 1) Lawyering: effective lawyering skills, works hard on client's case, and gets client a favorable outcome; 2) Client Relations: keeps client informed about their case, cares about the client, honest, listens to what the client says, and spends time with client before court date; and 3) Loyalty: advocates for client's interests and would not do whatever prosecution says. A minority of clients stated something along the lines of "Nothing — was satisfied with last lawyer." When clients were asked how they would interact with an ideal attorney, a third said they would not act differently than with the last attorney, one fifth said they would tell the attorney more about the alleged crime, another fifth said they would be more active in their defense, a tenth said they would be more trusting or respectful, another tenth said they would feel more confident about their case, and just under a tenth said they would be more cooperative (consult this paper's full-text for detailed question structures for each category).
Boccaccini and Brodsky (2002)	Examined attorney-client trust among 286 convicted criminal defendants.	The authors used the 24-item Attorney-Client Trust Scale (ACTS) instrument that they developed. Half of these items are affect-based trust scores and half are cognition-based trust scores on a rating scale of 1 (strongly disagree) to 6 (strongly agree) (a third of which were reverse scored before descriptive statistics were calculated). Affect-based (feelings) questions include items such as "My attorney has been unreliable in the past" and "The best way to get along with my attorney is to tell him/her things that make them happy." Cognition-based (thoughts) questions include items such as "My attorney always does what s/he should for my case," "My attorney always gives good advice," and "My attorney always does what s/he should for my case." In a later study, Boccaccini, Boothby, and Brodsky (2004) furthered this research using the ACTS and found that one question — "Did attorney ask client for suggestions?" — was significantly related to satisfaction with both the attorney (attorney trust) and the sentence.
Boccaccini, Boothby, and Brodsky (2002)	Examined client-relations skills in effective lawyering and attitudes of criminal defense attorneys and experienced clients	The lawyering skills questions were on a 1 = not at all important to 10 = essential scale and included the following criteria: standing up for the client's rights, comprehensive knowledge of criminal law, courtroom speaking skills, being a good deal maker, relationship with judges, relationship with prosecuting attorneys, client-relations skills, listening skills, caring about what happens to your clients, keeping clients informed about their cases, involving clients in decision-making, getting to know the clients, getting clients' opinions about case, and spending time with clients before court.
Peterson-Badali, Care, & Broeking (2007)	Interviewed 48 juvenile offenders about their perceptions and experiences of the lawyer-client relationship and lawyer-client exchange.	The following scales and instruments were used: 1) The Understanding about Lawyers Scale (UALS), developed and validated by Pierce and Brodsky (2002) to assess the youths' understanding regarding defense attorney roles; 2) The semi-structured Interaction with the Legal System Interview, which was developed by Peterson-Badali, Ruck, and Koegl (2001) and Peterson-Badali and Broeking (2004) to obtain respondents' experiences with the youth justice system at different points of their legal proceedings; 3) The Perceptions of Fairness in Lawyer-Client Interactions scale, which consists of 20 opinion statements rated on a six-point Likert scale, and



Appendix C: Examples of Doctor-Patient Satisfaction Research

Author(s)	Study Purpose	Domains, Themes, & Questions
Boquiren and colleagues (2015)	Identified domains and questions regarding patient satisfaction with their doctor	 Applied to defender clients, the domains are as follows: 1) Communication attributes: listening skills, eliciting client information, providing explanations, ensuring client understanding, providing information, addressing client's concerns and questions (e.g., "The attorney used words I did not understand," "The attorney seemed to brush off my questions," "My attorney listened carefully to me"); 2) Relational conduct and personal qualities: treating clients with respect, professional demeanor, allowed client a shared role in case process and decision-making, client trust and confidence, client felt understood and heard, client felt that s/he and/or legal problems associated with that case were taken seriously, and attorney "humanness" (i.e., empathy, kindness, caring, sensitivity, friendliness, concern) (e.g., "I felt the attorney did not take my problems very seriously," "My attorney treated me in a very friendly and courteous manner," "My attorney was always very kind and considerate of my feelings"); 3) Technical skill and personal qualities: professional knowledge and expertise (e.g., "I believe my attorney was competent," "I believe my attorney was knowledgeable"); and 4) Availability and Accessibility: attorney was accessible, client spent adequate time with attorney and did not feel rushed (e.g., "I feel the attorney did not spend enough time with me," "If I have a legal question about my case, I was able to reach my lawyer for help without any problem"). Note: We have adapted these doctor-patient domains and questions to apply to and capture attorney-client perspectives.
Dagger, Sweeney, & Johnson (2007) & Gill & White (2007), figure 1	Identified a multi- dimensional hierarchical model of patients' perceived service quality	The study instrument constructs refer to three main categories: perceived service quality, service satisfaction, and behavioral intentions. Perceived service quality has four main dimensions with their own sub-dimensions: 1) Interpersonal (interaction, relationship); 2) Technical (outcome, expertise); 3) Administrative (timeliness, operation, tangibles); and 4) Environment (atmosphere, tangibles). Note: Using these dimensions, an organization can create questions that address each dimension and sub-dimension (see Dagger et al, 2017 for this questionnaire).

