



A Guide to Conducting Online Focus Groups

I. About This Guide

While guidance on how to conduct focus groups effectively has been published elsewhere (1–6), this document focuses on how researchers may adapt existing in-person methodologies to an online format, at least through the COVID-19 pandemic if not beyond. It is based on the direct experiences of Vital Strategies and its partners conducting online focus groups during the first few months of the COVID-19 pandemic in both high-income countries (e.g., the United States) and in low- and middle-income countries (e.g., Argentina, Barbados, Brazil, Colombia, Ecuador, India, Jamaica, South Africa, Ukraine) with a range of study populations, from the general public to minority groups and target communities.

Challenges and Advantages of Conducting Online Focus Groups

Online focus groups have emerged as a leading research option for the collection of primary qualitative data during the COVID-19 pandemic, which has required strict physical distancing protocols to protect public health and comply with local regulations. Fortunately, use of online focus groups predate the pandemic. This approach has previously been used to reach participants in remote locations or to research sensitive topics, and these experiences offer important insights on the benefits, challenges and limitations of this approach (5,7,9). Evidence suggests that with careful adaptations, conducting groups online can replicate and be comparable to conducting groups in person (7, 8).

Conducting online focus groups offers some key advantages:

- Eases discussion of sensitive or personal topics (10, 11).
- Ensures convenient time and place for participation.
- Enables recruitment of participants from a wider geographic range or from conflict-ridden regions since participants do not have to be close to location of the study (10).
- Potentially lowers the cost of data collection (7, 8).
- Increases participant and researcher safety in risky conditions.

Conducting online focus groups also poses challenges:

- Participants must either own or have access to technology—a computer or a smart phone
 with video capability, earphones or headphones to support a clear audio output and any
 audio to be played. Participants should be able to afford to use this technology. Researchers
 may need to arrange a back-up device for participants without access to the technology.
 They should ensure that the compensation offered for participation takes into account the
 cost of access to the technology.
- Participants must be able to access the web-based meeting, turn on and off their cameras and audios, raise hands and respond to the discussions using chat or speak options (12).





Before the focus groups, the researcher or moderator must ensure the participants are trained to use the technology, and should set up ground rules for the discussion (13).

- In-person focus groups are often video recorded, which some people find uncomfortable. In addition, people who are participating from crowded homes or settings may struggle to create privacy. This may lower a participant's motivation to speak or participate, and it may lead to higher potential for "drop outs" or distracted participation (11).
- Interactions in an online environment may also seem unfamiliar or artificial to some people. Difficulties may arise with interpreting facial expressions and other non-verbal cues like body language, especially when participants are using mobile phones or tablets with small screens. Webcams only allow for the head and shoulders of the participants to show, and thus, body language, including hand gestures, might get missed (12). This can inhibit the flow of conversation among participants.
- Technology failures (13), disturbances in the environment, and fatigue may disrupt participation. Internet bandwidth issues and a poor connection may interrupt video or audio. Participants may be disturbed by their surroundings, especially those who live in crowded spaces. Participation fatigue may set in sooner and be harder to detect in online interactions, and it can affect not only individuals but also the flow of the group discussion.
- The online format does not allow for the presentation of physical materials, such as posters or product labels, which participants may touch, feel and respond to during in-person groups. Researchers may adapt protocols for the visual rendition of such materials, but must anticipate persistent challenges: for example, colors may vary across platforms; some participants may use devices with smaller screens or less clarity than others; and the web platform chosen for the study may have limitations on how materials can be presented.
- In addition to disruptions to the discussion that may occur due to poor internet connectivity or other causes, online focus groups often need to be shorter, requiring a greater number of groups to meet research needs.

Note that this guide is not intended as a general tutorial on how to conduct online focus groups. Its scope is limited to recommendations for migrating in-person focus group approaches to an online format, including tips for researchers and adaptations to study design and materials. Though many of the recommendations may apply to a range of research methods conducted online, such as in-depth interviews or online surveys, this guide itself is restricted to online focus group discussions.

