



# Focus Groups in Healthcare Simulation Research

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## Overview

This chapter outlines focus group method as an accessible approach to educational inquiry for live simulation based research. We define focus group method and its conceptual underpinnings, and describe the manner in which it fits into the lexicon of qualitative approaches either on its own or in combination with other techniques and tools. The chapter also includes a conversation between two researchers about various concerns and questions regarding how to run a focus group.

Focus group research is a useful qualitative method for simulation educators seeking to turn their daily work into scholarship that reflects the voices of many participating stakeholders. While this is a seemingly straight-forward method, our goal here is to illustrate to colleagues the complexities and nuances of best practices for implementing focus groups.

## Practice Points

- Introduce group agreements at the beginning of a focus group by gathering ideas from everyone about what they need from each other and the facilitator in order to speak freely.
- Create a focus group guide with open ended questions specific to your research topic.
- Focus groups are social engagements and should provide a comfortable environment in which participants can share their thoughts.

- Power dynamics need to be taken into consideration during all phases, from design and deliberation of group composition to facilitation of a group and in the analysis.
- Have a plan in place prior to running a focus group in the event that a member becomes distressed. Not all topics are suitable for a focus group format and this too needs to be taken into consideration during the planning phase.

## Introduction

Focus group research method represents a narrative approach to gathering information in the form of a group conversation that has broad appeal across professions, including an array of marketing, political, business, and organizational development groups. In health professional education—and for simulation educators in particular—focus groups are a valued method, either on their own or in conjunction with others, for exploring issues, explaining social phenomena, and deepening our understanding about how people make meaning from their experiences. Groups who may benefit from this method include (but are not limited to) learners, simulated patients (SPs), faculty members, and subject matter experts. Focus groups are an increasingly popular method within Simulation Based Education (SBE) for exploring a range of topics including quality assurance and safety within simulation design, clinical skills learning, SP recruitment, training, scenario development and briefing and debriefing. Due in part to its adaptability to multiple purposes, formats and groups the complexity and challenge of focus group method tends to be underestimated by new researchers.

This chapter will explore focus group method as one of many approaches within qualitative research with the goal of helping new researchers understand and integrate best practices.

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The main body of the chapter will take the form of a conversation between two researchers in order to illustrate some of the most frequently asked questions and common concerns about focus groups as a qualitative approach.

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## Conceptual Considerations

Focus groups as a method fit within a social constructivist paradigm that views reality (ontology) as socially negotiated or constructed and knowledge (epistemology) as a product of the social and co-constructed interaction between individuals and society. More importantly, focus groups as a method of data gathering fit under a methodological umbrella known as phenomenology, which is concerned with how people make meaning from their experiences in the world. The researcher engaging in focus groups is interested in participants' ideas, interpretations, feelings, actions and circumstances [1].

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## Background

Focus groups were originally described as “focused interviews” or “group depth interviews”. The technique was developed after World War II to evaluate audience response to radio programs [2]. The method was later adopted by broadcasting, business, marketing, and organizational development professionals and further developed within the sociology discipline by Robert K. Merton and colleagues as an ideal way of collecting data on a wide range of social and professional phenomena [2, 3].

Focus groups came into the education realm in the 1970s during a time of growing interest in participatory approaches for carrying out research [4]. As mentioned above, today they fit conceptually within a social constructionist paradigm and can be used as a valuable data collection method that is sensitive to people whose voices are not traditionally included in research. However, focus groups are not only used for exploratory and descriptive research, but also for more practical purposes such as conducting needs assessments, developing consensus guidelines as well as a way to follow up on quality assurance initiatives. Researchers in the simulation field can benefit from a knowledge of focus group method as it is an approach well-suited to gathering the perspectives and experiences of the many stakeholders involved in simulation.

For the purposes of our chapter focus groups are defined as:

(...) group discussions organized to explore a specific set of issues... The group is focused in the sense that it involves some kind of collective activity... crucially, focus groups are distinguished from the broader category of group interview by the explicit use of the group interaction as research data. [5]

A focus group as defined above by Kitzinger suggests an interactive format in which topics may be addressed and explored broadly by participants. The focus group leader is essentially a facilitator, guiding the discussion and making sure participants stay on topic while allowing unplanned for revelations from within the group. The role is key to collecting relevant and meaningful data from interactions within your groups.

