Introduction to Conducting Focus Groups

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About This Publication

Some of the most challenging decisions in coastal management stem from the relationship between people and the environment. NOAA provides technical assistance to coastal management professionals addressing complex human-based problems. This publication, "Introduction to Conducting Focus Groups," is the fifth in a series of guides developed to bring information to this audience about the use of social science tools in their field of work. For more information, or to obtain additional copies, contact our office at *coastal.info@noaa.gov.*

NOAA's Office for Coastal Management

"Coastal management" is the term used by communities and organizations striving to keep the nation's coasts safe from storms, rich in natural resources, and economically strong. The national lead for these efforts is NOAA's Office for Coastal Management, an organization devoted to partnerships, science, and good policy. This agency, housed within the National Ocean Service, oversees major initiatives that include the National Coastal Zone Management Program, Coral Reef Conservation Program, Digital Coast, and National Estuarine Research Reserve System.

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Focus Groups: An Introduction

To be an effective steward of a region's coastal resources, it is important to know as much as possible about the thoughts and perceptions of the region's citizens. A focus group is a good tool to use, because a focus group requires a relatively small portion of time from a much smaller number of people than is the case with many other social science methods. These efficiencies are usually particularly appreciated when public information and engagement is required.

The focus group as a data collection technique is widely used in the natural resource management field, though the technique's origins come from market research. The typical objective of a focus group is not consensus or debate, but rather to generate ideas and provide opportunities for stakeholders to express feelings about a particular topic.

Formal focus groups have been around since the 1940s, and during this time they have been used for an array of purposes (Höijer 2008).

- Stimulate new ideas and concepts for both the researcher and the participants
- Learn about impressions of product and service effectiveness, or management issues
- Learn general information about a specific topic
- Generate new hypotheses for future research opportunities
- Help develop sound quantitative research approaches
- Learn how respondents communicate about topics of interest (what words they use, what concepts they understand, etc.)
- Enhance the utility of survey content and delivery mechanisms
- Determine what additional research tools may be useful for follow-up information collection
- Better interpret previously obtained quantitative information

This document is an introduction to key elements and practices that will increase the success of a focus group effort. Topics covered in this publication include focus group basics, preparing for the focus group, developing effective questions, planning the focus group session, and analyzing the data.

While this publication provides basic information about putting together a focus group project, the researcher or facilitator will play a critical role in determining the ultimate effectiveness of the effort.

Focus Groups and Surveys: A Mixed Methods Approach

A common practice is to use focus groups in combination with other social science methods. One of the most common pairings is with surveys (Morgan 1996). Listed below are three of the most common tactics for the combined use of these methods.

- Most commonly, the survey serves as a primary method and the focus group serves a secondary, yet preliminary role. Specifically, the focus group is used to help develop effective survey questions. Information acquired in a focus group can reveal specific issues of interest, language and terminology used by the population of interest, and new ideas that may have never been discovered. Such items can help a survey better resonate with a target population, subsequently yielding higher quality data.
- Another approach uses the focus group as a primary method and a survey to guide its application. More specifically, the survey is used to help target specific populations for inclusion in the focus group and narrow the topics to be addressed. While research suggests this to be an effective approach, there are few published studies that incorporate this tactic.
- A third approach again uses the survey as a primary method, while the focus group is used to assist in interpreting survey results. Often, survey data can be a bit confusing, raising such questions as how to interpret neutral ratings or why respondents answer "no opinion" on a certain topic. Focus groups can help clarify such perplexing information.

Focus Group Weaknesses

As with any research method, focus groups are not without weaknesses. Challenges associated with focus groups are most often attributed to two main factors: the facilitator and the basic nature of group discussions (Calder 1977).

- Research suggests that group discussion can cause participant attitudes to become more extreme, which could in turn result in greater unification of group opinions or polarize participants.
- Focus groups require self-disclosure of information by participants, but the views and values of participants may render certain topics off limits. Participants may also convey information that may portray themselves "more favorably," which could slightly distort gathered information.
- Emotionally charged issues may result in argument.

A skilled facilitator and adequate advance planning can lessen and possibly eliminate some of these weaknesses.

Preparing for the Focus Group

Focus group information is gathered in a setting where participants are free to interact with other group members. While group interactions create a more natural, conversational feel than experienced in one-on-one interviews, the focus group still generally maintains a certain degree of structure and control via the moderator, questions, and procedures.

