

**Chapter 16**

**Qualitative Consumer Research Methods**

**Abstract** Qualitative methods are used to probe issues in depth with small groups of consumers. They can provide valuable information about product concepts and prototypes. This chapter describes quantitative methods and especially the use of focus groups. The setup, conduct, analysis, and reporting of focus groups are discussed as well as moderator skills and techniques.

*Discussing consumer perceptions of food quality is somewhat similar to exploring new and unknown land – it is not immediately clear where to begin or by what means to travel, and it is nearly impossible to foresee where one will end up.*

—Schutz and Judge (1984)

**Contents**

<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>16.1</td>
<td>Introduction</td>
<td>380</td>
</tr>
<tr>
<td>16.1.1</td>
<td>Resources, Definitions, and Objectives</td>
<td>380</td>
</tr>
<tr>
<td>16.1.2</td>
<td>Styles of Qualitative Research</td>
<td>380</td>
</tr>
<tr>
<td>16.1.3</td>
<td>Other Qualitative Techniques</td>
<td>382</td>
</tr>
<tr>
<td>16.2</td>
<td>Characteristics of Focus Groups</td>
<td>383</td>
</tr>
<tr>
<td>16.2.1</td>
<td>Advantages</td>
<td>383</td>
</tr>
<tr>
<td>16.2.2</td>
<td>Key Requirements</td>
<td>384</td>
</tr>
<tr>
<td>16.2.3</td>
<td>Reliability and Validity</td>
<td>384</td>
</tr>
<tr>
<td>16.3</td>
<td>Using Focus Groups in Sensory Evaluation</td>
<td>385</td>
</tr>
<tr>
<td>16.4</td>
<td>Examples, Case Studies</td>
<td>386</td>
</tr>
<tr>
<td>16.4.1</td>
<td>Case Study 1: Qualitative Research Before Conjoint Measurement in New Product Development</td>
<td>387</td>
</tr>
<tr>
<td>16.4.2</td>
<td>Case Study 2: Nutritional and Health Beliefs About Salt</td>
<td>387</td>
</tr>
<tr>
<td>16.5</td>
<td>Conducting Focus Group Studies</td>
<td>388</td>
</tr>
<tr>
<td>16.5.1</td>
<td>A Quick Overview</td>
<td>388</td>
</tr>
<tr>
<td>16.5.2</td>
<td>A Key Requirement: Developing Good Questions</td>
<td>389</td>
</tr>
<tr>
<td>16.5.3</td>
<td>The Discussion Guide and Phases of the Group Interview</td>
<td>390</td>
</tr>
<tr>
<td>16.5.4</td>
<td>Participant Requirements, Timing, Recording</td>
<td>391</td>
</tr>
<tr>
<td>16.6</td>
<td>Issues in Moderating</td>
<td>392</td>
</tr>
<tr>
<td>16.6.1</td>
<td>Moderating Skills</td>
<td>392</td>
</tr>
<tr>
<td>16.6.2</td>
<td>Basic Principles: Nondirection, Full Participation, and Coverage of Issues</td>
<td>393</td>
</tr>
<tr>
<td>16.6.3</td>
<td>Assistant Moderators and Co-moderators</td>
<td>394</td>
</tr>
<tr>
<td>16.6.4</td>
<td>Debriefing: Avoiding Selective Listening and Premature Conclusions</td>
<td>395</td>
</tr>
<tr>
<td>16.7</td>
<td>Analysis and Reporting</td>
<td>395</td>
</tr>
<tr>
<td>16.7.1</td>
<td>General Principles</td>
<td>395</td>
</tr>
<tr>
<td>16.7.2</td>
<td>Suggested Method (“Sorting/Clustering Approach”), also Called Classical Transcript Analysis</td>
<td>396</td>
</tr>
<tr>
<td>16.7.3</td>
<td>Report Format</td>
<td>397</td>
</tr>
<tr>
<td>16.8</td>
<td>Alternative Procedures and Variations of the Group Interview</td>
<td>398</td>
</tr>
<tr>
<td>16.8.1</td>
<td>Groups of Children, Telephone Interviews, Internet-Based Groups</td>
<td>398</td>
</tr>
<tr>
<td>16.8.2</td>
<td>Alternatives to Traditional Questioning</td>
<td>399</td>
</tr>
<tr>
<td>16.9</td>
<td>Conclusions</td>
<td>400</td>
</tr>
<tr>
<td>16.9.1</td>
<td>Appendi: Sample Report Group Report</td>
<td>402</td>
</tr>
<tr>
<td>16.9.2</td>
<td>Boil-in-bag Pasta Project Followup Groups</td>
<td>402</td>
</tr>
</tbody>
</table>

**References**

16.1 Introduction

16.1.1 Resources, Definitions, and Objectives

A number of techniques can be used to probe consumer responses to new products in addition to the traditional mode of inquiry using questionnaires and large statistical samples. Exploratory research methods often use small numbers of participants but allow for greater interaction and deeper probing of attitudes and opinions (Chambers and Smith, 1991). As a class of methods, they are referred to as qualitative techniques to distinguish them from quantitative survey work that stresses statistical treatment of numerical data and representative projectable sampling. This chapter reviews the principles and applications of qualitative research methods. We have drawn from the authors’ experience and from the overviews of the area by Casey and Krueger (1994), Krueger (1994), Chambers and Smith (1991), Stewart and Shamdasani (1990), and Goldman and McDonald (1987) to which the reader is referred for further information. The updated and detailed guidebook on focus groups by Krueger and Casey (2009) is especially helpful for those planning to conduct qualitative research. The paper by Cooper (2007) reviews the history of qualitative research and its relationship to the forms of psychology that have been in vogue during recent decades.

Qualitative research methods are techniques that involve interviews or observations that are less structured than controlled laboratory experiments. They are also less structured than survey research based on fixed questionnaires. The methods are flexible in the sense that as new information arises, the flow and content of the investigation may change. This is one of the strengths of these methods. Qualitative consumer research is most applicable to the exploration and development of new concepts that go hand in hand with the development of successful products. Although this chapter will focus primarily on sensory research, the reader should bear in mind that discovery and/or optimization of sensory attributes may be only one part of the qualitative research done in any study. The process of concept development places qualitative research more traditionally in the bailiwick of marketing research than sensory research. However, the sensory scientist is often part of a team looking for a well-integrated sensory–conceptual product.

