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Precincts and Prospects in the Use of Focus Groups in Social and Behavioral Science Research

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Over the past few years, the focus group method has assumed a very important role as a method for collecting qualitative data in social and behavioural science research. This article elucidates theoretical and practical problems and prospects associated with the use of focus groups as a qualitative research method in social and behavioural science research. The core uses of focus groups in social and behavioural science research are discussed. In addition, the strengths and limitations of employing focus groups in social and behavioural science research are elucidated. Furthermore, the article discusses practical recommendations for strengthening the focus group method in social and behavioural science research. Key Words: Focus Groups, Qualitative Research, Social Science, Behavioural Science.

In recent years, the importance of qualitative approaches in understanding social realities has been increasingly recognized by social and behavioural scientists. Many researchers have begun questioning the adequacy of an exclusively quantitative approach in social and behavioural research. Among the various qualitative methods, focus group methodology has become very popular and is being extensively used. Powell and Single (1996) define a focus group as 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. Fern (1982) also defines focus groups as small group discussions, addressing a specific topic, which usually involves six to 12 participants, either matched or varied on specific characteristics of interest to the researcher. There are many definitions of a focus group in the literature, but features like organised discussion (Kitzinger, 1994), collective activity (Powell & Single, 1996), social events (Goss & Leinbach, 1996) and interaction (Kitzinger, 1995) identify the contribution that focus groups make to social research.

Some researchers characterize focus groups as group interviews. For instance, Hughes and DuMont (1993) define focus groups as in-depth group interviews employing relatively homogenous groups to provide information around topics specified by the researchers. Others define them as group discussions. For instance, Krueger (1998) defines focus groups as a carefully planned discussion designed to obtain perceptions on a defined environment. It is important that a distinction is made between focus groups and group interviewing. In group interviewing, a number of people are simultaneously interviewed. However, focus groups rely on interaction within the group based on topics that are supplied by the researcher (Morgan, 1997). Thus, the key characteristic that distinguishes focus groups from group interviews is the insight and data produced by the interaction between participants (Gibbs, 1997).

Focus groups originated in sociology (Merton & Kendall, 1946) and were primarily used by market researchers (Templeton, 1987). They have been found to be most effective for learning about opinions and attitudes, pilot testing materials for assessments and generating recommendations (Smithson, 2000). While focus groups are an established method in market research (Templeton, 1987), their use in social science or other related disciplines is relatively new (Smithson, 2000). Khan et al. (1991) suggest that Merton and Kendall's (1946) classic article on the focused interview set the parameters for focus group development. According to Kitzinger (1995), the idea behind focus group methodology is that group processes can help people to explore and clarify their views in ways that would be less easily accessible in a one to one interview. When group dynamics work well, the participants work alongside the researcher, taking the research in new and often unexpected directions. Group work also helps researchers tap into the many different forms of communication that people use in day-to-day interaction, including jokes, anecdotes, teasing, and arguing. Gaining access to such a variety of communication is useful because people's knowledge and attitudes are not entirely encapsulated in reasoned responses to direct questions. In this sense, focus groups often reach aspects of knowledge that other methods cannot reach; this can reveal dimensions of understanding that often remain untapped by more conventional data collection techniques (Kitzinger, 1995).

Although focus groups are gaining prominence as a research tool, they are saddled with many limitations that could confound research outcome if not noticed and addressed. This article discusses theoretical and practical uses of focus group method in social and behavioural science research, its strengths and weaknesses, as well as how this method can be strengthened.

Uses of Focus Groups in Social and Behavioural Science Research

Researchers are often in need of innovative approaches to gather data, especially when little information on a specific topic of interest is known (Nassar-McMillan & Borders, 2002). Focus groups potentially provide such an exploratory approach (Vaughn, Schumm, & Sinagub, 1996). Focus groups have been used to explore topics as diverse as nutrition, AIDS, sexual education, and technology (Williams & Katz, 2001). The method is particularly useful for exploring people's knowledge and experiences and can be used to examine not only what people think but how they think and why they think that way (Kitzinger, 1995). Focus groups can offer an appropriate medium for work at various steps of the research process, from hypothesis generation to hypothesis testing (Krueger, 1994). More specifically, focus groups can be appropriate as an idea-generation tool, for complementing quantitative and qualitative research methods, as a primary data-collection method, and for the development and evaluation of programs. These uses of focus groups in social and behavioural science research are elucidated below.