Appendix D: Examples of Customer Service Satisfaction Research

Author(s)	Study Purpose	Domains, Themes, and Questions
Office of the King	Report/Toolkit for	The five main categories of satisfaction research, which include both open-ended
County Executive	measuring	and fixed-choice questions (e.g., Likert, multiple choice):
(n.d.). (see also	customer	1) Overall client perspective. Note the distinction between satisfaction and
Ware et al., 1983)	satisfaction:	experience (i.e., defendant may be satisfied by the work of the attorney but
	Improving the	have negative experiences with certain aspects of the process). You will also
	experience of the	want to distinguish between satisfaction with attorney versus outcome versus
	King County's	process.
	customers.	2) <u>Drivers of client satisfaction</u> , such as the number of phone calls between
	(1) Developed a	attorney and client, number of letters/emails from attorney to client, how often
	guideline, made up	calls/emails/letters not returned. It is just as important to include survey
	of five main	questions asking clients to rate both the satisfaction with specific drivers as well
	categories, for	as the importance of a set of possible drivers. For example, you can ask how
	organizing	satisfied client is with the updates given by attorney and then also ask how
	satisfaction	important updates from an attorney are to the client. Or you can ask if they felt
	research (note: our summary adapted	that their attorney was courteous and friendly to them and then ask them how important it is to them that their attorney be courteous and friendly. You can
	these categories to	also ask them to provide a satisfactory or dissatisfactory response; for example,
	client perspectives	you can ask how long it took on average for the attorney to call them back and
	research)	then also ask them how long they think is an acceptable time between calling
	(2) Identified the	and expecting the attorney to call them back.
	attributes of key	3) <u>Client characteristics</u> , such as age, gender, race, ethnicity, employment status,
	issues in	number of prior cases handled by public defender organization, number of prior
	satisfaction for	cases handled by specific attorney(s) handling case, prior private attorney
	county agencies to	representation experience).
	consider when	4) <u>Case characteristics</u> , including: original charge type/level (e.g., A-level
	developing their	misdemeanor); final charge type/level (e.g., violation); original court (e.g., city
	surveys These	court, circuit court); final court (e.g., county court, superior court); sentence
	issues (drivers of	type (e.g., 90 days jail, community service); disposition type (e.g., guilty plea,
	satisfaction) tend	adjournment in contemplation of dismissal, conditional discharge); how long
	to be common	case took to close out; whether defendant was detained, on bail or bond,
	among most	released on recognizance, or released under supervision; and time in jail, if any,
	service-providers.	on current case.
		Final thoughts/comments: open-ended questions where clients can share their
		opinions without parameters. Typical questions include "Is there anything else you
		would like to tell us?" "What is the most important thing your attorney can do to
		improve?" "Suggestions/comments?"
		Attributes of key issues in satisfaction (drivers of satisfaction):
		Timeliness — Service delivery speed and timeliness.
		• Information — Quality and completeness of information shared.
		Staff competence — Professionalism and expertise.
		Reliability — Performance of service facilities, goods, and staff.
		• Staff attitude — Courtesy, politeness, and friendliness.
		• Fairness — Honesty, justice, and fairness of the system/organization.
		Access — Availability of staff, services, and products.
		• Look and feel — Comfort and appearance of environment, facilities, and staff.
		Safety and security — Customer care, safety, and confidentiality.
		Convenience — Ease of obtaining the product or service.
		Value and cost — Value of the service or product compared to cost.
		End result — Product or service quality.
	I	

