The discussion guide is not a stand-alone instrument. The moderator is an important component in the delivery of questions and clarifications, and in probing the discussion. Therefore, the questions and their delivery by the moderator need to be assessed in the pilot-test. Pilot testing is thus an opportunity to also provide feedback to the moderator. During the pilot-testing it is important to identify whether any problem identified is caused by the design of the guide, the skills of the moderator, or perhaps issues related to the participant group. The guide can then be redesigned, the moderator retrained, or issues related to participants themselves can be reviewed.

Conducting Focus Group Discussions

Roles of Moderator and Note-Taker

Conducting the group discussion is the central activity in focus group research. It generates the study data; therefore, an effective group discussion is critical. Managing an effective discussion can be challenging and rewarding. A focus group discussion is typically conducted by a moderator and note-taker team.

A note-taker has multiple roles. Primarily they are responsible for writing down the key points raised in the discussion in as much detail as possible. The note-takers summary is important because it is the only record of the discussion if the recording device fails or participants refuse permission to record the discussion. The note-taker's summary needs to include the main points discussed and if possible key phrases or short sentences that reflect participants' expressions on critical issues. The summary should separate facts from any interpretation of the issues by a note-taker. In addition, a note-taker can also attend to any disturbances to the group, such as latecomers, so that the moderator can focus on conducting the group discussion. A note-taker sits outside the actual discussion circle to attend to these issues and to take notes unobtrusively. The note-taker can also operate the recording device and assist the moderator with other tasks that arise. More details on recording the group discussion are provided later in this chapter.

The moderator has the critical role of conducting the group discussion. In many ways the role of the moderator is similar to that of an interviewer in an in-depth interview in that they are responsible

for developing rapport, collecting detailed data, pacing the session, and remaining focused on the research agenda. However, moderating a focus group discussion can be much more challenging because the moderator needs to manage a group of participants, which means greater skills and attention are needed in questioning and probing a whole group, fostering group cohesion, and managing the group dynamics, while remaining focused on the research objectives and facilitating the flow of an interactive discussion. Moderating a group discussion is a skilled activity, and the quality of the data generated depends on these skills. An experienced moderator uses a range of techniques to effectively manage the group discussion so that it yields useful information to meet the research objectives. These include adapting the level of moderation, effective listening, probing the discussion, seeking diverse views, or using activities to stimulate discussion. These techniques are discussed in the following sections. The moderator's roles are summarized next (adapted from Hennink et al., 2011, p. 155–166).

Provide Information
- Introduce the note-taker
- Describe the purpose of the study
- Outline how the group will be conducted (i.e., "guidelines")
- State the length of the discussion (e.g., 60 or 90 minutes)
- Answer participant's questions

Attend to Ethical Issues
- Indicate that participation is voluntary
- Confirm consent for participation
- Assure confidentiality of the discussion and data
- Ask permision to record the discussion

Enhance Group Cohesion
- Introduce all participants
- Create a comfortable, permissive environment
- Develop rapport with participants (e.g., friendly informal style)

Manage Group Dynamics
- Seek contributions from all participants
- Encourage quiet participants and manage dominant members
- Foster respect for different views

Facilitate the Discussion
- Encourage discussion between participants
- Seek a variety of views and experiences
- Use probing to seek depth and detail in responses
- Reflect positive body language to encourage discussion
- Listen to issues raised and follow leads for discussion
- Keep the discussion focused on research topics
- Determine whether responses provide sufficient information on each topic
- Invite new issues and opinions
- Vary moderation techniques to broaden or narrow the discussion
- Monitor timing and pacing of the discussion

The essential role of the moderator is to foster a productive group discussion that generates useful data to meet the research objectives. Managing a group discussion may seem straightforward but it involves a great deal of skill to facilitate the discussion and manage the group dynamics. A moderator's role involves building rapport with participants, which begins with creating a comfortable atmosophere and friendly tone in the introduction, in question delivery, and in encouraging participation. A moderator also needs to actively manage the discussion by carefully listening and following up participant's contributions; probing for depth, detail, and clarity; stimulating debate while fostering respect for diverse views; and courteously managing group dynamics. All these tasks need to be conducted similtaneously while focusing on the research objectives and intended outcomes of the study. The moderator also needs to pace the discussion, which not only involves covering all issues in the prescribed time period but also sensing when the group has exhausted one topic and is ready to move to the next.