One of the most important elements of focus group method is the dynamic that is created between participants. This dynamic will affect the quality of the information that is collected and requires deft management by the focus group leader. Power dynamics need to be taken into consideration during all phases, from design and deliberation of group composition to facilitation of a group and in the analysis. When thinking about who to put together into a focus group there are many considerations. You are fundamentally creating a social and conversational environment in order to hear about ideas and stories that may require trust and sharing. Therefore it is important to consider the homogeneity or heterogeneity of a group especially as it relates to the question or issue that is being explored.

Remember a key aim of focus groups is to be able to record and explain the meanings and beliefs that influence participants' feelings, attitudes and behaviours [6].

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## Rationale

The advantages of focus group method are many. First, nuances between points of view can be attended to by the focus group leader, allowing for clarification, follow-up, and expansion on ideas. Next, non-verbal responses to a topic can be captured which supplement (or contradict) verbal responses. The leader acting as facilitator is following and probing ideas that are presented by participants. At the same time participants can develop their own ideas by listening to the opinions of others (the group effect). On a more practical level, there is the convenience of collecting many perspectives on a topic in one place and at one time, potentially at a lower cost than if the individuals were interviewed separately. In the end focus group transcripts should capture the words of participants allowing for potentially greater depth of meaning and nuance to be revealed and perhaps new insights to be gathered through the use of language itself. As has been pointed out, focus groups allow flexibility for researchers with respect to design and format, group makeup, tools used, and topics that can be covered.

In the end data produced by focus group method comes from people for whom the topics have relevance and may have greater face validity than other means of collecting information. Resources to help new researchers learn about, plan, conduct, and analyze focus groups are plenti-

ful. A number of these resources are highlighted in the reference list at the end of the chapter.

### Conversation between Simulation Educators on Focus Group Method

This section of the chapter features a conversation between two simulation educators, (SE1 and SE2). The first educator (SE1) is new to qualitative research and focus group method and is trying to decide if it is the appropriate method to use for an upcoming project in which SPs' experiences portraying emotionally challenging cases will be explored. The second educator (SE2) shares experiences of using focus groups with SPs and offers practical tips.

**SE1:** *I want to know about how my SPs are feeling when they portray emotionally challenging cases. Should I do an interview with each of them or a focus group? What data would a focus group provide that an interview won't? Could I do both? Which one would I do first, and why?*

**SE2:** Having done both individual interviews and focus groups with SPs during my research, I think the choice depends on your research goals and also on whether or not you will be asking sensitive questions. Since you are exploring emotionally challenging portrayals it seems that sensitive material may come up. For example, I am conducting a study for which I asked SPs about their experiences on this very topic, including portraying patient's experiencing domestic violence and who recently had a spouse die (e.g. breaking bad news). During individual interviews some of the SPs portraying the domestic violence patients surprised me, because I thought we did a careful job of screening them before we cast them to make sure no SP portraying a domestic violence patient experienced it in real life. It turns out some had experienced domestic violence in their own lives, and felt that participating made them feel positive and proactive. This is important information that I'm not sure would have come out in a focus group. Alternately, when I conducted a focus group for the same study and asked similar questions about motivation to participate, they had a robust discussion about the power of feedback following SP encounters. Several noted that their ability to provide feedback to learners motivated them to undertake portraying emotionally challenging cases. While feedback came up during individual interviews, the focus group provided a rich discussion which then informed individual interviews. This experience demonstrates the power of focus groups both in their own right and also as a qualitative method that may be used successfully in conjunction with individual participant interviews. It also shows how sensitive material may

emerge in any qualitative study, so it is always important to keep in mind ethical considerations especially if you are including vulnerable populations [7].

**SE1:** *We were talking about what I would consider formal research just now. Related to this, I am getting a sense that my SPs are not happy about the way that they are being used for breaking bad news roles. I have heard that some of them don't want to do them anymore. Should I do a focus group on this, or is it more of a program evaluation?*

**SE2:** Often, a focus group may feel like a program evaluation and vice versa. To distinguish between the two, it is useful to consider whether the goal in collecting information is to improve the educational experience of learners, or to describe and explain the SPs experience in addition to program improvement. If the goal is basically to improve the educational experience, a program evaluation is the best choice. If you seek to study the experience and explain it—in addition to improve the education experience—I recommend using focus groups.

**SE1:** *What type of protocol is needed if I pursue projects as research in addition to program evaluations?*

**SE2:** No formal protocol is needed to do program evaluations. However, often educators conducting program evaluations realize research questions and interests manifest in the program evaluation process—I recommend SP Educators file a broad Institutional Review Board (IRB/REB) application with their institution about researching/exploring work protocols with SPs. For example, SP educators including myself have often become interested in studying work conditions of SPs during the training process that occurs during event preparation, such as how SPs are impacted when portraying emotionally challenging patient cases [8, 9]. This way, when issues such as emotionally challenging cases come up, the research protocol will be there for SP Educators to capture and explore routine debriefing with SPs as research. If an IRB protocol is in place and you make debriefing with SPs a routine practice, then it will not feel strange to SPs when you discuss challenging cases or events.

