Group discussions

What does this technique do?

Group discussions help to summarise the ideas and information that a group of informants may come to hold as a group, rather than the information held by the individual members. The general idea is that each participant can act to stimulate ideas in the other people present, and that by a process of discussion the collective view becomes greater than the sum of the individual parts.

When to use them

Group discussions can be used to serve a variety of purposes, and may be used to assist in problem identification, in clarifying the issues relevant to a particular topic, and in the evaluation of products. Group discussions form a part of such techniques as Brainstorming and Focus groups, and these will be discussed in turn. Group discussions are very common in the “User requirement” stage of product development.

Brainstorming

Brainstorming is an essentially creative exercise, where groups of participants are brought together to explore a common issue and to look for possible solutions. The idea of a brainstorm exercise is that each participant is allowed to be creative in their ideas, and that other participants are not allowed to criticise others contributions. The idea is that such loose ideas may spark some association in the minds of other participants and that as a result some creative solutions to a
problem may be identified. Brainstorming is commonly used at the early stages of design in order to explore possible development opportunities (see the specific section on Brainstorming).

Focus Groups
Focus groups bring together participants to discuss a particular topic, and differ from brainstorming sessions in that the objective of the meeting in not necessarily to be creative, but rather to come to some agreement regarding a particular topic or issue. For example, focus groups have been used in the assistive technology field to identify the important features that a product should have, and to evaluate how successful a particular product is likely to be. A variation on the use of focus groups is to combines the characteristics of individual interviews with group based techniques. A researcher might first interview a number of participants on a particular topic, to then summarise those personal interviews, and then use the results as a basis for further interviews or a group discussion with the original participants. The idea behind this is that the individual interviews allow each participant to contribute to the ensuing discussion, where the collective opinions can be explored in more detail.

Who can use them
There are no specific requirements for the participants, apart from them having some knowledge of the discussion area. For complex issues it can be useful to have discussion groups which are multidisciplinary, so that different perspectives and viewpoints can be aired, whilst for other purposes relatively homogenous groups might be preferred. Whatever their composition group discussions need to be carefully led, and need a facilitator or leader who ensures that the group continue discussing the topic of interest and that all participants contribute. The quality of the discussions depend on how the group is led and it is important for the leader to have participated in similar groups. However this should not prevent an organisation from arranging its first group discussion.

What resources are needed
Group discussions are commonly arranged to last for two or three hours, extending up to a couple of days for complex issues. Shorter meetings can often be more effective than longer ones as many people have difficulty in finding the time or maintaining concentration for more than two or three hours. This is true for the fully able participant, and for certain disability groups even shorter sessions will be required, and a number of short discussions rather than a single large one might need to be considered. The preparation for a group discussion can also take time,
particularly if a number of people have to be consulted regarding their availability to take part. A discussion group commonly needs a couple of person days for preparation, and similar resources are needed for summarising the results of the discussion and producing a report. Expenses covering the room and refreshments may also be needed and in some cases accommodation and the travel expenses of participants.

Discussion groups can be run with large numbers, but to be effective it is better to have small groups. Experience shows that between six and eight participants is easy for a single facilitator to manage, and that such size groups allow all participants to contribute. If larger groups are desired it can be a good idea to break these down into sub groups of between six and eight members and for each sub group to have its own facilitator.

Who are the informants

Depending on the specific area to be understood, there several kinds of informants that may be considered. In some cases one would choose to have a homogeneous group, in others one would try to include participants from a variety of backgrounds and experiences. One should decide which of the following categories should participate.

Users, actual or potential

Very often it is the users that are the most relevant participants in discussion groups, as they are the experts in dealing with the disability they have, and have the direct experience of using the products designed to support them. However, if a new product is being developed it can be very difficult for potential users to express their needs, or to visualise how a new product idea might help them. This is less of a problem when non innovative developments are being considered, and if an existing product is being improved, users’ opinions are very valuable.

If you want to include users in a discussion group, it is important to remember that in a discussion group it is difficult to get a “representative sample”. You should therefore decide whether you want to include some “typical users”, or people who represent the extremes of a user group population. For example a discussion group might be constructed to include those users who have discarded existing technical aids, whilst another might consist of expert users of a product. Decisions regarding membership of groups depends on the objectives of the investigation, and also unfortunately to some extent on the availability of relevant participants and their willingness to take part in the study.

In any case, it is difficult to be confident that a groups opinions are representative of the wider population, and therefore other methods are

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Actual or potential users usually have valuable points of view on new products.
often used to supplement information gained in this way e.g. interviews and questionnaires.

Users may also be difficult to identify, and for some disability groups difficult to obtain in any numbers. Good sources of potential participants can often be identified by user organisations or by contacting schools or institutions in your area.

**Users “helpers”**

These may be someone close to a user, such as a parent or a nurse. The helper may be the users “voice” in the group, or may be a secondary user of the product themselves. One should be aware that a helper may not always be sure when they are expressing their own or the user’s needs.

