

Comparing Traditional, Group Support Systems (GSS) and On-Line Focus Groups

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Blackburn and Stokes (2000, p.48) suggest that focus groups have been “relatively under used” and that part of the reason for this might be a lack of understanding by researchers of “what rigorously conducted focus groups can achieve.” Our aim, therefore, is to provide researchers with a greater awareness of the potential for conducting focus groups, together with specific guidance on how to undertake three particular types of focus group: the traditional focus group; focus groups undertaken using Group Support System (GSS) software; and on-line focus groups. Each method will be discussed and their potential advantages and disadvantages highlighted.

INTRODUCTION

Focus groups represent a qualitative method for simultaneously exploring the views and perceptions of a number of individuals about an issue and would normally be conducted at either the beginning or end of a research project. For example, focus groups can be conducted at the beginning of a project as a precursor to a survey (Frey and Fontana 1991). Here the goal might simply be to check the wording of questions. Alternatively, the researchers may be looking to focus group discussions to stimulate their thinking and help generate hypotheses for subsequent testing. In this case the researchers would be in an exploratory phase and the focus group methodology is employed to learn more about the phenomenon or topic under investigation (Calder 1977). Focus groups can also be used at the end (or in the latter stages) of a project to help interpret questionnaire (or other quantitative) data “for which explanations might otherwise have to be conjectural” (Deri, Dinnerstein, Harding and Pepitone 1948, p.257), thereby contributing to a better understanding and interpretation of the material gathered. However, despite the potential benefits associated with the use of focus groups Blackburn and Stokes (2000, p.48) suggest they have been “relatively under used” and that part of the reason for this might be a lack of understanding by researchers of “what rigorously conducted focus groups can achieve.” With this in mind, our aim is to provide the reader with: a greater awareness of the potential for conducting focus group studies; and specific guidance on how to organize and conduct various types of focus groups.

Advantages of Focus Groups

From a review of the literature (see, for example, Goldman 1962; Fern 1982a; Basch 1987; Frey and Fontana 1991; Morgan 1996) there appears to be at least ten potential advantages associated with the use

of focus groups as a qualitative research method. First, they provide a relatively easy way of learning about the opinions of sub-groups within society. Second, by using audio (or audiovisual) recording equipment the researcher can obtain a permanent record of the verbal (or verbal and non-verbal) communication between group members. Third, they provide a particularly flexible method of inquiry because they can be conducted with just a few individuals or a larger group (twelve or more). They can also be used in a cross-sectional design to obtain opinions at a particular point in time, or longitudinally to examine changes in opinions over time. Fourth, involving participants in a form of group interview will generally be less costly than conducting one-on-one personal interviews with an equivalent number of individuals. Fifth, the turnaround time with a group interview is considerably shorter than would be the case with in-depth interviews conducted with a similar number of individuals. Sixth, with individual interviews the interaction is limited to the interviewer and the respondent; while in a focus group there is interaction between participants. This interaction can potentially provide additional explanations for, and a deeper understanding of, the views held by the group. Seventh, in a focus group situation the moderator can probe comments as they arise to judge the reaction of the other group members, again providing potentially more depth than would be the case in an interview situation. Eighth, it is also likely that “group pressures may inhibit individuals from providing misleading information” (Basch 1987, p.434). Ninth, because the focus group participants will often have similar backgrounds (and because participants may have had the opportunity to relax over some light refreshments prior to the focus group commencing) they are likely to be more willing to voice their true feelings than would be the case in a face-to-face interview with a complete stranger. Tenth, consistent with a number of the previously stated advantages, proponents of the focus group method argue that the sum of the responses from a group will exceed the sum of the individual responses.

Disadvantages of Focus Groups

While a number of advantages associated with focus groups have been advanced, there are also some potential disadvantages that need to be recognized. Fern (1982b) also notes that many of the advantages listed above have not been subjected to scientific testing, and where they have been formally tested the results suggest the stated benefits are marginal, at best. For example, Fern (1982b) found that participants interviewed in a group situation generated fewer ideas in total than an equivalent number of participants involved in one-on-one interviews; that is, there were diminishing returns (in terms of idea generation) to focus group size. However, even though the total number of ideas produced by a focus group might be less, the cost per idea generated should also be less than would be the case with individual interviews. Further, although there may be diminishing returns in terms of idea generation, the additional interaction between group members can potentially provide additional explanations for (and a deeper understanding of) the ideas and views held by the group, compared to an individual interview.