II. Key Considerations for Optimizing Online Focus Groups

While the general principles for conducting focus groups are relevant whether they are conducted in person or online, certain adaptations to the design and conduct of focus groups can improve their effectiveness online. These considerations are based on the direct experience of the authors of this guide and they are described below, broken out by the phases of research. These adaptations should be thoroughly checked during a rigorous pilot testing phase.

1. Adapting the Study Design





- Adjustments to study participants:
 - O Number of participants: Online focus group discussions are generally more effective with fewer participants than might be effective during in-person groups. Smaller groups give moderators more flexibility and room to manage the discussions and engage all participants (7,11,12,14). While the precise number of participants in a group might vary by country, topic and the length of the discussion guide, a general rule of thumb is to recruit half the number of participants to an online group than would be recruited in person. Hence, if an in-person focus group typically includes eight to 10 participants, we recommend no more than four to five participants for the same study conducted online. Given the higher "no show" rate for online participants, it is advisable to recruit more potential participants than needed (it is safest to estimate that about one-third to one-half of participants who are recruited may not show up for the focus group).
 - Oriteria for selection: One of the key benefits of online focus groups is that it allows for recruitment of participants from a wider geographic area. Hence, unless location is itself is a key variable—i.e., the research is designed to test the impact of location—researchers may expand the selection criteria to cover a larger area. Additional considerations in the selection of participants include technology ownership and technology literacy (i.e., the participant will need to be adept at handling the technology used in the study). Some studies may also use "extroversion" as a criterion to ensure robust discussion. However, the authors of this guide have not used this method and would recommend relying on a skilled moderator to solicit participation.
 - Compensation/per diems for participation: Researchers will need to structure the per diems, or compensation for participation in the study, to adequately cover the costs of participation. This may include offering data packages or compensation that covers costs for using data. This is important for all participants, but particularly for those who do not have immediate access (financial means or technology availability) to the means to participate.
 - o *Informed consent:* Researchers should obtain informed consent, including permission to be videotaped (if applicable), prior to the day of the focus group to allow enough time for a robust discussion during the group. Obtaining informed consent prior to the groups also allows the researchers to assess the participants' technological abilities and anticipate what they might need on the day of the group discussion. Some IRBs require that nicknames be used by participants during the groups to maintain confidentiality; obtaining informed consent ahead of time ensures that each person's full name stays anonymous if this is required.
- *Group duration:* Online focus groups should be shorter than in-person focus groups. People's ability to concentrate and stay engaged is more limited in the online format. Hence, researchers should anticipate discussions that ideally last no longer than one hour,

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^a Note, the video taping of groups, as per Institutional Review Boards (IRBs), is only for auditing purposes, and it is not permitted to share the video beyond the project's designated researchers; this restriction is required by IRBs in order to ensure the confidentiality of the participants.





- or two hours at the most (5,7,11,12,14,15). Researchers should structure the discussion guide accordingly, and moderators should consider breaks to relieve participant fatigue.
- Study design: Because online focus groups are generally shorter with fewer participants per group, researchers may need to increase the total number of groups. By increasing the number of groups, the researchers may be able to increase the sample size and the profiles of participants in the study. They may likewise divide the test materials or discussion topics across a greater number of groups to ensure adequate discussion and coverage across the groups.
- Adjustments to the research instruments, including discussion guide, rating sheet and accompanying materials (after pilot): Researchers may need to shorten the moderator's discussion guide to suit the desired duration of the groups. In addition, focus groups often include rating or ranking exercises to assess the comparative effectiveness of multiple intervention options (e.g., communication materials) (5). Researchers should consider adapting these exercises to accommodate the online format. For example, researchers may conduct certain tasks, such as demographic data collection, prior to the group, rather than during), so discussions can be limited to what is directly relevant to the research. Researchers can also reduce the number of items in a rating exercise and present them as a "poll" within the web platform, or turn rating scales into a short web survey that is conducted during the groups via a web browser. All of these adaptations must be checked thoroughly during the pilot test.
- Adjustments to the test materials: Any intervention material that is to be presented during the focus groups for discussion and testing—such as communication concepts, product labels, etc.—must be carefully rendered in a format that can be shown online. Web platforms like Zoom allow the moderator to play videos or show visuals. Researchers must ensure that the materials are suitably prepared for sharing, and that the expectations of what participants need (e.g., technology requirements) to engage with the materials are clearly articulated and set up. It is also advisable to have contingency plans in case of technology disruptions or other disturbances occur, for example, instructing participants to have pen and paper available for any answers or notes they want to send to the moderator.

