

Sampling Purposefully

It is necessary to locate *excellent* participants to obtain excellent data.

—Janice Morse (2010, p. 231)

Purposeful sampling: *Selecting information-rich cases to study, cases that by their nature and substance will illuminate the inquiry question being investigated.*

Perhaps nothing better illustrates the difference between quantitative and qualitative methods than the different logics that undergird their sampling approaches. Qualitative inquiry typically focuses in depth on relatively small samples, even single cases ($n = 1$), selected for a quite specific purpose. Quantitative methods typically depend on larger samples selected randomly. Not only are the techniques for sampling different, but the very logic of each approach is unique because the purpose of each strategy is different. While qualitative methodologists prefer the term *purposeful sampling*, quantitative methodologists are more likely to label these strategies “nonprobability sampling,” making explicit the contrast to probability sampling (e.g., American Association for Public Opinion Research, 2013).

The logic and power of random sampling derives from statistical probability theory. A random and statistically representative sample permits confident generalization from a sample to a larger population. Random sampling also controls for selection bias. The purpose of probability-based random sampling is generalization from the sample to a population and control of selectivity errors.

What would be “bias” in statistical sampling, and therefore a weakness, becomes intended focus in qualitative sampling, and therefore a strength. The logic and power of purposeful sampling lies in selecting *information-rich cases* for in-depth study. Information-rich cases are those from which one can learn a great deal about issues of central importance to the purpose of the inquiry, thus the term *purposeful sampling*. Studying information-rich cases yields insights and in-depth understanding rather than empirical generalizations. For example, if the purpose of an evaluation is to increase the effectiveness of a program in reaching lower-socioeconomic groups, one may learn a great deal by studying in depth a small

number of carefully selected poor families. Purposeful sampling focuses on selecting information-rich cases whose study will illuminate the questions under study.

Alternative Purposeful Sampling Strategies

Case selection is the foundation of qualitative inquiry. What you find from your inquiry will be determined by the cases you study. The type of sample you select should follow from and support inquiry into the questions you are asking. The purpose of a purposeful sample is to focus case selection strategically in alignment with the inquiry’s purpose, primary questions, and data being collected. Exhibit 5.7 illustrates this relationship.

The previous edition of this book presented 15 purposeful sampling strategies. This edition expands the options to 40. This reflects the emergence of more distinct and nuanced strategic options over the past decade. Because of the larger number of options, I’ve organized them into eight categories:

1. Single significant case
2. Comparison-focused sampling
3. Group characteristics sampling
4. Concept or theoretical sampling
5. Instrumental-use multiple-case sampling
6. Sequential and emergence-driven sampling strategies during fieldwork
7. Analytically focused sampling
8. Mixed, stratified, and combination sampling strategies

Exhibit 5.8 presents all 40 sampling options distributed within these eight categories. Each type of sampling is discussed following Exhibit 5.8. The importance of understanding sampling options is that they constitute design options, in essence, different ways of thinking and strategizing about what to study. In the opening of this chapter, I wrote, “Prepare for design immersion. *Think design. Engage design.*” Now, we focus more narrowly on one core qualitative design issue. So prepare for sampling immersion. *Think of sampling as a core design issue. Engage sampling as purposeful and strategic thinking.*

PURPOSEFUL VERSUS PURPOSIVE SAMPLING VERSUS NONPROBABILITY SAMPLING

Purposeful sampling: Strategically selecting information-rich cases to study, cases that by their nature and substance will illuminate the inquiry question being investigated

Purposeful sampling is also called purposive sampling. There is generally no difference in meaning. It's a matter of which term one prefers. In the first edition of this book (Patton, 1980), I substituted "purposeful" sampling for "purposive" sampling. I did so for three reasons:

1. My evaluation and applied research work involved close collaboration with nonresearchers who told me that they found the term *purposive* too academic, off-putting, jargon-ish, and unclear. One said, "Who talks like that?" In contrast, they could understand "purposeful." It meant for a purpose. No one I knew, including myself, had ever used "purposive" in common conversation. Ordinary people did know, understand, and sometimes used "purposeful." My aim was to communicate clearly and be user-friendly, so I introduced "purposeful sampling" and ceased using "purposive." However, readers should know that purposive remains the term of choice among academic qualitative researchers.
2. In deciding whether to abandon "purposive" for "purposeful," I investigated the origin of the term and found that it originated as a type of statistical sampling. The 1925 meeting in Rome of the International Statistics Institute included vigorous debate on various sampling approaches. The delegates ended by adopting a formal resolution that distinguished two principal kinds of representative sampling: random and purposive. Purposive sampling involved sampling population elements such that the chosen groups should have average values approximately equal to the population averages for the characteristics already known

of the population. By the 1930s, however, random sampling was ascendant, and "purposive sampling lost its appeal" (Kruska & Mosteller, 1980, p. 188). Subsequently, *quota sampling* emerged as

a kind of purposive sampling that attempts to mimic the population in particular respects. Like all purposive sampling, quota sampling procedures suffer from potential bias because the similarity to the population in some respects by no means implies similarity in others. (Kruska & Mosteller, 1980, p. 190)

This origin of purposive sampling can still be found in some qualitative definitions of the approach. For example, in Barbour's (2001) checklist for improving rigor in qualitative research, purposive sampling is defined as aiming to capture the diversity within a population. Given the historical origins of purposive sampling as an attempt to get a statistically representative sample of a population in order to generalize, I thought it appropriate to abandon the term altogether. So I introduced *purposeful sampling* as a specifically qualitative approach to case selection. My mistake, I now realize (and confess), was in not explaining the substitution when I originally made it in 1980. I simply started using the new term, and have ever since. Now it's your choice.

3. While qualitative methodologists use the terms *purposeful* or *purposive sampling*, quantitative methodologists are more likely to label these strategies "nonprobability sampling," making explicit the contrast to probability sampling (e.g., American Association for Public Opinion Research, 2013). This defines qualitative sampling by what it is not (nonprobability) rather than by what it is (strategically purposeful).

EXHIBIT 5.7 Steps for Design Alignment

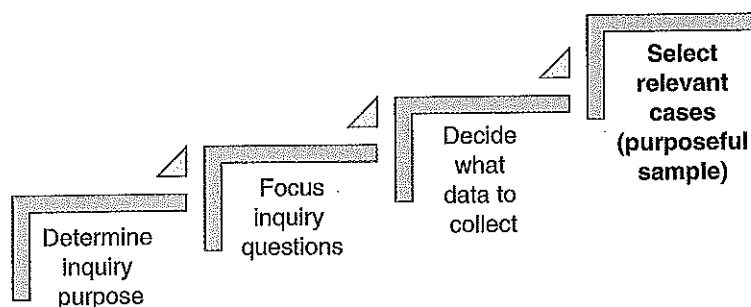


EXHIBIT 5.8 Purposeful Sampling Strategies**Selecting Information-Rich, Illuminative Cases for Qualitative Inquiry**

(For detailed discussion and references, see the accompanying text following this exhibit.)

PURPOSEFUL SAMPLING STRATEGY	PURPOSE: DEFINITION/EXPLANATION	PURPOSEFUL EXAMPLES
A. Single significant case	One in-depth case ($n = 1$) that provides rich and deep understanding of the subject and breakthrough insights, and/or has distinct, stand-out importance.	Single-case examples.
1. Index case	The first documented case to manifest a phenomenon; in epidemiology, the first person exhibiting a condition, syndrome, or cure; an index case often becomes the "classic" case in the literature on the phenomenon.	Understand the discovery and impact of <i>HeLa cells</i> , the first grown in culture that do not die, which enabled major medical breakthroughs on a number of frontiers. Document and understand the impacts of the discovery on the family of Henrietta Lacks, the source of the original cells.
2. Exemplar of a phenomenon of interest	Examining an issue in depth and over time through a single case that manifests the important major dimensions of the issue and that is accessible for intense longitudinal study.	Understand and illuminate how an elderly man and his family coped with and adapted to his severe memory loss over time, and the various medical, behavioral, and psychological interventions attempted over a span of 15 years.
3. Self-study: making oneself the case	Examining one's own experience of a phenomenon of interest.	Carl Jung recorded and analyzed his own dreams as a basis for research on the nature and meaning of dreams.
4. High-impact case	A case studied and documented in depth because of the impacts it illuminates and its significance to a field, problem, or society; a high-visibility case.	Extract lessons from a case study of the successful campaign to overturn the juvenile death penalty leading up to the Supreme Court's <i>Roper v. Simmons</i> case.
5. Teaching case	An in-depth case study that offers such deep insights into a phenomenon that it serves as a source of substantial illumination about the issues documented in the case and is written to use in teaching based on the case method.	Generate a high-quality case study to teach how the Robert Wood Johnson Foundation's 20-year investment in end-of-life grant making illustrates strategic philanthropy and leads to the development of a new field.
6. Critical case (or crucial case)	The weight of evidence from a single critical case permits logical generalization and maximum application of information to other, highly similar cases, because if it's true of this one case, it's likely to be true of all other cases in that category: If it works here, it will work anywhere, or if it doesn't work here, it won't work anywhere.	Document the generalizing value of one critical case when Australian medical researcher Barry Marshall injected a bacterium, <i>Helicobacter pylori</i> , into himself to demonstrate the physiological cause of peptic ulcers and to discredit the psychosomatic theory of ulcers dominant at the time. His carefully documented study of his own body's reactions constituted a critical medical case.