As a Tool for Generating Ideas

Focus-groups could be used to independently generate new ideas or knowledge in research (Barnett, 2002). Here, focus groups are seen as valuable tools for exploring how points of view are constructed as well as how they are expressed (Kitzinger & Barbour,

1999).Additionally, focus groups can help to generate hypotheses if researchers are investigating new areas. In this direction, stories told by focus group participants can be used in questionnaires or turned into hypothetical-type questions on surveys. Similarly, how stories, ideas, attitudes, and experiences function within a certain cultural setting, especially within an ethnographic study can be explained by focus group data (Barnett, 2002). In addition, focus groups may be used to refine information previously known about a topic or may be designed to elicit new insight and information about a topic by examining it from a new angle (Nassar-McMillan & Borders, 2002). For example, it could be used by researchers to investigate people's motivations for engaging in some health-risk behaviours. Such information can be essential for health professionals when designing interventions. In addition, focus group discussions with health-care providers can be functional in generating ideas for enhancing services.

For Complementing Quantitative and Qualitative Research Methods

As mentioned earlier, focus groups have the potential to generate data that may not surface in individual interviews or survey research. Focus group discussions are often used as a complement to a quantitative study, helping to address such questions as "why?" or "how?" rather than "how many?" They can also be used as a preliminary step, providing background information, and as indicated above, to generate hypotheses for research. Additionally, this method can be used to refine a questionnaire, and to ensure that the words and concepts correspond to those commonly used by the target group. Similarly, focus groups have been used as follow-ups to quantitative studies; helping to explain, expand and illuminate quantitative data, in order to gain some understanding regarding the reasons for certain findings (Khan et al., 1991). In short, focus-group discussions, when used alongside quantitative and other qualitative methods, can result in a much greater efficiency than either method used alone. For instance, Michell (1998) combined interviews and focus groups in collecting data on peer groups and indicates that the combined use of these methods allowed for a better understanding of her research topic.

As the Principal Data-Collection Method

Focus-group methodology can also be used as a primary data-collection method, especially for some topics that cannot easily be studied through quantitative methods. These discussions are particularly suited to subjects that are of a sensitive or personal nature (Khan et al., 1991). For example, Suyono, Piet, Stirling and Ross (1981) used this methodology in successfully investigating abortion among Indonesian women. Similarly, Folch-Lyon, de la Macorray and Schearer (1981) used focus groups to investigate family planning in Mexico. It is important to note that neither of the studies reported problems in discussing such sensitive topics. Indeed, Suyono et al. (1981) report that participants were much more willing to discuss abortion in the focus group discussion than they were in survey interviews. Group discussions also suggested high awareness of abortion and different techniques for abortion, whereas sample-survey results indicated low awareness of abortion. Suyono et al. suggest that survey interviews, which are usually observed by neighbours, are probably much less conducive to eliciting information about sensitive

topics than are focus-group discussions that are away from home and in a supportive setting. However, it is important to treat data from focus groups with caution since they can only suggest plausible answers, and are not indicative of the distribution of attitudes or beliefs in the population (Khan et al., 1991).

The Development and Evaluation of Programs

Focus groups can be conducted to assist with program development or evaluation. Determining the needs, evaluating programs, and determining the effectiveness of a particular curriculum topic are some of the possibilities that are well suited to a focus group study (Williams & Katz, 2001). Program development, as well as adaptation for use with different populations requires identifying appropriate aspects for inclusion. Engaging a sample of the target population as focus group participants provides an efficient means of both program development and adaptation. In addition, focus group discussions can provide valuable insight into whether a program or service has achieved desired goals. For instance, Pugsley (1996) recounts some of the benefits and difficulties she encountered when using focus groups to discuss sexual health curriculum with a group of British adolescents. Thus, if researchers or educators want to create learning tools that appeal to students and teachers, identify the sort of information young people are attaining and retaining from their classes, or measure how teachers feel about curriculum sensitive issues, focus groups may be a helpful starting point.