Appendix E: Question Type Examples

Table 1 provides a breakdown of the three main types of Likert scale questions. Tables 2-4 provide sample satisfaction, agreement, and time Likert-type scale client perspective questions, respectively. Table 5 is an example of a fixed alternative multiple choice question, whereas Table 6 is an example of a fill-in the blank question. Finally, Table 7 provides examples of open-ended questions and follow-ups. The questions in Tables 2-4 will produce ordinal variables, whereas Table 6 produces a continuous variable. The questions in Table 5 produce an ordinal and nominal variable, respectively. The questions in Table 7 produce qualitative data.

Tab	Table 1. Main five-level Likert response types.					
Satisfaction		Agre	Agreement		Time	
1.	Very dissatisfied	1.	Strongly disagree	1.	None of the time	
Z. 3	Dissatisfied Neither satisfied nor	<u>2</u> . 3	Disagree Neither agree nor	2. 3.	Some of the time About half the time	
0.	dissatisfied		disagree	4.	Most of the time	
4.	Satisfied	4.	Agree	5.	All of the time	
5.	Very satisfied	5.	Strongly agree			

Table 2. Question 1: How Satisfied are you with					
	Very Dissatisfied	Dissatisfied	Neither satisfied nor dissatisfied	Satisfied	Very satisfied
(a)your sentence, overall	1	2	3	4	5
(b)the information shared by your attorney during your case	1	2	3	4	5
(c)your attorney, overall	1	2	3	4	5

Table 3. Question 2: Rate the degree to which you agree or disagree with the following statements:					
	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly disagree
(a) My attorney explained what was happening during each step in my case	1	2	3	4	5
(b) I am satisfied with my plea deal/case outcome	1	2	3	4	5
(c) I am satisfied by the number of times my attorney communicated with me	1	2	3	4	5

Table 4. Question 3: Rate how often the following happened:					
	None of the time	Some of the time	About half the time	Some of the time	None of the time
(a) How much of the time did you feel respected by your attorney	1	2	3	4	5
(b) How much of the time did you feel disrespected by your attorney	1	2	3	4	5

Table 5. What is or ethnicity?	your highest level o	of education? a	and How would	you describe	your race
Doctorate degree	Master's degree	Bachelor's degree	Associates or vocational school certificate	High school diploma or equivalent	Did not graduate high school
Black	White	Hispanic	Asian	Native American	Other

Table 6. What is your date of birth?	
Please format as MM/DD/YYYY	

Table 7. Examples of open-e	Table 7. Examples of open-ended questions with follow-ups					
1) How do you feel about your attorney's communication throughout the case?	1a) How would you describe your interactions with them?	1b) Did you feel your attorney listened to your concerns?	1c) Did they discuss the plea offer with you?			
2) Do you feel your attorney advocated for you?	2a) Can you describe the ways in which they advocated for you?	2b) What would you have liked them to have done in that situation?				
3) Prior to the end of your case, what did you expect would happen?	3a) Why did you think your case would turn out that way?	3b) What do you think had the biggest impact on how your case turned out?				

Appendix F: References and Research Resources

NLADA Toolkits

- Beeman, M. (2014). Basic data every defender program needs to track: A toolkit for defender leaders. Washington, D.C.: National Legal Aid & Defender Association. Available at http://www.nlada.org/tools-technical-assistance/defender-resources/research/basic-data-toolkit
- Erwin, M. & Ledyard, M. (2016). *A toolkit for public defender organizations.* Washington, D.C.: National Legal Aid & Defender Association. Available at http://www.nlada.org/tools-and-technical-assistance/defender-resources/research
- National Legal Aid & Defender Association, & North Carolina Office of Indigent Defense Services. (2013). *Toolkit: Building in-house research capacity*. Washington, D.C.: National Legal Aid & Defender Association. Available at http://www.nlada.org/tools-technical-assistance/defender-resources/research/building-house-capacity-toolkit