In terms of specific disadvantages associated with the focus group method, the literature (Fern 1982a; Basch 1987; Kaplowitz and Hoehn 2001) suggests there are eight that researchers should be particularly aware of. First, focus groups are not useful for testing hypotheses in the tradition of experimental design. Second, the results from focus groups are generally not appropriate for drawing inferences about larger populations; that is, they should not be generalized. Third, only individuals who are capable and willing to verbalize their views can be studied in a focus group. Fourth, dominant group members may result in incomplete or biased information if other members are reluctant to speak out. Fifth, given the lack of anonymity, some participants might be reluctant to provide their true feelings about an issue; particularly if they believe their views to be controversial and not in keeping with those of the other group members. Sixth, it is possible that the ideas raised and the views expressed by the group could reflect ‘groupthink’ rather than being representative of the diversity of views held by the wider population. Seventh, in preparing transcripts from audio or video tapes it is not always possible to hear all the comments; particularly if some group members are quietly spoken or if a number of participants are making points simultaneously. Further, the transcription process and subsequent analysis of the transcripts can be time consuming and can significantly delay a research project. Eighth, there is also the issue of observer dependency, that is, the extent to which the responses provided by the group members are influenced by

the researcher. Note that many of these potential disadvantages can be minimized in a well designed focus group run by an experienced moderator.

Types of Focus Group

While Wikipedia (2011) lists a number of different types of focus group, we will look specifically at three alternatives: the *traditional* focus group; focus groups undertaken using *Group Support System (GSS)* software; and *on-line* focus groups. While there have been a number of entrepreneurship studies that have used the *traditional* method, we felt that both the *GSS* and *on-line* focus group methodologies offer some potentially important advantages over the *traditional* method. For example, the *GSS* method is particularly useful for: ensuring that the discussion is not dominated by a few assertive individuals; maximizing the contribution of all members, as participants can enter comments simultaneously thus permitting each group member to have more time to contribute ideas; and overcoming a reluctance by some group members to contribute because of concerns they may be ridiculed for asking ‘foolish’ questions or making unpopular comments. With *on-line* focus groups there is the added advantage of being able to include individuals from remote areas (different geographical regions) who might find it difficult to attend a *traditional* (or *GSS*) focus group because of the travel required.

The advantages and disadvantages of using each of these focus group methodologies will be further examined in the remainder of this paper, which will also explain how to organize and conduct a focus group using each technique.

CONDUCTING A TRADITIONAL FOCUS GROUP

Much of the prior empirical research has relied heavily on cross-sectional survey methodologies (mail and/or telephone). However, as closed-ended questions effectively require appropriate pre-knowledge of the area under study they are less likely (compared to more qualitative, open-ended questions) to present an exhaustive picture of a relatively unknown area of interest. Worse still, asking closed-ended questions may simply result in confirming the researcher’s expectations without the researcher knowing that important detail is being missed.

One way to generate broader qualitative data is through face-to-face interviews. However, Blackburn and Stokes (2000) argue that this method may suffer from the same inherent flaw as surveys, in that business owners may try to give an ‘expected’ answer rather than an accurate picture of themselves or their business. Blackburn and Stokes (2000) suggest that such difficulties can potentially be overcome through the use of a focus group approach because participants may feel more comfortable about sharing their feelings and experiences within a group of peers. It should also be noted that participants are more likely to be candid in a group situation because the focus is on the group and the ideas it generates rather than on the individual. A further benefit attributed to focus groups (over other qualitative methods such as personal interviews) is the additional insights that can be gained from the interaction of group members as each speaker provides a platform upon which others can contribute, rather than only responding to a pre-determined list of questions.

The *traditional* focus group comprises a single moderator controlling/overseeing an interactive group discussion where participants are free to talk with other group members in response to issues/questions raised by the moderator. These discussions are usually captured with audio (or audiovisual) recording equipment. Below we provide some guiding principles that should be followed when conducting a *traditional* focus group discussion. These include decisions concerning: the number and nature of participants; the number of focus groups to be conducted; the focus group structure; selecting a suitable venue; choice of moderator; and how to run the focus group session.

Deciding on the Number of Focus Groups

Normally several focus groups are held to ensure that a broad cross-section of views and opinions are canvassed on the topic of interest. At a minimum we would recommend holding two focus groups

because it is unlikely that researchers could feel confident about achieving a satisfactory outcome on the basis of a single group discussion. This is particularly so given some of the potential difficulties that can arise when conducting focus groups. For example: the recording equipment may prove faulty; a significant number of participants may fail to show up; a very vocal/disruptive participant may stifle discussion; and, if there are too many very quiet participants, it might be hard to generate adequate discussion.

Ideally, additional focus groups should be conducted until no more new ideas are being generated (if the study is 'exploratory' in nature) or until there appears to be a reasonable consensus among the participants (if the study is 'confirmatory' in nature). In practical terms, however, focus groups take considerable planning and can be costly to run (particularly if a professional moderator is being used and participants are being provided with some recompense for giving up their time to participate) and, therefore, it would be normal practice to decide on the number of focus groups to be conducted at the outset. This would almost certainly be the case where a grant or other form of funding is being sought for the project.