The moderator must be familiar with the research objectives to make quick decisions during the discussion on whether new issues raised should be pursued or the discussion redirected back to topics in the guide. In many ways the moderator needs to remain focused and flexible.

The group moderator needs to ensure that the discussion remains focussed around the central research issues, yet allow sufficient divergence to identify new and unanticipated

issues to emerge from the discussion. The moderator should encourage and manage a discussion, yet they should not dominate the discussion. The moderator needs to facilitate and channel the natural flow of the discussion, but not force it along a predetermined path. (Hennink, 2007, p. 177).

Although it is a moderator's imperative to ensure that the discussion remains focused on the research objectives, "in practice it can be difficult to decide when discussion goes off track, as participants may be developing a point that turns out to be germane, although this may not be clear from the outset" (Barbour, 2007, p. 106–107). Therefore, a moderator may often allow a group to continue to discuss a point until its relevance can be determined, whereby the moderator may either actively probe the issue or redirect the discussion. Furthermore, the moderator needs to be familiar with the questions on the discussion guide, the purpose of each question, and the approximate discussion time on each issue to effectively make decisions throughout the discussion process. Thereby, a moderator is continually thinking on their feet and making decisions on how to direct the discussion.

A key role of the moderator is to facilitate an interactive discussion among participants to achieve "non-directive interviewing" (described in Chapter 1). This provides the full benefit of using the focus group method. The core principle of non-directive interviewing is to move away from interviewer-dominated data collection and toward promoting a dynamic discussion among particiapants to access more spontaneous information than can be achieved through direct questioning. With this approach, the moderator's aim is to allow the discussion to emerge from the group itself while guiding it around the research topics. The group discussion format provides more scope for spontaneous issues to emerge than an individual interview, because there are multiple participants contributing to the discussion; the discussion becomes led more by the participants themeselves with the moderator ensuring that key issues are covered in the allotted time (Ritchie & Lewis, 2003). Effective group interaction leads to participants essentially probing each other for explanations, justifications, clarifications, examples, or simply by entering into a dynamic discussion. When participants agree with one another this provides confirming data about an issue, whereas if they disagree the ensuing dialogue can

provide greater insight into the differing perspectives of the issues, thereby providing greater depth and sponteneity to the resulting data. As Kitzinger states (1994, p. 107), achieving effective discussion between participants enables researchers to "reach parts that other methods cannot reach—revealing dimensions of understanding that often remain untapped by the more conventional on-to-one interview or questionnaire." Therefore, an interactive discussion can uncover new and unanticipated issues, which is a core goal of focus group research.

The style of moderation used can encourage or stifle discussion among participants. Figure 2.5 depicts a moderator-dominated discussion involving serial questioning of each participant versus an interactive discussion between participants with limited moderator involvement. A moderator should aim to acheive the latter dynamic, because a spontaneous discussion is less likely to occur with a more directive style of moderation (Hennink, 2007; Flick, 2002; Krueger, 1988). An effective focus group discussion is one where the moderator has limited input yet still subtly manages the discussion by probing participants, allowing time to explore issues, picking up on participants' cues, and keeping the discussion on the research issues. However, the moderator's level of direction may vary throughout the discussion, with a more directive style of moderation in the

Question/Probe ——→
Response   - -→

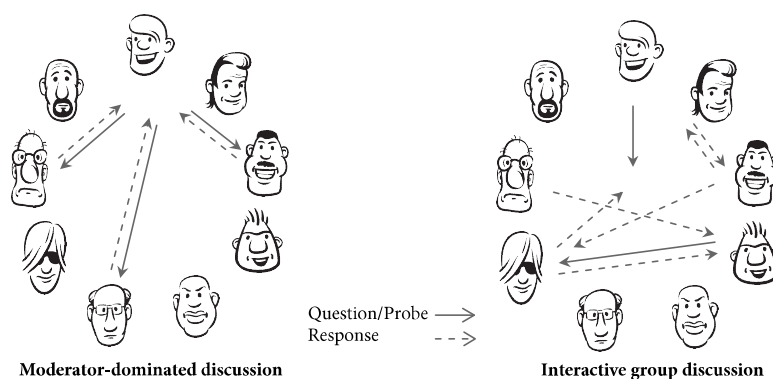**Moderator-dominated discussion**   **Interactive group discussion**

Figure 2.5. Types of group moderation. Adapted and reproduced with permission from Hennink, M., & Diamond, I. (1999). Using focus groups in social research. In A. Memnon & R. Bull (Eds.), *Handbook of the psychology of interviewing* (Chapter 2.5). Chichester, UK: Wiley & Sons.

beginning of the discussion to provide focus and a less directive approach during the central discussion to enable more sponteneous dialogue whereby new issues may emerge naturally.

