Pergamon

International Journal for Quality in Health Care, Vol. 8, No. 5, pp. 499–504, 1996

Printed in Great Britain

PII: S1353-4505(96)00078-6

1353-4505/96 $15.00 + 0.00

Methodology Matters—V

"Methodology Matters" is the title of a series of intermittently appearing articles on methodology. Other articles on such topics as Confidence Intervals are planned. Suggestions from readers of additional topics they would like to see covered here are welcome. Please send all such suggestions to the Editor-in-Chief.

Focus Groups

RICHARD A. POWELL and HELEN M. SINGLE

Department of Mental Health, University of Exeter, Wonford House Hospital, Exeter, UK

This paper introduces focus group methodology and discusses its relevance to those researching health care provision. As a qualitative data collection technique, the focus group has advantages over other qualitative methods, such as the in-depth interview and the nominal group technique. This paper highlights these advantages after providing guidelines on group composition, the management of group discussion and the process of analysing results. Copyright © 1996 Elsevier Science Ltd.

Key words: Focus group, group discussions, qualitative research methods.

INTRODUCTION

Health services research has traditionally relied upon the use of quantitative methods. Producing results that are amenable to statistical analysis and generalizable to wider populations, such methods indicate the extent to which health services are efficient and effective. For some purposes, however, qualitative methods prove more appropriate; e.g. when the need is to identify or to understand new or complex issues, rather than to enumerate their prevalence. Qualitative methods permit development of concepts that enable researchers to comprehend social phenomena in "naturalistic" rather than experimental settings and accord importance to the meanings, views and experiences of respondents. While quantitative methods result in reliable, empirical data upon which preconceived hypotheses are evaluated, qualitative methods generate detailed, valid data that permit formulation of new hypotheses and inform further study or practice.

This paper introduces focus group methodology and discusses its relevance to those researching health care provision. In order to highlight the special features and strengths of this methodology, the paper also discusses the differences and advantages of focus groups and compares these with two alternative qualitative research methods: the in-depth interview and the nominal group technique.

WHAT IS A FOCUS GROUP?

A focus group is a group of individuals selected and assembled by researchers to discuss and comment on, from personal experience, the topic that is the subject of the research. As a research technique, the focus group employs guided, interactional discussion as a means of generating "the rich details of complex experiences and the reasoning behind [an individual's]

Correspondence should be addressed to: Mr Richard A. Powell, Department of Mental Health, University of Exeter, Wonford House Hospital, Dryden Road, Exeter EX2 5AF, UK. Tel. 01392-403-640; Fax 01392-403-007; E-mail: R.A.Powell@exeter.ac.uk.

actions, beliefs, perceptions and attitudes" [1]. This information can be used to identify potential areas of enquiry or to clarify subject matter that, by its nature, eludes other research instruments. The "focus" underpinning the discussions is anything that engages the focus group in a collective activity, "such as viewing a film, examining a single health education message or simply debating a particular set of questions" [2].

The focus group dates back to the 1920s, when it was used as a market research technique. Today, the focus group has evolved into a data collection technique that is employed commonly in a range of settings throughout the social sciences. Examples include investigating experiences of childbirth, developing consensus guidelines for general practice in medicine, evaluating a school sexuality education programme and determining the decision-making process behind the search for health care.

WHEN TO USE A FOCUS GROUP

In health services research, the primary goal of a focus group is to elicit information to answer research questions. A focus group may also improve morale and generate feelings of self-worth among its participants, as well as demonstrate that an organization (such as a health authority) is listening to users of its services. The potential therapeutic benefits and public relations successes to be derived from a focus group are, however, secondary outcomes of the process.

A focus group is especially useful when:

- existing knowledge of a subject is inadequate and elaboration of pertinent issues or the generation of new hypotheses is necessary before a relevant and valid questionnaire can be constructed or an existing one enhanced [3];
- the subject under investigation is complex and concurrent use of additional data collection methods is required to ensure validity;
- the subject under investigation is complex and comprises a number of variables. A focus group enables the researcher to concentrate time and resources on the study's most pertinent variables;
- the results of a quantitative survey are ambiguous or misleading and statistical associations require clarification, elaboration or "salvaging".

In this respect, a focus group can be employed either prior to, concurrently with, or after a quantitative study, or separately to explore complex phenomena not amenable to quantitative research.