In this situation three key factors need to be considered when deciding on (and justifying) the number of focus group sessions to be conducted. First, is the study 'exploratory' or 'confirmatory'? Normally 'exploratory' focus groups are run with fewer participants (than 'confirmatory' focus groups) and, therefore, more focus group sessions are required to achieve a reasonable outcome. Second, how many differing participant characteristics are being considered. For example, if we are examining business owners as one homogeneous group then a minimum of two focus groups would be required. If, however, we are interested in the views of 'nascent' versus 'established' business owners then a minimum of four focus groups is likely to be required (two for each demographic group). Third, while it is clear that the greater the number of focus groups held the more confidence the researcher(s) can have in the outcomes (and the easier it is likely to be to get the findings published), it is important to note that there are typically diminishing returns with each additional focus group.

Deciding on the Number and Nature of Participants

While there is no 'ideal size' for a focus group, it is generally accepted that the most effective focus groups are those with between 8 and 12 participants (Fern 1982b). If the group is too large some participants may become frustrated because they are unable to adequately express their views; particularly where there are a number of dominant participants and there is limited time available for each question. Note that this problem is likely to be made worse if a relatively inexperienced moderator is conducting the session. Alternatively, if the group is too small there may be difficulties generating an active discussion; particularly if there are a number of very quiet participants.

As a starting point, the size of a group should first be guided by the aims of the research. For example, if the focus groups are being conducted to help generate research hypotheses (that is, they are more 'exploratory' in nature) a larger number of smaller groups, conducted in a less structured manner, is preferable to maximize the amount of information that is likely to be gathered. By way of contrast, if the focus groups are being conducted to interpret research findings (that is, they are more 'confirmatory' in nature) then a smaller number of larger groups, conducted in a more structured manner, is likely to be preferable.

Besides the nature of the study, there are a number of other practical considerations that also need to be considered when determining the size of focus groups. First, the time available for the focus group discussion needs to be addressed. As a 'rule of thumb', allowing between 90 and 120 minutes for discussion seems reasonable (Kahan 2001). Trying to maintain the interest of the group for longer than two hours (particularly if the focus group is to be held after work, which is often the case) is likely to prove difficult. Second, is the number of questions to be discussed. Third, is the time that is deemed appropriate to allot to the discussion of each question. Here it is important to note that while not all participants will necessarily want to respond to every question, it is important to allow sufficient time for the moderator to try and elicit responses from the less vocal members of the group. If we assume, for example, that our focus group session is to run for 120 minutes, there are to be 10 questions and allowing

1.5 minutes for each participant to provide their response, then we would ideally like to have 8 participants ($8 \times 10 \times 1.5 = 120$). If there were fewer questions to be discussed, or it was felt that less time would be needed to answer each question, then it would be appropriate to invite additional participants (or reduce the time allocated for the focus group session). Fourth, it is also important to note that not all invited participants who have indicated a willingness to take part in the focus group will turn up; there will be the inevitable 'no-shows'. Therefore, it is generally advisable to invite one or two additional participants to ensure the size of the group is sufficient to generate a lively discussion. A final consideration in deciding on the size of the focus group is the experience of the moderator. Other things being equal, if the moderator is inexperienced it would be prudent to err on the side of smaller, rather than larger, focus groups.

Because the objective of conducting a focus group is to highlight where agreement exists amongst the participants, it is normal practice for the participants to be selected on the basis that they are relatively homogeneous with respect to the topic of interest. Therefore, a purposive sampling approach would normally be adopted in recruiting focus group participants. To determine how representative the views/opinions of a focus group are (and how strongly they are held) subsequent research using a probability sampling design can be undertaken. The characteristics to be considered in selecting focus group participants could include age, sex, and any other factors that might influence the attitudes of the participants towards the topic of interest. It has also suggested that, ideally, participants should be 'strangers' because having acquaintances participating in a focus group may upset the dynamics of the group and could inhibit responses (Fern 1982b).

Choosing a Moderator

The focus group discussion is led and controlled by a moderator/facilitator who has eight primary tasks that she/he needs to fulfill. First, to create a non-threatening environment that promotes a free-flowing discussion. Second, to help members share their experiences by ensuring that, as far as possible, there is only one person speaking at a time. Third, to elicit the views of all, particularly the quieter participants. Fourth, to facilitate interaction amongst participants. Fifth to ensure that all important topics and questions in the prepared outline are covered, that is, keeping group members on track. Sixth, to present questions in an unbiased way. Seventh, to use judgment in pursuing alternative lines of questioning or to probe responses if this is likely to lead to a better understanding of the issue/topic being discussed. Eighth, to ensure that the discussion is captured, usually by audio (or audiovisual) equipment.