Consider the Degree of Structure

Social scientists differ over the degree of structure and standardization needed in cases where more than one focus group is being conducted.

Focus groups commonly follow a fixed design, which includes a formalized set of questions and procedures. This allows the information collected to be compared against the results of additional focus groups if needed. A notable shortcoming of a fixed approach is that the researcher must remain loyal to the questions and approaches selected in the initial planning phase of project design, which can cause difficulty and frustration once the focus group session begins. A truly "fixed" design can restrict the facilitator's ability to explore issues as freely or deeply as he or she might like when the opportunity arises, which seems to defeat the purpose of using a "qualitative" approach to data collection.

Undoubtedly, a certain degree of standardization is required to yield good quality results. However, the degree of standardization is often left to the discretion of the researcher, which means he or she can incorporate minor changes while the focus group is in progress to accommodate any unique or unforeseen circumstances.

Selecting Participants

Social scientists also differ over the optimal number of respondents to include in a focus group. Estimates generally range from six to twelve individuals who are homogeneous to a specific variable (e.g., gender, age range, educational level). Too few people may not generate enough active conversation, while too large a group may lead to some participants not having an opportunity to express themselves. Though not always possible, it is ideal to select participants who do not know one another, which may encourage them to speak more freely and not censor certain information.

Duration of the focus group is another point of debate. Suggestions range from a brief 30 minutes to 2.5 hours in length. A more generally agreed-upon time frame is 1.5 to 2 hours in length.

"Segmentation" of participants is another issue. In the field of marketing research, target audiences are segmented into smaller subgroups according to specific, categorical attributes (e.g., gender, job title). Segmentation therefore means more than one focus group (i.e., one focus group session per population segment), with the typical number being four to six in a given research project. The criteria by which a population is segmented focus directly on the questions and objectives of the study.

The practice of segmentation has distinct advantages, the first of which is that it builds an element of comparison into the project from the very beginning. When engaging a heterogeneous group, it may be difficult afterwards to determine how specific population segments felt about discussed topics. Segmentation helps take much of this guesswork out of the analysis. A second advantage is that segmentation has the ability to enhance the discussion by providing a common thread across participants in the group. These commonalities can be used to focus conversation and enhance the organization of information. One notable disadvantage of segmentation, however, is that it can lead to a much larger number of groups. It is important to consider project resources before any segmentation efforts begin.

Selecting a Moderator

Securing an effective moderator for the focus group is very important. Moderating is a skill that may be perceived as being easy, but this task requires skill and experience to be effective. Leaders need a balance of time management skills and flexibility, the ability to probe deeply into topics that arise, and the experience to effectively manage diverse personalities. An added bonus is for the moderator to have at least a basic awareness of the subject at hand to further engage participants and improve the quality of resulting information.

In many instances, the project leader or researcher serves as the focus group moderator, but this is not always the case. The project leader may not have the experience necessary to lead the session, or may impose certain biases on the group that reflect desired outcomes. In these instances, it is critical to find another individual who can be an effective moderator for the focus group.

Developing Effective Questions

Social methodological research has provided great insight into how best to develop and arrange questions to be used in focus groups. While there are various approaches, certain common elements exist in the process. The following is a general sequence that is followed in the question-development process.

1. Revisit the project goals.

While it seems like an obvious first step, it is important to consider project goals before developing the focus group questions. With your goals and objectives in hand, consider the following elements.

- What information will specifically benefit this project (as opposed to fulfilling the moderator's own personal interests)?
- What are the high-priority items on which information is needed?

2. Determine what information is currently available.

A great benefit to focus group participants and researchers is to seek out information that currently exists before developing the list of questions. As with most professional fields, coastal managers are a very busy group, and time is a precious commodity. Minimizing redundancy of topics and questions helps to reduce the level of "fatigue" associated with focus groups and surveys. If the researcher has a clear understanding of what information is currently available, then fewer questions and public engagement activities may be required over time, increasing the potential for public compliance with similar, future engagements.

3. Draft a preliminary list of questions.

With a clear understanding of the project objectives and a firm knowledge of currently available information, draft a comprehensive list of questions. At this point, do not limit the length or number of questions. This can be done later. The most important element of this step is to put these thoughts on paper to evaluate and prioritize.