2. Preparing for the Groups

- Technology selection:
 - O Participants will need access to uninterrupted internet connectivity and to a computer or mobile phone with a good camera. This is ideally available to participants already; otherwise, researchers might need to provide it. Note, researchers should determine a priori whether camera access is a criterion for participation or if it would be acceptable to participate through audio only. Likewise, they must determine how to handle a situation where the camera stops working midway and the participant is available only through audio. The acceptability of this situation will depend on the participants, the nature of the group, and how disruptive one participant's audio-only participation will be for the rest of the group. For cohesive, extroverted groups—particularly those familiar with one another (e.g., a study of community leaders who know one another)—this may not be an issue. For others—particularly those who are concerned about





- privacy or more inhibited about participation—it may be disruptive to have such variations in video availability.
- The choice of online conferencing platforms through which the focus groups will be conducted should be based on the widely used platforms in a specific country or location. This decision should also consider:
 - the number of people who can join the group, including not only the participants but also the researchers and other observers, and their ability to join as participants vs. observers;
 - technical complexity and the need for high technical competence;
 the ability to record (12); and
 - the platform's security measure and ability to ensure confidentiality of the groups.
- Appropriate planning and adjustments to approaches can help to ensure that participants with lower resources are not excluded from research (12). For instance, when computers are not available, mobile phones with good cameras may be considered since it is more important to have the relevant participation through whatever means possible than to be prescriptive about the technology that is used. In areas with uncertain internet connectivity, participants can be asked to connect with both a computer (for the video) and their mobile phones (for audio). In another case, some authors of this guide arranged for distribution of computer devices, as well as internet connectivity, during the duration of focus groups.
- O To ensure security and confidentiality of the focus groups, the technology platform must be carefully selected. Technology security experts that are well versed in a specific country's environment can advise about this consideration.
- Assembling the optimal research team: While all focus group researchers need a competent
 and supportive team, the following are some specific considerations for online focus
 groups. Every online team should include a moderator, a couple of research assistants, and
 a technology assistant.
 - Moderator selection:
 - Moderators ideally should have experience in conducting online focus groups and should be familiar with the platform and its function. If they do not have such prior experience, then they should run practice groups with staff first, as well as with one or more pilot groups to ensure familiarity with the online mode of research.
 - While good moderators are flexible and able to think on their feet, it is especially important for moderators of online groups to be capable of understanding, anticipating and adjusting to technical disruptions.
 - Moderators of online groups need to be adept at time management given the more limited time and attention available online (5).
 - Moderators must do even more to encourage conversations during online focus groups than in face-to-face focus groups to ensure participation (5)(14).
 - Research assistants:





- Research assistants should be familiar with the platform and its function.
- They should also possess moderation skills and be familiar with the protocol so they can act as a backup if the moderator faces technical glitches or other problems.
- They should be keen observers and note takers. Since it is not possible to observe entire body language or sometimes even hand gestures, keen observation becomes essential. Moreover, note taking and observing come in handy if the moderator or a participant drops off the screen due to a technical fault.
- Research assistants can also serve as a single point of contact between researchers who are observing a focus group and the moderator, raising any questions or additions that are suggested.
- For particularly complex projects, researchers might consider engaging multiple assistants.
- Technology assistant:
 - A person trained in information technology must be present to handle any technical issues before and throughout the focus groups. The moderator should not be responsible for such solutions, but there should be an open line of communication between the technology assistant and the moderator or researchers throughout the session.