When focus group discussions are conducted in another language, it may seem logical to conduct the discussion through an interpreter. However, an interpreter has a significant impact on the group dynamics and reduces the likelihood of creating an interative discussion, because each comment by a paticipant needs to be translated, which quickly stifles the flow of a natural discussion. A more effective strategy is to train a moderator fluent in the appropriate language to conduct the group discussion. See the earlier section on training a field team and also Hennink (2007) or Maynard-Tucker (2000) for further guidance on training moderators.

Active Listening

Listening is a key skill in effectively moderating a group discussion. Experienced moderators spend more time listening to participants than talking or questioning. Listening to participants' contributions allows the moderator to identify subtle cues in what is being said to redirect and manage the discussion without disrupting its momentum. When training a moderator "perhaps too much emphasis is placed on asking questions, when the real skill may be listening" (Barbour, 2007, p. 111). A moderator may use active and passive listening to moderate the discussion (Fern, 2001).

Active listening involves the moderator carefully listening to participant's comments and building on these to guide the discussion. Active listening allows the moderator to take cues from participants' comments to subtly direct the discussion. It allows the moderator to follow issues of importance to participants, explore these more fully, and maintain the natural flow of the discussion. This is the essence of qualitative interviewing. As the moderator listens to the discussion they are simultaneously considering the research objectives in deciding whether to follow the issues raised or redirect the discussion back to issues in the discussion guide. Therefore, it is an active task of listening, processing, and making decisions on how to guide the discussion. Active listening followed by effective probing (described later) are two basic moderation skills for facilitating an effective discussion.

A moderator may also use passive listening during the group discussion. Passive listening is a more empathetic task, whereby the moderator allows the discussion to flow naturally without interrupting or influencing the direction. "Knowing when not to intervene is, in itself, a skill…One of the hardest things for the novice moderator is perhaps taking a back seat and refraining from asking questions or making comments, provided that the discussion remains on track" (Barbour, 2007, p. 106). Passive listening may involve making positive and encouraging gestures to show interest in each contribution, but not direct the discussion as such. This approach is useful during a dynamic discussion to allow issues, responses, and dialogue to emerge naturally among participants. Thus, the moderator is essentially "leaning back" during parts of the discussion allowing the discussion to proceed uninterrupted. This strategy is most effective if used intermittently with active listening, whereby passive listening provides opportunities for participants to raise issues spontaneously thereby capturing new perspectives, and active listening provides direction to the discussion again.

Using Non-Verbal Cues

Using non-verbal cues given by participants can be an effective moderation strategy to encourage participation. Most moderators can feel participants' interest or enthusiasm for a topic that is independent of their actual contribution to the discussion (Fern, 2001). A moderator becomes familiar with certain facial expressions, gestures, or body language of participants that signal their desire to contribute to the discussion, disagreement with a speaker, or confusion about the dialogue. For example, frowning or shaking the head can indicate disagreement with what is being said; leaning back or looking away from the group may indicate boredom; whereas interest in the discussion may be signalled by attentiveness, leaning forward, and looking at a speaker. These non-verbal signals can be used to great effect by a moderator to stimulate further discussion or elicit views from individual participants. A moderator may notice one participant nodding as another speaks, and say, for example, "You are nodding, did you have a similar experience you would like to share with us?" Alternatively, a moderator may notice a participant frowning and simply ask "Do you disagree

with this issue?" A moderator's attentiveness to non-verbal sig-nals can dramatically increase participation in the discussion in a more natural way than calling on individuals at random for a con-tribution (Stewart & Shamdasani, 1990). A moderator needs to be aware, however, that although many non-verbal cues are universal some may have different meanings across cultures.

Motivational Probing

Motivational probes are short verbal cues used by the moderator to encourage participants to continue speaking. A motivational probe can be an encouraging word or phrase that is typically unspecific, for example uttering "uh-huh," "I see," or "ok" as a par-ticipant is speaking. This is different from topical probes written in the discussion guide (as described previously), which are specific topics related to a particular question (e.g., "cost" or "stigma") to remind the moderator to ask about this topic.