Research Design and Methods

- Corbin, J. & Strauss, A. (2008). Basics of qualitative research. Los Angeles: SAGE Publications.
- Creswell, J. W. & Creswell, J. D. (2015). *Research design: Qualitative, quantitative, and mixed methods approaches.* Fifth Edition. Los Angeles: SAGE Publications.
- Fink, A. (1985). *How to conduct surveys: A step-by-step guide*. Beverly Hills: SAGE Publications. https://jerosystems.com/2016/rskills4.pdf
- Foddy, W. (1993). Constructing questions for interviews and questionnaires: Theory and practice in social research. Cambridge, UK: Cambridge University Press.
- Krueger, R. A. (2002). *Designing and conducting focus group interviews.* Available at: http://www.eiu.edu/ihec/Krueger-FocusGroupInterviews.pdf
- Lofland, J., Snow, D., Anderson, L., Lofland, L. H. (2006). *Analyzing social settings: A guide to qualitative observation and analysis.* Belmont, CA: Wadsworth.
- Morgan, D.L. & Krueger, R. A. (1997). *The focus group kit.* Thousand Oaks, CA: SAGE Publications.
- Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation.* San Francisco: Jossey-Bass.
- Patton, M. Q. (2002) Qualitative research and evaluation methods, 3d ed.
- Savin-Badin, M. & Major, C. H. (2013). *Qualitative research: The essential guide to theory and practice.* London: Routledge.

- Weiss, R. S. (1994). *Learning from strangers: The art and method of qualitative interview studies.* New York: The Free Press.
- Yin, R. K. (2014). Case study research: Design and methods. New York: SAGE Publications.

Data Analysis

- Boone, H. N. & Boone, D. A. (2012). Analyzing Likert data. *Journal of Extension 50*(2), article number 2TOT2.
- Saldaña, J. (2009). The coding manual for qualitative researchers. London: SAGE Publications.
- Stevens, S. S. (1946). On the theory of scales of measurement. Science, 103(2684), 677-680.

Sampling Questions/Methods

- Lenth, R. V. (2001). Some practical guidelines for effective sample size determination. *The American Statistician*, *55*(3), 187-193. https://stat.uiowa.edu/sites/stat.uiowa.edu/files/techrep/tr303.pdf or http://www.tandfonline.com/doi/pdf/10.1198/000313001317098149
- Martínez-Mesa, J., González-Chica, D. A., Bastos, J. L., Bonamigo, R. R., & Duquia, R. P. (2014). Sample size: how many participants do I need in my research?. *Anais Brasileiros de Dermatologia*, 89(4), 609-615.
- Needham, M. D., Vaske, J. J., & Vaske, J. (2008). Survey implementation, sampling, and weighting data. Survey Research and Analysis: Applications in Parks, Recreation, and Human Dimensions'. (Ed. JJ Vaske) (Venture Publishing: State College, PA). http://nature.forestry.oregonstate.edu/sites/default/files/2008-3%20Needham%20%26%20Vaske%20-%20Chapter%2008%20-%20Survey%20Implementation%2C%20Sampling%20%26%20Weighting%20-%20Second%20Proofs.pdf
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: a critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879.

Attorney-Client Perspectives Research

- Boccaccini, M. T., & Brodsky, S. L. (2001). Characteristics of the ideal criminal defense attorney from the client's perspective: Empirical findings and implications for legal practice. *Law and Psychology Review, 25*, 81.
- Boccaccini, M. T., & Brodsky, S. L. (2002). Attorney-client trust among convicted criminal defendants: preliminary examination of the attorney-client trust scale. *Behavioral Sciences and the law, 20*(1-2), 69-87.
- Boccaccini, M. T., Boothby, J. L., & Brodsky, S. L. (2002). Client-relations skills in effective lawyering: Attitudes of criminal defense attorneys and experienced clients. *Law and Psychology Review*, *26*, 97.