To achieve all these outcomes clearly requires a highly skilled moderator. There are five key traits/skills that are important for moderators to possess if they are to produce a useful outcome. First, they must be able to create a non-threatening environment that promotes a free-flowing discussion. Second, they must be sensitive to the views of the participants, even if those views are not shared by the moderator. Third, they must have an outgoing personality that helps to make the participants feel comfortable and generate discussion. Fourth, they must have experience in controlling group discussions to ensure that all participants have the opportunity to have their views heard and, particularly, to ensure that a few individuals do not dominate the discussion. Fifth, they must have a good understanding of the subject matter being discussed.

Who then should be chosen to take the role of moderator? Should it be a member of the research team or should a professional moderator be engaged for this purpose? In choosing the most appropriate moderator there appears to be two schools of thought. The first suggests that an experienced moderator should be sought for this task (Kahan 2001). The second argues that the researcher (or one of the research team) should take the role of moderator (McLafferty 2004). Like most things in life, this is a matter of judgment and will depend on the answers to a number of questions. First, does the researcher, or a member of the research team, have any experience in moderating a discussion group? Second, are there funds available to pay a professional moderator? Third, what is the nature of the study? For example, if the study is exploratory in nature, then having a deep understanding of the topic/issue might outweigh a lack of skill/experience in conducting group discussions.

Where a decision is made to use a professional moderator it is essential that sufficient time is spent with that person so the researcher (research team) can ensure the moderator has a reasonably in-depth understanding of: the aims of the research project; the nature of the participants; and the questions/issues to be discussed. It is also important that at least one member of the research team is present (but in the background) at all focus group sessions to: observe the body language of participants; take notes; and, if necessary, provide clarifying comments about the project.

Focus Group Structure

Depending on the purpose of the research, focus groups can be relatively structured (with specific questions asked of group members and with the moderator playing a very active/directive role) or they can be quite unstructured (with participants being allowed/encouraged to talk more freely with each other in response to open-ended questions). For example, if researchers are simply interested in ‘pilot testing’ a research instrument then a fairly structured approach would be called for with the moderator systematically progressing the discussion through each questionnaire item. Alternatively, if researchers have the more ambitious goal of using qualitative research to generate (or select) theoretical ideas and hypotheses which they plan to test/verify with future quantitative research then the focus group should be conducted in a much less structured manner (Calder 1977).

Selecting a Suitable Venue

There are a number of issues that need to be considered when selecting a venue/room in which to hold a focus group discussion. First, it is important to try and find a suitable location that is reasonably central for the majority of the participants; the further they have to travel at the end of a hard day’s work the more likely they are to be ‘no shows’. Second, the size of the venue needs to be considered. It is important that the venue is reasonably intimate to facilitate discussion, but there needs to be adequate room for all participants to feel comfortable and, ideally, there should be space at the side or rear of the room for one or more members of the research team to sit and observe proceedings. Third, the venue selected should be free from interruptions, such as phones ringing or people passing through (Basch 1987).

Conducting the Focus Group

Having recruited the required number of appropriate participants for a focus group session and decided on both the venue and moderator, the next step is to conduct the focus group. In doing so, the following key steps should be kept in mind.

Prior to Conducting a Focus Group

First, a detailed script needs to be prepared for the session. Amongst other things, this script will cover the aims of the session and the questions/issues to be discussed, and is particularly important when an independent/professional moderator is to conduct the focus group. In this case the script needs to be discussed with the moderator in some detail well before the session is due to be held to ensure he/she has a thorough understanding of the aims of the research. Developing the discussion outline and, in particular, the questions/issues to be discussed requires careful thought and a considerable amount of effort. As with any questionnaire design, each item should have a specific purpose and be related to the research aims. As a general rule, items should proceed from general to specific. Ideally it would also be useful to pretest the script.

Second, a suitable day and time for holding the focus group has to be determined. If possible, some consultation with prospective focus group participants on this issue might be worthwhile. In our experience, conducting focus groups from about 6pm onwards on a Monday to Thursday has typically worked well. A later starting time might be required if participants have to travel some distance to the venue.

Third, when obtaining confirmation from potential participants that they are willing to attend a focus group, the participants should be advised of the location and expected duration of the session. A reminder confirmation should be sent to all participants several days before the session is due to be held, again with the location and timing details provided.

Fourth, recording equipment needs to be arranged and the moderator/researcher must ensure he/she knows how to operate the equipment. Ideally the equipment should be installed in the venue and tested well in advance of conducting the focus group in case any problems arise, however, this might not always be practical. Care needs to be taken with the placement of the recording equipment to ensure that all comments are captured.