Motivational probes are very effective in gaining greater depth, clarity, and nuance on the issues discussed, which can greatly increase the quality and richness of the data. Motivational probing can also foster a positive group dynamic, because it indicates that the moderator is listening and interested in points raised by partic-ipants. Motivational probing is often used more at the beginning of the discussion to encourage participants to provide detailed contributions. However, one needs to take care not to overprobe participants, as this may stifle the discussion because participants may feel that the moderator is looking for specific responses.

A moderator can direct a motivational probe to an individual in the group in the same way as in an in-depth interview. The simplest example is uttering "uh-huh" to acknowledge a partici-pant's contribution and encourage them to continue speaking. Other motivational probes for individuals include the reflective and expansive probes. The reflective probe involves the moderator paraphrasing a participant's comment for clarification and contin-ued dialogue. The expansive probe seeks more information from a speaker by the moderator typically stating "Can you tell us more about that?" Additionally, the group format of a focus group pro-vides a unique opportunity for a moderator to direct motivational

probes to the whole group and thereby stimulate discussion. These group probes can be very effective in fostering interaction among participants and allowing a natural discussion to develop. Greenbaum (2000, p. 27) states that

> an important implied role of the facilitator is the ability to use moderation techniques that will 'peel away the onion' and delve into the real reasons for the attitudes or behaviours that are indicated. An integral part of this is to leverage the energy of the entire group to explore the topic area in depth.

A wide range of group probes can be used, as summarized below from Hennink et al. (2011, p. 162). Perhaps the most challenging is the silent probe. Silence can be very uncomfortable for a moderator. However, it is a simple and effective strategy that actually increases contributions to the discussion (Krueger & Casey, 2009). Conversely, too long a pause can have the opposite effect, therefore, a 5-second pause is typically recommended.

Types of Group Probes

Group probe	Seek further information from the group by using an issue raised by one participant to seek input from others. For example, "Jane raised an interesting point. Does anyone else have a similar experience?"
Group Explanation Probe	Ask the group to collectively explain an issue. For example, "Everyone seems to agree that the age of marriage should be 18 years. Can you all explain the reasons for this?" or "There seem to be several different views on the age of marriage, can you all explain the reasons for this difference?"
Ranking Probe	Ask the group to rank the issues raised, then provide reasons for their ranking. For example, "We have identified five problems in this community. Can you rank these in order of importance?" Then, "Why is this issue ranked first?"

Probe for Diversity	Ask for different views to seek diversity in opinions. For example, "Does anyone else have a different opinion or experience?" or "It seems like everybody has the same opinion, do you know whether others in the community have different views?"
Silent Probe	Remain silent for 5 seconds after a participant has spoken, to enable the speaker to expand their point or another participant to respond.

Managing Group Dynamics

One of the challenges of moderating a group discussion is managing the group dynamics. Every group has a range of personalities from those who are quiet to others who dominate the discussion. Kelleher (1982, cited in Krueger & Casey, 2009) estimates that 40% of participants are eager to share insights, another 40% are likely to be more introspective and contribute when the situation presents itself, and 20% are apprehensive and rarely share their views. A moderator's task is to manage the group dynamics that result from these personalities so that all participants have the opportunity to share their views. The moderator needs to be aware of how each of these personalities can affect group dynamics and use a range of strategies to manage each situation that arises. Some strategies are described next.

Quiet participants often remain silent during most of the discussion, providing only brief comments or responding only when called on. It can be easy to overlook a quiet participant, particularly when they are overshadowed by more dominant members. However, their opinions are equally important and it is the moderator's role to encourage their contribution. A quiet participant can often be encouraged to share their views with gentle probing by the moderator, open body language, and welcoming eye contact. A moderator may call on a quiet participant directly, but should be careful not to inhibit them by highlighting their silence. Inviting contributions that reinforce the value of their views can be most effective. For example, "Janice, we also value your views, do you have an opinion about this issue?" Reflect the value of

their contribution by using it to stimulate a broader discusson, for example, "That's a good point what do others think?" Sometimes simply acknowledging the contribution of a quiet member is sufficient, for example, "Thank you. We have also heard this in other groups too." Participants who are quiet are likely to be acutely aware of their lack of engagement and the longer they remain silent the more difficult it may be to contribute. Therefore, gentle invitations to contribute by the moderator may come as welcome relief for these participants. Sometimes an entire group is quiet, and a moderator may need to take more time to develop rapport and reinforce the importance of participants' views. A quiet group may also be the result of poor participant selection, where a heirarchy has developed or participants feel they have little in common with others.