ORGANISING A FOCUS GROUP

Group membership and recruitment

A focus group is composed of individuals with shared key characteristics pertinent to the study and comprises between six and 10 participants who are strangers to each other. In this way, not only are participants not inhibited by or deferential to intra-group differences (such as occupational seniority among health care professionals), but the anonymity engenders an atmosphere that encourages honest airing of what could be critical personal views and negative experiences.

It is important to ensure that focus groups embrace the full range of possible observations. This can be achieved using theoretical sampling. Under this approach, the researchers draw upon their own and existing knowledge of the subject under investigation to identify those salient characteristics (such as ethnic group or length of health service contact) likely to influence variability in focus group responses. Membership of the focus group is then stratified according to these characteristics (e.g. if ethnicity and health services usage were of interest, a researcher might conduct focus groups among Afro-Caribbean, Asian, Hispanic and Caucasian health service users).

In general terms, efforts to recruit participants for focus groups must avoid systematic biases in the selection process. For example, participants should not be chosen from individuals suggested by fellow group members on the grounds that they are "the best" or "most suitable" for the task. Given that focus groups are used to identify important issues and illuminate complex psychosocial phenomena, they should be comprised of participants from a diverse range of backgrounds, views and experiences (e.g. ordinary users of mental health services as well as their more articulate and "suitable" user advocates).

Anticipating subject loss, a researcher generally over-recruits participants by approximately 25%. It is desirable to "reward" participants with a small incentive — ideally a non-monetary one — if only as a gesture of gratitude for the time committed to the group and as an means of minimizing subject attrition.

Number, duration and scheduling of sessions

The desirable number of focus group sessions depends upon the nature and complexity of the subject under investigation and the use for which the data generated by the focus group are to be employed. From one to 10 sessions are generally sufficient for most studies, since at some juncture the group's discussion will simply replicate existing data, making further sessions unnecessary. A focus group session lasts approximately 90–120 minutes (the length of the session is usually determined by the complexity of the subject under investigation or the number of participants in the group). Scheduling the time for the focus group sessions requires a receptiveness to participants' other commitments. When planning a session, it is advisable to provide group members with 10–14 days' advance notice; this enables participants to plan their schedules to include this additional obligation.

Meeting setting

The researchers will seek out a meeting place for the focus group that is considered neutral; it should have no special significance to the participants and no bearing on the subject under study. For example, in a study of health care services, this would be a non-health service-related setting, or other neutral location acceptable to those taking part. This again allows for frank, unhampered and, if necessary, critical discussion and expression of negative views.

Moderator role

Facilitation of open, uninhibited dialogue is central to the role of the moderator. The moderator should therefore be a relaxed, non-judgemental individual and a good listener, who ideally shares some of the participants' characteristics, such as their age, sex or language. The moderator occasionally is accompanied by a note-taker, who can document important aspects of the group's interaction, such as expressive body-language of participants, that in the absence of a filmed record of the session would go unrecorded. The moderator works to a non-prescriptive, semi-structured interview schedule and usually will supplement the prepared questions with sub-questions that enable researchers to clarify a topic or explore participants' answers in greater detail. The five or six questions selected for the discussion guide must be open-ended, phrased clearly and simply and must draw upon concrete examples to illustrate a topic. Where appropriate, the questions should be sequenced from less to more sensitive questions. The moderator should also be receptive to relevant issues raised by participants that have not been anticipated in the discussion guide, and should encourage equal participation of all those in the group, ensuring that discussion proceeds accordingly.

Moderators also must be sensitive to, and be prepared to initiate, appropriate measures to address ethical dilemmas posed by participants' overdisclosure, especially on sensitive questions (e.g. patients' sexually abusive encounters with medical professionals) [4]. The major concern is the preservation of confidentiality among group members. Researchers should endeavour to ensure that sensitive information will not be disclosed by other participants. Measures, such as asking members before discussion begins to sign a written declaration that they will not disclose what they hear, may help counter this problem. It is often advisable for a moderator to linger after the conclusion of a group discussion. This provides an opportunity for individual participants who may wish to elaborate upon or raise points they felt inhibited about discussing in the group.