**Users representative**

If your product (or service) is affected by legal or ethical issues it may be particularly relevant to contact a user organisation in order to have one of their representatives in the group. Matters that may seem straightforward to a developer, may be seen quite differently from a user organisations perspective.

**Developers and designers**

These groups may have very valuable experiences in a given field and can assist a group in understanding the technical feasibility of many ideas discussed in a group setting. They may also be included in discussion groups because they are the users of the information provided by the discussion and are likely to benefit from the experience of talking directly to end users. However care is needed not to allow the developers to assume the role of “expert” where their opinions are perceived as being more relevant or important than other participants.

**Domain experts**

Experts on the user group, the services involved or the technology involved, may have valuable information regarding the design of the product. They are usually found in universities, research organisations, institutions and competence centres for disabled people. Again care should be taken when putting domain experts in groups with those with less formal qualifications, as there is likely to be a tendency for such experts to dominate discussions. This can be a particular problem when male experts join discussion groups with female participants who are perceived to be of a lower status. Under these circumstances it can be better to run separate discussion groups and then summarise the findings from both groups rather than attempting to run one large group.
Special considerations

General
Organising a group discussion may call for a considerable amount of preparation, such as getting all the participants gathered at the same time. One may have to be prepared to pay them for participation or at least to cover their expenses. One should start to make appointments early, but one should also be aware that some participants such as domain experts and other professionals may have particular difficulties in making appointments at short notice, and conversely for others e.g. end users it may be difficult to make appointments a long time in advance. Making appointments for a long time in advance can be particularly problematic when dealing with certain types of disability where the person’s condition may deteriorate rapidly, or where they may have reoccurring periods of illness.

Considerable attention should be paid to the participants eventual special needs, some of which are discussed below. Also be aware that some users may have medical needs that should be attended to during the meeting. Some may have special needs regarding their diet, whilst others may have limitations in the length of sessions they can take part in.

The ability to participate in a group discussion is dependent on the person’s communication skills. If you are designing for people with severe communication problems, you should probably look for other information gathering methods, for example personal interviews or direct observation.

Opinions held by people with severe communication problems may better be recorded by other methods, for example a personal interview.
Mental impairment
First of all consider how well the participants know each other. Mentally impaired users may feel embarrassed in a discussion with strangers. One could try to limit the number in the group down to as few as four participants. It is important that the themes discussed are specific and that examples are shown either as pictures or as prototypes or models.

One would in some cases involve both the user and a helper. It is important that the discussion leader ensures that it is the mentally impaired person’s opinion which is expressed, rather than that of the helper. The mental impairment may be only one characteristic of a multi-handicapped person. In that case other considerations should be taken into account as well. In some cases one would prefer to use other methods, for example a personal interview.

Hearing impairment
Other participants who are not accustomed to interacting with people with hearing impairment should be reminded to speak with normal loudness. It is important to have good lighting in the room and that all participants faces, and especially the mouth, are easily seen by the whole group. Group members should be explicitly instructed on the importance of giving hearing impaired the opportunity to lip read. The meeting should be held in a quiet environment, and visual aids such as overheads used when appropriate. It is often a good idea to prepare some written material in advance for the participants so that they do not have to rely on having to listen or read a screen.

There are several options for technical aids to amplify sound in a group discussion and some kind of sound amplification (either portable inductive loop systems or FM systems) can be effective. User organisations may be able to give advice on how to obtain such aids.

Sign users
If one wants sign users to participate together with hearing persons, one may need an interpreter. The discussion leader should then consider how to instruct the rest of the group in order to give time for the interpretation. In a mixed group one should try to avoid “parallel” discussions where sign users and non-sign users don’t interact.

Lip readers
In a mixed group the discussion leader should instruct the participants to speak clearly, one at a time, and facing the audience. Lip readers need sufficient opportunities to have statements repeated. If lip readers are present other participants should again try not to speak abnormally
i.e. with exaggerated facial movements. Remember that lip readers may have particular problems when other participants wear a beard or have their face obscured in some other way.

**Blind and visually impaired**

It is very important to realise that the participants need to get familiar with the location where the discussion is held. One should be prepared to spend some time showing the participants the layout of the room, how to get to the toilet etc. The participants should also be asked if they want guiding or some other kind of help. Remember that the participant will want to hold your arm rather than you holding his.

It is also important to ensure that the lighting conditions are adequate for the participants vision. Ask in advance what requirements the participants have. Some people need high intensities, whilst others prefer a dim light.

As with the hearing impaired it is important to conduct such meetings in a quiet environment, and to limit the amount of external noise.

Group members with normal sight will often use visual cues to indicate their wish to speak and may not realise that this is of no use to blind and many visually impaired people. It is important that only one person is allowed to speak at any time, and that the discussion leader manages this. It may also be appropriate to have a simple rule to indicate when a person wishes to speak i.e. raising their hand for attention.