- Boccaccini, M. T., Boothby, J. L., & Brodsky, S. L. (2004). Development and effects of client trust in criminal defense attorneys: Preliminary examination of the congruence model of trust development. *Behavioral Sciences and the Law, 22*(2), 197-214.
- Campbell, C., Moore, J., Maier, W., & Gaffney, M. (2015). Unnoticed, untapped, and Underappreciated: Clients' Perceptions of their Public Defenders. *Behavioral Sciences and the Law*, *33*(6), 751-770.
- Casper, J. D. (1970). Did you have a lawyer when you went to court—No, I had a public defender. *Yale Review of Law and Social Action, 1*, 4.
- Casper, J. D. (1978). Having their day in court: Defendant evaluations of the fairness of their treatment. *Law and Society Review, 12*(2), 237-251.
- City of Seattle Office of City Auditor. (2010). Indigent defense services follow-up and 2010 Audit. Abstract available at http://defenderresearch.legal/pub/11444/indigent-defense-services-audit/
- Cunningham, C. D. (1999). Evaluating effective lawyer-client communication: An international project moving from research to reform. *Fordham Law Review*, *67*(5), 1959.
- Cunningham, C. D. (1999). The client's perspective on the initial interview: A social science approach. *Fordham Law Review 67*(5), 1959.
- Cunningham, C. D. (2013). What do clients want from their lawyers. *Journal of Dispute Resolution 2013*(1), 143.
- De Mesmaecker, V. (2014). Perceptions of Criminal Justice. London: Routledge.
- Hazard Jr, G. C. (1978). An historical perspective on the Attorney-Client Privilege. *California Law Review*, 1061-1091.
- McDonald, B. R., Morgan, R. D., & Metze, P. S. (2016). The attorney-client working relationship: A comparison of in-person versus videoconferencing modalities. *Psychology, Public Policy, and Law, 22*(2), 200.
- Moore, J., Sandys, M., & Jayadev, R. (2014/2015). Make them hear you: Participatory defense and the struggle for criminal justice reform. *Albany Law Review 78*, 1281.
- New York State Defenders Association. (2005). Client-centered representation standards. Retrieved from https://www.ils.ny.gov/files/NYSDA%20Client%20Centered%20Representation%20Standards%20072505.pdf
- Peterson-Badali, M., Abramovitch, R., Koegl, C., & Ruck, M. (1999). Young people's experience of the Canadian justice system: Interacting with police and legal counsel. *Behavioral Sciences and the Law, 17*, 455–465.
- Peterson-Badali, M., Care, S., & Broeking, J. (2007). Young people's perceptions and experiences of the lawyer-client relationship. *Canadian Journal of Criminology and Criminal Justice*, *49*(3), 375-401. http://muse.jhu.edu/article/221227/pdf

- Peterson-Badali, M. & Broeking, J. (2004). *Final report: Parental involvement in youth justice proceedings: Perceptions of youth and parents.* Ottawa: Department of Justice, Canada.
- Peterson-Badali, M., Ruck, M, & Koegl, C. (2001). Youth court dispositions: Perceptions of Canadian juvenile offenders. *International Journal of Offender Therapy and Comparative. Criminology*, 45, 593-605.
- Pierce, C.S. & Brodsky, S. (2002). Trust and understanding in the attorney-juvenile relationship. *Behavioral Sciences and the Law*, 20, 89–107.
- Psychological Corporation. (1999). *Wechsler abbreviated scale of intelligence (WASI).* San Antonio, TX: Harcourt.
- Sandys, M., & Pruss, H. (2016). Correlates of Satisfaction Among Clients of a Public Defender Agency. *Ohio State Journal of Criminal Law*, *14*, 431. https://kb.osu.edu/dspace/bitstream/handle/1811/80799/OSJCL_V14N2_431.pdf?sequ ence=1
- Schmidt, M. G., Reppucci, N. D., & Woolard, J. L. (2003). Effectiveness of participation as a defendant: The attorney-juvenile client relationship. *Behavioral Sciences and the Law, 21*(2), 175-198. http://research.policyarchive.org/20681.pdf
- Smirniotopoulos, Amalea, (2017) Client satisfaction surveys: Practical lessons for community oriented defenders. The Bronx Defenders. Presented at the NLADA Community-Oriented Defender Network Conference. Baltimore, MD. (PowerPoint presentation available upon request)
- Tuck, A. K. (2003). *Quality of legal representation: An evaluation of indigent defense and client satisfaction* (Unpublished doctoral dissertation). Radford, VA: Radford University. Abstract available at http://defenderresearch.legal/pub/11722/quality-legal-representation-evaluation-indigent-defense-client-satisfaction/
- Tyler, T. R. (1984). The role of perceived injustice in defendants' evaluations of their courtroom experience. *Law and Society Review, 18*(1), 51-74. http://www.jstor.org/stable/3053480.
- Tyler, T. (2000). Social justice: Outcome and procedure. *International Journal of Psychology,* 35, 117–125.
- Woolard, J. L., & Harvell, M. P. P. (2008). Anticipatory injustice among adolescents: Age and racial/ethnic differences in perceived unfairness of the justice system. *Behavioral Sciences and the Law*, *26*(2), 207-226. http://research.policyarchive.org/20691.pdf