Perhaps one of the most intriguing aspects of working with focus groups is that there are no definite rules for their use (Krueger, 1994). Many aspects of focus groups can be adapted to meet specific needs of researchers. For example, groups charged with generating hypotheses could have a relatively unstructured agenda, while ones conducted to test hypotheses could use a relatively structured one. Size of groups and membership characteristics can also be adapted to meet research needs.

Strengths of Focus Group Methodology

As indicated above, focus groups are increasingly gaining popularity as a qualitative research method in the social and behavioural sciences. There are many reasons for the effectiveness and popularity of the focus group method in social and behavioural science research. Most of these reasons also differentiate focus groups from the other qualitative methods. This section discusses the strengths of focus groups and how these strengths create a synergy within the field of social sciences.

The Influence of the Moderator

A major feature of focus groups is the authority role of the moderator in guiding the conversation. The involvement of a good moderator can ensure that the conversation is always on track, and encourage participants' engagement without one individual dominating the discussion. In addition, a good moderator can keep the group discussion on track so that none of the material that is intended to be covered is omitted. The moderator's face-to-face involvement with the participants in focus groups is a major advantage over other qualitative and quantitative techniques.

The High Level of Participant Contribution to the Research

Another major strength of focus group methodology is the high level of contribution that participants make to the research. One of the benefits of traditional focus groups is that the moderator can be assured that each of the participants is giving virtually 100% attention to the subject matter throughout the session (Greenbaum, 2003). Because participants know they are under observation by the moderator, it is relatively easier to make participants fully engaged even during non-discussion time. For instance, in surveys that administer questionnaires to participants and collected later, there is no way to determine how involved the participants really are. Participants could easily be doing other things like working on the computer or watching television while answering the questionnaire. Thus, there would be a much lower level of involvement for these participants, resulting in lower quality data for the research.

Additionally, focus group research has immense benefits to participants. The opportunity to be involved in the decision making processes (Race, Hotch, & Parker, 1994), to be valued as experts, and to be given the chance to work collaboratively with researchers (Goss & Leinbach, 1996) can be very empowering for many participants. If a focus group discussion works well, trust develops and the group may explore solutions to a particular problem as a unit rather than as individuals (Kitzinger, 1995). For example, in a study by Goss and Leinbach (1996), the Indonesian transmigrant participants in the research experienced a sense of emancipation through speaking in public and by developing reciprocal relationships with the researchers. Another advantage of focus groups to clients, users, participants or consumers is that they can become a forum for change (Race et al., 1994), both during the focus group meeting itself and afterwards. For example, in a study by Smith, Scammon, and Beck (1995), patients in a hospital were invited to give their views about services and to provide ideas about improvements. In this instance, change occurred at the management level as a direct result of patients' input. Thus, if participants are actively involved in the change process as in the above study, empowerment can realistically be achieved.

The Dynamic Nature of the Method

Another major strength of focus groups is the dynamic nature of the methodology. With focus groups, the researcher can modify the topics that are covered in the sessions before the fieldwork has been completed. For example, if one is conducting focus groups to evaluate reactions to a new product concept, it is standard practice to modify the concept statement as the research progresses based on the learning from the research, as the objective is to complete the research with the best possible statement (Greenbaum, 2003). This is not possible with surveys, interviews and other quantitative research methods, as they are normally conducted using structured questionnaires that are administered at one time and are not changed during the data gathering process.

The Utilisation of Participants' Non-Verbal Cues as Research Input

The ability of focus groups to employ the non-verbal behaviour of participants in research is a major strength of this methodology. In focus group research, a researcher

can utilize the non-verbal cues of participants as a significant part of the data that is gathered. These signals will help the moderator determine how to most effectively utilize the individuals in the group to maximize the effectiveness of the discussion and also provide another dimension as to the general receptivity of the topic being discussed with the participants (Greenbaum, 2003). In addition, the expressions, attitudes, and the intensity of the conversation among participants can be included by the researcher. The ability of the focus group methodology to involve the non-verbal behaviour of participants in research is a major strength of this methodology unparalleled in many qualitative and quantitative research methods.

