

# WRITING FOCUS GROUP METHODS

THE RESEARCH METHODS section is a critical component of any research report. Not only does the methods section need to provide the procedural detail of how the study was conducted, it also provides context to the study and is used to assess the quality of the research. Writing the methods section of a focus group study may present some challenges in effectively describing and justifying the methodological procedures used and in determining how to effectively demonstrate scientific rigor throughout the research process to show that the study results are valid.

This chapter begins with a description of the challenges in writing the methods section of a focus group report. Many of these challenges apply to writing qualitative methods in general, not only the focus group method. It then describes the purpose and content of the methods section. Guidance is provided on what to include in the methods section, why each component is important, and suggestions on how to write each part. Examples of extracts from published focus group research are used throughout the chapter to demonstrate how particular aspects of the methods section can be written. Common pitfalls in writing the methods section are described, as is how to overcome these pitfalls.

The next chapter discusses how to write the results section of focus group research. The focus of this book, on writing the methods and results sections of focus group research, is warranted because they are central components to any research report and often present the greatest writing challenges for qualitative researchers. The emphasis of both chapters is on writing for academic audiences.

# **Challenges of Writing Focus Group Methods**

Writing research methods can be challenging because of the multiple roles of this part of the research report. The methods section needs to simultaneously report procedural detail, provide scientific justifications, and reflect methodological rigor. In addition, the methods section needs to identify qualitative concepts and procedures used, but also explain them to readers unfamiliar with specific terminology. The methods section also needs to effectively reflect the context of the study, which influences the study outcomes. Overall, the methods section needs to provide methodological depth yet be written concisely, and present a logical process from what is a more circular iterative research approach. These challenges are briefly highlighted next and are reflected throughout this chapter.

#### Procedural Detail

There is no single way to conduct qualitative research or focus group discussions. Therefore, in writing the research methods the challenge lies in providing sufficient transparency on how focus groups were conducted and the methodological decisions that shaped the study process. The methods section needs to describe both the procedural detail and scientific reasoning to demonstrate the rigor of the study. Therefore, a reader should be clear on both what was done and why it was done in that way.

In addition, the overall process should be clear, by describing each step undertaken in a logical progression. There should be sufficient detail for another researcher to (potentially) repeat the tasks and follow the logic of decisions made. Too often there are gaps in the description of qualitative research methods, leaving a reader unclear on what was done at a certain stage of the

research process. This is particularly true in the description of data analysis, whereby data preparation is often described in detail (e.g., transcription, code development, coding of data, intercoder assessment), but then little or no description is provided on how the data were subsequently analyzed after these components of data preparation. For example, were analytic tasks used, such as description or comparison; how were concepts developed; how was a conceptual framework or theory developed and validated; and so on. Similarly, descriptions of participant recruitment are often incomplete, naming only a strategy without describing how it was applied in the study context. The methods section therefore needs to be logical, comprehensive, and detailed. An effective way to assess if all necessary detail is included in a methods section is to ask another researcher to read and subsequently describe in their own words what was done and why; this can uncover gaps in the process or unclear reasoning.

## Writing Concisely

A further challenge of writing focus group research is to write concisely yet provide the necessary procedural detail and methodological justifications that give the study scientific credibility. This is particularly challenging when writing within the word limits imposed by academic journals. The methods section of a qualitative report is often longer than for other types of research. In part, this is because of the non-standard application of qualitative methods, which requires a more detailed description of the research strategy and justifications for methodological decisions and procedures used. "Qualitative researchers employ less standardised data collection methods, ways of developing analytic categories and modes of organising evidence. The methods chosen depend on the conditions of the research site and the researchers' preferences. Hence, qualitative research needs to explain what, and why, they did what they did in greater detail" (Liamputtong & Ezzy, 2007, p. 309). This need to explain and justify the research procedures adds length to a methods section. In addition, the credibility of the study is assessed through the rigor of the methodological approach applied; therefore, sufficient detail needs to be presented. Although adding length to the methods section this detail is critical.

#### Reflecting the Interpretive Approach

Focus group discussions are a method of qualitative research. Therefore, writing the research methods needs to reflect the interpretive paradigm within which the research was conducted. This relates to describing the process of data collection and analysis, referring to appropriate techniques and concepts, and using relevant terminology. When describing the research process, refer to the circular, iterative nature of qualitative data collection and how this was operationalized in the study. The iterative process is not only a hallmark of qualitative data collection but also provides an indicator of quality data collection. In describing data collection and analysis, refer to methodological concepts that are relevant to the interpretive paradigm and describe how these were applied to the study. For example, refer to purposive (non-random) recruitment of participants; state how saturation (the point where no new information is gained) was used to determine an appropriate number of participants; refer to the emic perspective (participants' viewpoint) and how this was obtained in the study; and describe how reflexivity (assessing a researcher's subjective influence on the study) was used through the study. These concepts and terminology situate the study clearly within the interpretive paradigm.

Although it is important to use terminology appropriate to the interpretive paradigm, such terminology should not be used without briefly indicating what the concept is and how it was specifically applied to the study. Belgrave, Zablotsky, and Guadagno (2002) caution to "use technical language, but don't use it alone" (p. 1431), because not all readers are familiar with qualitative research and the methodological concepts it embraces, or there may be variations in how certain concepts are understood. It is better to "waste" space to explain a concept to readers than to have them misunderstand what was actually done. Therefore, the challenge is to report focus group research within the parameters of the interpretive paradigm to reflect scientific rigor, and to use relevant methodological terminology to do so, but also embrace readers who may not be familiar with the terminology or concepts used. Furthermore, it is important not only to mention particular concepts, but to describe how they were applied to the specific study. Avoid providing a generic description of focus group research or using terminology to provide methodological "labels"

in the methods section. For example, rather than stating "purposive recruitment was conducted," "grounded theory was used," or "saturation was achieved," describe exactly how this was done in the context of the study. This inevitably requires providing specific methodological detail that reflects the study purpose, context of the study, or particular methodological challenges. These details provide specificity to the research methods section and allow the opportunity to justify methodological decisions and procedures.