PURPOSEFUL SAMPLING STRATEGY	PURPOSE: DEFINITION/EXPLANATION	PURPOSEFUL EXAMPLES
B. Comparison-focused sampling	Select cases to compare and contrast to learn about the factors that explain similarities and differences.	Comparison-focused examples.
7. Outlier sampling	Cases on the tails of a distribution that would have little or no visibility in a statistical analysis; but outlier cases can reveal a great deal about intense manifestations of the phenomenon of interest.	In program evaluation, comparing successes (high outcomes) with failures (low outcomes and dropouts); studying high achievers, excellent organizations, and/or outstanding communities; studying disasters manifesting great ineffectiveness.
8. Intensity sampling	Information-rich cases that manifest the phenomenon intensely but not extremely.	Good students/poor students; above average/below average.
9. Positive-deviance comparisons	Comparing individuals or communities that have discovered solutions to problems (positive deviants) with those peer individuals or communities where the problem endures.	In the rural area of a developing country, most children were malnourished, but a few communities had healthy children: "positive deviates." Understanding the differences led to scalable solutions.
10. Matched comparisons	Studying and comparing cases that differ significantly on some dimension of interest to understand what factors explain the difference.	Comparing "great" companies with "good" companies"; comparing select public, private, and charter schools; comparing resilient with nonresilient youth.
11. Criterion-based case selection	Based on an important criterion, all cases that meet the criterion are studied, implicitly (or explicitly) comparing the criterion cases with those that do not manifest the criterion. This includes <i>critical incident sampling</i> .	Quality assurance programs: Deaths in foster care, hospitals, or prisons, as examples, trigger an in-depth investigation into cause of death. Accidents or errors in hospitals trigger case studies. All airline crashes are investigated.
12. Continuum or dosage sampling	Select cases along a continuum of interest to deepen understanding of the nature and implications of different levels or positions along the continuum.	Continuum: five stages of women's ways of knowing. Dosage comparisons for levels of program participation: high dosage—participated in all sessions; medium dosage—participated in more than half the sessions; low dosage—participated in fewer than half the sessions.
C. Group Characteristics Sampling	Select cases to create a specific information-rich group that can reveal and illuminate important group patterns.	Group characteristics sampling examples.
13. Maximum variation (heterogeneity) sampling	Purposefully picking a wide range of cases to get variation on dimensions of interest; two purposes: (1) to document diversity and (2) to identify important common patterns that are common across the diversity (cut through the noise of variation) on dimensions of interest.	Case studies of 20 leaders from different kinds of organizations with different background characteristics: First, document the diversity, then identify any common leadership traits or patterns.