4. Elicit feedback on the draft questions.

Once a preliminary collection of questions has been drafted, it is important to have the questions reviewed by other members of the project team, or potentially by someone outside of the project team. This step is an important one, since it will help decide which questions are most important and which items are candidates for omission. This process is like a pilot survey, since the project team will also see if the questions are easy to understand and are interpreted as intended. This feedback will be valuable in the following step.

5. Revise the list of questions.

At this point, revisit the list of questions and consider the feedback obtained in the previous step. It is here that the final focus group questions will begin to surface. As the feedback is incorporated, the number of questions under consideration should become fewer. The following suggestions were adapted from Krueger (2000).

- Use only open-ended questions.
  - "What do you think about the proposed shoreline management law?"
  - "Where do you get relevant information on this proposed law?"
  - "What problems do you see associated with this law?"
- Avoid dichotomous questions, since they yield minimal response.
  - "Are you in favor of proposed shoreline management law?" (Yes/No)
  - "Should the fisheries, habitat, or water quality office be responsible for the law?"
- "Why" is seldom asked. As an alternative, consider asking about specific components that directly relate to the project.
- Use "think back" questions to provide contextual information. Highlight a past event or a past experience common to all participants. Avoid questions that put the focus on the future.
- Use a variety of questions that will encourage participant involvement. Questions may include perceptions, preferences, rating scales, and case examples.
- Order questions in a sequence that goes from general to highly specific.
- Budget time for unanticipated questions.

6. Seek final approval of the question list.

Have the questions reviewed one final time by the project team or professional and peer reviewers. This is an opportunity to make any final modifications before moving forward with the focus group session.

Planning the Session

Ample planning for the focus group engagement is crucial for a successful outcome. Once the question-development process is complete, it is time to identify a venue for the focus group session. The site should be convenient to participants, as well as provide a point of neutrality. For example, if participants may be against a local ordinance to be discussed, it might not be a good idea to hold the focus group in a government office building. Also consider that the focus group does not have to occur in a formal boardroom setting. A casual atmosphere, such as in someone's home, will also work.

When a venue for the session has been secured, it is a good idea to invite the desired participants as soon as possible, since a series of focus groups can take anywhere from a couple of weeks to several months to complete. The timeframe is heavily dependent on the availability of participants, since the focus group session should be scheduled at a day and time that is ideal for participants. It may be necessary to identify ideal times from each participant and then determine a time that works best for the group.

When inviting participants, consider the level of detail provided to them. It is usually a good idea to inform candidates of the goal of the focus group in general terms, but not the specific discussion topics and questions. This will prevent participants from becoming sensitized to the subject matter between the time of the invitation and the session. Providing a basic level of information will satisfy curiosity and ensure that potential participants are interested and willing to participate.

After making decisions about the participants, it is time to focus on the session itself. The most useful resource for mapping out the required logistics is through a process agenda. The process agenda is the schedule used by the moderator and others involved in staffing the session and should highlight all materials, activities, and associated timing. The agenda should include all activities from the preparation time needed to organize the meeting space to the debrief session. The following is a general list of items to include in the process agenda.

- Prepare room and all equipment and supplies
    - Sample tasks: arrange tables as needed, set up flip charts to capture notes, set up tape recorder, set up laptop for note taking, arrange chairs so that participants can see each other, provide name tags

- Welcome participants as they enter the room.
  – Sample tasks: have attendees sign in, distribute any relevant handouts, direct them to refreshments, invite them to be seated
- Focus group session formally begins
- Process overview
  – Sample tasks (by researcher or moderator): welcome participants and thank them for attending, review purpose for the session, introduce moderators, provide a brief overview of the focus group process, establish any ground rules to encourage positive participation, have participants briefly introduce themselves
- Moderator begins focus group questions
- Session debrief (an opportunity for the moderator to ensure all points have been captured effectively and comprehensively)
  – Sample tasks: highlight key points of discussion, answer any final questions, describe how results will be used, inform participants if (and how) study results will be made available, thank participants for their participation, remain in the room until everyone leaves

Analyzing the Data

Once data have been collected, it's time to think about how the results will be reported. The following is a systematic approach to the analysis and data interpretation (adapted from Taylor-Powell and Renner 2003).