Fifth, given a focus group session can normally be expected to last about two hours and is likely to be held after normal working hours, it is generally a good idea to provide some light refreshments before the session starts. This will allow the participants to mingle and ‘unwind’ a little prior to the commencement of the session. If refreshments are to be provided the participants should be advised of this in the confirmation letter they are sent. Depending on the size of the venue to be used for the focus group discussion, it might also be necessary to arrange a separate room in which the refreshments are provided to participants prior to the commencement of the session.

Sixth, budget permitting, a decision needs to be made concerning the reimbursement/compensation to be offered to participants for any travel costs and for giving up their time to attend the focus group session. Again, if compensation is to be provided the participants should be advised of this in the confirmation letter they are sent.

Seventh, it is normal practice to provide participants with an information sheet and consent form prior to the focus group so they are aware of: the general aims of the project; their rights; and how their anonymity will be preserved.

When Conducting a Focus Group

To ensure participants are reasonably close together (to maximize the quality of the audio- or audio-visual recording), any surplus chairs as a result of ‘no shows’ should be removed from around the table. Then, using the script provided, the moderator will typically progress through the following items.

First, the participants should be welcomed and asked if they have any questions about the information they were provided (typically in the form of an information sheet) concerning the focus group they were about to participate in. Then, if they have not already done so, they should be asked to complete and sign a consent form. If it is not obvious, the moderator might also like to point out to the group the location of the nearest restroom. The moderator should also reiterate that all comments provided will remain confidential and that no individual will be identified in any publications that might result from the focus group discussion.

Second, the moderator should provide a brief overview of the main aim(s) of the study and how long the session is expected to last. At this stage the moderator should briefly introduce any members of the research team that are present. Note, however, that members of the research team should not be seated around the table with the focus group participants; they should be seated in the background, preferably at the back of the room or at the side if there is no room at the back, but not at the front of the room.

Third, it is often useful before launching into the session to ask the participants to briefly introduce themselves. This tends to ‘break-the-ice’ and allows the participants to relax a little before the serious business starts.

Fourth, the moderator needs to set the ground rules; for example, there is to be only one person speaking at a time, otherwise it is very difficult to properly capture all comments.

Fifth, the moderator can then work through each of the questions/issues of interest to the researcher(s). In doing so it is important that the moderator provides all participants with the opportunity to express their views. Indeed, the moderator may have to work hard to elicit the views of participants that are not particularly forthcoming. As part of this process, the moderator may have to ensure that a minority within the group does not dominate the discussion. At all times it is important that the moderator remains

neutral with respect to the issues being discussed and, if need be, he/she should feel free to seek clarification concerning any of the views expressed.

Sixth, at the conclusion of the session the moderator should thank all of the participants for their contribution. If any reimbursement/compensation is being provided to the participants the moderator needs to facilitate this process, which will normally involve the participants signing a document acknowledging the payment they have received.

After Conducting the Focus Group

As soon as possible after the conclusion of the focus group session it is useful if the moderator can prepare a brief summary of the main points raised during the discussion and any comments he/she might have that are relevant to the study. This should also be done by any members of the research team that observed the session.

Finally, arrangements have to be made to have the focus group discussion transcribed for subsequent analysis by the researcher(s).