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PURPOSEFUL SAMPLING STRATEGY	PURPOSE: DEFINITION/EXPLANATION	PURPOSEFUL EXAMPLES
14. Homogeneous sampling	Select cases that are very similar to study the characteristics they have in common.	Study the subpopulation of female immigrants in a job training program to evaluate the program from their unique perspective as a subgroup. Focus groups typically bring similar people together.
15. Typical cases	Select and study several cases that are average to understand, illustrate, and/or highlight what is typical, normal, and average.	Sample and study average participants who complete a program for students who dropped out of secondary school. "Average" students are those who competed in an "average" amount of time with "average" educational outcomes.
16. Key informants, key knowledgeable, and reputational sampling	Identify people with great knowledge and/or influence (by reputation) who can shed light on the inquiry issues.	Interview long-time employees about the history of an organization, or long-time residents about the history of a community.
17. Complete target population	Interview and/or observe everyone within a unique group of interest.	Following up all 19 marathon runners who lost limbs in the 2013 Boston Marathon terrorist bombing.
18. Quota sampling	A predetermined number of cases are selected to fill important categories of cases in a larger population. Quota sampling ensures that certain categories are included in a study regardless of their size and distribution in the population. Quota sampling can be flexible, a beginning point to frame the initial design and to facilitate entering the field rather than a fixed and rigid sample size; the size and composition of the sample can be adjusted based on what is learned as the inquiry deepens.	A statewide evaluation contract specifies that the study will conduct 12 community case studies with three cases from each of four regions. Having equal cases from each region is a political consideration. Janice Morse (2000) advocates quota sampling as the foundation for "organic" qualitative inquiry that grows as the inquiry unfolds and deepens.
19. Purposeful random sample	Adds credibility to a qualitative study when those who will use the findings have a strong preference for random selection, even for small samples; it can be perceived to reduce bias; purposeful random sampling is especially appropriate when the potential number of cases within a purposeful category is more than what can be studied with the available time and resources.	Resources are available to do in-depth case studies of 20 village programs in an area of hundreds of villages. Even though the sample size is too small to be considered representative or generalizable, random selection will avoid controversy about potential selection bias.
20. Time–location sample	Interview everyone present at a particular location during a particular time period.	Study everyone who works out at a fitness center every day after work (or every day before work).

PURPOSEFUL SAMPLING STRATEGY	PURPOSE, DEFINITION/EXPLANATION	PURPOSEFUL EXAMPLES
D. Theory-focused and concept sampling	Select cases for study that are exemplars of the concept or construct that is the focus of inquiry to illuminate the theoretical ideas of interest.	Concept or theory-focused sampling examples.
21. Deductive theoretical sampling; operational construct sampling	Find case manifestations of a theoretical construct of interest so as to examine and elaborate the construct and its variations and implications. Theoretical constructs are based in, are derived from, and contribute to scholarly literature. This involves deepening or verifying theory.	Cases of resilience, posttraumatic stress, or other psychological constructs; case studies of organizational culture, or social capital in communities as sociological constructs; studying ecological diversity in natural ecosystems.
22. Inductive grounded and emergent theory sampling	Open-ended fieldwork reveals concepts that become the basis for subsequent sampling. "Participants are selected according to the descriptive needs of the emerging concepts and theory" (Morse, 2010, p. 235). Grounded theoretical sampling becomes more selective as the emerging theory focuses the inquiry. Additional cases are added to support constant comparison as a theory-sharpening analysis process.	In <i>Awareness of Dying</i> (Glaser & Strauss, 1965), the inquiry began by open-ended observations between nurses and patients in diverse settings; emergent concepts directed further sampling and comparisons. Grounded theory inquiries into social justice, which "often focuses on people who experience horrendous coercion and oppression" (Charmaz, 2011, p. 371).
23. Realist sampling	"Theory always precedes data collection in a scientific realist sampling strategy" (Emmel, 2013, p. 95). Explanation and interpretation in a realist sampling strategy tests and refines theory. Sampling choices seek out examples of mechanisms in action, or inaction toward being able to say something explanatory about their causal powers. Sampling . . . is both pre-specified and emergent, it is driven forward through an engagement with what is already known about that which is being investigated and ideas catalyzed through engagement with empirical accounts. (Emmel, 2013, p. 85).	A realist researcher evaluating a program aimed at helping poor families transition out of poverty would begin by identifying ideas about how the program was intended to help these families, essentially identifying hypothesized causal mechanisms within the context of the program. This conceptualization would direct the sampling. "The realist sample is always bootstrapped with theory" (Emmel, 2013, p. 83). See an example of studying perceptions of health in a Mumbai slum (Emmel, 2013, pp. 103–105).
24. Causal pathway case sampling	A <i>pathway case</i> provides "uniquely penetrating insight into causal mechanisms" (Gerring, 2007, p. 122). "Maximize leverage over the causal hypothesis" (George & Bennett, 2005, p. 172).	Case study of how leadership-initiated reform leads to increased democratization, to trace the causal pathway from leadership to reform to democratization (Gerring, 2007, p. 123).
25. Sensitizing concept exemplars sampling	Select information-rich cases that illuminate sensitizing concepts: terms, labels, and phrases that are given meaning by the people who use them in a particular context.	Empowerment, leadership, inclusivity, sustainable development, complexity, and innovation are sensitizing concepts.