A variety of evolving techniques are used to interface with consumers in new product development. Many researchers now think of consumers as “co-designers” of products (Bogue et al., 2009; Moskowitz et al., 2006). Common methods include group interviews (focus groups), one-on-one interviews (also called “in-depth interviews”), observational methods (ethnography), focus panels that do repeated evaluations, and consumer immersion techniques where innovative and/or vocal consumers can work alongside product developers as the product prototypes are formulated and modified. These innovative consumers are sometimes referred to as “lead users,” people with strong needs that will sooner or later be met by product innovations in the marketplace (von Hippel, 1986). The approach of making consumers part of the design team is the reverse of observational ethnographic research. Rather than making the researcher part of the consumer’s situation, it makes the consumer part of the researchers’ and designers’ world. Sometimes combinations of methods are used. For example, ethnographic observation coupled with in-depth interviews can yield insights about what consumers do as well as what they say and provide compelling real-life video clips to illustrate the main points and conclusions. Qualitative techniques are instrumental in starting projects off on the right foot and avoiding “type zero error,” i.e., asking the wrong questions to begin with. Some researchers refer to this exploratory work as the “fuzzy front end.” Companies are becoming increasingly consumer-centric although there is a danger that overreliance on the “average consumer’s” input may miss some truly inspired, entrepreneurial, and/or creative opportunities (Cooper, 2007; von Hippel, 1986). New approaches and techniques continue to evolve. The Internet has opened a new area for mining product ideas, with blogs and websites that can be searched for innovative opinions, expectations, and/or points of dissatisfaction that could suggest new product opportunities.

16.1.2 Styles of Qualitative Research

The most common form of qualitative research is the group depth interview or focused group discussion, which has come to be known simply as a “focus
group.” This typically involves about ten consumers sitting around a table and discussing a product or idea with the seemingly loose direction of a professional moderator. The interview is focused in the sense that certain issues are on the agenda for discussion, so the flow is not entirely unstructured, but rather centered on a product, advertisement, concept, or perhaps promotional materials. The method has been widely used for over 50 years by social science researchers, government policy makers, and business decision makers. In 2007, Cooper estimated that there are about a half million focus groups conducted each year worldwide, with about half of those occurring in the United States. Of course, not all focus groups are concerned with new product development, and they are used for a variety of purposes such as research on advertising, assessing political opinions, and developing election strategies.

Historically, the focused group discussion grew from R.K. Merton’s use of group interviews to assess audience reactions to radio programs in the 1940s, and later his use of the same techniques for analysis of Army training films (Stewart and Shamdasani, 1990). Currently, the methods are widely used in marketing research for probing of product concepts and advertising research concerning product presentation and promotion. Sensory evaluation departments have added these techniques to their repertoire. In 1987, Marlowe stated that many sensory evaluation groups in industry were already using these techniques to support product development, and that there was growing interest in professional organizations such as ASTM in these methods. This interest was generated by the realization that the methods could be used to develop insights and direction for sensory evaluation issues in early stages of new product development. This activity primarily serves product development clients, just as a marketing research department probes consumers’ reactions to product concepts and potential advertising or promotions in order to provide information for their marketing clients. The main difference is that a sensory evaluation group is more likely to focus on product attributes, functional consumer needs, and perceptions of product performance, while a concept study done by marketing research addresses more of the ideas underlying a new product opportunity, i.e., its benefits, emotional connotations, and brand imagery. Obviously, there is often overlap. For example, both approaches usually involve probing of consumer attitudes toward the product category based on experience and expectations. More and more often, a sensory specialist will be invited to “sit at the table” as the early qualitative work is done to initiate and then refine the product concept.

In general, qualitative methods are best suited for clarification of problems and consumer perspectives, identifying opportunities, and generating ideas and hypotheses (Stewart and Shamdasani, 1990). For example, a qualitative study of consumer attitudes toward irradiated poultry suggested directions for consumer education and label design (Hashim et al., 1996). The techniques are well suited to new product exploration and for follow-up to probe issues raised in other work, e.g., puzzling results from a consumer in-home test or survey. Groups can also function as a disaster check to make sure the conceptualization and realization of the product in the laboratory has not overlooked something important to consumers. Sometimes a high level of enthusiasm may follow a technical breakthrough in product research, but consumers may not share this enthusiasm. Conducting a few consumer groups to explore the new development may provide a sobering reality check (Marlowe, 1987). Qualitative research tends to be hypothesis generating but rarely stands alone to prove anything. It is good for exploration, rather than verification, and for creative stimulation and adding direction and deepening understanding. The techniques can be used to probe consumer opinion of a product category, to examine prototypes, to explore new product opportunities, to design questionnaires, and to examine motivations and attitudes about products (Marlowe, 1987).

The style of the interview, whether in a group or one-on-one, is characterized by careful probing of comments. The probing leads to deeper understanding of the reasons behind the comment. A classic question is “Why is that important to you?” This technique is commonly referred to as “laddering” because it takes steps down into the underlying reasons for an attitude, belief, or choice. Examples of laddering techniques can be found in Krystallis et al. (2008) and Ares et al. (2008) in studies of consumers’ motivations in purchasing functional foods. Laddering may either be “hard” or “soft.” Hard laddering refers to a fixed question sequence such as “Why did you choose that yogurt?” followed by “Why is that important to you?” and “Why is the latter important to you?” (Ares et al., 2008). Soft laddering refers to the same kind of question, but with more latitude given the interviewer to
tailor the probing question to the specific comment or consumer. Bystedt et al. (2003) give an entire chapter to ladder- ing techniques in consumer interviews. They stress that at the surface, there are a collection of desired attributes. Beneath these functional characteristics there are a set of objective benefits. Beneath the objective benefits is a set of emotional benefits. Beneath the emotional benefits are basic values (self-esteem, health, attraction to the opposite sex) that should be understood. Laddering works down this chain.

Because it is based on the reactions of small numbers of specifically recruited consumers who have limited interaction with the product, caution is justified in generalizing the findings to the population at large. Even if the respondents are selected on the basis of regular use of the product category, it is not possible to insure a representative sample of the public on all relevant demographic variables. This stands in contrast to a large-scale consumer home use test that may be conducted with hundreds of participants in several geographic areas. Other limitations are recognized in the method. Dominant members may have undue influence on expressed attitudes and the direction of the discussion. There is often only limited exposure to the product or it may not be used at all by the participants. Both the direction of the interview and the interpretation of results involve some subjectivity on the part of the moderator and analyst. Qualitative interview methods trade off a certain amount of objectivity and structure in favor of flexibility. Some differences of qualitative and quantitative research are shown in Table 16.1. Chambers and Smith (1991) point out that qualitative research may precede or follow quantitative research, and that both types of research gain in validity when they can be focused together on a research problem.

The trade-off between depth of understanding and the acknowledged limitations in sampling and projection was well stated in a study of food choice by Furst et al. (1996). This study used an interview method to uncover influences, valued aspects of each person’s food choice system, and strategies used during purchase decisions. Important personal system values included sensory attributes, quality, convenience, health and nutrition concerns, cost, and interpersonal relationships. The study identified these consistent themes underlying food choice behavior and how they could interact with each other and with contextual factors. The rationale for the trade-off between extensive sampling and in-depth interaction was summarized as follows:

In developing the conceptual model, depth of understanding was accorded a higher priority than breadth in sampling, and to this end a group of people in a particular food choice setting were invited to articulate their own thoughts and reflections on food choice. The sample was not designed to be representative, but was used to examine the range of factors involved in food choice among a group of diverse people. The component and processes represented by the model acknowledge and illuminate considerable variation in many dimensions, such as personal life course, extent of personal system, social setting and food context, even among a relatively small group of people operating within a specific context (Furst et al., 1996, p. 262).