In terms of how to conduct a focus group, it is a good idea to begin by developing a focus group guide. This is essentially a list of questions for your participants based on research goals which facilitators use to ensure research questions are standardized and topics are being addressed in each focus group that is part of the same study. The IRB, (Institutional Review Board) office at your institution may offer a template on their website for both focus group guides as well as individual interview guides. (If you have not already, it will help you to become familiar with the IRB

office at your institution). I usually include several open-ended questions, each followed by a few probing or follow-up questions. Follow-up questions enable you as researcher to explore interesting responses that you want to hear more about. When you have probing or follow-up questions ready to go, this will prevent you from fumbling for words or missing additional information related to a valuable topic you might not have anticipated.

**SE1:** *Is a focus group guide different from an interview guide?*

**SE2:** There are perhaps more similarities than differences. Because a focus group is a social event, however, there may be a certain amount of inhibition for participants to share their thoughts and feelings at the top of the session. There are number of methods a focus group leader can use to create a feeling of safety and we have included some ideas about these in the section below entitled *Tips for running a focus group*.

**SE1:** *Once you've developed a focus group guide, how do you address key logistical issues such as number of participants and the length of the focus group? Also, how do you as a facilitator balance the contribution of very vocal participants with quieter ones?*

**SE2:** There are several important logistical factors to consider when facilitating a focus group. First, I recommend including between 6 and 10 participants—enough so varying perspectives will be heard but not too many so that each participant has ample opportunity to contribute. While you may have multiple stakeholders you wish to include in a study, (e.g. SPs, physicians, students) I recommend careful consideration of who to include in which groups. For example, physicians and students included in a group of SPs would likely influence the responses. Be especially careful to consider any power differentials in terms of role.

During your introduction, you should inform participants as to the nature and goals of the research study using an IRB approved informed consent document or research preamble. A preamble or description of the research without obtaining consent is sufficient if there is no significant risk to you participants as determined by the IRB and the study is placed in the exempt category. If the IRB classifies your research with the exempt category, you can simply use this document or preamble to inform the participants about the study and give them the option to continue or decline. Those electing to participate should keep the informed consent document for their reference. When research studies pose a potential significant risk to participants, they may be classified by the IRB as necessitating a full IRB board review. This may occur if your

study is assessed to pose a risk to vulnerable populations such as actual patients; please note educational studies with SPs are often classified exempt as SPs are not considered actual patients.

Following the informed consent process, make sure each participant and facilitator put on name tags to alleviate awkwardness in terms of addressing one another. The facilitator should begin by establishing a comfortable environment in which participants may share their thoughts and opinions. Establishing a comfortable environment includes ensuring—to the best of their ability—confidentiality. At this early point in the focus group it is also helpful to share with the group how long they can expect to be with you, where the facilities are located, information about reimbursement (if any). Most importantly remind the participants that the conversation is being recorded and to try not to talk over one another or interrupt or carry on side conversations as you want to capture everyone's ideas.

Next, the facilitator should draw upon their focus group guide to ask questions of the group. Ideally, the group will begin a dialogue within itself, so that the facilitator is guiding the conversation when needed but simultaneously stepping back so participants may interact freely with one another. As a facilitator, I feel most successful when participants are engaged with one another purposefully and on target with the research study aims while I am offering an observant and supportive nonverbal presence. Should you have one or a few participants who are dominating the conversation, you may choose to facilitate this situation in a variety of ways, but it is important to encourage other members to speak up without alienating the dominant voices. You could also make a broad claim at the beginning and throughout that it is important to hear from each member of the group. To encourage participants who are not speaking out, you may call them by name to ask their opinions. If these facilitation strategies do not work and you still have one or a few dominant voices, be direct in acknowledging their contributions but asking the dominant group members to temper their participation so that other group members may contribute.

For timing the focus group should run—at the longest—between 60 and 90 min—and this may be influenced by the number of participants with fewer (e.g. 6) taking less time and the maximum recommended (e.g. 10) taking more time. Use at least two audio or video devices to record the focus group, as it is always important to have a backup recording device so you do not lose valuable data due to a technical mishap. A cell phone with voice memo capability is always another option for a backup device, but we urge you to have a primary recording device independent of a cell phone. You will also want to consider how the recorded audio will be downloaded for later transcription. To learn more about transcription and data management—please see Chap. 17 by Nicholas, Clark, and Szauter [11].