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PURPOSEFUL SAMPLING STRATEGY	PURPOSE: DEFINITION/EXPLANATION	PURPOSEFUL EXAMPLES
26. Principles-focused sampling	Principles provide guidance and direction for working with people in need or trying to bring about change. Principles, unlike rules, involve judgment and have to be adapted to the context and situation. Principles-focused sampling identifies cases that illuminate the nature, implementation, outcomes, and implications of the principles.	Several agencies serving homeless youth posited a shared set of principles. Case studies of youth and staff focused on generating and analyzing evidence of the meaningfulness and effectiveness of these principles.
27. Complex, dynamic systems case selection: ripple effect sampling	Selecting cases where complex dynamic processes can be tracked, studied, and documented over time; such studies are inherently highly emergent. The unit of analysis is a complex phenomenon.	Tracking and documenting complex dynamic phenomena, like vicious and virtuous circles, ripple effects, adoption and adaption of innovations, viral-like spreading phenomena, crowd-sourcing dynamics, network dynamics, etc.
E. Instrumental-use multiple-case sampling	Select multiple cases of a phenomenon for the purpose of generating generalizable findings that can be used to inform changes in practices, programs, and policies.	Instrumental-use multiple-case sampling examples.
28. Utilization-focused sampling	Select a set of cases concerning a problem or issue where sufficient depth and detail in specific cases will support rigorously identifying key factors that can credibly inform future decision making.	Detailed, systematic case studies of railroad switching operation fatalities identified five changed practices and 10 hazards to be corrected that would save lives.
29. Systematic qualitative evaluation reviews	Selecting diverse evaluation studies already completed on a program or policy and synthesizing findings across those separate and diverse evaluations to reach conclusions about <i>what is effective</i> ; systematic reviews serve a meta-evaluation function (Purposeful Sampling Strategy 37 is a synthesis of qualitative <i>research studies</i>).	The Cochrane Collaboration Qualitative & Implementation Methods Group supports the synthesis of qualitative evidence and the integration of qualitative evidence with other evaluation evidence (mixed methods) in Cochrane intervention reviews on the effectiveness of health interventions.
F. Sequential and emergence-driven sampling strategies during fieldwork	Build the sample during fieldwork. One case leads to another, in sequence, as the inquiry unfolds. Follow leads and new directions that emerge during the study.	Sequential and emergence sampling examples.
30. Snowball or chain sampling	Start with one or a few relevant and information-rich interviewees and then ask them for additional relevant contacts, others who can provide different and/or confirming perspectives. Create a chain of interviewees based on people who know people who know people who would be good sources given the focus of inquiry. Researcher does the recruiting.	Seek to understand the effective relationships between agricultural extension agents and small farmers in Burkina Faso. Begin with a few farmers referred by extension agents, and then build the sample by getting referrals from the first farmers interviewed.
31. Respondent-driven sampling, network sampling, and link-tracing sampling	A network-based strategy in which a small number of initial participants from the target population ("seeds") are studied and asked to recruit up to three new contacts in their network; initial interviewees do the recruiting, usually for compensation; used to find hard-to-access research participants because of the rarity of the phenomenon of interest and/or the sensitivity of the topic being studied.	Identify sex workers living with HIV to document and understand their coping and mutual support strategies. Trust and confidentiality are critical to obtaining a sample among rare and hard-to-reach people involved in or affected by illegal or stigmatized behaviors.