16.1.3 Other Qualitative Techniques

In addition to the popular focus group method, other techniques are available. In some cases, one-on-one interviews are more appropriate for gathering the information of interest. This may be necessary when the issue is very personal, emotionally charged, or

| Table 16.1 Some differences of qualitative and quantitative consumer research |
|-------------------------------------------------|-------------------------------------------------|
| Qualitative research                           | Quantitative research                           |
| Well suited to generate ideas and probe issues | Poorly suited to generate ideas, probe issue    |
| Small numbers of respondents                   | Large projectable samples                       |
| \(N < 12\) per group                           | \(N > 100\) per group                          |
| Interactions among group members               | Independent judgments                           |
| Flexible interview flow, modifiable content    | Fixed and consistent questions                  |
| Analysis is subjective, non-statistical        | Well suited to numerical analysis               |
| Poorly suited to numerical analysis            | Statistical analysis is appropriate             |
| Difficult to assess reliability                | Easy to assess reliability                      |
| Modified from Chambers and Smith (1991)       |                                                 |
involves experts who are better probed individually. Experts include such individuals as culinary professionals, dieticians, physicians, lawyers, depending, of course, on the research question. Sometimes people with a high degree of ego involvement in the topic may give more complete information alone than in a group. Sometimes the topic lends itself more comfortably to individual interviews than to group discussion. Examples can be found in studies of food choice with consumers (Furst et al., 1996), older adults (Falk et al., 1996), and cardiac patients (Janas et al., 1996). Groups also run the risk of social competition, one-upsmanship, or unproductive arguing. One-on-one interviews are also better suited to groups that are extremely sensitive to social pressures. An example is teenagers, who are easily swayed by group influence (Marlowe, 1987). The limitation of one-on-one interviews is the loss of opportunity for synergistic discussion among participants. Of course, opinions from earlier interviews can be presented to later participants for their consideration. Thus the interview plan itself becomes dynamic and makes use of what is learned in further information gathering as the study progresses (Furst et al., 1996; Janas et al., 1996). This flexibility is a major point of separation from fixed quantitative questionnaire methods and is one advantage of the qualitative approach.

A third type of qualitative research is naturalistic observation, also known as ethnography (Bystedt et al., 2003; Eriksson and Kovalainen, 2008; Moskowitz et al., 2006). This is a process of observing and recording unguided behavior with the product, much in the ways that ethologists study animal behaviors by observing from concealed positions. This can be done by observing, videotaping, viewing from a one-way glass, or even going to live with a family to study their food habits, for example. Of course, people must be informed of the observation, but the goal is to be as unobtrusive as possible. Such methods are applicable to issues that involve behavior with the product, such as cooking and preparation; use of sauces, condiments, or other additions; spice usage, package opening and closure; time and temperature factors; whether directions are read; how food is actually served and consumed; plate waste; and the storage or use of leftovers. Data have high face validity since actual behavior is observed rather than relying on verbal report. However, data collection may be very slow and costly. Observational methods are well suited to studying behaviors where consumers actively interact with the product (i.e., perhaps more than just eating it). Bystedt et al. (2003) give the example of observing women at a cosmetics counter in a department store. Suppose your company manufactured a non-stick spray product for barbecue grills. It would be appropriate to observe how grillers actually used the product, when they sprayed it, how much they used and how often, etc.

16.2 Characteristics of Focus Groups

16.2.1 Advantages

There are several advantages to qualitative research. The first is the depth of probing that is possible with an interactive moderator. Issues may be raised, attitudes probed, and underlying motivations and feelings uncovered. Beliefs may be voiced that would not easily be offered by consumers in a more structured and directed questionnaire study. Since the moderator is present (and often some of the clients, out of sight), issues that were not expected beforehand can be followed up on the spot, since the flow of the interview is usually quite flexible. The second advantage is the interaction that is possible among participants. One person’s remark may bring an issue to mind in another person, who might never have thought about it in a questionnaire study. Often the group will take on a life of its own, with participants discussing, contrasting opinions, and even arguing about product issues, product characteristics, and product experiences. In a successful group interview, such interaction will occur with minimal direction from the moderator.

A perceived advantage of these methods is that they are quick and inexpensive to do. This perception is illusory (Krueger and Casey, 2009). In practice, multiple groups are conducted, often in several locations, so that moderators and observers may spend days in travel. Recruiting and screening participants also take time. The data analysis may be very time consuming if video or audiotapes must be reviewed. So time to completion of the report is no faster than other types of consumer research and professional hours involved may substantially add to costs. There are also some obvious efficiencies in the procedure for the users of the
data who attend the groups. Consumer contact with 12 people can be directly observed, all within the space of an hour, and with the participants collected by appointment. So the rate of information transfer is very high once the groups are underway, as opposed to in-home individual interviews or waiting for a mail-in survey to be retrieved and tabulated.

### 16.2.2 Key Requirements

The environment is designed to be non-threatening and encourages spontaneity. One principle is the “strangers on a train” phenomenon. People may feel free to air their opinions because they will probably never meet these same people again. So there is nothing to lose in being candid, and there is no need to adopt socially expected postures as one might find in a group of neighbors. Of course, in every community there is some chance that people will be connected through a previous neighborhood or community group, but this is not a big problem. The commonly held belief that better data are given when the participants are total strangers has been opened to question (Stewart and Shamdasani, 1990). Commonly used warm-up procedures that are intended to facilitate acquaintance and interpersonal comfort would seem to contradict this notion of anonymity as a requirement for good data.

There are key requirements for a productive focus group study (Casey and Krueger, 1994; Chambers and Smith, 1991; Krueger, 2009). They include careful design, well thought-out questions, suitable recruiting, skillful moderating, prepared observers, and appropriate, insightful analysis. As in other sensory evaluation procedures, fitting the method to the questions of the client is key. For example, if the end users of the data want to say that over 55% of people prefer this product to the competition, then a quantitative test is needed and they must be dissuaded from using focus groups. The sensory professional must also consider the overall quality of the information produced and consider the reliability and validity of the method both in general and as practiced in their programs and research projects. The primary steps in conducting a focus group study were summarized by Stewart and Shamdasani (1990) as follows: define the problem, specify characteristics of participants and means of recruitment, choose the moderator, generate and pre-test the discussion guide, recruit participants, conduct the study, analyze and interpret the data, and report the results (a more detailed list is given below). It should be fairly obvious from this list that the image of qualitative research as quick and easy is completely false. Conducting a good focus group study is as involved as any other behavioral research study or sensory test and it requires careful planning.

### 16.2.3 Reliability and Validity

Reliability and validity are issues in qualitative research, just like any other information gathering procedure or analysis tool. Concerns are often raised that the procedure would yield different results if conducted by a different moderator or if analyzed by a different person (Casey and Krueger, 1994). Having multiple moderators and more than one person’s input on the analysis provides some protection. Reliability in a general sense is easy to judge although it is difficult to calculate in any mathematical way. When conducting several focus groups, common themes begin to emerge that are repeated in subsequent groups. After awhile, there is diminishing return in conducting additional groups since the same stories are repeated. This common observation tells us that the results from one group are incomplete, but that there is some retest reliability in the sense that additional groups yield similar information. Janas et al. (1996) framed this issue in terms of the “trustworthiness” of the data and cited three guiding processes during extended individual interviews that could be used to enhance trustworthiness: (1) peer debriefing where emerging concepts are questioned and discussed by co-investigators, (2) using return interviews that can assess consistency of emerging themes, and (3) checking conclusions and key findings with participants. The consistent themes also become part of the data coding and then provide a basis for categorization strategies and grouping of similar concepts. The principles for these guiding processes are found in “grounded theory” methods (discussed by Eriksson and Kovalainen, 2008).