The Interaction among Participants

A major strength of focus groups is the interaction among participants when the moderator stimulates discussion among them. According to Kitzinger (1995), interaction is the crucial feature of focus groups because the interaction between participants highlights their view of the world, the language they use about an issue and their values and beliefs about a situation. Interaction also enables participants to ask questions of each other, as well as to re-evaluate and reconsider their own understandings of their specific experiences (Gibbs, 1997). This can often generate new thinking about a topic which will result in a much more in-depth discussion of the subject being covered. Importantly, it enables participants to share their views whether agreeing or disagreeing with the subject, thus enabling all the key issues to surface. This interaction among participants does not exist in other qualitative and quantitative approaches.

Limitations of Focus Group Methodology

As with any research method, focus group method is not without weaknesses. According to Calder (1977), challenges associated with focus groups are most often attributed to two main factors: the moderator, and the basic nature of group discussions. The following represent the most frequently mentioned criticisms of the traditional focus group technique, which are normally advanced by individuals seeking to use other qualitative methodologies or quantitative research.

Sensitive Topics

In contrast to the position espoused by Suyono et al. (1981) that focus groups are more conducive for eliciting information about sensitive topics such as abortion, Mack, Woodsong, MacQueen, Guest, and Namey (2005) suggest that focus groups are not the best method for acquiring information on highly personal or sensitive topics. Many researchers shy away from using focus groups when investigating very difficult or sensitive topics for fear that participants will not disclose their real feelings with the group. A group setting is not always ideal for encouraging free expression, as sometimes the group can inhibit discussion (Khan et al., 1991). For example, in focus group research by Vlassoff (1987) involving adolescent girls in India, though the researcher tried at best to create a comfortable setting conducive for discussion, the participants were utterly shy and refrained from discussing their views among the other participants. Participants, in

discussing sensitive topics, may also convey socially desirable information that could confound gathered data. In addition, according to Kitzinger (1995), the articulation of group norms may silence individual voices of dissent.

The presence of other research participants also compromises the confidentiality of the research session. For example, Kitzinger (1995) found in group discussion with elderly people in long term residential care that some residents tried to prevent others from criticizing staff, becoming agitated and repeatedly interrupting with cries of "you can't complain" and "the staff couldn't possibly be nicer." However, often the most sensitive topics can become very easy to discuss when participants recognize that all have the same problem in common, and that the goal of the group is to talk about various aspects of their situation in order to find a viable solution. It is important to reiterate that there also is an equally large group of researchers (e.g., Folch-Lyon et al., 1981; Suyono et al., 1981) who have found that when handled properly, there is a feeling of safety in numbers, and that people are often more willing to share more personal details when they recognize that the others in the room are in the same situation.

Dominant Voices

The domination of focus groups by an individual or group of individuals is another potential shortcoming of focus groups. In most cases, focus groups tend to become influenced by one or two dominant people (Greenbaum, 2003). This occurs when a contribution is not strongly challenged by the others, so this dominant viewpoint emerges from the discussion. In such a case, other opinions within the group may be ignored. In addition, research suggests that group discussion can cause participant's attitudes to become more extreme, which could in turn result in greater unification of group opinions or polarize participants (NOAACSC, 2009). This situation could confound gathered data. Thus, the issue of dominant voices is a major potential limitation of focus group methodology.

Artificial Environments

Another major limitation of focus groups is that they are conducted in very artificial environments which can influence the responses that are generated (Greenbaum, 2003). This is the argument that ethnographers make when recommending their methodology instead of focus groups. A key building block of the ethnographic methodology is observation in a "real world" environment (Greenbaum, 2003). Ethnographers, unlike researchers employing focus groups, situate themselves in the real environment that is unreachable for focus groups. Thus with focus groups, participants may behave differently from how they behave when they are not under observation which may confound the quality of gathered data.

External Validity

The external validity or generalizability of focus group findings is another major shortcoming of focus group methodology. This is the most common criticism of the focus group methodology among advocates of quantitative research (Greenbaum, 2003).