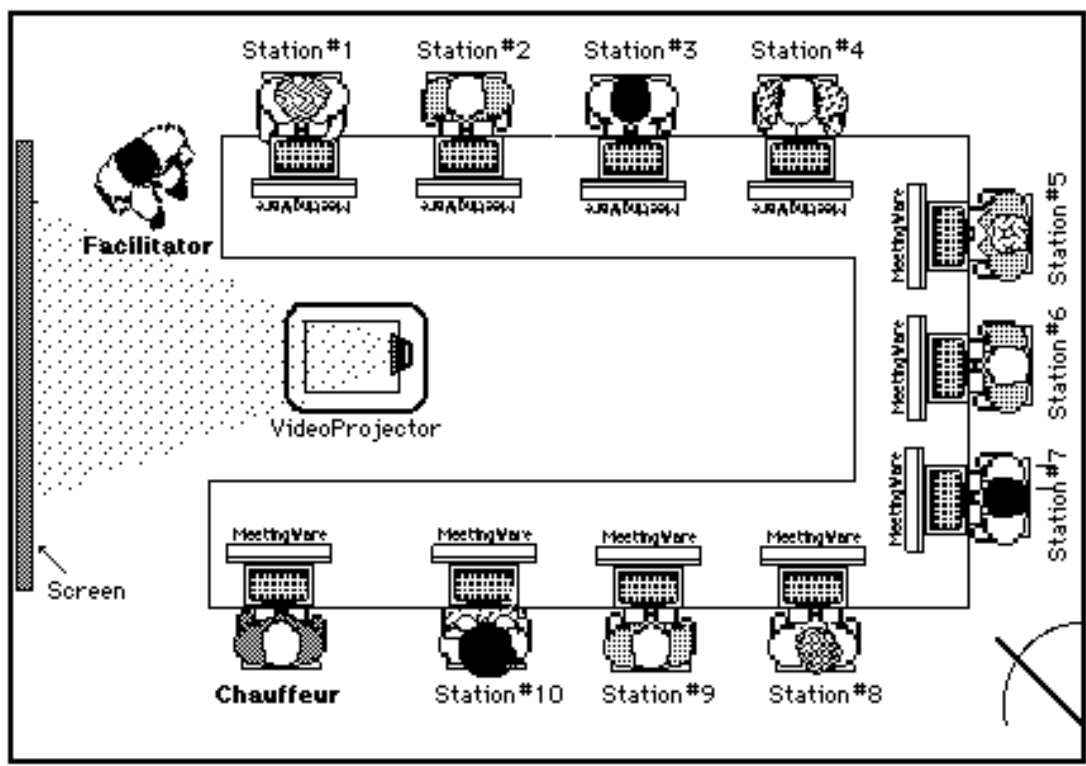
CONDUCTING A GSS FOCUS GROUP

While there are many advantages associated with the use of *traditional* focus groups they also have a number of potential disadvantages. Firstly, the group might too quickly agree to the first idea presented in the discussion ('yea saying'). Secondly, the group's views might be unduly influenced by pressures to conform, as individuals could be hesitant to express views different to those normally expected (Blackburn and Stokes 2000). Thirdly, it is possible for a focus group session to be dominated by a few assertive individuals, preventing the expression of potentially useful ideas through either a reluctance on the part of some participants to speak out, or a lack of opportunity. Finally, there can be a number of potential problems associated with capturing all responses from individual group members. For example, in preparing transcripts from audiotapes, it is not always possible to hear all the comments, particularly if some group members are quietly spoken or if a number of participants are making points simultaneously. Further, the transcription process (and the subsequent analysis of the transcripts) can be time consuming and can significantly delay a research project.

The GSS Approach

It is argued that using a GSS approach can overcome (or at least minimize) many of the above problems; because responses to questions are captured electronically prior to any discussion taking place. In a typical GSS session up to ten people, each with a computer, are arranged around a table as depicted in Figure 1. The computers are linked to a central 'chauffeur's' computer workstation. The chauffeur drives the computer technology that is used to capture, clarify and print copies of responses from group members. The chauffeur's screen can be made visible to group members through a data show and an overhead projector.

FIGURE 1
A TYPICAL GSS MEETING ROOM



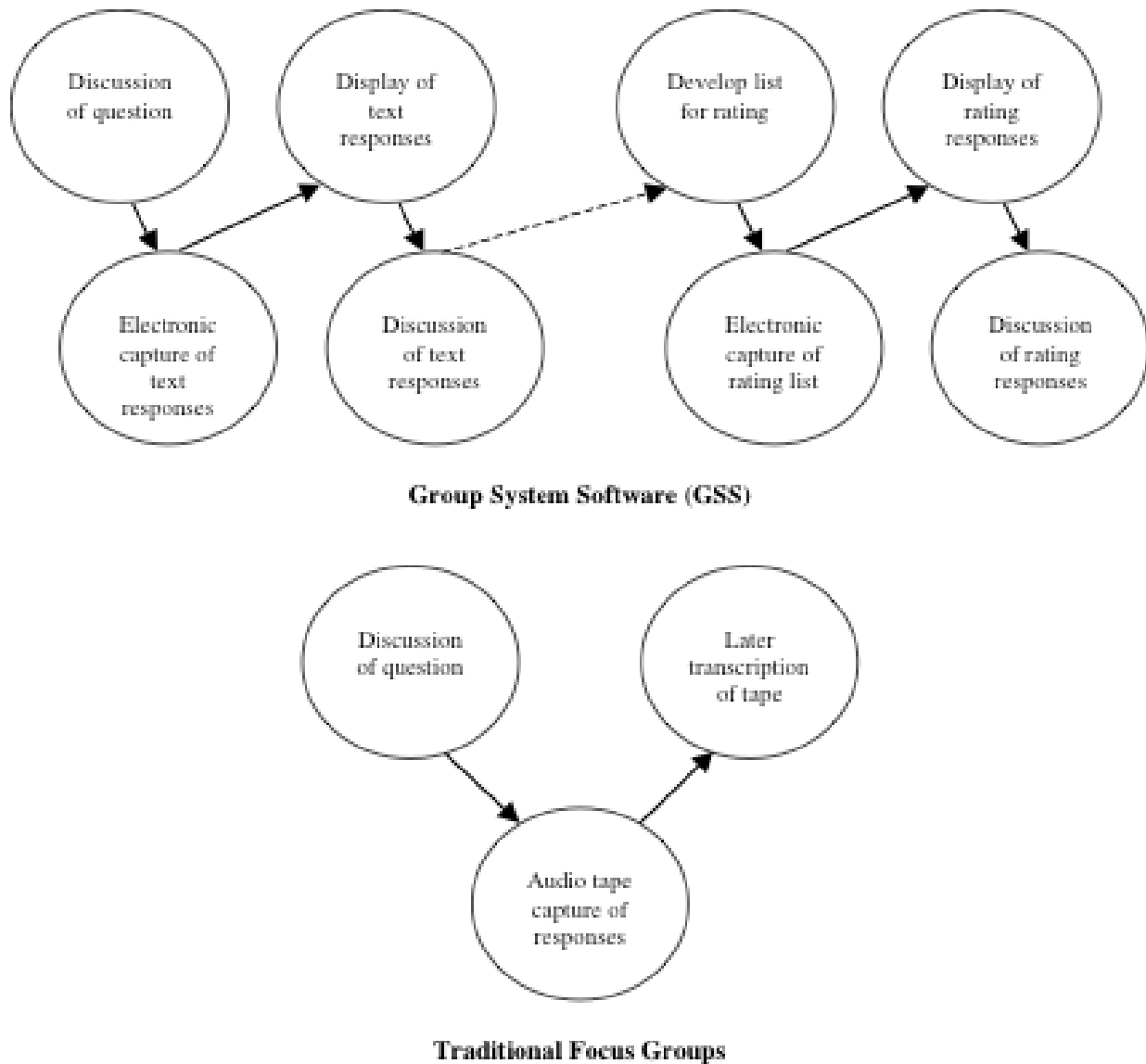
(Based on Lewis (1987) – GSS Meeting Works™)