Doctor-Patient Satisfaction Research

Boquiren, V. M., Hack, T. F., Beaver, K., & Williamson, S. (2015). What do measures of patient satisfaction with the doctor tell us?. *Patient Education and Counseling*, *98*(12), 1465-1473.

- http://clok.uclan.ac.uk/12345/1/Beaver%20K%20%282015%29%20Satisfaction%20Measures.pdf
- Dagger, T.S., Sweeney, J.C. and Johnson, L.W. (2007). A hierarchical model of health service quality: scale development and investigation of an integrated model. *Journal of Service Research, 10*(2), 123-142.

 https://s3.amazonaws.com/academia.edu.documents/31195392/A_Hierarchical_Model_of_Health.pdf?AWSAccessKeyId=AKIAIWOWYYGZ2Y53UL3A&Expires=1515495068&Signature=Ont6TvWCOU0CJQgkaGfUIT5P6%2Bo%3D&response-content-disposition=inline%3B%20filename%3DA_hierarchical_model_of_health_service_q.pdf
- Gill, L., & White, L. (2009). A critical review of patient satisfaction. *Leadership in Health Services*, *22*(1), 8-19. https://doi.org/10.1108/17511870910927994.
- Hawthorne, G., Sansoni, J., Hayes, L., Marosszeky, N., & Sansoni, E. (2014). Measuring patient satisfaction with health care treatment using the Short Assessment of Patient Satisfaction measure delivered superior and robust satisfaction estimates. *Journal of Clinical epidemiology*, *67*(5), 527-537. http://www.sciencedirect.com/science/article/pii/S0895435614000043
- Singh, J. (1989). The patient satisfaction concept: a review and reconceptualization. *ACR North American Advances*. http://www.acrwebsite.org/search/view-conference-proceedings.aspx?ld=6900
- Sitzia, J., & Wood, N. (1997). Patient satisfaction: a review of issues and concepts. *Social Science and Medicine*, *45*(12), 1829-1843. http://www.sciencedirect.com/science/article/pii/S0277953697001287
- Ware, J. E., Snyder, M. K., Wright, W. R., & Davies, A. R. (1983). Defining and measuring patient satisfaction with medical care. *Evaluation and Program Planning*, 6(3-4), 247-263. http://www.sciencedirect.com/science/article/pii/0149718983900058.

Customer/Consumer Service Satisfaction Research

- Lee, E. (2015). Measuring customer satisfaction: Nine steps to success. Association of State and Territorial Health Officials. Retrieved from http://clphs.health.mo.gov/qualityimprovement/pdf/Measuring-Customer-Satisfaction-Document.pdf
- Office of the King County Executive. (n.d.). *Measuring customer satisfaction: Improving the experience of King County's customers.* Retrieved from http://www.kingcounty.gov/~/media/services/customer-service/files/1101CustomerSatisfactionGuide.ashx?la=en
- Van Ryzin, G. G. (2015). Service quality, administrative process, and citizens' evaluation of local government in the US. *Public Management Review*, *17*(3), 425-442.
- Vavra, T. G. (1997). *Improving your measurement of customer satisfaction: A guide to creating, conducting, analyzing, and reporting customer satisfaction measurement programs.*Milwaukee, WI: ASQ Quality Press.

Appendix G: Index

References by Relevant Themes and Categories

A list of suggested references of relevant studies to consult have been provided for your convenience in Appendix F. The table below provides a far from exhaustive list of topic domains linked to authors of specific articles that you may want to reference at various phases such as: goal development, selecting the data collection method(s) and sampling strategies, designing the instrument(s), and analyzing the data. These studies offer insights into and examples of a variety of research design considerations, data collection strategies, instruments used in prior research, and analyses employed.