External validity is defined as the degree to which the results of research accurately generalize to other individuals and situations (Heiman, 2001). Focus group samples are usually small and purposively selected. Thus, they do not allow for generalization to larger populations (Khan et al., 1991). According to Khan et al. (1991), it is not appropriate to treat the findings from focus group discussions as though they were findings from quantitative research. They further assert that while the focus-group discussion can provide plausible insights and explanations, one should not extrapolate from focus group discussions to the distribution of responses in a population. Thus, the external validity or generalizability of focus group findings is a major shortcoming of focus group research.

While the focus group methodology is saddled with many constraints as shown above, Myers (1998) suggests that these constraints "do not invalidate focus group findings; in fact, it is these constraints that make them practicable and interpretable". Moreover, Khan et al. (1991) indicates that these limitations can be viewed as possibilities for the method. The discussion which follows will discuss how focus group methodology could be improved to produce valid and reliable data in research.

Strengthening the Focus Group Method

It can be inferred from the above discussion that although the focus group method possesses enormous strength, it also has some weaknesses. As indicated above, some of these weaknesses may confound the data generated from this methodology if not considered and their effects reduced to the barest minimum. Thus, it is important that this method is ameliorated so that data generated from it will be valid and reliable. Next, procedures for improving the validity and reliability of the focus group method will be discussed.

Preparations for the Focus Group Session

Preparations in advance of the focus group session are as important as the discussion itself. Adequate planning for the focus group discussion is crucial for a successful result. Once questions for the discussion have been developed, it is time to identify a venue for the focus group session. The venue should be convenient to participants, as well as provide a point of neutrality (NOAACSC, 2009). Neutral locations can be helpful for avoiding either negative or positive associations with a particular site or building (Powell & Single, 1996). For example, if participants will be discussing the quality of health-care in a health clinic, it might not be a good idea to hold the discussion in the premises of the health facility. The discussion must be done in a casual atmosphere such as in rented facilities, people's homes, or where the participants hold their regular meetings if they are a pre-existing group. A relaxed environment promotes openness and willingness to talk, two factors vital to a successful focus group (Barnett, 2002).

In addition, prospective participants must be reminded a day before the scheduled focus group meeting to secure a commitment from them. They must be informed about how long the group discussion will last and be assured that the time frame will be adhered to. Many participants will start to exhibit signs of boredom or restlessness if kept

too long. Telling people in advance of the ending time is likely to increase commitment and willingness to participate (Barnett, 2002). It is also important to note that focus group discussions were originally developed for market research in developed countries (Khan et al., 1991). Thus, some of the procedures for conducting focus group discussions will need some modification when being used in developing and rural country environments.

Selecting Participants

Social scientists differ over the optimal number of participants for a successful focus group. Many prefer a group ranging from eight to 12 (Kitzinger & Barbour, 1999), 6-8 (Krueger, 1998), or five to six (Green & Hart, 1999). According to Brown (1999), the size of the group should consist of four to 12 if the group is homogeneous and six to 12 if heterogeneous. According to Barnett (2002), a balance between the need to have enough people for a lively discussion and the danger of an overwhelming group size must be achieved. If the group consists of too few people, active conversation may not be generated, while too large a group may lead to some participants not having an opportunity to express themselves.

Recruiting Participants

After the prospective sample has been determined, they must be recruited (Stewart & Shamdasani, 1990). Recruitment refers to the process of gathering the group together in the same place at the same time (Barnett, 2002). The researcher can choose from several methods of recruitment such as using membership lists, getting referrals from others or through word of mouth, or through the snowball technique. Demographic variables are another important consideration. In conducting focus groups, it is important to consider if the focus group reflects the target population in terms of gender, ethnicity, religion, political views, socioeconomic status, age, education, and whatever other dimensions might be relevant (Barnett, 2002).

Another important consideration is whether to target a heterogeneous or homogeneous sample. Most researchers prefer a homogeneous group (Vaughn et al., 1996). This is because homogeneity will ensure that participants will be comfortable speaking with each other. If participants are familiar with each other outside of the research situation, this will, in some cases, facilitate more open responses and, in other cases, may close off a dialogue (Williams & Katz, 2001). Advocates of heterogeneous groups however argue that focus groups should capture diverse opinions, and that participants should feel able to present their perspective free from the fear of appearing different. In heterogonous focus group discussions, it is important that researchers take into consideration how hierarchy within the group may affect the data. For instance, junior staff of an institution is likely to be inhibited by the presence of their administrator.