HOLDING THE FOCUS GROUP

Researchers should provide participants with an opportunity to meet before the formal discussion begins. One way to do this is to set aside time for informal conversation at the beginning of the meeting and provide light refreshments for participants. This enables the moderator and note-taker to introduce themselves to participants and, more importantly, for the participants to interact informally. The value

of this "ice-breaking" interaction cannot be underestimated, as it relaxes participants and fosters an atmosphere conducive to frank discussion.

In the formal session, participants should be seated in a circle, to maximize face-to-face contact. Lively interaction between participants is the goal of every focus group and the facilitator should play a minimal part in proceedings to avoid becoming a central focus of group attention. It is recommended that the audio or video equipment used to record the discussions should be as unobtrusive as possible, in order not to inhibit participants' interaction.

Researchers must also be aware of the potentially self-censoring and conforming influence exerted by the so-called "group effect". Participants may "jump on the group bandwagon", adjusting their contributions according to their individual needs, as well as their perceived location in the social expectations of the group [5].

INFORMED CONSENT

Researchers should make clear to participants that note-taking or recording facilities will be employed during the group discussion and obtain each member's agreement to this procedure. Focus group participants need to receive assurance from the research team that all information gathered, the tapes recording the group discussions and the resulting data, are subject to the same rigorous safeguards and formal assurances of confidentiality and anonymity employed by other research techniques. A document should be prepared by the researchers for each participant, guaranteeing present and future anonymity and confidentiality of information received and acknowledging the use of note-taking, or audio or video recording equipment at the sessions. Two copies of the document should be signed by a senior member of the research team and by the participant, with each party retaining one copy of the document.

ANALYSING RESULTS

This is a time-consuming and difficult stage of the focus group study. The process of analysing results is the least agreed upon and the least developed part of focus group methodology [6]. In general, the means of analysis employed to process focus group data wrestles with raw, transcribed information. The process of analysis is largely two-stage.

Stage 1

Code and classify the raw data by reviewing the transcribed discussions for potential conceptual categories, using the guideline questions as initial categories. These coded data are then regrouped or indexed along the lines of the nature of the responses provided and the intensity with which they are expressed, to facilitate further analysis. This process has been considerably simplified by the development of computer software packages, including Ethnograph [7] and Q.S.R.NUD·IST [8].

Stage 2

Analyse the original data in conjunction with the transformed conceptual data. This is the most problematic phase of focus group data analysis, entailing a great deal of creative interpretation. Constant comparisons are carried out with the data to detect divergent views among the participants and to contrast observations that relate to variables within the sample population. This analytical process is inductive, involving the conceptualization of themes from empirical data.

COMPARISON WITH OTHER QUALITATIVE METHODS

The focus group is one of a number of qualitative methods available to health services researchers (others include observational techniques and case studies) [9]. This section discusses the advantages and disadvantages of the focus group compared with the in-depth interview and the nominal group technique (Fig. 1).

In-depth interview

The in-depth interview is a one-to-one research technique in which a respondent answers a researcher's questions. In contrast to the schedule-structured interview, the in-depth interview pursues a respondent's subjective interpretation of a subject following a loosely

Criteria	In-depth interview	Nominal group technique	Focus group
Number of participants	1	6-10	6-10
Goal	individual views/experiences	consensus opinion	divergent views/experiences
Interactional quality	no	partial	yes
Level of group influence	N/A	med	med/high
Level of structure	low	high	low
Depth of experiences	deep	shallow	med
Range of experiences	narrow	med	wide
Level of moderator involvement	low	high	low

FIGURE 1. A comparison of the focus group with the in-depth interview and the nominal group technique.

structured or unstructured interview guide. Respondents are given considerable liberty in their responses and in discussing areas not raised by the researcher. As is the case with the semi-structured focus group, the in-depth interview enables researchers to gather detailed attitudinal and experiential information from respondents, and this information is elicited by supplementing the broad, open-ended, exploratory questions with pertinent, gently probing sub-questions.

Nominal group technique

The nominal group technique, or expert panel, as it is sometimes called, is an impersonal, qualitative group method in which "exchange and interaction between group members is more controlled than in focus groups" [10]. The nominal group is similar in size to a focus group, and is used to determine the extent to which experts agree about a given issue. In this methodology, a facilitator presents the question or problem on which the group's views are required. The participants list on paper their feelings and experiences connected with the issue being addressed, without conversing with the other participants. When requested, participants declare their responses and these comments are recorded on a flipchart by the group facilitator. After review and discussion of the contents of each recorded comment, the group ranks the list of comments from the most important to the least important or acceptable. This initial ranking is recorded, then discussed and this is followed by a second private ranking of the listed items. These data comprise the researcher's core set of information [11].