You should be mindful of the time as the conversation continues. Once you have asked all the questions you've planned on, or if time runs short—consider guiding the conversation to a conclusion. I recommend doing this directly by asking the group a broad question to signal that time is running short such as “Since our time together is ending in a few minutes is there anything else anyone wants to add that hasn't been discussed yet?” Once participants have offered any last remarks, thank them for their time, reassure them again regarding confidentiality, and offer to be available in case questions arise following this session.

Transcribing the resulting narrative data is another important piece of assuring the quality of your research. This topic is covered in detail in Chap. 17 of this volume [11]. Given the iterative nature of qualitative research listening to the recordings of the various focus groups as you proceed is helpful with respect to shaping subsequent groups you may want to hold on your topic. Tiberius has published a helpful one page guide that I took into my first focus groups as a reminder for myself.

**SE1:** *How do I know how many focus groups I should run?*

**SE2:** Most researchers agree that there is no magic number of focus groups for the successful completion of your data collection. There are a number of considerations to think about here. The principle of saturation or data sufficiency is the most relevant, however this will be affected by your sampling strategy which will have a direct effect on your decisions about group composition.

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## Saturation

There are different kinds of “saturation” (theoretical, data, member). To answer your question, however, the number of focus groups you plan for depends on when you feel that you have reached a point where no new information is being collected. Saturation point determines the sample size in qualitative research as it indicates that adequate or sufficient data has been collected for a detailed analysis. This may mean that even if you plan for a particular number of groups it may change depending on your decision about the amount of data you feel is necessary to adequately answer your question. Along with these considerations is the understanding that running more groups is not necessarily better. However, Crabtree and Miller suggest that when focus groups are to be the sole source of data collection a minimum of four to five focus groups is recommended. Barbour suggests that nominally three or four focus groups are advisable if you want to conduct across group analysis looking for patterns and themes [3].

## Sampling

Sampling for focus groups involves a researcher's strategic choices about how different group configurations may impart a range of ideas and insights into a research question [1]. This will have an impact on how many groups you plan to run. There are different kinds of sampling, such as “purposeful” sampling in which participants are chosen based on pre-determined set criteria that best suits your research topic. For example, consider a group made up of recent retirees talking about pensions. This group may involve people from different educational and economic backgrounds or not. It is up to the researcher to delimit the group according to what they want to hear about from the group. Other common kinds of sampling in qualitative research include “convenience” sampling which as the name implies is more logistically informed by who you as a researcher realistically have access to, and “snowball” sampling which asks participants to share names of others who may be helpful for the researcher to contact for future groups. As with other decisions in qualitative approaches sampling and saturation are iterative and may change as your research is underway. An explicit rationale for your sampling strategy is important for reporting your findings.

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## Group Composition

Depending on your research topic you may want to plan homogeneous groups such as all nurses or all SPs. A homogeneous sample involves people who may have a number of shared criteria, (i.e., age, socio economic status, profession) or share a common relationship to the issue being explored. For example, SPs who have all portrayed roles in a psychiatry OSCE [8]. Heterogeneous groups on the other hand are made up of people from disparate backgrounds (social, economic, ethnic, gender, educational, and professional) and with diverse experiences with the topic being explored in the group. As a caution because of the potential for uneven power relations such group can be tricky to run. Imagine having a group of patients all from different walks of life sharing their thoughts about fair access to free healthcare. You will get a rich variety of perspectives and will need to make sure the most privileged participants are not dominating while the less advantaged voices get lost or silenced. One of the advantages of heterogeneous group compositions is that participants do not know each other and everyone comes to the meeting without pre-set assumptions about the other people in the group. When heterogeneous groups are well run the information can be very rich. It all depends on what you are looking for out of your data collection.

## Tips for running a focus group

### Starting the Focus Group

Once you have finished the informed consent or preamble process and introductions, it is important to begin the focus group with a question that puts your participants at ease. Ideally, the first question should be relatable for participants so that they may connect it with their own experiences. A relatable first question will support participants who may feel awkward sharing their experience with strangers or people they may not know. Most participants however, will overcome this once they get to know each other. Other techniques that may be helpful to encourage participants to share their experiences include the use of a visual stimuli or trigger such as a video or a paper case that presents the participants with a dilemma relevant to the subject matter. This can help alleviate initial discomfort by focusing participants on the issue or topic in a more external way, providing a bridge to their stories through discussion about a common item. In this way you can facilitate a comfortable environment for participants to relate their experiences.