1. Get to know the data – In this preliminary step, the objective is for the investigator to become as familiar as possible with the data holdings. This may take a considerable amount of time, depending on the volume of information available. If the focus group sessions have been recorded (which is recommended), it is useful to transcribe the recordings. Listening to the recordings several times and noting the tone (pauses, enthusiasm, reluctance) projected by the respondent would become part of the notes, along with other impressions (Krueger 2002).

   It is important to record these impressions as soon as possible so that critical information will not be lost or forgotten. At the same time, also consider the usefulness of all data points, since a high volume of data does not guarantee useful information. Potential biases of the moderator should also be considered. It is important to explain all possible limitations up front to provide a realistic account of what the data may explain (or not explain). By concealing such information, the strength of the findings and the leading organization's reputation could be tarnished.

2. Focus on the analysis – Revisit the project's purpose and goals. Write down key information needs. How should the analysis be focused—by question or topic, or by case or group?

3. Categorize information – The purpose is to give meaning to words and phrases. Identify trends, general themes, and patterns, including ideas, concepts, behaviors, terminology, or phrases used. Organize data into categories that summarize and bring meaning to the text. This is the crux of qualitative analysis. This can be labor-intensive!

4. Identify patterns – When the analysis is underway, connections within the text will begin to appear. It is important to take note of the various themes and pay close attention to any subtleties that may be important to the analysis. The following bullets contain a few pointers.

- Within a single category – All the data that pertain to a particular theme (category) should be assembled. What are the key ideas being expressed? What are the similarities in the way people responded, including the subtle variations? Writing a summary that answers these questions for each category is helpful.

- Larger or combined categories – Leaders may wish to combine categories to form larger, super categories. Doing this usually means working up from the more specific categories to larger ideas and concepts. This approach helps people see how the parts relate to the whole.

- Relative importance – To determine importance, researchers may want to count the number of times a theme comes up, or the number of times a unique respondent refers to certain themes. These counts can provide a rough estimate of relative importance. They are not statistically significant, but can reveal general patterns in the data.

- Relationships – Two or more themes may occur together consistently in the data. An example would be "beach safety" and "police." From this it might be concluded that safe beaches are primarily perceived as a result of frequent police patrols. Relationships can help explain why something occurs. Be careful not to assume strict cause-and-effect relationships, since this is rarely the case. Seldom is human behavior so simple! At the same time, pay attention to statements that do not fit into specific themes. This information can often be valuable.

5. Interpretation – In this step, researchers should clearly articulate what has been learned. This will offer a richness and meaning to the analysis. Some general questions to guide the interpretation include the following: what does all this information mean? What are the most important aspects? What new information has been learned? What are the main points with which the reader should be made familiar? Above all, what are the users of this information most interested in learning? It is sometimes helpful to include descriptive case examples to illustrate key points and display the data in a practical context. Finally, consider the use of models with arrows and boxes to display how multiple pieces fit together and where gaps exist and greater engagement may be required.

Above all, avoid the use of generalization. Qualitative data are not intended to be generalized across populations. Rather they are meant to provide subjective insight into the perspectives within a particular population of interest. To avoid generalization, select direct quotes carefully if using them in the report. Direct quotes are often effective in providing context and meaning, but they can be easily misused to exaggerate success or to oversell a particular point, which leads to study bias. Be up front about the purpose for using a specific quote and state it within the report. Provide enough text to allow the reader to understand the context in which it was conveyed. Confidentiality and anonymity are often of critical importance. It is very important to consider the consequences of someone figuring out who said what! Be sure to get permission to use quotes. It is also helpful to check with others on the project team about their opinions regarding the use of selected quotes.

Qualitative Data Analysis Checklist

1. Get to know the data
   - ❑ Read and familiarize yourself with the information
   - ❑ Write down impressions
   - ❑ Describe the integrity and quality of the information
   - ❑ Explain the limitations

2. Focus on the analysis
   - ❑ Write down key information needs that are based on goals
   - ❑ Decide how to focus the analysis (by question? by group? other?)