# Reporting Context

Examining the context of social issues is a well-known characteristic of qualitative research and may be the explicit purpose of a focus group study. These contextual influences form part of the study findings and are therefore reported in the results section of the research report. However, contextual issues also influence data collection in qualitative research, but reporting this aspect of context is often overlooked when writing the research methods. There are various types of context that can be described in the methods section. For example, the theoretical context of the study phenomenon underlies the research question and the development of research instruments, and can be reflected when describing the topics or questioning strategies used in the focus group discussions. The socio-cultural context of the study site is perhaps the most tangible aspect of context included in the research methods. This may include a description of broad social issues and cultural behaviors that may impact on the research topic. The methodological context of data collection refers to describing the study design and the context in which focus group discussions were conducted. This may include describing the physical setting where focus groups were conducted and the group context of data collection. Finally, a brief description of the broader sociopolitical context in which the study was conducted is warranted because this constitutes the political, administrative, or governance structures and boundaries within which the study recommendations need to be shaped. All these aspects of context influence the study design, implementation, and outcomes. They help the reader to understand contextual influences that shaped each stage of the study and provide the backdrop against which the study results need to be interpreted.

# **Demonstrating Rigor**

A critical role of the methods section is to demonstrate scientific rigor and reflect research quality. This adds a critical dimension to writing qualitative research methods that is often overlooked. There is no single way to conduct a focus group study, therefore, it is imperative not only to describe the study procedures but also the justifications and reasoning for methodological choices. Describing what was done (research tasks), how it was done (methodological procedures), and why it was done this way (scientific reasoning) demonstrates rigor in the research process. A further reflection of rigor involves appropriately referring to procedures, concepts, and terminology relevant to the interpretive paradigm within which focus group research is conducted (as described previously). The research methods section is central to determining the rigor and crediblity of the study; therefore, providing procedural detail needs to be balanced with methodolgic justifications. Strategies for conducting rigorous focus group research are described in Chapter 2, and reflecting research quality is described in Chapter 5.

# **Writing the Methods Section**

Purpose of the Methods Section

The methods section of a research report has multiple functions: it simultaneously needs to describe the research process, set the context of the study, and reflect the quality of the research. Therefore, the methods section is a critical component of any research report. It is important to understand these multiple functions because they indicate how the methods section is read and assessed by different types of readers.

A basic function of the methods section is to describe the research process. It needs to tell the reader what was actually done, how it was done, and why it was done this way. Therefore, the methods section needs not only to identify each step in the research process and describe how it was implemented, but it also needs to provide a rationale for the methodological decisions made. Given that there is not one single formula for conducting focus group research and researchers may need to navigate certain fieldwork constraints, the methods section needs to provide an insight into the decisions

that shaped the research process and its outcomes. A methods section needs to provide the most comprehensive description possible within the word limit available. This may involve presenting some information in visual format (e.g., tables or figures). An effective methods section provides the reader with sufficient procedural information to enable them to repeat the research process and understand the methodological decisions made.

The methods section also needs to provide context to the study. It is not only important to describe the socio-cultural context in which the study was conducted, but also the methodological context in which data were collected. Providing methodological details about the nature of focus group research and how group discussions were conducted enables readers to correctly interpret the study findings and understand the purpose and limitations of this type of data. Furthermore, the context of the research design is also important. Whether focus group discussions were the core method used or if they supplemented other methods in the study provides important contextual information on the role of focus groups within the larger context of the study.

A third function of the methods section is to demonstrate research quality. The flexible nature of qualitative research means that it is not conducted in a standardized way. Therefore, there is a greater need than for other types of research to describe the procedural steps and methodological decisions that demonstrate scientific rigor. The methods section is thus an opportunity for researchers to demonstrate the quality of the study by providing a transparent description of the research process undertaken and the methodological decisions and challenges that influenced the study outcomes. Although the quality of a study is demonstrated throughout a research report, the methods section provides the procedural details on data collection and analysis from which to judge the credibility of the study findings. Therefore, the methods section has a critical role in allowing readers to assess the scientific rigor of the study and overall research quality (see Chapter 5 for discussion on assessing quality).

#### The Target Audience

A basic rule of writing is to consider the target audience, because this influences all aspects of writing. The target audience

determines the structure, content, language, style, and length of the methods section. Even though the primary audience may be academics, there may also be a need to present the study to other audiences, such as policy makers, practitioners, advocacy groups, community members, non-goverment organizations, or media sources. Therefore, several versions of the methods section may be needed to suit different audiences.

Academic audiences (more than others) expect the methods section to be embedded in a theoretical framework that reflects the scientific literature on the topic, use appropriate methodological terminology, and describe measures that reflect scientific rigor. The theoretical or conceptual framework of the study is generally described in earier sections of the report. The methods section needs to reflect the theoretical framework of the study by demonstrating how the study design, research question, and research methods operationalize the broader theoretical framework of the study. For example, the theoretical framework may be referred to when describing the selection of topics or questioning strategies used in the focus group discussion guide, the rationale for the types of participants recruited, or the analytic approach selected. Embedding the research methods within a broader theoretical framework reflects the scientific rigor expected of academic audiences. In addition, refering to appropriate research techniques and using methodological terminology and academic language are additional features of writing for academic audiences. These components often mean that the methods section of an academic report is longer than for other types of audiences.

Although the previously mentioned components are expected in an academic report, academic audiences come from diverse disciplines and have varying experience of qualitative research. Not all readers are familiar with qualitative research or focus group discussions, how they are conducted and why, the type of evidence produced, and what they can and cannot do. Therefore, in addition to tailoring the research methods section to a specific type of audience, it also needs to be understood more broadly, in particular by those less familiar with focus group research. This is not to say that methodological terminology should be avoided, but that it may need to be explained so that all readers can follow the logic of procedures described.

Non-academic audiences, such as policy makers or nongovernment agencies, have different requirements and expectations of the research report. They typically place less emphasis on the theoretical and methodological components of the study, instead giving prominence to key findings and implications for policy and practice. Writing for these audiences is typically shorter, little academic terminology is used, the study findings are highlighted and are often placed first, and research methods are often de-emphasized. Therefore, the first task in writing focus group research is to identify the target audiences and understand their requirements.

#### Content of the Methods Section

There is no definitive way to design and conduct focus group research (Morgan, 2010; Barbour, 2007). What is most important is transparency in reporting how the focus group study was conducted and, perhaps more importantly, the rationale for the methodological decisions made. The methods section provides the opportunity to demonstrate that the study was conducted with methodological rigor that supports the validity of the results presented. It is the section of the research report most heavily scrutinized by those assessing the overall quality of the research. Given that the study results arise out of the research methods applied, this is a critical section of any research report. Word limits often restrict the amount of detail that can be provided. Therefore, the methods section needs to be concise and comprehensive.