3. Conducting the Groups

What to anticipate during the conduct of the groups?

- Moderators should expect distractions and participant fatigue. For instance, participants might slouch and disengage or start to multitask off-screen. It will be important for the researchers and moderators to communicate clear ground rules for participation ahead of the groups. This must be reinforced at the start of the groups and then reasserted during the group session, as required. Participants should be encouraged and reminded to sit in an upright position, in a quiet space without distractions, and with their videos turned on at all times. To ensure this, the moderator and the research assistants should pay close attention to the participants' engagement during the group, and the moderator may solicit participation from those who are starting to disengage (12). The moderator must anticipate unavoidable disruptions, especially for certain participants for whom perfect privacy and uninterrupted time is simply not available (e.g., parents of young children, people in crowded homes, etc.) The moderator will need to exercise judgment, with assistance from the research team, to set acceptable limits and flexibly guide the group discussion through such disruptions.
- Observers of online focus groups should not be visible to the participants. This must be checked prior to the start of the group. If an observer has anything important to convey to the moderator, the observer should be able to do this either through a specific point of contact (research assistants) or through chats that are not sent to the participants (5,12).

4. Tips for Moderators

To ensure participation:





- Ask participants to participate in as quiet and formal a set-up as is available to them, and to sit upright throughout. The moderator and the research team should also be aware of participants who drop off the call; the research and technical assistants should be able to quickly assist them to return. Ask participants to not leave the group or switch off their video until the session is over.
- The moderator should observe each participant and prompt without leading to an answer.
- Researchers or the moderator should speak to the participants ahead of time and provide step-by-step instructions on how to log in to the groups and use essential online platform features. It will be important to test the audio and video with participants and to ensure that they know how to mute and unmute the microphone, how to turn the video on or off (in case internet connection is too slow, participants should turn off the video and use only audio), ow to use the chat for accessing the questionnaire link that may be shared during the group session, and how the moderator will show a video or image through screen sharing.
- To create a sense of a group discussion and enable all participants to read one another's non-verbal cues, ask participants to opt for "gallery/grid view" and not "speaker view" (specific to Zoom, but equivalent features are available on other platforms) so that all participants can see one another on the platform. A grid view is also important so that the moderator can maintain constant eye contact and not completely lose the information revealed by body language.
- During the group, the moderator should frequently check in on how participants are doing—if they are struggling to keep up or not, and if they continue to be engaged. For instance, the moderator should ask for verbal confirmation from participants of submission/completion of web surveys or polls.
- The moderator should not be responsible for addressing any technical glitches during the groups. There should be a designated IT person for such issues who should share an open line of communication with the researcher or the moderator to be available to troubleshoot issues that arise.





Appendix: Check List for Researchers and Moderators

The time frames provided are the ideal ones. In reality, when such lead times are not possible, tasks may be truncated or adjusted within the general workflow provided below.

At least two weeks before focus groups start^b

Things to be done before the forus groups		
(√)	Things to be done before the focus groups	
Checklist for moderators to ensure participation and avoid technical glitches		
	Make sure the selected online platform is convenient to use and that participants are well versed in using it. Field teams should visit a participant's household if the participant is not technically adept and might not be able to join the group without assistance (this can be done at the time of the focus group as well).	
	Make sure every participant in the study has a good internet connection. ^c If not, then moderators/researchers should provide a good internet connection for at least two hours. <i>Note: To ensure representation and to ensure that low-resource populations are not excluded, having a good internet connection should not be a recruitment criterion for participation. Instead, the researchers should explore workarounds, including making technology available during the period of the study.</i>	
	Make sure all participants have working email addresses to enable sharing of information/links, etc. If not, moderators/researchers must make sure that participants receive all information/links through an alternate medium.	
	Consent for participating and recording the focus groups should be obtained prior to the groups. Obtain participants' signatures on consent forms and also record the process of documenting consent.	
	Make sure all the criteria mentioned in section 2. "Considerations in Preparing for the Groups: Technology selection" are met.	
	Ensure there is no firewall that blocks the links to focus groups or materials to be tested on participants' laptop/desktop.	
	Apply demographic data questionnaire using the online tool with the following explanation: "Before the groups, we would like you to fill in some questions. On the research day, we will use this same dynamic to answer some questionnaires." Note: Make sure that each person can view the survey and is able to complete the questionnaire.	
	Ensure that the participants are able to access the link to fill the response/rating sheet and ensure that the response/rating sheet is filled correctly and saved properly.	
	Observers must not be visible to participants during focus groups (i.e., use webinar format if using Zoom platform).	