Participants type their responses to a series of questions posed by the facilitator. The system allows all group members to ‘talk’ at once, creating what Sweeney *et al.* (1997) have termed a ‘parallel interviewing process.’ The ideas that group members generate in a *GSS* session are anonymous and can only be connected to a particular group member if that person makes their views known in the discussion that normally takes place after participants have entered their responses to a question. This process helps to ensure that all ideas are recorded, even where participants may have reason to believe that the majority of group members do not share their beliefs. It has been suggested that this type of anonymity is one of the important advantages of the *GSS* technology, as it ensures that good ideas “are allowed to dominate rather than assertive individuals” (Sweeney *et al.* 1997, p.400).

There are a number of other advantages associated with using *GSS* technology. It allows each group member to input ‘top of mind’ information early in the process, and before any individual has had an opportunity to dominate the discussion. This ensures that all participants have an equal opportunity to have their ideas recorded and considered by the group. As a result, prior studies have suggested that using a *GSS* approach generally results in more ideas being captured than with a *traditional* focus group approach. For example, Sweeney *et al.* (1997) found that *GSS* groups produced a third more ideas compared to *traditional* focus groups. The highly structured nature of *GSS* groups also seems to generate more ‘useable’ information because unimportant sidetracks are more easily avoided and it is easier to keep participants focused on the task (Sweeney *et al.* 1997). Also, when using *GSS* technology, the “facilitator is free to give full attention to group dynamics without having to control a queue of speakers, write ideas or take down notes” (Soutar, Whitely and Callan 1996, p.38) and this can significantly increase the effectiveness of the process. Another potential advantage of the *GSS* approach is that it allows participants to rate, or rank, the ideas generated by the group during the session. This can be useful

when determining which ideas, out of a long list, should be retained for further analysis or discussion. Finally, the *GSS* technology permits the ideas that are generated by the group to be displayed (or printed) at important stages of the process, enabling these ideas to be used for further group stimulus and discussion, and ensuring that good ideas are not ‘lost’. Figure 2 depicts the sequence of events as they might occur in a typical *GSS* session compared with a *traditional* focus group.

**FIGURE 2
SEQUENCE OF EVENTS**



One possible disadvantage of the GSS approach is that it may increase the cost of conducting a focus group session as it requires sophisticated computer equipment (including computer hardware and software and data display facilities) and both a facilitator and a chauffeur. However, there may also be some cost savings as there is no need to transcribe audio or video recordings. Further, there can be a considerable time saving as the GSS output is available immediately after the session concludes, without having to wait for audio tapes to be transcribed.

Another potential disadvantage of using the *GSS* technology is that it may prevent a free flowing discussion. This, in turn, may result in a less ‘in-depth’ understanding of the issues of interest than would otherwise have been achieved using a *traditional* focus group format (Sweeney *et al.* 1997). Whether or not this is a serious disadvantage will depend on the primary purpose of the session (that is, idea generation or in-depth understanding). In any event, significant discussion can still take place in a *GSS* session after participants have entered their responses. Although the purpose of this discussion is normally to clarify or elaborate on particular ideas before moving to the next question, the researcher could capture this discussion using audio recordings, as with a *traditional* focus group.