A typical methods section provides some background on the study setting and research design, details about study participants and their recruitment, a description of the process of data collection and analysis, how ethical issues were managed, and any limitations of the study. It can be useful to begin the methods section with an overview of the research design and methods of data collection to set the context for the details that follow. The structure, length, and style of the methods section varies by the target audience and type of publication (e.g., journal article, research report). Discussed next are suggestions on the content of a methods section with a focus on writing for academic publications. Details of what to include and why are presented, as are common writing pitfalls and challenges; examples of writing particular sections are shown by using extracts from published focus group research.

#### Study Setting

A methods section needs not only to "set the scene" of the study by describing where the research was conducted (e.g., country, city, region), but also to justify why this setting was the most appropriate for this particular study. Many studies identify the study location but fail to indicate why this location was selected for the study. The description of the study setting typically appears either in the background or methods section of the research document.

Describing characteristics of the study site provides important contextual information, so that the study findings can be understood against the context in which the research was conducted. It is common to briefly outline broad social and demographic features of the study site and then highlight any conditions or characteristics that are particularly relevant to the study topic. For example, a study about family planning behavior may describe women's limited access to contraception at the study site because of policy restrictions (e.g., a woman must be married, abortion services are illegal in the region). Similarly, a study on access to safe water may highlight that safe water sources are not maintained at the study site leading to residents collecting contaminated water from other sources. The extract below shows a concise description of a study site from focus group research on community and religious perspectives on the prevention of type 2 diabetes among the British Bangladeshi population. Therefore, the description highlights the broad socio-cultural context, religious identity, and diabetes prevalance of the study community.

This study took place in the London borough of Tower Hamlets, one of the most densely populated, multi-ethnic and socio-economically deprived areas in the UK, where the age adjusted prevalence of diabetes is 5.9%. The Bangladeshi population comprised 34% of the borough in 2001, is the largest Sylheti community outside Bangalsesh, with many classifying themselves as Sunni Muslims. Religion has a strong visible presence in the locality although there are dynamic sociocultural trends influencing the link between faith and identity. (Grace, Begum, Subhani, Kopelman, & Greenhalgh, 2008, p. 1)

A longer description of a study site in South Africa is shown below. This study focused on adolescent sexual behavior in rural South Africa in an area with high HIV prevalence. The description of the study site highlights the context of poverty, illiteracy, and unemployment in the province where the focus group study was conducted, because this impacts the social and sexual behavior of young people, which is the focus of the study itself.

This study was conducted in Mankweng, about 30 kilometers east of Limpopo Province's capital city, Polokwane. Mankweng settlements consist mostly of periurban townships, tribal villages and informal settlements, where large families live under relatively deprived conditions, lacking a satisfactory water supply and sanitation, and having inadequate access to basic services. A significant percentage of the labor force is unemployed and there are few possibilities for employment. This forces many adults to leave their families in search of employment elsewhere, mainly in the mining industry or the Limpopo farms but also in other sectors available to less educated people. This labor migration has profound implications in terms of reduced social cohesion and many young people have to take on parental responsibilities. The population is very young, with approximately 60% under the age of 18 years. More than a third of those aged 20 years and older in Limpopo Province have not received sufficient education or schooling. Furthermore, educational attainment in the province is below the national level and in Mankweng the illiteracy rate is approximately 10%. As one of the poorest provinces in South Africa, Limpopo spends less than the national average on health services and the HIV prevalence among the poor and disadvantaged population is high, at approximately 19.3%. (Ragnarsson, Onya, Thorson, Ekstrom, & Aaro, 2008, p. 740-741)

It is also useful to indicate how the study site was selected and what informed site selection. Was site selection informed by empirical data, for example study sites were selected because they had the highest concentration of the phenonenon of interest? Was site selection informed by key informants in the region because those sites are where the issues of interest are known to be present? Was the focus group study linked to previous research conducted at the same location? Studies conducted across multiple study sites need additional description to understand differences between each site and reasons for conducting the study in several locations. It is common, for example, to select both rural and urban study sites or sites with or without certain characteristics (e.g., services, facilities, and so forth) to identify how the phenomenon of interest differs in contrasting settings. The extract below provides a detailed justification for the selection of two contrasting school divisions and the selection of individual schools for a focus group study on physical activity.

Representatives from two local school divisions in a midsized Canadian city worked with the researchers to identify elementary and high schools from two diverse socioeconomic areas of the city. Two high schools that represented the lower socioeconomic areas were selected based on demographic and social characteristics of the neighbourhoods in which the schools were located. These characteristics included community demographics (income levels, unemployment rates), justice information (general crime statistics, young offenders in school, etc), health information (mental health information, alcohol and drug use, etc), and school data (transcience, single parents, absenteeism, etc). We selected the two high schools that represented the higher socioeconomic areas by using data obtained from neighbourhood profiles (e.g., educational attainment, family income, and neighborhood characteristics). Once the four high schools had been selected, two elementary (Grades 1-8) schools located in close proximity to each of the high schools and fulfilling the same low- or high-SES neighbourhood criteria were included in the study. (Humbert et al., 2006, p. 469).

For some studies, the study site may be an institution (e.g., prison, school, hospital); therefore, the nature of the institution is described and why this was specifically selected for the study. Other studies may conduct virtual focus groups by telephone or Internet, whereby there is no specific study site per se to describe. Instead, the focus is on describing the characteristics of the participant group and the logistics of conducting the virtual group discussion. Finally, the date and duration of data collection are typically included. as are details about any collaborating organizations and the their involvement in the study.

#### Study Design

An important component of the methods section is to identify the overall study design and how focus group discussions fit into the study design selected. Often the study design is not described unless it differs from a typical cross-sectional study design, such as longitudinal research, experimental research design, or mixed methods research design.

Many studies use a typical cross-sectional research design where focus group discussions are the only method of data collection. In this case it is useful to describe why focus group discussions were the most appropriate method of data collection for the study. Other studies may adopt a longitudinal study design that includes multiple episodes of data collection using focus group discussions. For longitudinal research a description of the purpose of each round of focus group discussions is warranted and whether the study is a panel design that uses the same focus group participants each time or uses different participants. It is also common for focus group discussions to be included in mixed methods research designs that combine several qualitative methods (e.g., focus group discussions and in-depth interviews) or use both qualitative and quantitative methods (e.g., focus group discussions and a population survey).