^b In mock (practice groups, done with research staff, prior to pilot groups with participants) focus groups, researchers need to determine if the whole checklist is working for participants from rural areas and those with low socioeconomic status and low education levels. Any difficulties should be noted for future learning.

^c While doing mock (practice) focus groups, researchers should make sure that a few participants are connected with Wi-Fi and a few with mobile data. This will enable researchers to check for any internet issues during the focus groups.





	Make sure each participant has a laptop or desktop (or tablets and smartphones if applicable), webcam, earphones or a headphone. Check the audio and video functionality in each participant's laptop/desktop.	
	Ask participants to opt for "gallery/grid view" and not "speaker view" (specific to Zoom) so that all the participants can see one another on the platform.	
	Advise participants to find a quiet spot in their homes to avoid distractions.	
Moderator activities to ensure seamless monitoring by researchers		
	Moderator has to ensure the participation of all the participants in the discussion and discussion among the participants as well. ^d	
	Ensure seamless recording of focus group discussion.	
	Online platform should be able to accommodate at least 12 participants online. This includes participants, moderator, note taker, technology assistant and research team.	
	The link to the online focus groups livestream and instructions about using the online platform must be shared with researchers in advance.	
	Researchers should be able to observe live online focus groups with simultaneous translation (if it is required).	
	One to two mock (practice groups, done with research staff, prior to pilot groups with participants) online focus groups must be conducted with proxy participants, translator, moderator and researchers.	
	During mock (practice) focus groups, make sure that the response/rating sheet is completely filled including with participant's name.	
	Ensure technical details are in order before the focus groups for a smooth flow during the actual sessions.	

Just before the focus group starts

(√)	Things to be done before the focus group	
Checklist before starting		
	Participants must log in 15 minutes before the start of the focus group to test for video quality and audio quality on their laptop/desktop, etc. The moderator should try sharing the screen/playing a video to ensure everyone that each participant can hear and view any materials to be tested in the focus groups. Any participant unable to view or hear the materials properly must be terminated on account of low bandwidth.	
	The moderator also must check that participants are able to see the video of all the participants and the moderator simultaneously.	
	During the 15 minutes prior to the start of the focus group, share the proxy link and check if that link is working on each participant's laptop to avoid any problems later when sharing the link for the response/rating sheet.	

^d Discussion should not be between participants and moderator but has to be among participants.





Tips for moderators just before the focus groups start	
	Ensure that the aforementioned checkpoints have been checked for all the
	participants, and anyone unable to pass any of the checkpoints above should be
	terminated.
	The technology assistant must be on standby throughout the focus group to address
	technical glitches.
	Make sure the recording of the focus group is working.
	Research assistants must be ready to call participants who do not join on time to
	make sure they do not drop out.
	Ensure that the note taker is able to join the group without any technical problem.

During the focus group

(√)	Things to be done during the study
	Video cameras must be turned on by all participants throughout the session.
	The moderator must be available to assist participants in providing responses to questions or offering ratings and rankings of the materials being tested.
	Every participant should fill out the response/rating sheet, but they should submit them one, by one.
	Researchers should be able to send a message to the moderator directly or via any designated person who can then pass the message to the moderator.

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