Many focus group discussions have a dominant participant who monopolizes the discussion. They may always be the first to respond to a question or to react to the comments of others, or provide lengthy or repetitive comments (Ritchie & Lewis, 2003). The challenge for the moderator is to allow a dominant participant to share their views but ensure that they do not overshadow others and inhibit their contributions. The moderator can use body language to signal reduced interest in the dominant participant once they have made their point, by reducing eye contact, turning a shoulder toward them, or looking down at the discussion guide. Occasionally, a moderator may need to use verbal cues to redirect the discussion away from the dominant member to allow other participants to contribute. For example, "Thank you for your views (then turn to the rest of the group). Perhaps we can hear the views of others as well?" or "Would anyone else like to comment on this point?" Usually a combination of verbal and nonverbal strategies begins to equalize contributions of group members. Moderators always need to remain tactful in these situations to avoid a negative impact on the group dynamic, and emphasize the importance of the dominant participant's comment before redirecting the discussion. If a moderator is ineffective in managing a dominant member, others in the group will begin to interrupt the dominant speaker to contribute their own views or they will simply lose interest and stop participating.

Some groups may include a rambling participant who feels very comfortable in the group and provides overly long responses or

accounts that are of marginal or no relevance to the discussion issues. The moderator needs to manage a rambling participant because they take up the limited time for the group discussion and impede the ability for others to contribute in a similar way to a dominant participant. This may be achieved by reducing eye contact; redirecting the discussion (as described previously); or occasionally by interrupting them to enable others to contribute to the discussion.

Occasionally, a participant may proclaim that they are an expert on the topic with more knowledge than others in the group. These participants are rarely true experts, but they can easily create a hierarchy in the group whereby others begin to defer to them rather than share their own views. This situation can be particularly detrimental to group dynamics and quickly reduce the quality of the discussion. A moderator may disempower the "expert" by indicating that everyone in the group has expertise on the research topics, which is why they have been invited to the discussion, and that researchers are interested in the views of all group members. Occasionally, a participant has genuine expertise on the topic, whereby the moderator may acknowledge this but still emphasize that all perspectives are valued.

Some participants may have very strong views on the discussion issues, they may vehemently disagree with other views presented, or argue with other participants. A novice moderator may immediately try to quiet the argument or quickly move the discussion to the next topic to avoid conflict in the discussion. However, unless the argument was acrimonious and damaging to the group dynamics, then disagreement and thoughtful argument is a valuable contribution to the discussion, and a reminder to respect all participants points of view may be all that is needed. Barbour (2007, p. 81) offers the following advice, "focus groups allow the researcher to subtly set people off against each other and explore participants' differing opinions. Rather than seeking to move the discussion along…probe and invite participants to theorize as to why they hold such different views." This can result in fascinating insights on the different perspectives that adds valuable data to the study.

Group Location and Seating

A focus group discussion can be conducted in any type of location. They are often held in community settings, such as a town

hall, school room, church, hotel, restaurant, offices, and in out-door locations. An ideal location is quiet, private, comfortable, free of distractions, and easy to access.

A quiet location is critical for participants hear one another and to get a clear recording of the discussion. Always try to test the recording equipment at the location, because unexpected background noise may conceal participants voices making later transcription difficult. The location should be easily accessible for participants. Selecting a central community location or a venue regularly used by study participants is preferable. A neutral venue is also important. Sometimes materials at the venue (e.g., posters or advertising materials) can influence participants' contributions to the discussion. For example, a group discussion held at a health clinic displaying anti-abortion posters may influence how partici-pants discuss this issue. Similarly, assess whether a venue has any particular associations for particpants. For example, a focus group held in the house of a prominent politician may lead participants to withold comments that do not align with that politician's views, even though they are not present at the discussion (Hennink et al., 2011).

Many focus group discussions are successfuly held outdoors. In some settings this is the only option available. Figure 2.6 shows a focus group discussion held outdoors. The main issue with

Photo: M. Hennink

Figure 2.6. Focus group discussion held outdoors in Uganda.

groups held outdoors is the lack of privacy. Participants may feel exposed or passers-by may stop to listen or join the group uninvited. Onlookers can disrupt group dynamics causing participants to withhold comments because of the lack of privacy. If onlookers join a group it may become too large and unweildly to moderate. These issues can be reduced by locating outdoor groups in a quieter part of the community, out of sight from pedestrian walkways or assigning an assistant to intercept and discourage onlookers from interrupting the group. For detailed guidance on effectively conducting outdoor focus group discussions see Hennink (2007).