In mixed methods research, it is particularly important to identify how each method of data collection contributes to the research objectives. This may involve highlighting the specific research aim where focus group data will contribute, or explaining how focus group data may inform the design of other components of the study. For example, data from focus group discussions may be used to design elements of a household survey or to identify the questions to include on an in-depth interview guide. Too often studies use mixed methods without a clear description of the purpose of each method or their contribution to the overall research objectives. This is a particular issue when both in-depth interviews and focus group discussions are used in a study with no description of an overall study design to describe why both methods were needed, the different data that each would produce, and how these data contribute to different aspects of the research question. This description is warranted to dispel criticism of data redundancy and to demonstrate relevant application of each method to the overall study purpose.

A common problem is that a study design may be named but it remains unclear why this study design was appropriate for the particular study. This issue can arise in research that uses less common study designs, such as longitudinal, case study, ethnography, or mixed methods research designs. A reader needs sufficient information to help them answer the question: "why is the study design used suitable for this particular study?" Therefore, a brief statement may be included to justify the study design selected in relation to the research objectives.

#### **Study Population and Participant Recruitment**

The characteristics of the study population and how they were recruited are critical components of the research methods section. Sufficient detail should be provided for a reader to understand the exact study population and how study participants were recruited from this population. A reader should be able to broadly repeat the process of recruitment with the information provided; however, many research reports provide insufficient detail about these aspects of the research process.

A clear description of the study population is needed. Usually the study population is defined in a brief statement, for example, "Study participants were young women aged 15-25 who had received counselling about anorexia from the clinic in the last 12 months. Those who were currently in treatment for the condition were excluded from the study." This statement succinctly identifies the eligibility criteria for participants and the exclusion criterion. Other studies may list each eligibility criterion with a brief statement on why it was important for the particular study. Some studies may have several distinct target groups, such as health providers and patients, or parents and adolescents. Therefore, a description of each target group is needed. Even though the study population is defined at the outset of the study it may have been refined during data collection or an additional target group added as more is learned about the study topic. Describing this iterative process and how it influenced participant recruitment is useful to reflect the circular nature of qualitative research.

Details on the process of participant recruitment are important, but are often omitted from a description of the research methods. Vaughn, Shay Schumm, and Sinagub (1996) reviewed 150 articles reporting focus group methodology and found that most studies neglected to describe participant selection criteria and recruitment procedures, only reporting the number of study participants. Full details of the participant recruitment are needed. It is insufficient

to only state that "purposive sampling" was used, because this is a theoretical approach and not a method of recruitment per se. There are many ways to achieve purposive sampling (i.e., snowball recruitment, venue-based recruitment) and these may be applied in multiple ways and be influenced by the context in which they are applied. Therefore, a description of the actual recruitment process and its rationale is warranted. The goal is to provide sufficient detail on the recruitment process to enable readers to judge whether the process used was appropriate, adequate, and rigorous. Therefore, stating that "participants were recruited through a community leader" or "venue-based recruitment was used" provides no further detail on exactly how recruitment was conducted. Although word limits often lead to much methodological detail being omitted, it is still possible to provide a succinct description of the process of participant recruitment. The two extracts below include descriptions of the process of participant recruitment that describe exactly how recruitment was conducted.

A community-based sample of African American women was recruited in a large metropolitan area in the south eastern region of the United States. Purposive sampling was used to obtain a sample of women who were diverse in age and educational levels. Each scheduled group was designed to be homogenous in age and educational background, to bring individuals together who have shared life experiences...Flyers were distributed strategically at locations including a historically Black university campus, a community college, a women's health clinic, several government agencies (e.g., local health department), hair salons, local libraries, African American women's civic organization meetings, and a local recreation centre and local cultural centre (both of which served the local African American community). Interested persons were instructed on the flyers to contact, via telephone or email, the principal investigator (PI) to learn more about the study. Prospective participants were informed that the study objective was to learn more about how African American women experience and cope with stress; individuals were told that participation would include a 2 hour focus group and brief follow-up contact, and that participants would receive \$30 as compensation for their time. After a telephone-based informed consent process, participants completed a screening questionnaire to determine eligibility and to obtain demographic information for the purposive sampling. If a woman chose to participate in the study, she was informed that research personnel would contact her to schedule a date, time, and location. (Woods-Giscombe, 2010, p. 670)

Recruitment took place at four antiretroviral clinics geographically dispersed throughout southern Malawi. Three of the clinics were situated in rural villages, and one was in an urban setting. Whenever the researchers were present to do a focus group at a site, the clinic nurses would ask the first six women who were at least 18 years of age if they would be interested in participating in a focus group. On every occasion, that is, for three focus groups at each clinic site all the women approached expressed interest in participating in the study. Following recruitment, the first author provided each woman with additional details about the study, including the limits of confidentiality in focus groups, and obtained informed consent. None of the women participating withdrew from the study. For their participation, women received a modest nonmonetary gift of a packet of sugar, a bar of soap and a packet of salt. (Mkandawire-Valhmu & Stevens, 2010, p. 687)

Some studies use several methods of participant recruitment or different recruitment strategies at different study sites, in particular at urban and rural study sites or for different methods of data collection used in the study (e.g., in-depth interviews and focus group discussions). It is not a limitation to use different recruitment strategies in a study; on the contrary, it provides an indication that recruitment strategies are selected as appropriate to the study context, therefore the description of each recruitment strategy should be included.

It is essential to identify the number of focus groups conducted in the study. The overall number of focus groups in any study is likely to be small, often less than 20 groups. Given that this may seem to be a small sample for readers more familiar with quantitative research, it is important to deflect the expectation of a representative sample, therefore avoiding the primary objection to qualitative studies that the findings are not generalizable (Belgrave, Zablotsky, & Guadagno, 2002). Indicate that the goal of participant recruitment is inductive discovery of the research issues and not generalizability, and justify why a representative sample is not sought or appropriate. Sample size is a linchpin for scientific research, therefore it is important to indicate how and why the sample size is appropriate for the study. Some studies use theoretical sampling to guide participant recruitment to provide diversity in study participants, and this should be clearly described. The concept of "saturation" determines an adequate sample size in qualitative research, therefore a clear explanation or empirical evidence that saturation (or data redundancy) was achieved is warranted (Guest, MacQueen, & Namey, 2012; Giacomini & Cook, 2000; Bluff, 1997). If saturation did not determine the number of focus groups in the study, a description of how the sample size was determined is needed, for example by using other evidence-based studies as a guide, or indicating budget constraints, logistical considerations, or other reasons. Some aspects of participant recruitment are conducted for pragmatic reasons and these too need to be included. Therefore, describing conceptual and pragmatic influences on the sample size provides transparency in the logic, decisions, and practical constraints on the study.