The reliability of group interview information was examined by Galvez and Resurreccion (1992) in a study of attributes used to describe oriental noodles. Five consumer focus groups were run to generate important terms for the sensory aspects of the
noodles and to sort them into positive and negative groups. Highly similar lists were generated by all five groups and they agreed on which terms were desirable versus undesirable. The lists of terms from the consumer groups included 12 of 14 terms used by a trained descriptive panel (apparently two attributes from the descriptive panel were not important to the consumers). In some cases, the words generated were not identical, but were synonyms, such as shiny and glossy. At least for this kind of sensory evaluation application the method seems to have good reliability. Galvez and Resurreccion were careful to screen their participants for product familiarity, which may have contributed to the consistency of results.

Validity is a little more difficult to judge. A study of consumer attitudes and self-reported behaviors found good directional agreement between the results of a series of 20 focus groups and the results of a quantitative mail survey (Reynolds and Johnson, 1978). Validity can also be sensed by the flow of the research process. If the qualitative attribute discovery process is complete, there will be few if any new issues rose on a subsequent consumer questionnaire in the open-ended questions. If the qualitative prototype exploration works well and changes are realized in product characteristics or even conceptual direction, consumer needs and expectations will be fulfilled in the later quantitative consumer test. Phased coordination of qualitative exploration and quantitative testing may enhance utility of results from both types of research (and note that this is a two-way street!) (Chambers and Smith, 1991; Moskowitz et al., 2006). Since conducting a number of groups provides similar information, there is validity in the sense that the information is projectable to additional consumer groups. Although we are careful to disclaim the ability to make any quantitative statistical inferences, the information must be representative of the larger consuming public or it would not be useful. Finally, one can examine the validity in terms of risk from making decisions based on the information. From a practical view, the question arises as to whether the end users of the data will make poor decisions or choose unwarranted courses of action. The sensory professional can aid in this regard in trying to keep product managers from overreaching in their deductions from the information.

The process of conducting focus groups or any kind of flexible interview can be thought of as a communication link (Krueger and Casey, 2009). There are at least five assumptions or key requirements for this process. First, the respondents must understand the question(s). Second the environment is conducive to an open honest answer. Third, the respondents know some answers, that is, they have information to provide. Fourth, the respondents are able to articulate their knowledge or beliefs. Finally, the researcher must understand the respondents’ comments. A lack of accuracy or validity can creep in if any of these communication links is weak or poorly functioning. These concerns are key when developing good questions and a good discussion guide.

16.3 Using Focus Groups in Sensory Evaluation

How are qualitative methods employed for questions asked of sensory evaluation specialists? Here are some common applications.

Qualitative methods can be used for exploration of new product prototypes. While product concepts are usually explored by a marketing research group, product development groups that are most often the primary clients of sensory evaluation services may need early consumer input on the direction and success or shortcomings of newly developed variations. Rather than make mistakes that are not detected from the laboratory perspective, consumer opinions and concerns can be explored as part of the refinement and optimization process (Marlowe, 1987; Moskowitz et al., 2006). Prototypes can be evaluated in the group itself, or may be taken home to use, after which a group is convened. This may be very helpful in determining how a product was prepared, served, and consumed and whether any abuse or unexpected uses and variations were tried (Chambers and Smith, 1991). Changes of direction and additional opportunities may be suggested in these interviews and this information should be shared with marketing managers. If they are partners in the development process they will use this information to the company’s advantage. A key strategy is to explore consumer needs and expectations and whether the product in its early stages is moving toward meeting those needs and satisfying those expectations.

Consumer opinion may also help the sensory group focus on key attributes to evaluate in later descriptive
analysis and quantitative consumer surveys. A common application of group interviews is in the identification and exploration of specific sensory characteristics. One issue is to try and define attributes that are strongly influential on consumer acceptance (Chambers and Smith, 1991). The early stages of a QDA procedure (Stone and Sidel, 1993) involving terminology discovery for descriptive scorecards resemble the information gathering nondirective approach in consumer focus groups. Attribute discovery can also be conducted with consumers or with technical personnel, e.g., technical sales support and quality assurance staff (Chambers and Smith, 1991). This can help ensure that everyone is speaking the same language, or that the different languages can be related to one another, or at the very least that difficulties can be anticipated. In one such application, Ellmore et al. (1999) used qualitative interviews to explore dimensions related to product “creaminess” before further descriptive analysis and consumer testing. This phase was important to identify smoothness, thickness, melt rate, and adhesiveness as potential influences on consumer perception of the creaminess of puddings.

Such “ballot building” is very useful before a consumer questionnaire study. Research personnel may think that they have all the important attributes covered in a questionnaire, but it is likely that some additional consumer feedback will point out a few omissions. Consumers do not necessarily think like research staff. Chambers and Smith (1991) suggest that prescreening questionnaire items with qualitative interviews can address the following issues: Are questions understood? Are they likely to generate biased answers? Are questions ambiguous? Do they have more than one interpretation? Will they be viewed from the expected context? Were there unstated assumptions?

One can get an impression of the potential importance or weight that different product characteristics have in determining overall appeal of the product. This is a classic use of qualitative methods to explore variations in attributes that consumers might find appealing (or not). These variations can then be used in a designed study with a larger group of consumers to uncover the “hedonic algebra” of different attributes and combinations (Moskowitz et al., 2006). A case study linking focus groups with later quantitative consumer testing is given below. Of course, the exploratory groups can be integrated with the goal of getting consumer feedback on early prototypes, as mentioned above. Insights may arise for new product opportunities here, too. For example, a discussion of flavor characteristics may easily lead to new directions in flavor variations that were not previously considered.

Another useful application is when groups are interviewed as a follow-up after a consumer test. After data have been analyzed or even partially analyzed, it is possible to convene groups of test participants, perhaps some of those who were generally positive toward the product and some who were negative. The interview can probe certain issues in depth, perhaps issues that were unclear from the quantitative questionnaire results or results that were puzzling, unexpected, and in need of further explanation. Chambers and Smith (1991) give the example of a barbecue sauce that received a low rating for spice intensity in a survey, where the actual problem was that the flavor was atypical. Interviews can help confirm or expand upon questionnaire results. For sensory professionals who need face-to-face consumer contact on a project, convening several focus groups is more cost efficient for company personnel than one-on-one interviews. Feedback, probing, and explanation from 20 or 30 consumers can be obtained in an afternoon. Groups are much more efficient than single interviews and have the interactive and synergistic idea-generation characteristics that are not present in other quantitative surveys.