Topic Domains	Author(s)
Experiences and perceptions of attorney-	Boccaccini and Bodsky, 2001; Boccaccini,
client relationships and exchanges	Boothby, and Brodsky, 2002; Peterson-
	Badali, Care, & Broeking, 2007; Moore,
	Sandys, & Jaydev, 2014/2015
Clients' general perceptions of public defenders	Casper, 1971; Campbell, Moore, Maier,
derenders	Gaffney, 2015; McDonald, Morgan, Metze, 2016
Open-ended responses regarding what	Cunningham, 2013; New York State
clients want from their lawyers	Defenders Association, 2005
Attorney-client trust	Boccaccini and Brodsky, 2002
Client satisfaction with attorney services	Sandys and Pruss, 2017
Effective lawyer-client communication	Cunningham, 1999
Perceptions of the initial attorney-client	Cunningham, 2002
interview	
Historical perspectives on attorney-client	Hazard, 1978
privilege	
Attorney-client working relationship in-	McDonald, Morgan, & Metze, 2016
person vs videoconferencing	
Attorney-juvenile client relationship	Schmidt, Reppucci, & Woolard, 2003
Perceptions of procedural and distributive	Casper, 1978; De Mesmaecker, 2014;
fairness	McDonald, Morgan, & Metze, 2016; Tyler,
	1984; Woolard, Harvell, & Graham, 2008
Focus groups	Moore, Sandys, & Jaydev, 2014/2015;
	Krueger, 2002; Morgan & Krueger, 1997
Quantitative research design and methods	Creswell & Creswell, 2015;
Case study research design and methods	Yin, 2014

Qualitative research design and methods	Corbin & Strauss, 2008; Creswell & Creswell, 2015; Foddy, 1993; Lofland, Snow, & Lofland, 2006; Maggi & Major, 2013; Merriam, 2009; Patton, 2002; Savin-Badin & Major, 2013; Weiss, 1994
Designing and conducting interviews	Saldana, 2009; Weiss, 1994
Designing and conducting surveys	Fink, 1985; Foddy, 1993; Lee, 2015
Sampling strategies	Creswell & Creswell, 2015
Quantitative data analysis	Boone & Boone, 2012
Qualitative data analysis	Krueger, 2002; Saldana, 2009; Weiss, 1994

Appendix H: Glossary

Case study: Process of research in which detailed consideration is given to the development of a particular person, group, or situation over a period of time.

Categorical variable: A variable that has a finite number of possible values.

Continuous variable: A variable that may take on an infinite number of values (e.g., age).

Cell: The intersection of a row and a column in a table, containing data relating to the row-column combination.

Central tendency: Provides a measure of the most common or average response (mean, median, or mode).

Coding: In quantitative analysis, is the process of reducing a wide variety of information to a more limited set of variable attributes. In qualitative analysis, the process of reviewing (verbal, written, archival, observational) content for common themes and patterns.

Convenience sampling: Sometimes referred to as an accidental sample and involves recruiting a sample that is easy to reach (e.g., volunteers; approaching clients in court immediately after their case disposition).

Crosstabulation: A table that displays the relationship between two categorical variables. The categories for one variable define the rows, and the categories for the other variable define the columns. Each cell contains the number and/or percentage of records in the data set with the specified pair of values.

Data cleaning: The process of identifying and correcting or deleting inaccurate or missing data.

Data dictionary: A set of information describing the contents, format, and structure of a database and the relationship between its elements, used to control access to and manipulation of the database.

Dependent variable: A variable whose value is hypothesized to change in response to changes in the value(s) of one or more independent variables.

Dispersion: The extent to which a distribution is stretched or squeezed. Common examples of measures of statistical dispersion are the variance, standard deviation, and interquartile range.

Double-barreled question or *double-direct question:* A question that touches upon more than one issue but only allows for one response.

Double-blind study: The practice of anonymizing the information about both the participant and the person(s) about whom the study is conducted.

Ethnographic research: Systematic study of human behavior and cultures in which the researcher observes from the point of view of the subject of the study.

Fill-in-the-blank short response question: Short response questions prompt participants to provide brief descriptions of up to a few words (e.g., date of birth, original charge, address).

Fixed-alternative multiple-choice question: Fixed-alternative questions provide multiple choice answer options. These types of questions are good when there are a few simple possible reply options (e.g., race, gender, ethnicity, highest level of education).

Frequency: The number of times a particular data value occurs.