Given that homogeneity in participant characteristics is important in individual focus group discussions, state exactly how this was achieved and by which criteria participants were homogeneous and how they were heterogeneous. If diversity was built into the study design at the outset by segmenting focus groups by certain characteristics (e.g., age, gender, location), state this clearly and indicate the number of groups conducted per strata and the rationale for the segmentation used. This information may be presented in narrative or table format. Table 3.1 presents segmentation of the study population in table format for a mixed methods study using focus group discussions and in-depth interviews that were segmented by gender (male, female); location (urban, rural); and length of membership in a microcredit group (new, short-term, long-term). The table highlights the number

Table 3.1				
Segmentation of Focus Group Discussions and In-Depth Interviews				
Focus Group Discussions				
Urban site (women)	1	1	1	3 groups
Urban site (men)	1	_	1	2 groups
Rural site (women)	1	1	1	3 groups
Rural site (men)	1	_	1	2 groups
In-Depth Interviews				
Urban site (women)	3	3	3	9 interviews
Rural site (women)	3	3	3	9 interviews

Note: The number in each cell represents the number of interviews or group discussions.

Source: Reproduced with permission from M. Hennink and D. McFarland, "A Delicate Web: Household Changes in Health Behaviour Enabled by Microcredit in Burkina Faso," 2013, *Global Public Health*, 8(2), 144–158.

of focus group discussions conducted by each stratum, and the reasons for segmentation by these criteria were described in the narrative.

The extract below provides an effective narrative justification for the segmentation of focus groups among the study population of African Americans with renal disease.

We conducted focus group meetings involving African American and non-African American patients with end stage renal disease and their family members or friends for the purpose of eliciting their experiences with decision-making concerning their choice of RRT [Renal Replacement Therapy]. We hypothesized that participants' perspective on decision making about RRT initiation might differ according

to their ethnicity/race, as well as their status as a patient or family member. We also hypothesized that experiences with RRT initiation might vary according to treatment modality (hemodialysis, peritoneal dialysis, transplant). We therefore conducted focus groups stratified by race/ethnicity, patient / family member status and current treatment modality. (Sheu et al., 2012, p. 998)

#### **Data Collection**

The process of data collection needs to be described in detail. This is important because of the flexible nature of qualitative research whereby data collection may evolve iteratively as the study progresses. Belgrave and colleagues (2002, p. 1430-1431) describe this process and how it may appear to readers; "as we begin to make sense of the phenomenon under investigation, we might change our approach, change our focus, add research sites, even develop new strategies or tools... However, this strength can appear as a weakness. We can leave [readers] with the impression that we...flew by seat of our pants, with little idea of our destination." They go on to say that these impressions are avoidable by providing a transparent description of the data collection process and its rationale. If data collection proceeded in an iterative way this needs to be described at the outset, in particular how data collection was empirically guided and which aspects of data collection followed the iterative process.

All methods of data collection used in the study need to be stated and a rationale given for each method used. One indicator of research quality is the selection of appropriate methods of data collection for the research objectives; therefore, state why focus group discussions were suitable for the specific objectives of the study. If multiple methods were used, the purpose of each method should be stated. For example, a study on stigma related to obesity may use focus group discussions to identify community perceptions of obese people, and use in-depth interviews with obese people to identify individual experiences of stigma. Each research method therefore has a clear and distinct purpose related to the overall research objective. The example below provides a clear and concise justification for the selection of focus group discussions in a study on HIV vaccine acceptability in South Africa.

We selected an exploratory qualitative study design to allow us the opportunity to approach the topic broadly, given that there is little existing knowledge on this topic. We chose to explore post-trial HIV vaccine acceptability through FGDs because this method allows for expression of views and for opinions about products within the broader social context from which the participants come. This group experience replicates the experience study participants might have in decision making around this topic outside of the research setting, and is therefore more useful than the collection of individual perceptions might be. (MacPhail, Sayles, Cummingham, & Newman, 2012, p. 669–670)

It is also important to indicate who collected the data, whether this was the authors or members of a field team. A brief description of the characteristics of the focus group moderator and note-taker is typically included, because a moderator can influence the focus group dynamic and the data generated (discussed in next section on Reflexivity). A typical description may include how many moderators were used, whether they were gender matched to the focus group participants, and whether they shared the same cultural background. It is also useful to indicate whether moderators were experienced in focus group research or were trained specifically for the study. Other relevant details may include the language skills of moderators where focus group discussions were conducted in another language. For example,

The group interview...was moderated by one of the authors (a 29-year-old White female graduate student with previous interview experience). (Jette, Wilson, & Sparks, 2007, p. 327)

The research team for phase one of the study was composed of a female nurse researcher who had basic competence in Spanish and was experienced in conducting focus groups, a bilingual translator from the United States, and two local bilingual research assistants with previous experience working as health clinic assistants. The principal investigator served as the focus group facilitator. (Cooper & Yarbrough, 2010, p. 647)

A description of the discussion guide used to collect data is a key component of the methods section. Indicate how the guide was developed, for example questions may have been developed from concepts in the literature, previous empirical research, or in collaboration with colleagues familiar with the study context or community. A list of topics covered on the discussion guide is usually provided, so that readers can understand what was asked in the group discussion and whether certain questioning strategies were used to improve data validity (e.g., recall strategies for retrospective questions). Some studies include the wording of select questions asked, where these form a critical part of the analysis and research goals. If activities were part of the focus group, these should also be described and the type of data generated by the activity. It is usual to indicate how the research instrument was piloted and any resulting changes made to the instrument. The research instrument may be included in the appendix of a research report, but is rarely included in a journal article. Below are two extracts that show how the description of the research instrument was reported. The first example highlights the theoretical framework that influenced the questioning strategy (the ecologic model) and the second example describes how questions were posed in the group discussion to acknowledge they were being asked in a group setting and to protect individual confidentiality.