If the company has standing panels of local consumers who regularly test products, it may be possible to bring them in at several points to discuss product characteristics. This is a special case of focus group research termed “focus panels” by Chambers and Smith (1991). This type of setup loses the anonymity factor that is seen as beneficial in most group interviews. However, it may work well in some cultures in which people do not feel comfortable speaking in front of strangers. Local standing consumer panels can be very cost efficient (see Chapter 15), as donations can be made to community groups rather than paying individuals for participation (Casey and Krueger, 1994).

16.4 Examples, Case Studies

The following case studies illustrate two appropriate uses of qualitative methods.
16.4.1 Case Study 1: Qualitative Research Before Conjoint Measurement in New Product Development

Raz et al. (2008) published a protocol for new product development using qualitative consumer information and quantitative data at several stages. Focus groups were used to identify the sensory factors that were used later in a large consumer study based on conjoint analysis principles. This is a classic application of qualitative research that is used to guide further quantitative research. Conjoint analysis is a technique in which consumers evaluate various combinations of attributes at different levels or options and rate their overall appeal. It seeks to find optimal combinations of key attributes at different levels and can estimate the individual contributions of each attribute (called “utilities”) to the overall appeal of the product. Moskowitz et al. (2006) show several examples of how the mental algebra of product benefits can be uncovered using conjoint methods. Another example of qualitative interviews used before more structured concept development (also using conjoint measurement) can be found in the paper by Bogue et al. (2009) who looked at foods and beverages with a possible therapeutic or pharmacological function. In order to have meaningful variations of the product, the qualitative work must precede the construction of the product prototypes (or conceptual prototypes) to be evaluated.

The product in this case was a healthful juice drink targeted primarily at women. Two focus groups of nine consumers each were used in the initial stages. Consumers were selected based on socio-demographic characteristics of the target market and were users of the brand or people who switched among brands in the category. Groups were conducted by a psychologist and lasted from 2.5 to 3 h, an unusually lengthy session. The interviews consisted of three phases: an evocative phase involving free association, collage, product, and consumer profiling; a second phase involving presentation of the concept; and then exploration of sensory factors, use properties, and symbolic content of the product and package. The desired result was a set of key attributes with two to four levels or variants of each key attribute and an assessment of the potential products’ fit to the concept (i.e., appropriateness).

The flow of the group interviews proceeded as follows: After the introductions, there was an exploration of the brand image and the imagined universe of the product category for that brand. Then the concept was explored and profiled without any additional stimuli. Next, actual samples of taste, odor, and mouthfeel “experiences” were presented to see how they might fit the concept. Visual images were presented that were evocative of the concept and finally packaging variables presented for tactile exploration. Next, the product identity was explored using a collage technique (patching together of visual images) to see if the product identity (as these consumers envisioned it) was in line with the brand image and with the target concept.

These results were used to set up product prototypes for evaluation in a conjoint design with a larger group of consumers generating liking scores for the various attribute combinations. “Importance” scores were also generated which reflected the degree of change across levels of an attribute. That is, attributes which showed a large change in liking scores as the attribute levels changed were high in “importance.” A key part of the final analysis was an evaluation of potential segments of consumers, groups who might like different styles of the product, rather than assuming that there was just one overall optimal product from a single set of attribute combinations. The potential segments were explored using cluster analysis.

16.4.2 Case Study 2: Nutritional and Health Beliefs About Salt

Qualitative research is well suited to exploring and understanding consumers’ attitudes, beliefs, and knowledge systems and understanding the vocabulary they use to talk about foods and nutritional issues. This study (Smith et al., 2006) examined beliefs and attitudes about salt and high salt-containing foods among at-risk groups of older Americans in the “stroke belt” of the rural southern United States. They conducted both in-depth (one-on-one) and focus group interviews with minority and white community-dwelling elders aged 60–90. The one-on-one interviews consisted of 60–90 min semi-structured interviews to uncover knowledge, beliefs, and folk phraseology. Themes discovered in these interviews were used to develop the interview guide for later focus groups. Seven groups with approximately eight to nine participants were
conducted. Some groups were homogeneous in ethnic makeup (African American, Native American, or white) and others were mixed.

A short demographic questionnaire was administered before the group discussions. A moderator and note-taker participated and discussions were tape (audio) recorded. Tapes were transcribed verbatim. From the transcripts and notes, a codebook was developed of key phrases consisting of core concepts and significant points. Multiple researchers checked the code system for accuracy. The combined transcripts and code system were submitted to ethnographic software analysis of the text. Segments of the text were extracted using the codes for further analysis. Researchers then reviewed the abstracted text samples for “themes.” Themes were developed according to the level of consensus, strength, and depth of concepts and frequency. In the analysis and reporting, interpretation of the themes was supported by illustration with supporting quotes from individuals.

Results showed that participants believed that salt was an important element in their diet and regional cuisine (those foods loyally described as “southern”) and that salt was important to counteract bland taste in fresh foods. Participants recognized a connection between discretionary (table salt, so-called raw salt) usage and high blood pressure, but less connection between salt used in cooking and blood pressure. There was also a connection to a folk condition termed “high blood” which included both dietary sugar and diabetes as linked concepts. The authors contrasted these folk systems and cultural beliefs with medical knowledge and common medical practice. The reader is referred to the full report for further details. A conceptual map depicting the results is shown in Figure 16.2, p. 400.

16.5 Conducting Focus Group Studies

16.5.1 A Quick Overview

A typical focus group procedure could be described as follows: At first glance, we have 8–12 people sitting around a table with an interviewer throwing out questions for discussion. An example of the room setup for a focus group is shown in Fig. 16.1. Some smaller or “mini-groups” have become fashionable, although the probability of respondent synergy goes down with smaller groups, and the possibility of trouble from unresponsive participants goes up. A common style of questioning is the open-ended form that avoids the possibility of a simple yes/no response. For example, a moderator would probably not ask “Is this easy to prepare?” but rather “How do you feel about cooking this product?” Another useful question style is the “think back” type of question when probing previous experience with the product category (Casey and Krueger, 1994). Probing can proceed by asking for examples, for clarification or simply admitting that you do not understand something. In summary, the visible activity in a focus group resembles the open-ended questions in a structured interview, but allows for more in-depth probing and, of course, considerable interaction of respondents.

A common rule of thumb is to conduct at least three groups (Casey and Krueger, 1994). In case two groups conflict one can get a sense of which group’s opinions may be more unusual. However, since the method
is not based on the need for quantitative projection, the usefulness of this rule is questionable. The discovery of differing opinions is in itself an important and reportable result. It may have later implications for market segments or the need to engineer different products for different consumer groups. Large marketing research projects often require multiple groups in multiple cities to insure some geographically diverse sampling in the United States. Exploratory projects for product development prototypes or language exploration as conducted by a sensory service will generally not be that extensive. However, if there is an important segmentation in the experimental design (e.g., ages, ethnic groups, gender, users versus non-users), then it may be necessary to conduct three groups from each segment (Krueger and Casey, 2009). As noted above, there is a marginal utility in increasing the number of groups, as repeated themes will emerge (Chambers and Smith, 1991).