PURPOSEFUL SAMPLING STRATEGY	PURPOSE, DEFINITION/EXPLANATION	PURPOSEFUL EXAMPLES
32. Emergent phenomenon or emergent subgroup sampling	Selecting a sample after the study is under way when important subgroups self-organize, or critical issues arise that affect some and not others, so those affected become the target sample.	Understand the different experiences and outcomes for two subgroups that naturally emerge in an early-childhood parent education program. Women participants with and without spouses connect and cohere together. These two subgroups become an emergent comparison sample not anticipated in advance.
33. Opportunity sampling	During fieldwork, the opportunity arises to interview someone or observe an activity, neither of which could have been planned in advance.	During a site visit to a youth homeless shelter, a former staff member who helped open the shelter happens to have come for lunch and a visit with current staff friends. This is an opportunity to learn about the history of the shelter.
34. Saturation or redundancy sampling	Analyzing patterns as fieldwork proceeds and continuing to add to the sample until nothing new is being learned (especially with snowball or response-driven sampling).	After 18 interviews with female sex workers about their knowledge of and approaches to sexually transmitted diseases, the same things were being said by each new interviewee, so no new cases were added.
G. Analytically focused sampling	Cases are selected to support and deepen qualitative analysis and interpretation of patterns and themes. This is a form of emergent sampling at the analysis stage.	Analytically focused examples.
35. Confirming and disconfirming cases	Elaborate and deepen initial analysis by seeking additional cases, e.g., variations on or exceptions to the patterns identified in the original sample.	Case studies of nonprofit leaders showed that all those in the initial sample of 15 had spent their whole careers in the not-for-profit sector. Diversify the sample by seeking nonprofit leaders who had worked in the private sector to explore the significance of background experience on leadership approach.
36. Illumination and elaboration additions to the original sample	Deepen understanding of a finding that emerges in analysis of the original sample by adding cases that can specifically illuminate that finding.	Case studies of homeless youth ($n = 14$) turned up evidence that gay, lesbian, and transgender youth faced special problems. Three such cases were added to the sample, when that pattern emerged, to strengthen the findings.
37. Qualitative research synthesis	Selecting qualitative research studies to analyze for crosscutting findings; quality criteria for which studies to include in the synthesis is a sampling issue (systematic evaluation reviews, # 29 in this table, are a form of qualitative synthesis that focuses on evaluation findings).	A substantial number of separate and independent ethnographic studies of coming-of-age and initiation ceremonies have been conducted across cultures. A synthesis involves selecting studies to include in the cross-study analysis.
38. Sampling politically important cases	Attract attention to a study (or avoid attracting controversy) by adding or omitting politically important cases.	A study of adult literacy programs across the state purposefully includes a program located in the district of the chair of the legislative committee that oversees those programs.

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PURPOSEFUL SAMPLING STRATEGY	PURPOSE: DEFINITION/EXPLANATION	PURPOSEFUL EXAMPLES
H. Mixed, stratified, and nested sampling strategies	Meet multiple inquiry interests and needs; deepen focus, triangulation for increased relevance and credibility.	Mixed, stratified, and nested examples.
39. Combined or stratified purposeful sampling strategies	Begin with one sampling strategy, and then add a second to further focus the sample, e.g., (a) begin with outliers, then do snowball sampling or (b) begin with key informants to construct a maximum-variation sample.	Evaluating the implementation of the Paris Declaration Principles for Development Aid, key informants were sampled and interviewed to then identify exemplary cases of implementation for in-depth study (outliers).
40. Mixed probability and purposeful samples	Five examples of mixed sampling strategies: 1. <i>Stratified mixed methods.</i> Use statistical distribution to stratify for purposeful sampling, e.g., identify outliers, typical cases, or subgroups of interest. 2. <i>Sequential mixed methods.</i> Select cases from a probability sample for greater in-depth inquiry to illuminate and validate what the numbers mean. 3. <i>Parallel mixed methods.</i> Simultaneously do a survey of a probability sample for representativeness and generalizability and, at the same time, in-depth case studies purposefully chosen to provide depth of interpretation of what the survey results mean. 4. <i>Triangulated mixed methods.</i> Compare probability and purposeful samples, studied independently, with the triangulate and examine the consistency of findings with different methods and sampling strategies. 5. <i>Validity-focused mixed methods.</i> Do fieldwork (observations and interviews) to determine the validity of select statistical data, e.g., whether the procedures for gathering statistics have been followed rigorously, or find out if the control and treatment groups in an experimental design have complied with the design specifications.	A random, representative sample of people with disabilities was surveyed to determine their priority needs. A small number of respondents in different categories of need were then interviewed to understand in depth their situations and priorities and make the statistical findings more personal through stories. The qualitative sample was also used to validate the accuracy and meaningfulness of the survey responses

Discussion of the 40 purposeful sampling options in Exhibit 5.8 follows in Modules 31 through 38.