Participants need to be seated in a circle, as shown in Figure 2.7 (panel 1). This is important for developing group rapport, facilitating group interaction, and managing the discussion. Vaughn, Shay, Schumm, and Sinagub (1996) state that participants communicate most with those seated directly across from them. Therefore, circular seating enables participants to have eye contact with others in the group, which fosters interaction. A linear seating arrangement (as shown in Figure 2.7, panel 2) hampers eye contact among participants, which is counterproductive for group interaction and discussion. A linear arrangement may quickly become a moderator-dominated session, or result in participants anticipating a presentation by the moderator. Circular seating also aids in effectively managing the group discussion. With circular seating, the moderator can manage a dominant speaker by turning a shoulder toward them, facing the other side of the circle, and encouraging other speakers. However, this is not possible with linear seating because the moderator is continuously facing all participants and cannot turn away. Poor seating arrangements can quickly hamper an effective discussion. Therefore, select a venue where seating can be arranged appropriately. This may involve some improvization with what is available at the venue. For example, benches were used in Figure 2.7 (panel 1) to form a makeshift circle. In outdoor groups, mats may be placed on the ground and participants asked to sit in a circle.

Recording the Discussion

Obtaining an accurate record of the group discussion is critical because this comprises the data for analysis. Focus group discussions are typically recorded in two ways: with an audio recorder

Panel 1: Circular seating

Panel 2: Linear seating

Photo: M. Hennink

Figure 2.7. Seating of focus group participants (Panels 1 and 2).

and a note-taker's written summary. Audio recording is preferred because it offers a verbatim record of the discussion, which is necessary for some approaches to data analysis, such as grounded theory. However, not all participants may consent to audio record the discussion; therefore, note-taking remains an important backup.

Note-Taking

A note-taker is part of the focus group team, who attends the group discussion to develop a written summary of the key issues

raised (see the previous section on a note-taker's role). The note-taker's summary should focus on recording the main points discussed, rather than interpretation or judgment about what is said. In addition, a note-taker may record participants' body language, or note whether the discussion was lively, heated, or subdued around specific issues. This can add insight to the issues during data analysis, but is not mandatory and can be somewhat subjective.

A note-taker's role is critical because they are generating data; therefore, they need to be throughly briefed before the task. It is not possible to write down everything said in a fast-paced discussion. A note-taker's summary should therefore aim to reconstruct the main flow of the discussion, highlighting key issues discussed in as much detail as possible. This may involve paraphrasing discussion points, and noting some phrases or comments verbatim that exemplify critical issues raised. A note-taker typically writes notes in the same language as the discussion itself. This enables them to focus on the discussion and capture key phrases verbatim. If necessary, the notes can be translated after this discussion.

A note-taker's summary should be clearly labelled and structured. Each written summary may be labelled with key characteristics about the group, such as the date; start and end time of the discussion; number of participants; participant characteristics (e.g., women younger than 30 years); name of moderator and note-taker; location of the discussion; and any other information relevant to the project. A clear structure is also important. Using a template may help a note-taker to structure their notes during the discussion. For example, using a three-column table, whereby the first column lists each question in the discussion guide, the second column summarizes participants' responses to each question, and a third column may be used for a note-taker's additional comments. Similarly, Krueger and Casey (2009) recomend a two-column table for summarizing "notes" and "quotes," with a horizontal line separating each question or topic discussed. Using a template can be very effective for a structured discussion, but less effective for a more free-flowing discussion where a note-taker may become frustrated on where to include comments that are not clearly aligned with a question on the template. Therefore, taking notes freely (without a template)

can be equally as effective at capturing the flow of a discussion. Whichever method is used a note-taker's summary should be written in full within 24 hours of the discussion and certainly before the next group discussion so as not to confuse the issues raised in each group.

Audio- and Video-Recording

A focus group discussion is typically recorded using an audio-recording device. Audio-recording provides an accurate, verbatim record of the discussion, which enables researchers to use quotations of participants' own words when reporting issues discussed. This is a tradition of qualitative research. Participants' permission should always be sought before audio-recording the discussion. Taking time to explain the purpose of recording the discussion and how it will be used and safeguarded often dispels participant concerns about using the recorder (Hennink, 2007). However, if permission is refused, the note-taker's summary becomes the only record of the discussion (described previously).