The focus group interviews were centered on one open ended question: 'If you could be the one in charge of increasing the physical activity level of kids your age, what would you do?' We used a number of questions designed around the three components of the ecological model to prompt the open ended question. Examples of such questions included 'Would you need to be skilled to participate in this activity or program?' (intrapersonal); 'Would you do this activity alone or with friends?' (social); and 'Where would this activity be done?' (environmental)... (Humbert et al., 2006, p. 470)

Data were collected using a semi structured topic guide that addressed the key issues around vaccine acceptability. After some discussion of vaccines in general, we asked participants relating specifically to HIV vaccines: What have you heard about vaccines for HIV/AIDS? What are the reasons that you or your close friends would want to be vaccinated against HIV/AIDS? What are the reasons that you or your close friends would not want to be vaccinated against

HIV/AIDS? How would being vaccinated change you or your close friends' sexual behavior? Participants were asked to discuss their own views and their perceptions of the views of others in their communities to get a range of responses but also to protect the confidentiality of those not wishing to disclose their own potential behaviors. (MacPhail et al., 2012, p. 670)

Including logistical details about data collection also provides useful context about how the focus groups were conducted. Indicate where focus groups were held, whether they were conducted in community locations, how privacy was maintained, how seating was arranged, and any drawbacks of the location used. Indicate the length of the group discussion and explain any particularly long (more than 2 hours) or short (less than an hour) groups. If the group was conducted in another language this needs to be stated. Include whether participants were provided with refreshments, incentives, or a payment to attend. Any difficulties encountered in conducting the group discussions need to be highlighted and whether these were mitigated, because they may influence the quality of the data generated. A description of how the group discussions were recorded is essential. Typically focus group discussions are recorded using an audio-recording device (e.g., digital or tape recorder) or by a note-taker. If a recording device was not used, indicate the reasons why and state how data were then generated.

# Reflexivity

Qualitative research involves intense interaction with study participants and uses flexible research instruments, which can lead to a greater potential for the researcher to influence data collected, compared with a fixed-format quantitative survey. Furthermore, the researcher's background, position, or presentation can also influence data collection and interpretation (Green & Thorogood, 2009; Berg, 2007; Hesse-Biber & Leavy, 2006; Finlay & Gough, 2003; Pillow, 2003). Qualitative researchers are therefore advised to describe the characteristics of those involved in data collection and analysis and highlight any potential effect this may have had on data generated, this is known as *reflexivity*. Reflexivity therefore needs to be considered in writing qualitative research to make explicit any potential influences of the researchers or the research

process on data produced. Reporting reflexivity is also important to demonstrate an understanding of the interpretive paradigm, the influence of subjectivity, and how it was managed throughout the research process, thereby contributing to the rigor of the study. Reflexivity is typically reported in the methods section, and the level of detail is influenced by the broad paradigm underlying the research discipline or academic journal, whereby social sciences typically require more detail on this than biomedical science (Corbin & Strauss, 2008; Finlay & Gough, 2003; Lynch, 2000).

Two aspects of refexivity, highlighted by Hesse-Biber and Leavy (2006), are commonly reported: personal and interpersonal reflexivity. *Personal reflexivity* involves reflecting on the researchers' own background and assumptions and how these influenced the research process and data generated. For example, the socio-cultural background, gender, training, or presentation of a focus group moderator sends certain unconscious signals to participants about this person, whereas the researcher's own beliefs and assumptions about the study population influences their questioning strategies and interpretation of the group discussion. Therefore, a methods section typically highlights the background characteristics of those involved in data collection and analysis and highlights any clear (or potential) influences on the data collected and whether (and how) these were managed.

The extracts from focus group studies below show how researchers acknowledged personal reflexivity by describing the potential influence of the moderator's characteristics on participants, and whether this was managed in any way.

It is particularly important to point out for this report that although the first author is a Malawian woman and has experienced understanding of the social and cultural context of the women's lives, her educational background and social class required her to make efforts to flatten the hierarchical power inherent in the process of research... For instance, she dressed in clothing common in the context, limited use of technologies with which the women were unfamiliar, prioritized verbal over written communication and used the inclusive first-person plural we in posing questions. (Mkandawire-Valhmu & Stevens, 2010, p. 686)

Recognizing that the role of the facilitator in the data collection, we selected a young African woman fluent in all three languages to moderate the discussions in the belief that her age, gender and race would counter the educational distance between herself and the discussion participants. This focus on reflexivity has been noted as vital in other qualitative data collection using FGDs. (MacPhail et al., 2012, p. 670)

Although I was no longer employed by the correctional system, my social location as a White, middle-class woman with formal education allied me with the authority of the institution [a US prison]. It is likely that my status as White and middle class and the prison environment both influenced and shaped the participants' narratives. (Pollack, 2003, p. 466)

Interpersonal reflexivity involves reviewing the setting of the group discussions and the interpersonal dynamic within the group and between the moderator and participants, which may have influenced data produced. For example, power dynamics may have emerged in a group discussion, interruptions to the group may have influenced participation, or there may have been issues with the location where the groups were held or with the level of rapport development achieved. These issues may influence data generated and are important to note in the description of research methods. The first two examples below are from a focus group study among prison inmates and staff and demonstrate reporting of interpersonal reflexivity. The first quotation indicates how the situational influence of the prison context may have influenced participants' contributions, whereas the second describes how potential power dynamics between the researchers and participants were diverted. The third example shows how reflexivity on group dynamics was reported in a study among participants with serious mental health issues, who were recruited to share their experiences on receiving support services.

During one group interview, for example, the primary investigator took a visible step to ensure that members of the inmate peer staff refrained from walking into the area where the interviews were being conducted as their presence was inhibiting. This small gesture was interpreted by the inmates

that the primary researcher was independent, understood the inmate or convict code of conduct and its influences on the tenets of daily prison life, and was willing to protect them during the data-gathering phase; this resulted in a noticeable increase in the depth of discussion and the number of inmates participating. (Patenaude, 2004, p. 78S)

On numerous occasions during each group interview, it was necessary to reassure the participants that the research team was independent of ADC [Arkansas Department of Correction] and was seeking ways to improve the substance abuse treatment program. (Patenaude, 2004, p. 78S).