The steps in conducting a focus group study are similar to those in other consumer research. They are outlined in Table 16.2 and another checklist can be found in Resurreccion (1998). A focus group study resembles a central location consumer test in many aspects of the setup and procedural details, with the notable exception that a moderator or trained interviewer is needed and that the activities are almost always recorded. The project team must be careful to insure that the facility is set up properly and that all recording equipment is pre-tested and functioning correctly. Do not leave this pre-testing up to the facility owners. The researchers may also have to arrange for transcriptions of the verbal record. It is advisable to send the tapes to the transcriptionist as they are completed because each 90 min group may require a day or more of transcription even from a professional.

### Table 16.2
Steps in conducting focus group studies

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Meet with clients, research team: Identify project goals and objectives</td>
</tr>
<tr>
<td>2.</td>
<td>Determine best tools for meeting objectives</td>
</tr>
<tr>
<td>3.</td>
<td>Identify, contact, and hire moderator</td>
</tr>
<tr>
<td>4.</td>
<td>Develop screening criteria for participants</td>
</tr>
<tr>
<td>5.</td>
<td>Develop questions, discussion guide, and sequence</td>
</tr>
<tr>
<td>6.</td>
<td>Schedule room, facilities, taping equipment</td>
</tr>
<tr>
<td>7.</td>
<td>Screen and recruit participants; send directions/map</td>
</tr>
<tr>
<td>8.</td>
<td>Send reminders to participants, time/place/directions/parking</td>
</tr>
<tr>
<td>9.</td>
<td>Identify and brief assistant moderator, if used</td>
</tr>
<tr>
<td>10.</td>
<td>Arrange for incentive payments, refreshments</td>
</tr>
<tr>
<td>11.</td>
<td>Pre-test recording equipment</td>
</tr>
<tr>
<td>12.</td>
<td>Conduct groups</td>
</tr>
<tr>
<td>12a.</td>
<td>Conduct de-briefings after each group</td>
</tr>
<tr>
<td>12b.</td>
<td>Write summaries after each group</td>
</tr>
<tr>
<td>13.</td>
<td>Arrange for transcriptions if used</td>
</tr>
<tr>
<td>14.</td>
<td>Modify discussion guide as new information arises</td>
</tr>
<tr>
<td>15.</td>
<td>Analyze information</td>
</tr>
<tr>
<td>15a.</td>
<td>Review summaries</td>
</tr>
<tr>
<td>15b.</td>
<td>Read transcripts or review audio or video tapes</td>
</tr>
<tr>
<td>15c.</td>
<td>Select themes; find verbatim quotes to illustrate</td>
</tr>
<tr>
<td>15d.</td>
<td>Confer with another team member to check themes and conclusions</td>
</tr>
<tr>
<td>16.</td>
<td>Write report and present results</td>
</tr>
</tbody>
</table>

### 16.5.2 A Key Requirement: Developing Good Questions

Questions and probes for focus groups are different from the structured questions one finds on a quantitative questionnaire. Examples of probing techniques and alternate methods to direct questions are given in Bystedt et al. (2003). Krueger and Casey (2009) list the following attributes of good questions in group interviews: A good question evokes conversation as well as a single response. It is phrased in common language (not technical jargon). It is short and easy to say/read, is open ended (not yes/no), and is specific, not double-barreled (“Do you think ice cream and frozen yogurt are healthful and nutritious?” is twice double-barreled). Often, focus group questions consider feelings and emotions. That is, they are not
always about knowledge or factual issues. Even in laddering probes (searching for underlying benefits, emotions, values), focus group moderators will tend to avoid the simple question, “Why?” because it may be seen as a criticism or challenge. These can often be rephrased such as “What prompted you to buy X?” or “What aspect of the product motivated you to buy X?” Moderators should avoid giving any examples of answers, as this will tend to tell participants how to answer and get the group in a rut. If directed toward an action, the direction is detailed and specific, such as the following: “Take these magazines and clip out any images you associate with this concept. Put them in a pile in front of you on the table” (Bystedt et al., 2003).

Developing the questions and discussion guide (sequence) is not a solo activity. One should discuss important issues with the clients (people who are requesting the research), including any details, use of product prototypes, other sensory stimuli that might be used as “props,” the concept, and review the general objectives. Questions should be brainstormed with five or six other researchers. One should seek appropriate phrasing (e.g., open ended, “think back”). Then the questions or topics can be sequenced. There are a few general rules, including the following: Proceed from general topics to more specific issues. Probing positive aspects generally should precede negatives. The researcher should estimate the time per topic or question area. Then the question guide or discussion flow guide can be drafted. Finally, it should be reviewed with the staff and clients. At this point, the client or research manager may think of all kinds of other issues to include. This can lead to length problems and the researcher has to remind people that this is a 90-min interview. The critical test is to separate what is simply nice to know from what you really need to know.

16.5.3 The Discussion Guide and Phases of the Group Interview

It is most common to have a scripted sequence of questions, but some highly skilled moderators may simply work from a list of issues. There are commonly about five distinct phases to the group and these will be organized on the discussion guide. The moderator may deal with the guide flexibly as new or unexpected potentially useful insights arise and call for probing.

The group begins with a warm-up phase. Turns may be taken or people will just go around the table in order and introduce themselves. One approach is the “introduce your neighbor” option. For example take 5 min to introduce yourself to your neighbor and get one or two interesting facts about this person next to you. Then participants go around and introduce their neighbor to the group. The purpose of the warm-up phase is to engage each participant and make him or her connect his or her thought process with the act of speaking. For many people, it is necessary to commit this simple act of speaking to be able to contribute later. There is otherwise a strong tendency to think about the issues being raised without actually engaging the vocal chords. The warm-up also helps the group members feel more comfortable with each other, as the other people become more of known entities rather than complete strangers, which can be inhibiting to some participants. The introduction phase should try to avoid status indicators. For example, it is better to get them to talk about hobbies than what they own or where they work.

Next comes the introduction to get the topic rolling. Sometimes they may be asked to say something about what products they use in the general category to be discussed that day. A common approach is to ask them to “think back,” i.e., tell us about your latest or recent experience with the product. Some issues can be broached at this point, e.g., probe: “What comes to mind when you hear... about this kind of product?” The flow of the interview from the general to the specific is the normal trend, and occurs quite naturally in conversation. Stewart and Shamdasani (1990) refer to this as “the funnel” approach. The third phase is a transition phase that moves toward key issues. More specific questions are asked. A product concept may be introduced here or a sample prototype product explored.

The fourth phase gets to the meat of the key questions and issues. Now we get their overall reactions to product, concept, or issue(s) and any individual, personal reactions and thoughts, issues, concerns, and expectations. The bulk of the interview will occur in this phase and one must allow lots of time to probe issues and have them discussed. More specific issues are raised, finally focusing specifically on aspects of interest to the product developers. For example, what characteristics would you like to see in a microwaveable frozen pizza (browning? nutritional...
16.5 Conducting Focus Group Studies

content? convenience? shelf life?). Often the critical issues will arise in the natural flow of the conversation. However, the moderator has a discussion guide, which will direct the flow in a general way and insure that all the issues get on the table.