The recording device is placed in the center of the discussion circle and is typically operated by the note-taker. It is good practice to test the audio-recorder at the venue for any interference that may reduce the quality of the recording, and to carry replacement batteries. There are many affordable, high-quality digital recorders now available, which provide high-quality sound, have large memory storage, and a USB connection to immediately download the recording.

Video-recording of focus group discussions is not common in social science research. There is often little reason to capture a visual record of the discussion in addition to the audio-recording. Although video can capture participants' body language and facial expressions, many researchers remain concerned about the intrusiveness of video-recording. The presence of a video-recorder can influence participants' contributions to the discussion and thereby reduce data quality. For this reason, the benefits of video-recording need to be balanced against the potential impact on participants' contributions. The purpose of obtaining a visual record of the discussion needs to be made clear to participants, and their consent is always required.

Using Court Reporters

Some researchers are beginning to use court reporters to capture a "real-time" record of a focus group discussion (see for example, Jennings, Loan, Heiner, Hemman, & Swanson, 2005; Newhouse, 2005; Kick, Adams, & O'Brien-Gonzales, 2000). Court reporters are trained transcriptionists who are used to create a verbatim record of court proceedings, but can also be used to record meetings or closed-caption media steaming.

A court reporter may be used to create a verbatim record of a focus group discussion. The court reporter is present at the focus group discussion and simultaneously listens to the discussion and types into a stenotype machine using specialized shorthand. This is then transformed into a verbatim transcript in real-time. The benefits of using a court reporter include the immediacy of the written transcript (Scott et al., 2009); potential for greater accuracy (Easton, McComish, & Greenberg, 2000); and because court reporters are present at the group discussion, they can also note body language and identify speakers on the transcript. This method of recording a focus group discussion eliminates any problems associated with audio equipment or poor-quality recording. Despite the appeal of using a court reporter there are some drawbacks. In a formal evaluation of court reporters and transcriptionists for qualitative research, Hennink and Weber (2013) reported that court reporters were actually shown to make more errors in transcription, particularly in the topical content of the discussion, and were less able to produce a verbatim transcript with colloquial dialogue. However, the potential immediacy of the transcript was advantageous. The cost of court reporters varied but they were found to be more cost effective than transcriptionists for longer focus group discussions (Hennink & Weber, 2013). Understanding the benefits and drawbacks of court reporters is therefore necessary if selecting this method of recording focus group discussions.

Analyzing Focus Group Data

The systematic analysis of focus group data is what distinguishes the academic approach to focus group research from the market research approach (Bloor et al., 2001). Focus group discussions produce textual data that can be analyzed using a range of

analytic approaches. The method of analysis selected depends on the purpose of the study. For example, focus group research may be conducted to inform the development of a quantitative survey; therefore, intense in-depth analysis may not be required. Other studies use focus group data to understand social processes or explain behavioral norms for which more extensive analysis and theory building is needed. Therefore, the approach to analyzing focus group data varies from study to study. The analytic strategy used is guided by the purpose of the study, how the study outcomes will be used, and the resources available for analysis.

Many analytic approaches require data to be transcribed to produce a written record of the discussion for analysis. Transcription requirements are influenced by the analytic approach selected. For example, thematic analysis, grounded theory, and discourse analysis require a verbatim transcript. Conversation analysis has additional transcription requirements, because the purpose is to analyse how participants express themselves; therefore, the transcription needs to include detail on word emphasis, pronunciation, elongation of words, hesitations, the length of pauses, and so forth.

Approaches to Analyzing Focus Group Data

It is worthwhile to note that "focus groups are distinctive…primarily for the method of data *collection* (i.e. informal group discussion), rather than for the method of data analysis" (Wilkinson, 2011, p. 169). Therefore, focus group data are typically analyzed using conventional methods of qualitative data analysis. Three main approaches are commonly used to analyze focus group data: (1) qualitative content analysis; (2) thematic analysis; and (3) constructionist methods (e.g., discourse analysis, conversation analysis). Perhaps the most common of these is thematic analysis or variations on this approach.

Approaches to data analysis can broadly be divided into those that break-up data into segments or themes for analysis (e.g., content analysis, thematic analysis) and those that do not break-up data but analyze the whole narrative (e.g., discourse analysis, conversation analysis). Even within this categorization there is variation in the analytic strategies used. For example, even though content analysis and thematic analysis involve