In all focus groups the women mainly directed comments to me [moderator] and were often reluctant to discuss issues amongst themselves. This was possibly a reflection of the women's poor communication and social skills, and their lack of experience of sharing ideas in a group... Whilst this dynamic became increasingly evident as the study progressed, it was difficult to see how it could be resolved... Whilst the level of verbal interaction in the focus groups was low, there was evidence of other types of interaction amongst the women. In particular, there appeared to be considerable empathy between the women, nonverbal acknowledgement of shared experiences, and they were frequently very supportive towards one another. (Owen, 2001, p. 655–656)

A common concern about reporting reflexivity is how far to go. What is important is to find a balance between demonstrating reflexivity and becoming overly analytical on potential influences on the study. Finlay (2002, p. 541) states that "we need to strike a balance, striving for enhanced self-awareness but eschewing navel gazing." Similarly, Guest et al. (2012, p. 252) fairly argue that "the researcher, research process and research context can affect *all* types of data collection...it doesn't seem productive or fair to ask practitioners of qualitative research to discuss reflexivity or response bias to a greater degree than researchers in other disciplines. In line with good overall scientific practice we therefore recommend that qualitative researchers simply report the known potential for, and measures taken to minimise, relevant biases in their studies, as one would with any scientific study." Researchers

values and self-identity may also be ingrained within individuals, therefore some level of reflexivity in writing research findings is important to bring forth a greater sense of self-awareness on the researcher's role in shaping data generation. Reflexivity is needed in all research studies to legitimize, to validate, and to question the research process (Pillow, 2003).

#### **Data Analysis**

The description of data analysis continues to be one of the weakest areas of published qualitative research (Guest et al., 2012). Several issues are common weaknesses in reporting data analysis. First, data analysis is often treated as a "black box" whereby analytic procedures are simply absent from written reports. In other situations only a broad analytic approach is mentioned with no detail on the analytic tasks, procedures, or decisions made to support the findings presented. For example, stating only that "thematic analysis was used" provides insufficent information about how data were actually analyzed and the procedural steps taken to ensure validity of the study findings. Unfortunately, articles with these critical omissions are still published. Second, at times analytic methods are reported incorrectly. As qualitative research increases in popularity specific analytic terminology has become familiar and appears in research reports without evidence that the task or approach stated was actually used. This is perhaps seen most often in studies claiming to use the "grounded theory" approach, yet the analytic tasks described or the nature of the results presented do not follow grounded theory and most fall short of theory development. Third, some research reports present a "textbook" description of analytic processes resulting in a generic outline of procedural steps in analysis, with no indication of how analytic tasks were applied to the specific study data. These limitations on reporting data analysis have critical omissions that make it difficult to judge the quality of the analysis and validity of the results. Therefore, including procedural detail that is specific to the study data is a critical component in reporting data analysis. Reporting of data analysis also differs by the analytic approach used. Below are some general guidelines on what may be reported in a comprehensive description of data analysis in focus group research.

For readers unfamiliar with qualitative research, the analytic procedures used need to be made explicit and clear so that

readers can follow the analytic process and thinking that led to the conclusions presented. Belgrave et al. (2002) make this point succintly: "if our strategies for selecting research participants and collecting data are somewhat unfamiliar to quantitative [readers], our means of analyzing data verge on the incomprehensible... to tell a quantitative [reader] that 'categories will emerge from the data' or that you 'will develop themes' is to tell him or her virtually nothing" (p. 1435–1436). The description of data analysis therefore needs to be sufficiently transparent to be understood by almost any scientific audience. Rather than relying on certain terminology to be self-evident of an analytic task (e.g., codes, categories, constant comparison), explain what was actually done in clear and simple words to enable the analytic process to become meaningful to those unfamiliar with this approach. Some suggestions on areas of greater transparency are described next.

#### Describe how data were prepared for analysis

Indicate whether written transcripts were developed from the group discussions, if these transcripts were verbatim or in another format, and how data were cleaned and checked for accuracy. State whether field notes or additional data from the group discussions were part of the analysis and the form of these additional data. (e.g., drawings, pile sorts, and so forth). If transcription also involved translation of the discussion, describe how the translation was conducted and verified. If a written transcript was not developed, provide the reasons. State the name and version of any computer package that was used for textual data analysis and describe exactly how it was used in analysis. Even when software is used it is still necessary to document the analytic steps undertaken, because software for qualitative data does not actually do the analysis itself, rather it provides tools that allow researchers to manipulate the textual data in various ways to facilitate analysis.

# Identify the overall analytic approach used and the rationale for selecting it

Grounded theory, thematic analysis, conversation analysis, and content analysis are examples of distinct approaches to textual data analysis, each with a different analytic focus and distinct analytic tasks. Providing a rationale for selecting the analytic approach used provides evidence of research quality, which begins with selecting an analytic approach appropriate for the research objectives. It is

not sufficient to only identify the analytic approach used without providing the procedural detail on exactly how analysis was then conducted. Analytic processes vary and there exist adaptations of several approaches, therefore procedural details of the analytic tasks conducted are important. A comprehensive description of data analysis provides an audit trail of all analytic tasks conducted, begining with data preparation and each subsequent analytic task conducted. This demonstrates analytic rigor and how the study findings presented were derived. The analytic description also needs to be complete. For example, some studies using thematic analysis or grounded theory only provide details about data preparation (e.g., developing codes and coding data) but then fail to describe how the coded data were then analyzed, because coding is only one task in the analytic process of these approaches. Therefore, a comprehensive description of all analytic steps and procedures is needed.

Describe how analytic tasks were applied to the study data

Avoid presenting a generic description of data analysis by describing how analytic tasks were applied to the particular study. For example, indicate whether certain concepts from the literature were used as codes, identify which intercoder assessment procedures were used and their outcome, describe specific comparisons made across data, provide examples of inductive categories developed, or detail the components of a conceptual framework developed. These details provide specificity on how analytic tasks were applied to the study data. In addition, a description of analytic reasoning makes transparent how certain concepts were developed from the data or why links between certain issues are important. Overall, what is needed is a transparent description of the analytic tasks used and the analytic reasoning to provide a comprehensive description of data anlysis.