It should also be noted that some participants may be reluctant to use computer technology with which they are unfamiliar. However, as the use of various forms of electronic communication becomes more widespread, this problem should become less of an issue (Soutar *et al.* 1996).

CONDUCTING AN *ON-LINE* FOCUS GROUP

A major disadvantage with face-to-face focus groups (such as the *traditional* and *GSS* methodologies) is the difficulty in recruiting participants from diverse geographical regions (Oringderff 2004; Brüggem and Willems 2009; Deggs, Grover and Kacirek 2010). However, this problem has (to some extent) been overcome with the rapid development and adoption of internet technology, which has facilitated the use of *on-line* focus groups (Sweet 2001; O'Connor and Madge 2003; Stancanelli 2010). As noted by O'Connor and Madge (2003, p.133) “[t]he attraction of cyberspace lies in its versatility as a research medium offering possibilities in an arena not restricted by geography and where researchers can interact with participants in ways which may not be possible in the real world.” *On-line* focus groups can be conducted as either real-time synchronous discussions (similar to both the *traditional* or *GSS* methodologies) or as asynchronous discussions, which might take place over many days or weeks. Each of these formats has its advantages and disadvantages. However, before exploring the advantages/disadvantages of synchronous/asynchronous *on-line* focus groups it is worth noting the key advantages/disadvantages of *on-line* versus *traditional* focus groups.

There are seven potential benefits of *on-line* focus groups. First, they are less costly to organize as there is no need to book facilities or organize refreshments and participants do not have to incur any travel costs. Second, issues such as the weather, traffic and transportation are unlikely to affect the ‘no-show’ rate. Third, transcripts are available instantly (as with the *GSS* approach). Fourth, where the anonymity of participants is maintained they may be more willing to say exactly what they think and to ask what might appear to be ‘foolish’ questions. Fifth, there is less chance of the discussion being dominated by particularly outspoken individuals. Sixth, shy individuals who might be reticent to speak in a face-to-face situation are likely to feel more comfortable expressing their views in an *on-line* environment. Seventh, all individuals can effectively ‘talk’ at the same time, potentially leading to greater input from group members.

However, there are also a number of potential disadvantages with the use of *on-line* focus groups that need to be acknowledged. First, respondents might not be fully engaged because of distractions in their home or work environment. Second, only participants with ready access to internet facilities are able to participate. Third, the loss of non-verbal cues limits the ability of the researcher to engage in subtle probing of participant responses. Fourth, *on-line* discussions can be more demanding as a greater level of concentration is required by participants; they have to read the question being asked, then respond, then read the responses and, finally, they have to comment on the responses. Fifth, given that all participants can effectively ‘talk’ at the same time can make it difficult for group members (and the facilitator) to follow the various threads that can rapidly emerge.

As noted earlier, there are also a number of specific advantages/disadvantages associated with the use of synchronous versus asynchronous *on-line* focus groups. With synchronous discussions: the participants do not have time to prepare a considered response and, therefore, the views expressed are more likely to represent their initial thoughts; and the results of the focus group discussion(s) will be available much sooner because the discussion is not spread out over a period of days/weeks. However, novice internet

users and those with slow typing speeds may be left behind in the ‘conversation’; and if any internet problems arise during the discussion there may be insufficient time for these to be resolved, thus precluding those affected from participating in the discussion.

With asynchronous discussions: participants can respond to questions (and the comments of other group members) at a time that is convenient for them; participants can give a more considered response, as they are not under pressure to respond quickly; and more participants can be involved as more time is available for participants to consider and respond to the comments of others. However, the researcher(s) will have to be available 24 hours a day to monitor the discussion and to keep participants ‘on track’; and maintaining the motivation of group members over an extended period can be difficult.

CONCLUSION

In summary, as noted by Klein et al. (2007, p.2117), “focus groups build on the potential for individuals to think synergistically in a group setting. As participants interact, they feed off each other’s ideas, potentially creating a snowballing effect and enabling them to develop new insights that they might not have been able to develop independently.” The outcome of this process is far richer results than would be possible from a survey or one-on-one interviews. However, it is important to note that because non-probability, purposive sampling is typically used to form focus groups, they cannot be used for traditional hypothesis testing or drawing inferences from a large population (Basch 1987). As noted by Kahan (2001, p.132), conducting focus groups can be seen as “both an art and a science. They are an art to the extent that science is identified as precision and replicability of data collection. But they are a science to the extent that the protocol guides the session and that rules specify how the session will be conducted.”

Finally, we suggest that while reading about ‘best practice’ in conducting focus groups can be extremely helpful, the skills needed for planning, conducting, and analyzing focus groups are “gained best through practice and experience” (Basch 1987, p.414).

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