3. Categorize information
   - ❑ Identify and write down any trends or themes that present themselves
   - ❑ Organize your data into these categories

4. Identify connections
   - ❑ Consider combining similar categories to strengthen data groupings
   - ❑ Consider the relative importance level of each category, based on goals
   - ❑ Identify any connections or relationships between categories

5. Interpret the data
   - ❑ Describe, in depth, what has been learned
   - ❑ Draw attention to the main points
   - ❑ Consider what information is most useful for the end user

Summary

For coastal programs that want to use a focus group to collect information about a target audience, this document provides information about the primary components of a successful focus group process. The document pays particular attention to the benefits and limitations of this social science tool and the numerous considerations when planning a focus group. While the cost and overall degree of effort vary according to the specific project, focus groups represent a useful, practical, and rewarding data collection method. The frequent use of this tool has shown it to be a highly collaborative process for participants and an opportunity for the project leader to gain multiple perspectives on the topic of interest.

References

Calder, B.J. 1977. "Focus Groups and the Nature of Qualitative Marketing Research." *Journal of Marketing Research*. Volume 14. Number 3. Pages 353 to 364.

Clark, J.K., and Stein, T.V. 2004. "Applying the Nominal Group Technique to Recreational Planning on Public Natural Areas." *Journal of Park and Recreation Administration*. Volume 22. Pages 1 to 22.

Cox, K.K., J.B. Higginbotham, and J. Burton. 1976. "Applications of Focus Group Interviews in Marketing." *The Journal of Marketing*. Volume 40. Pages 77 to 80.

DiCamillo, J.A. 1995. "Focus Groups As a Tool for Fish and Wildlife Management: A Case Study." *Wildlife Society Bulletin*. Volume 23. Number 4. Pages 616 to 620.

Dixon, J. 2005. "Focus Group Facilitation." White Paper from the Centre for Higher Education Quality, Monash University.

Fern, E.F. 1982. "The Use of Focus Groups for Idea Generation: The Effects of Group Size, Acquaintanceship, and Moderator on Response Quantity and Quality." *Journal of Marketing Research*. Volume 19. Number 1. Pages 1 to 13.

Folch-Lyon, E., and J.F. Trost. 1981. "Conducting Focus Group Sessions." *Studies in Family Planning*. Volume 12. Number 12. Pages 443 to 449.

Gay, L.R. 1996. *Educational Research: Competencies for Analysis and Application.* Prentice-Hall. Englewood Cliffs, NJ.

Gibbs, A. 1997. "Focus Groups." *Social Research Update*. Winter. Volume 19. Pages 1 to 8.

Green, L., M. Fullilove, D. Evans, and P. Shepard. 2002. "'Hey Mom, Thanks!': Use of Focus Groups in the Development of Place-Specific Materials for a Community Environmental Action Campaign." *Environmental Health Perspectives*. Volume 110. Number 2. Pages 265 to 269.

Höijer, B. 2008. "Ontological Assumptions and Generalizations in Qualitative (Audience) Research." *European Journal of Communication*. Volume 23. Number 3. Pages 275 to 294.

Hsu, C., and B.A. Sandford. 2007. "The Delphi Technique: Making Sense of Consensus." *Practical Assessment, Research & Evaluation*. Volume 12. Pages 1 to 8.

Krueger, R.A. 2000. *Focus Groups: A Practical Guide for Applied Research*. Sage Publications. Thousand Oaks, CA.

Krueger, R.A. 2002. "Analysis: Systematic Analysis Process." Website. Accessed March 10, 2008, at *www.tc.umn.edu/~rkrueger/focus_analysis.html*.

Merton, R.K., and P.L. Kendall. 1946. "The Focused Interview." *The American Journal of Sociology*. Volume 51. Number 6. Pages 541 to 557.

Morgan, D.L. 1992. "Designing Focus Group Research." In *Tools for Primary Care Research*. Sage Publications. Thousand Oaks, CA.

Morgan, D.L. 1996. "Focus Groups." *Annual Review of Sociology*. Volume 22. Pages 129 to 152.

Myers, G. 1998. "Displaying Opinions: Topics and Disagreement in Focus Groups." *Language in Society*. Volume 27. Pages 85 to 111.

Sussman, S., D. Burton, C.W. Dent, A.W. Stacy, and B.R. Flay. 1991. "Use of Focus Groups in Developing an Adolescent Tobacco Use Cessation Program: Collective Norm Effects." *Journal of Applied Social Psychology*. Volume 21. Number 21. Pages 1772 to 1782.

Taylor-Powell, E., and M. Renner. 2003. "Analyzing Qualitative Data." University of Wisconsin–Extension. Madison, WI. Accessed March 14, 2009, at *http://learningstore.uwex.edu/pdf/G3658-12.pdf*.

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