#### Describe how study findings were validated

Describing measures to ensure the validity of the study findings is often overlooked in the research methods section. Indicate any techniques used to ensure that the issues identified, concepts developed, or explanations presented are empirically grounded in the study data. These details are critical to demonstrate that the results presented are valid and based on systematic data analysis involving effective validity checks, and not subjective interpretation. This information may comprise a separate paragraph or validity checks may be interspersed with the description of the

methodological tasks. Strategies for qualitative data validity and reliability are described in Chapter 5.

#### **Ethical Issues**

It is usual to indicate ethical approval of the study and how ethical issues were adressed throughout the research process. Issues of consent and permission need to be described in the research methods. For example, state how informed consent was received from participants (e.g., oral or written), and how permission to record the group discussion was sought. In addition, describe how participants were informed that their involvement in the focus group is voluntary and they have a right to leave the discussion at any time. Confidentiality and anonymity can be particular concerns in focus group research because of the group nature of data collection. Therefore, indicate measures taken to maintain confidentiality of the information shared in the group, and how data records were secured. State how participant identities were protected. Also describe how anonymity of participants was managed in reporting the study findings. Indicate whether participants received any incentive or payment for participation in the group discussion and how potential coersion was curbed. Additional ethical issues may relate to the discussion of sensitive topics, such as how potential harm to participants was minimized (e.g., in question phrasing, provision of support materials).

### **Study Limitations**

It is routine to indicate any limitations of the study that influence how the study findings are read and understood. The main focus here is on the methodological limitations of the study, such as limitations of the study design, selection of participants, data collection issues, and so on. However, a common pitfall is that generic drawbacks of qualitative research are reported rather than the limitations of the particular study. Simply stating the drawbacks of the qualitative approach (e.g., small sample size) or limitations of focus group research (e.g., reduced confidentiality) is not informative because these are generally well known and are anticipated at the outset of the study. It is more appropriate to report limitations of the study per se, such as a study that was only conducted with women, thereby the exclusion of male perspectives was a limitation, or a study conducted only in rural areas is limited by the exclusion of data from urban participants. Specific omission may also be described, such as certain topics not discussed in the focus

groups that may in hindsight have yielded fruitful data. Other limitations may include unforeseen logistical issues that arose during data collection and curtailed the original study design, or compromised the quality of data collected. Describing these limitations allows readers to understand the boundaries of the study when reading the study findings. It is also good practice to indicate whether (and how) study limitations were minimized. Although some methodological limitations simply need to be stated, other issues may have arisen during data collection and were mitigated in some way.

The extracts below report the limitations section of two separate focus group studies. Each extract reports limitations specific to the study design (not generic limitations of qualitative research). For example, each describes the potential limitations in how researchers structured the composition of focus groups (e.g., limitations of using groups of participants with mixed language skills in the first example and using single-gender group composition in the second). Each example also indicates how potential limitations were minimized. The first example also indicates the parameters in which the study findings can be relevant to other settings to deflect the limitation that qualitative findings lack generalizability.

Several considerations must be kept in mind when interpreting the findings derived from this study. First, we offer a caveat related to language. Although the inclusion of multiple ethnic-linguistic groupings enabled us to hear about the experience of service users who are not often included in other studies, important themes or cultural references may have been 'lost in translation.' In a broader sense, we also noted the possibility of 'linguistic disparities' across focus groups, with members of some groups expressing their experiences more eloquently than members of other groups. Second, we acknowledge that we seek transferability rather than generalizability... Accordingly, the findings are applicable to contexts that are similar to the one in which this study was undertaken, that is, urban environments in which individuals with mental health problems of diverse cultures use formal treatment programs or peer support groups. Third, we recognise that the findings reflect the subjective experiences of the study participants and the cultural communities about which they spoke. (Wong, Sands, & Solomon, 2010, p. 658–659)

We acknowledge that there are limitations to the data used in this article. We collected data in this study through focus group discussions, which might have allowed for overrepresentation of some research participants who might have dominated the conversation and influenced the overall dynamics of the groups. We made attempts to account for this through ensuring that all comments in the transcripts were accountable to individuals for tracking, and by using a facilitator skilled in managing group dynamics. The information might also be influenced by the decision to use single-gender FGDs, although we did this to increase participant comfort with a potentially difficult and sensitive topic. We did not use a formal translation and back translation process for the topic guide, given that FGDs should be reflexive and not dependent on formally structured questions. This might have resulted in errors in interpretation that we did not identify, although attempts were made to limit this through in-depth discussion of the FGD topic guide with the facilitator, specifically examining the language to be used. (MacPhail et al., 2012, p. 675)

Readers may also expect some indication on the extent to which study findings can be transferred to other settings or similar population groups. In general, population level generalizability is not within the scope of focus group research; however, transferability of the findings from qualitative research is typically achieved in the "conceptual transferability of the concepts generated, rather than the statistical representativeness of the sample" (Green & Thorogood, 2009, p. 267). Therefore, it is useful to highlight any concepts generated from the study that may have wider applicability and to indicate their potential transferability.

Finally, if all the advice in this chapter were heeded in writing the methods section of a qualitative study, the document would go well beyond any prescribed word limits. Therefore, careful discretion is needed in deciding where greater detail or justification is required for a particular study. This is primarily guided by the target audience and the purpose of the research itself. However, perhaps the core advice of this chapter is the following: first, to adhere to the interpretive paradigm when writing qualitative research methods, even though the procedures may need to be explained; and second, to become practiced at concisely conveying scientific procedures while maintaining analytic depth.

#### **Key Points**

- There is no single way to conduct focus group research; therefore, it is necessary to provide transparency on the research process and methodological decisions that shaped the study outcomes.
- The methods section is a critical component of the research report and needs to simultaneously describe the research process, set the context of the study, and reflect the quality of the study.
- The research methods section needs to not only state *what* was done, but also *how* it was done and *why* it was done this way.
- Writing the research methods needs to reflect the interpretive paradigm within which focus research is conducted, in terms of describing the research process, applying methodological concepts, and using appropriate terminology.
- A challenge in writing the methods section is to write concisely yet provide the necessary procedural detail and methodological justifications that give the study scientific credibility.
- The methods section may include a description of various contexts, such as the theoretical context of the research problem, the socio-cultural context of the study, and the methodological context of data collection.
- The research methods section is inevitably shaped by the target audience and their requirements.
- The research methods section typically includes a description of the study setting, research design, participant recruitment, data collection and analysis, ethical issues, and study limitations.