If you provide the group with documentation, keep in mind that the participants with low vision usually would need enlarged font and good contrast between text and paper. For the visually impaired 16 point font should be considered a minimum, and even larger text is desirable.

Although it is obvious that persons with visual impairment will gain little benefit from the use of visual aids, like overheads and white boards, other participants in the group may want to use such aids. The discussion leader should take this up in the group and find a solution that is satisfactory for all participants.

**Mobility impaired**

Arrangement for transport to and from the meeting should be considered to be the organiser’s responsibility. The accessibility of the location must be considered in detail before the discussion is arranged. Remember that it is not only the room itself that has to be accessible, but also the immediate environment e.g. the toilets, the lunch room and the table that the participants sit around.

Many participants will have specific requirements for the accessibility of the premises where the discussion is held.
Procedure

The procedural requirements for doing a group discussion are few, and to some extent self-evident. However, the specific technique used may require several specific steps to be taken during the exercise.

Preparations

The first thing to do for the organisers is to agree upon the participants and make a checklist of things to do before the meeting, including all practical arrangements. Although it might seem trivial, the success of the discussion group is partly dependent on the participants’ feeling of well-being and confidence in the activity, and practical details are an important aspect of this. Participants also need confidence in the discussion group leader. Therefore, the first contact and the arrangements with the participants are preferably done by the discussion leader.

In advance of the meeting, the organisers and the discussion leader should have chosen the relevant methods and techniques and provided the relevant material for the exercise. Based on these decisions, a timetable for the session should be prepared covering the themes and activities during the discussion. This is of course dependent on the purpose of the meeting, and the particular techniques used.

Role of discussion leader

In general, the discussion leader should be active in formulating the themes for the discussion, and sum up the results of the discussion at the end. It is important to distinguish between what is the consensus of the group, and what is the opinion of the different participants.
Here are some general “rules-of-thumb” that the discussion leader may use as a guide:

• create a good atmosphere
• suggest some rules for the discussion and enforce these rules
• support the participants in the formulation of the problem, and guide participants when necessary
• prevent destructive behaviour on the part of specific participants
• protect individuals, ideas and ideologies
• do not suggest solutions to the problem
• avoid evaluating proposed solutions themselves
• ensure that all participants get an opportunity to contribute and that the proceedings are not dominated by any one person or group

Results
The result of a group discussion is usually a list of statements which the group agrees upon. However, it should also be remembered that issues where the group disagrees are also important to report. In addition to a simple list of statements, the discussion should be reported as accurately as possible for detailed analysis after the event.

It is also fairly common to include a short questionnaire after the group discussion has taken place. This can include background information on the participants, but also asking them to summarise the opinions on the issues raised during the discussion. This can be particularly useful in ensuring that all participants believe that their views have been listened to, and can be a useful supplement to the issues raised in the discussion. See the tool section on questionnaires for more information on how to use this survey technique.

Sources of Further Information
Group discussions often involve bringing a variety of experts together to focus on a particular issue or problem. The idea is that groups of ‘experts’, e.g., consumers, care providers, experts in gerontology, can be brought together to help refine the requirements for products or to evaluate them. Rebelo et al (1994) describes the use of multidisciplinary focus groups, e.g., ergonomists, rehabilitation engineers and doctors, in
developing new wheelchairs, and Fernie et al. (1994) also reports the use of the technique for designing bathrooms for elderly people. Barlow et al. (1994) also describes the use of focus groups in the development of pictograms for use with pharmaceutical products. These were evaluated using individual questionnaires administered to groups of respondents.

Such ‘focus’ groups can also be used in order to obtain rapid feedback as to the anticipated problems with products. Verburg et al. (1993) reports a Canadian project in which consumers with disabilities, researchers, and industry are collaborating in the evaluation of home appliances and rehabilitation devices. These groups review common appliances and produce reports of features important to disabled people, and then share this information with developers. Batavia and Hammer (1990) also describe the use of a focus group approach to identify and prioritise factors used by long term users of assistive technology in assessing their devices.

Isaacs (1988) provides a description of the work carried out at the Centre of Applied Gerontology at Birmingham University, which uses panels of elderly people to review products, and highlights the features that are needed in new products. The centre has obtained information on what features elderly people object to with many consumer items, and provides a consultancy service to industry on how to improve their products.

Wood (1993) provides a description of the approach used at the Special Needs Research Unit at the University of Northumbria for evaluating consumer products for elderly people, which also involves the use of user panels. They develop convenience checklists of the products that are to be evaluated, which covers all the elements of the product, e.g. documentation, ease of opening door of product, etc. These lists are evolved from a task analysis and also from a consideration of evaluation criteria which includes ease of use, comfort of user, ease of understanding instructions, effort involved, safety in use, ease of cleaning, etc.


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