Histogram: A graph that shows how frequently different values occur in a set of values.

Hypothesis: An assumption about a characteristic or characteristics about a population.

Independent samples t-test: Comparing means between two groups.

Independent variable: A variable whose value is hypothesized to influence the value of a dependent variable.

Instrument: A generic term used to describe a measurement device, such as a survey or questionnaire. Even brief interviews and focus groups, which may involve exclusively verbal questions and responses, would include a written document outlining the study protocol and the specific questions organized in general order or cluster by topic.

Interval variable: A variable measured on an interval scale, on which the interval between values indicates relative magnitude but no absolute zero is implied (e.g., temperature measured in degrees Fahrenheit or Celsius).

Likert-type scale. The Likert-type scale, where one is considered the lowest rating and five is considered the highest rating, is one of the most widely used survey research approaches. A "Not Applicable" option allows respondents to still complete the survey while also acknowledging that the question does not apply to them. There are three main five-level Likert response types: Satisfaction, Agreement, and Time.

Maximum: The largest in a set of values.

Mean: The average of a set of values; a measure of central tendency.

Median: The middle number in a set of values when the values are ordered from least to greatest; a measure of central tendency.

Minimum: The smallest in a set of values.

Mode: The value that most frequently appears in a set of values.

Nominal variable: A variable measured on a nominal scale, for which numeric values serve as category labels (e.g., male = 1, female = 2).

Non-probability sampling: Non-representative sampling of the population.

Null hypothesis: The hypothesis that there is no difference between two or more populations and that any observed difference results from sampling error. Statistical tests seek to reject the null hypothesis.

Pearson chi-square test: Provides a statistical test of whether the two variables are independent of each other or whether they seem to vary together.

Probability sampling: Representative sampling of the population.

Purposive sampling: A non-representative sample of a subset target group of a larger population.

One-way analysis of variance: Comparing means among three or more groups.

Ordinal variable: A variable measured on an ordinal scale, on which values are rank-ordered but the distance between values does not indicate relative magnitude (e.g., a Likert-type scale).

Qualitative research: Involves the collection of narrative or explanatory data that can be used to provide in-depth explanations of phenomena and to provide context for quantitative findings. Examples of commonly used methodologies include open-ended interviews, focus groups, case studies, analysis of archival information such as newspaper articles or social media, and ethnographic research.

Quantitative research: Involves the collection of quantifiable data that can be used to make statistical inferences. Examples of methodologies commonly used include surveys, closed-ended interviews, and existing data that can be analyzed (such as the information found in arrest reports).

Quota sampling: Involves the deliberate setting of proportions and segments of a population independent of population characteristics (e.g., an interview sample consisting of equal numbers of incarcerating males and females regardless of the ratio of in-custody men and women).

Random sampling: Each individual in the population of interest has an equal likelihood of selection.

Ratio variable: A variable measured on a ratio scale, on which the interval between values indicates relative magnitude and an absolute zero is implied.

Raw data: Any data object that hasn't undergone thorough processing, either manually or through automated computer software.

Sample or sampling: A way of picking representatives from a population (units; e.g., people, organizations, jurisdictions) in order to be able to answer questions about the whole population.

Single-blind study: A practice of keeping the identity of either the participant or about whom the study is conducted anonymous; most often it is the participant's identity.

Snowball sampling: A subset of purposive sampling that involves picking up the sampling along the way by asking participants to suggest someone else who may be willing to participate, which is useful in hard-to-track populations (such as your clients).

Standard deviation: A measure that is used to quantify the amount of variation or dispersion of a set of data values; how much, on average, do values vary from an average point.

Statistically significant result: A result that is not attributable to chance; is not always substantively significant.

Statistical test: A test that has the statistical ability to correctly detect genuine differences among groups of interest and will be greater in larger samples.

Stratified sampling: Involves a mini-reproduction of the population, which is divided into characteristics of importance for research (e.g., gender, social class, case disposition time period; i.e., collect the percent in either group reflective of the population, such as interviewing the exact percent or ratio of males to females incarcerated).

Themes: A central idea found in the data and related to one or more research questions.

Transcribing: The process of converting audio or video data to text for analysis.

Variable: A quantity that can take on different values.

Z-test: Comparing proportions between two groups.



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