

# Focus Groups

## for Ergonomics & Human Factors Applications

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<p><b>What is a Focus Group?</b> <b>Why Are They Called Focus Groups?</b> <b>When are Focus Groups Useful?</b> <b>An Example</b></p>
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### What is a Focus Group?

A focus groups is a planned, organized small group discussion, facilitated by a trained individual who helps the group 'focus' their discussion on particular topics or questions of interest. The purpose of a focus group is to gather information by letting a target group talk among themselves about an issue, topic, or question. The information is gathered through note taking or by recording the discussion (audio or audio-visual).

### Why Are They Called Focus Groups?

They are called 'focus groups' because they focus in three ways. They focus on:

- **Persons** – the participants are similar in some way. They may be grouped by age, gender, socioeconomic background, race, or work/job responsibilities, to name a few
- **Purpose** – the idea is to gather information about a single topic or narrow range of topics.
- **Process** – guided, open discussion questions, offered by a skilled facilitator, help the discussion to remain on topic, yet explore all pertinent aspects of the topic.

### When are Focus Groups Useful?

- **Qualitative Information:** Focus groups are very useful when qualitative information is needed, such as the 'who', 'what', and particularly 'why'. While the information might also be available through other avenues, such as interviews or surveys, focus groups may yield additional information as participants talk with one another and share their opinions, ideas, and insights.
- **Research Question:** Focus groups are useful when it is considered important to develop a broad or deep understanding of the topic of interest. That is, the information needed from the participants is more 'telling' than one could get from a quantitative summary.

This might include information from the target group such as their insights, ideas or opinions, rather than (or in addition to) facts. This kind of information is especially important in marketing research, for example. Marketing researchers might want to know which product labels appeal to shoppers or which labels attract the attention of shoppers as they walk down a grocery aisle. They may wonder whether handing out samples truly encourages shoppers to purchase a product, and how the shopper makes his or her decision (is it the taste of the product or the friendliness of the customer service representative that is more influential?). In these cases, using a focus group can provide a richer understanding of what is important, acceptable, needed by and appealing to the targeted participants - shoppers.

- **Buy In:** Conducting focus groups can also help researchers or product developers get 'buy in'. By considering users needs, wants, and opinions during the development stages, users often develop a sense of 'ownership'. By participating in the focus group, the users may have actually assisted in developing the product or process they may later use. For example, human factors engineers may be asked to examine safety issues in a manufacturing plant. While they gather facts and figures from accident rates, financial concerns from injuries and compensation packages, and data on near misses, they should also interview employees at all levels, and conduct focus groups on perceived safety issues and potential solutions. This process, often referred to as **participatory ergonomics**, brings the target audience into the fold, so to speak, allowing them to become 'research assistants'. Indeed, their responses not only help identify problems and solutions, they can also help to prioritize any actions that will be taken in this regard. For by prioritizing according to the workers concerns, management can show they listen to and support the workers themselves.
- **Target Audience:** The target audience may influence when to use a focus group versus another method of data collection. For example, they may not read or write well, be more at ease discussing information in a group rather than talking alone during an interview, or simply be more accepting of a discussion where they are actively involved. For example, surveys do not work well with young children, as they are still learning to read and may not understand the concepts or verbiage in the questionnaire. Interviews can work, but individual interviews can be intimidating for a child and in a one-on-one interview a child's responses are often short or punctuated with "I don't know". Also, many schools have strict rules about permitting adults to spend alone time with a single child, for protection of both the child and the adult. A focus group, with a small number of children, will often yield a clamor of retorts, as children seek to share their thoughts, spurred on by the group interactions, and the desire to be heard.

### Children's Backpacks:



The facts are:

- many children carry backpacks of considerably greater weight than the 10-20% of their body weight recommended by experts
- carrying heavy back packs can result in restriction of full lung expansion, arm, shoulder, neck and back discomfort
- backpack construction is an important issue for comfort and ease-of-use
- the method of carrying a backpack can impact pain, discomfort, and posture

HOWEVER: If the issue is trying to reduce injuries and pain associated with backpack use, just knowing and publishing the “facts” may not be enough. Qualitative information, such as what is in the pack, why children carry select items in their packs, and who selects the pack and why are also important considerations. For these, and other questions, the use of focus groups can provide additional ideas for interventions and individual or community-based solutions.

**Example, Children's Backpacks:** When examining the question of whether backpacks are too heavy for school children, researchers would want to know the physical and personal characteristics of the children in question (height, weight, gender, fitness) and the physical characteristics of the backpacks they carry (weight, padding, straps, configuration). They would then compare that information with the recommendations of experts, perhaps using a ratio of body weight or lean body mass to backpack weight. To be more thorough, researchers might even photograph or videotape the children carrying their packs and examine how their posture changes when they carry their packs and compare it with their posture when walking without their packs. Researchers might annotate the percentage of the packs that met recommended standards for construction, such as padding and equal distribution of weight. The results would be quite useful for parents, health care professions, and school staff.

However, simply having the ‘facts’ might not change anything. The researchers need to step back and examine the question from a larger, **macroergonomic** perspective. Several questions may arise that are answered best by talking with the children themselves.

- Why is the backpack so heavy? Is it filled with books for school that must be carried back and forth on a daily basis? Or is it like my own son and daughters packs, filled with old papers – graded yet not removed from the pack, and with novels of interest, games, a change or two of clothing, make-up and art supplies to use during their ‘down time’?
- How does the child carry the pack? Why do they carry it that way – is it easier to don and doff? Did one of the straps break at some point? Is that how other children carry their back packs? Is the pack designed to encourage several methods of carrying (over

one or both shoulders, horizontally across the chest). Do they perceive the way they carry their pack as influences their posture, the pressures on their shoulders, backs or hands, or their popularity?

- Why is the child carrying their particular pack? Who selected the pack? How did they make their decision on what to purchase? What factors were important during the selection process?
- How can the children, parents, school staff or health care professionals assist in identifying and creating solutions to the problem of young children carrying backpacks that may injure them, now or in the future? Again, while a survey could ask such questions, researchers will get a better sense of what the targeted audiences are willing to do, during focus groups. Guiding and observing the personal interactions, and the enthusiasm (or lack thereof) will help guide the prioritizing of future actions, marketing, and solicitation of volunteer efforts. Again, using a **macroergonomic** systems perspective heightens involvement of those individuals who are directly, and peripherally, related to the issue (**participatory ergonomics**) and often improves their 'buy in' or commitment to the efforts of prevention and intervention.