Finally, there is an ending question period. The moderator can review issues and state tentative conclusions. He or she can ask again for overall opinions: “Given what you have heard...?” At this point, ask for comments or corrections of moderator summaries or conclusions that can be thrown out to the group. For example, are there any differing opinions that may not have been stated or included? Was there anything overlooked, something we should have explored but did not? Was there anything that should be included in the next group or should be done differently? Of course, after this phase the group is thanked, paid, and dismissed.

The discussion guide should be developed after a brainstorming session with key people involved in the project to get all potential issues included. The moderator can then draft the discussion guide and submit it for further revision. Examples of discussion guides are found in Table 16.3 and in Chambers and Smith (1991) and Resurreccion (1998). The keyword here is “guide,” since flexibility is needed, especially when unexpected but potentially important issues come up. If the moderator recognizes such an opportunity, he or she can ignore the guide for the moment and change direction. Alternatively, the group could return to the issue later but the moderator must note this. If the discussion drifts in a totally unrelated direction (weather, politics, sports, TV shows are all common), the moderator can bring the group back to the main line of discussion.

16.5.4 Participant Requirements, Timing, Recording

As in most consumer tests, participants will be frequent users of the product category and have been carefully prescreened. One exception may be when the goal is to probe non-users, for example, when exploring what it would take for them to try the product or switch into the category or to another brand. In setting up the study, the project leaders should consider the demographic characteristics of the target consumers and set up screening mechanisms to recruit them based on such variables as gender, age, ethnic background; type of household; and location of residence. Generally, the participants will not know each other although in some areas it may be impossible not to get occasional acquaintances in the same group. The key for a group is not necessarily homogeneity, but compatibility (Stewart and Shamdasani, 1990). Some differences in background and opinion may facilitate

<table>
<thead>
<tr>
<th>Table 16.3 Sample discussion guide: high fiber, microwave pizza</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Introduce self, note ground rules, mention taping.</td>
</tr>
<tr>
<td>2. Warm up—go around table and state name and what type of pizzas you bought most recently (briefly).</td>
</tr>
<tr>
<td>3. Discuss pizza category. What is out there? What is most popular? What is changed in your pizza eating habits in the last 5 years?</td>
</tr>
<tr>
<td>4. When cooking pizza at home, what kinds do you make (frozen, chilled, baked, microwaved, etc.) Any related products?</td>
</tr>
<tr>
<td>Probe issues: convenience, costs, variations, family likes and dislikes</td>
</tr>
<tr>
<td>Probe issues: Any nutritional concerns?</td>
</tr>
<tr>
<td>Probe: Is fiber a concern? Target opportunity for some consumers?</td>
</tr>
<tr>
<td>Probe: Is microwave preparation appealing? Concerns about browning, sogging/crispness?</td>
</tr>
<tr>
<td>6. Taste and discuss representative prototypes. Discuss pros and cons. Probe important sensory attributes. Reasons for likes or dislikes.</td>
</tr>
<tr>
<td>Ask for new product suggestions or variations on the theme.</td>
</tr>
<tr>
<td>Last chance for suggestions. False close (go behind mirror).</td>
</tr>
<tr>
<td>8. If further discussion or probes from clients, pick up thread and restart discussion.</td>
</tr>
<tr>
<td>9. Close, thanks, distribute incentives, dismissal.</td>
</tr>
</tbody>
</table>
the discussion. It is generally advisable to overbook the participants to anticipate no-shows (Resurreccion, 1998). No-shows can be minimized by sending maps, directions, and a follow-up reminder the day before the group.

The time necessary for most groups is about 90 min, and participants must be informed of this commitment. Motivating people to spend this time (plus travel to a facility) is not always easy. Participants are generally paid and may be provided with refreshments and child care. Incentives must be carefully considered so that the amount is neither too big nor too small, but just sufficient to motivate people to spend the time (Casey and Krueger, 1994). It is sometimes necessary to screen out people who enjoy the activity so much that they become professional participants in the recruiting pools of different testing services. On the other hand, it is sometimes desirable to screen for people who are more vocal. For example, a screening interview might ask, “Do you enjoy talking about __________?”

The discussion is almost always recorded on videotape and/or audiotape. In marketing research, some or all of the clients (those requesting the research) will view the proceedings from behind a one-way mirror. This unusual piece of equipment is not a necessity. Casey and Krueger (1994) point out that the environment will seem more natural without it, and there is a wider range of choices for facilities if you do not use one. Of course, it would be distracting to have clients sit in the same room with participants, so the alternative is to skip direct observation, which entails a good deal of faith in the skills and reporting abilities of the moderator. Participants must of course be told that they are being taped and viewed if that is the case. Usually they forget about this after the discussion starts. There is little reason to believe that the act of taping influences the discussion, since the opinions that are aired are being given publicly in any event (Stewart and Shamdasani, 1990). Debriefing the respondents after the interview about the general purpose of the study is considered polite as at least some participants always want to know. The amount of information disclosed may depend on the security concerns of the client.

Because there is remarkably little action involved, the question is sometimes raised whether videotape is necessary. The advantage is that facial expressions, gestures, and body language can be captured in this medium. This is information that is routinely lost in using only written transcripts for analysis (Stewart and Shamdasani, 1990). Whether non-verbal information is useful depends on the skill of people observing and interpreting the tapes. One or more people may be responsible for generating a report that summarizes the attitudes and opinions uncovered by the procedure. Often this responsibility falls to the moderator, but sometimes to another observer. It may be useful to have at least two independent interpreters view the tapes or proceedings, as a check on the subjective biases of the observers, as a kind of inter-judge reliability check. Tapes may be transcribed to facilitate the use of verbatim quotes to illustrate points and conclusions in the report (see section on reporting results, below). Backup systems for taping are a common recommendation to insure against equipment problems (Chambers and Smith, 1991).

16.6 Issues in Moderating

16.6.1 Moderating Skills

Like descriptive panel leadership, good moderating skills are developed with practice and training. First and foremost, a good moderator is a good listener (Chambers and Smith, 1991). People who like to talk a lot may not be able to suppress the temptation to give their own opinions. Social skills are also required, including the ability to put people at ease, and if necessary to be assertive but diplomatic (Casey and Krueger, 1994). Not everyone can develop a high level of facility in getting respondents to feel comfortable and express their candid personal opinions. Most moderators work well with consumers that are most like them. The same moderator may not fit both a group of female heads of household and a group of male sport fishermen. A weight loss product targeted at obese women should not have a professional racing cyclist as the moderator. Training and practice is important in the development of moderating skills. Videotaping and critique by experienced professionals can be beneficial.

Certain personality traits are helpful. A successful moderator is one who has a sense of humor, is interested in other people’s opinions, is expressive and animated, is aware of his or her own biases, and is insightful about people (Stewart and Shamdasani,
They will also show a good deal of flexibility, as the direction of a group can change rapidly. It is advisable to watch a trained moderator in several different groups and preferably in several different products in order to gain insights into the kinds of problems and opportunities that can occur in the flow of the discussion. A good next step is to moderate or co-moderate a session and have the tapes viewed and critiqued by an experienced moderator. Each group will differ so the key to doing this well is experience.