### Negotiating Power Dynamics in the Group

Power needs to be taken into consideration at all stages of your focus group design and delivery. There can be a tendency for dominant individuals to want to lead a group towards consensus. One way to counter this is to be explicit during your introduction about your interest in everyone's ideas across a range of perspectives and your lack of interest in agreement on a topic. Introducing group agreements at the beginning of the focus group by gathering ideas from everyone about what they need from each other and the facilitator in order to speak freely is also helpful. For example, turn cell phones off, do not interrupt each other, etc. If someone is dominating the group by taking up too much time than you can bring everyone back to the group agreement as a reminder to share the space. This can be done gently by taking what has been shared by the one person and asking for other's opinions or views about the statement. A questioning approach by the moderator is important to the process of making participants feel valued. As mentioned earlier, periodically go around the group to make sure everyone has an opportunity to answer questions and share their thoughts.

### Redirecting Participant Eye Contact

Often participants will look at the focus group leader when responding to a question, (especially at the beginning of a

session) rather than engaging with each other. Ideally, as the session progresses, participants should make eye contact with one another which is a nonverbal signal that they are engaged with the conversation. One way to begin this process is to cast your eyes around the group when the person who is answering the question is responding. The speaker's eyes will often follow that of the moderator's around the group and in this way both the speaker and the moderator invite individuals from the rest of group to get involved in responding.

### What If No One Is Saying Anything?

This is the most common anxiety experienced by first time focus group leaders. One of the hardest skills to master is comfort with silence, which leaves space for the others in the group to jump into the conversation. Above all, care must be taken to preserve the social space of the group. Leaders must always be mindful of the dynamic that is occurring between people and the impact on participants' ability to contribute their thoughts. Some people just take longer to feel comfortable in a group than others and as leaders our responsibility is to provide the opportunity for them to be heard.

### What if you notice someone is reacting strongly to the discussion or getting upset with something that is said?

Establishing emotional and physical safety for focus group participants is crucial. If you notice that a participant is reacting strongly to the discussion they may be experiencing the topic or the focus group as a reminder of a previous experience or simply be deeply affected by what is being revealed within the group. We refer to this as being "triggered". If you notice this happening it is important to act immediately to support the participant. Triggering can involve both emotional and physical discomfort when a topic resonates profoundly and could manifest in a number of ways such as recalling a painful memory, the desire to immediately leave the session, or even to burst into tears. So, it is important to have a plan in place prior to running the focus group in the event that a member becomes distressed. Not all topics are suitable for a focus group format and this too needs to be taken into consideration during the planning phase. More sensitive topics or those in which sharing confidential information is important for the research will require a one on one focused relationship between the researcher and the subject.

One cannot not always know ahead of time what may trigger a participant. In a recent study with patient instruc-

tors who are HIV positive (PHA-PI's) we conducted focus groups following their exchange with second year medical students who were providing them with a positive diagnosis of HIV [10]. The study itself was rich and very positively received by the students, preceptors, and HIV positive Patient Instructors. In the focus groups following the sessions, however, some of the PI's were triggered by the discussion - not the study itself but the focus group discussion afterward triggered unwanted memories and emotions that came vividly back to some of them. Discussions about experiences of loss, discrimination, rejection stuck with after few of the participants after leaving the group and going home. We had foreseen this possibility and planned for health professionals to be available on site and on call. In this way we were able to speak with and connect those who requested help to immediate healthcare support and follow up counselling services as needed. While this is an extreme example, such triggering can occur even for seemingly benign topics. Ultimately, we cannot know if someone in the group has had an experience with the topic or with another individual in the group that the discussion may reopen. It is our ethical responsibility as researchers to be ever aware of the possibility for unintended harm to participants through our research processes, and we must do our best to mitigate this [11].

## Conclusion

Focus group method is a useful qualitative approach for simulation educators seeking to turn their daily work into scholarship while reflecting the voices of many participating stakeholders. While this is a seemingly straight-forward method, it is, in reality, a quite complex and nuanced technique. This method offers busy professionals the opportunity to gather a variety of perspectives on relevant educational issues in a brief period of time. Additionally, focus group method may be combined with individual participant interviews to strengthen data by triangulating it—in order to build common themes and findings from multiple voices that offer a variety of perspectives on a common topic. As with all research methodology involving human subjects, care should be taken to ensure confidentiality and respect for participants. Potential ethical issues must also be considered from the inception of the design to the final analysis and reporting.

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## Additional Resources

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