In addition, when recruiting participants, the researcher must 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 some information will satisfy potential participants' curiosity and ensure that they are interested and willing to participate.

Duration of the Session

The duration of the focus group session is also worth considering. The timeframe should be dependent on the availability of participants since the focus group session should be scheduled at a day and time that is convenient for participants. A more generally agreed-upon time frame is one and a half to two hours in length (NOAACSC, 2009). Most importantly, it may be necessary to identify convenient times from each participant and then determine an ideal time frame for the group discussion.

The Number of Focus Group Sessions

According to Barnett (2002), determining how many focus groups are needed for a study is more difficult than establishing the number of participants per group. Not much is known about how many focus group sessions are needed to be reasonably sure that all or most aspects related to the subject of inquiry have been explored (Khan et al., 1991). The number of focus group sessions to be conducted will be mediated by factors such as the purpose and scale of the research, as well as the heterogeneity of the participants (Morgan, 1993). A diverse range of participants is likely to necessitate a large number of sessions (Wong, 2008). What is needed in this area is a methodical investigation into this area which will permit the users of focus groups to make an informed decision on the optimal number of focus groups for their purposes. For the time being, common sense, financial resources and availability of participants can be the guiding principles. Another guideline is the concept of saturation (Cameron, 2005) which suggests that researchers continue conducting focus group sessions until they reach a point of saturation, where there is repetition of themes and no new information is shared.

The Moderator's Role

Once a meeting has been arranged, the role of the moderator becomes critical. In beginning the discussion, the moderator needs to inform participants that their responses are neither right nor wrong. It is the job of the moderator to let the group members know that they can disagree with views expressed by other participants. During the discussion, disagreements within groups can be used to encourage participants to elucidate their point of view. The moderator will also need to encourage debate among participants. The moderator must probe for details, or move things forward when the conversation is drifting or has reached a minor conclusion.

At the same time, a moderator must not show too much approval (Krueger, 1998) so as to avoid creating the impression of favouring particular participants. A moderator must also avoid giving personal opinions so as not to influence participants towards any particular position or opinion (Gibbs, 1997). The role of the moderator is a challenging one and moderators need to be good listeners, non-judgmental and flexible, and have excellent interpersonal and personal qualities. These qualities will promote the participants' trust in the moderator and facilitate affable discourse. In some cases, the researcher may not have the experience necessary to lead the discussion. In such instances, it is important to find another individual who can be an effective moderator for the discussion. Finally, it is essential that when the discussion is over, the moderator

and/or the researcher makes an important concluding statement, thanking the participants for their contributions and assuring them of the confidentiality of their submissions.

Recording Focus Group Sessions

Recording is indispensable in focus group research. The researcher may record the discussion for analysis later. In beginning the session, the moderator needs to explain and assure participants that notes, videotapes and audiotapes will be kept completely confidential and that reports will be anonymous. While video recording the discussion is useful because nonverbal communication behaviours are easily missed otherwise, this could be uncomfortable for participants. Videotaping is extremely invasive (Barnett, 2002) so many participants may not be comfortable making their submissions knowing that every movement can be captured. In such instances, the researcher may use an audio recorder or note-taker. According to Barnett (2002), an audio recorder is much less intrusive and less likely to stifle discussion.

Even when the discussion is being video or audio recorded, it is important that notes be taken. Note-taking is crucial because researchers and/or moderators cannot observe the range of behaviours of the group. In the absence of video recorders, important nonverbal behaviours which can aid in interpretation can be missed if notes are not taken. The note taker, usually the researcher, should know about the objectives and subject of inquiry, and is expected to be good in observing and noting nonverbal group reactions such as facial expressions (Khan et al., 1991). The researcher then transcribes the complete discussion later, based on notes and tapes. These transcripts then serve as basic data for analysis.

Analysing Focus Group Data

Focus-group discussions provide a great deal of data. This data needs to be analysed so the researcher can make meaning of it. Analysing focus groups is basically the same as analysing any other qualitative self-report data (Mays & Pope, 1995). In commencing the analysis process, it is imperative that the researcher summarize the discussion immediately after the focus group. This will forestall any loss of important information resulting from poor memory. In addition, tapes should be transcribed as soon after the focus group discussion as possible (Barnett, 2002). It is important that researchers do the transcription themselves as this will improve the quality of the analysis. Again it is worth noting that transcription is first-level analysis so it is important that researchers transcribe the data themselves.