Focus group

By comparison with the in-depth interview, focus group discussion may be comparatively superficial, generating only "surface" information on individual respondents. It is argued — though this is disputed by others given the use of focus groups to investigate attitudes to and experiences of intimate sexual health issues — that the collective nature of the focus group is less appropriate as an investigative tool for the disclosure of personal, sensitive information.

Similarly, doubts exist about the extent to which both the moderator and the "group effect" influence individual participation in a focus group discussion.

A comparative advantage of the focus group, however, is its ability to enable researchers to identify quickly the full range of perspectives held by the respondents. Moreover, the interactional, synergistic nature of the focus group allows participants to clarify or expand upon their contributions to the discussion in the light of points raised by other participants, thus expanding on contributions that might be left underdeveloped in an in-depth interview.

Unlike the focus group, which draws upon spontaneous rather than carefully considered responses, the nominal group technique is a directed method. Like the focus group, though not to the same extent, participants' contributions may be influenced by the "group effect". However, the focus group is flexible enough to be sensitive to the personal agenda of participants, and draws upon its explicit interactional quality to elicit divergent ideas and experiences rather than seek a consensus. In this respect, the focus group is an ideal means of generating hypotheses, of investigating unexplored areas of human experience and of clarifying ambiguous ones.

CONCLUSIONS

It remains the case that some health services researchers perceive qualitative and quantitative data collection methods as antithetical to one another. Focus groups, together with other qualitative methods, however, provide researchers with additional means of acquiring rich, experiential feedback from service users. Moreover, the supportive, congenial, non-judgemental setting offered by the focus group enhances the likelihood of collecting the diverse and spontaneous opinions that elude the in-depth interview and the nominal group technique.

FURTHER READING

Kitzinger J, Introducing focus groups. *Br Med J* **311**: 299–302, 1995.

Knodel J, Sittitrai W and Brown T, *Focus group discussions for social science research: a practical guide with an emphasis on the topic of ageing*. Research Report No. 90–3, Population Studies Centre, University of Michigan, Michigan, 1990.

Kreuger R A, *Focus groups: a practical guide for applied research*. Sage Publications Inc., London, 1988.

Morgan D L, *Focus groups as qualitative research*. Sage Publications Inc., London, 1988.

Morgan D L (Ed.), *Successful focus groups: advancing the state of the art*. Sage Publications Inc., California, 1993.

Acknowledgements: The authors express their gratitude to Dr Keith Lloyd, Ms Elspeth Mathie and Dr Andrew Thompson for comments on an earlier draft of this work. Any remaining errors are the responsibility of the authors.

REFERENCES

1. Carey M A, Introduction. *Qual Health Res* 1995; **5**: 413.
2. Kitzinger J, The methodology of focus groups: the importance of interaction between research participants. *Sociol Health Illness* 1994; **16**: 103–120.
3. Powell R A, Single H M and Lloyd K, Focus groups and mental health research: enhancing the validity of existing questionnaires. *Int J Soc Psychiat* 1996; **42**: 193–206.
4. Smith M W, Ethics in focus groups: a few concerns. *Qual Health Res* 1995; **5**: 478–486.
5. Carey M A, The group effect in focus groups: planning, implementing and interpreting focus group research, 225–241. In: Morse J M (Ed.) *Critical issues in qualitative research methods*. Sage Publications, Inc., California, 1994.
6. Carey M A, Concerns in the analysis of focus group data: comment. *Qual Health Res* 1995; **5**: 487–495.
7. Seidel J, Friese S and Leonard D C, *The Ethnograph V4.0: a user's guide*. Amherst: Qualis Research Associates, 1995.
8. *Q.S.R. NUD·IST* (Application Software Package). Qualitative Solutions and Research, Melbourne, 1995.
9. Pope C and Mays N, Reaching the parts other methods cannot reach: an introduction to qualitative methods in health and health services research. *Br Med J* 1995; **311**: 42–45.
10. Fitzpatrick R and Boulton M, Qualitative methods for assessing health care. *Qual Health Care* 1994; **3**: 107–113.
11. Jones J and Hunter D, Consensus methods for medical and health services research. *Br Med J* 1995; **311**: 376–380.