Once the transcribing is done, the next step is coding the data in the transcripts, which involves sorting the data and assigning them to categories (Dey, 1993). Coding can be done manually, by “cutting and pasting” and using of coloured pens to categorise data (Wong, 2008). With recent technological advancements in computer software, there are data management packages such as NUDIST and NVivo that have been invented to facilitate the coding process. Nonetheless, the researcher is responsible for the interpretive process of the analysis.

It is important to note that coding merely allows the researcher to establish connections in the data to facilitate data analysis. The actual data analysis process can be

classified into two levels (Wong, 2008). The basic level of analysis is merely a descriptive account of the data. It consists of an explanation of what was said and no assumptions are made. The second level of analysis is interpretative and involves the comprehension of the various themes or perspectives, creates links between the themes, demonstrates how those themes emerged and generates a theory grounded in the data (Basit, 2003). This process must be carried out until saturation is reached.

Reporting Focus Group Findings

In reporting focus group findings, researchers must consider the intensity of respondents' comments, as well as the specificity of probe responses (Fern, 2001). Focus group results are often expressed in impressionistic terms, and should be replete with statements, such as "many patients mentioned…", "several disagree…" and "almost none of the patients had ever…" (Wong, 2008). Findings must also be supported with direct quotes to illustrate the different ways responses were expressed. These quotes should be reported anonymously. Although it has been suggested that numerical terms is inappropriate in reporting results of focus groups (Fern, 2001), some qualitative data can be dealt with in a quantitative way. For instance, if a theme repeatedly appears in the data, it is alright to quantify how often it appears. Statistical frequencies can be used to describe the important characteristic of the themes, although a generalisation is not possible. It should be noted that due to the sampling method and the number of members of a focus group, it is usually not large enough to be a representative sample of a population. Thus, the data obtained is not necessarily representative of the general population, unlike in a survey (Wong, 2008).

Ethical Considerations

Ethical considerations for focus groups are the same as for most other methods of social research (Homan, 1991). Before the study is begun, the researcher must obtain ethical clearance from for instance ethics committees, civil authorities and community representatives. The consent of the focus group participants is always required. Prospective participants should understand that participation in the focus group is a completely voluntary activity, and that even after the discussion begins they are free to leave. In addition, when selecting participants, researchers must ensure that full information about the purpose and uses of participants' contributions is given. Being honest and keeping participants informed about the expectations of the group and topic, and not pressurising participants to speak is good practice. A particular ethical issue to consider in the case of focus groups is the handling of sensitive material and confidentiality given that there will always be more than one participant in the group. At the outset, moderators will need to clarify that each participant's contributions will be shared with the others in the group as well as with the moderator. Participants need to be encouraged to keep confidential what they hear during the meeting. Furthermore, researchers have the responsibility to anonymize data from the discussion when reporting it.

Conclusion

This article has discussed problems and prospects associated with the use of the focus group method in social and behavioural science research. The main uses and strengths of focus groups in social and behavioural science research have been discussed. In addition, the limitations of focus group have been elucidated. It is important to note that some of these limitations can be viewed as possibilities for the method. Indeed, Myers (1998) suggests that "the constraints on such talk do not invalidate focus group findings; in fact, it is these constraints that make them practicable and interpretable" (p. 107). Further research is therefore needed regarding how to incorporate these shortcomings and complexities into focus group analysis. Furthermore, the article has discussed how focus groups can be improved for use in social and behavioural science research. This article challenges researchers to widen their scope and continually seek creative ways of incorporating focus groups in research. Focus group discussions can be very empowering for both researchers and participants. Additionally, focus groups can be used to gather rich data that can enhance decision-making and provide constructive data for the development, assessment, and modification of programs. Such information might not be accessible from other research methods. This article has also shown that focus group discussions have considerable potential to be used as a complementary approach to enrich social and behavioural science research. It is hoped that this article has further stimulated interest in the use of focus group method in social and behavioural science research

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