When moderating is done well the focus is on the participants and they discuss issues with one another, rather than answering probes of an interviewer in one direction only, i.e., back at the interviewer. Like a referee in a boxing match, a good moderator becomes invisible as the event progresses. Krueger and Casey (2009) list the following attributes of a good moderator: A good moderator understands the objectives of the project. The moderator has at least some basic familiarity with the product or product category. A good moderator communicates clearly, respects the participants (and shows it), and is open to new ideas. A moderator, by definition, is good at eliciting information. He or she gets people to talk and to elaborate on their comments. Three issues are keys to good moderating: nondirection, full participation, and coverage of issues.

### 16.6.2 Basic Principles: Nondirection, Full Participation, and Coverage of Issues

The primary goal of the moderator is to guide the discussion without suggesting answers or directing discussion toward a specific conclusion. In this respect, the moderator acts like a conceptual midwife, extracting ideas, perceptions, opinions, attitudes, and beliefs from the group without imparting his or her own opinions. The technique draws heavily from the client-centered interview techniques of psychologists such as Carl Rogers. Whenever participants look to the moderator for an answer or opinion, the question is thrown back to them, perhaps rephrased or in some general terms like “I hear what you are asking. Why is this issue important to you?” To avoid the temptation of subtle direction, many users of focus group information prefer to have a moderator who is technically uninformed about the issues and has no preformed opinions. While this goes a certain distance in helping insure an unbiased discussion and report, it can sometimes miss an opportunity to probe important technical issues that arise, that only an informed moderator would recognize.

Much of the questioning from the moderator will take the form of probing for further thoughts. Sometimes silence is useful as a probe, as the recent participants may want to fill the gap with further elaboration. In general, an experienced moderator will use carefully placed silences to advantage (Stewart and Shamdasani, 1990). Silence is by its nature nondirective. Other useful probes are to ask for reasons behind feelings or to expand the discussion to other participants by asking whether anybody else “shares this view.” However, it is important to avoid emotionally loaded phrases like “Does anybody agree (or disagree) with this?”

Moderator bias can easily creep in. This can arise from a need to please the client, reasons of personal bias on the issue at hand, or a need for consistency in the moderator’s own thoughts and beliefs (Stewart and Shamdasani, 1990). It is a relatively simple matter to give undue support to the ideas of a participant you agree with by a number of different means: giving more eye contact, verbal affirmation, head nodding, being more patient, or calling on them first (Kennedy, 1976). Conversely, the unwanted opinions can be easily de-emphasized by failing to probe, summarize or reiterate contrasting, minority or unfavorable opinions. A good moderator will recognize these actions and avoid them as well as recognize when they may have occurred when viewing the taped records.

Moderators should also be sensitive to the answers that are generated due to social factors. Often respondents will choose to try and please the moderator by giving answers that they suppose are the desired ones. Chambers and Smith (1991) give the example of a discussion of brown bread, in which participants may claim to like or use it, but are actually fond of white bread.

A good moderator tries to encourage inclusion of all participants to insure that all sides of an issue are raised and aired. Depending on the culture, different techniques can be used by the moderator to this end. A good idea after some discussion of the idea is to probe the lack of consensus, encouraging new opinions by asking if anyone disagrees with what has been said.
Overly talkative or too quiet participants are a common problem. Dominant respondents may be experts, either real or self-appointed. True experts will tend to ruin a group since less knowledgeable participants will look to them for answers. These individuals can usually be screened out during recruiting. Self-appointed experts are a more difficult problem, and need to be controlled or they will have undue influence on the discussion. Dominating participants can be restrained somewhat by subtle negative reinforcement by the moderator. Non-verbal cues such as lack of eye contact (looking at the ceiling or floor), drumming fingers, reading the discussion guide, shuffling notes, getting up and doing something in the room, or even standing behind the person—each of these can provide negative feedback (Wells, 1974). Often a confrontational or aggressive individual will choose a seat directly opposite to the moderator. A change of seating, if this can be done comfortably (e.g., shifting name placards during a 5 min break) may help. Conversely, a shy person may choose to sit to the side, in a corner or facing the same direction as the moderator to avoid eye contact. Drawing such people out demands additional strategies. Nodding and smiling when they speak or leaning forward to show interest will reinforce their participation. Casey and Krueger (1994) suggest a combination of pausing with eye contact to elicit a response from a quiet participant. People feel a little uncomfortable with silences of even 5 s and will want to fill the gap.

Another goal of every moderator is to insure that all issues are covered. This entails careful development of the discussion guide with the people who request the groups. Interviewing them is no less important than interviewing the consumers in the actual group. All issues should be included, barring major time constraints. Time management is an important skill of the moderator as groups can become surly if held over the stated time (Stewart and Shamdasani, 1990). The moderator should have flexibility if some issues arise naturally and out of the order of the discussion guide. It is often best to keep the ball rolling. In some very good groups, the participants will anticipate the next issue and the stream of discussion will flow with little pushing and probing by the moderator. If a one-way viewing room is used, the moderator may wish to step out for a minute and visit with the observers to see if there are new issues or further probing that they desire. This may also provide the opportunity for a “false close,” when the moderator makes it appear that the discussion is ended and leaves the room, only to observe a sudden burst of discussion in his or her absence. People may voice opinions they did not feel comfortable saying in front of the moderator (Chambers and Smith, 1991). This should trigger some follow-up, as it is a clear indication that there are other issues on the people’s minds that need to be probed. Data gathering on multiple occasions should be viewed as a learning process rather than a repeated experiment (e.g., Falk et al., 1996; Furst et al., 1996, Janas et al., 1996).

### 16.6.3 Assistant Moderators and Co-moderators

Some texts recommend the use of an assistant moderator (Krueger and Casey, 2009). This is not often seen in marketing research but makes a lot of practical sense. The assistant can check the equipment, arrange for food and incentive payments, check in the participants, and take care of any forms that need to be filled out. An assistant can take notes from behind the one-way mirror or off to the side of the room, paying careful attention to be unobtrusive and draw no attention from the participants. If there is only one professional moderator, the assistant can come from the research team. If so, it is important for other team members or clients to realize that they are not allowed to sit in on the groups in the same room. The assistant moderator’s notes become an important source of data for the eventual report, along with the moderator summaries and any recorded and transcribed records. The person requesting the research act can also act as an assistant to the moderator. This insures that he or she sees a representative number of groups and does not rush to premature conclusions based on the first group alone.

Another variation of the group interview uses multiple moderators. It may be helpful in a group to have co-moderators to probe discussions from different points of view. The second moderator may also make some people feel more at ease, if they can identify better with that person in terms of gender and other social variables. Like an assistant moderator, an important function of a co-moderator is to assist in debriefing and constructing the immediate summary of the results. Co-moderators may also be technically experienced people (Marlowe, 1987). Such persons
can clarify some issues or technical questions that arise and may recognize the potential importance of some unexpected lines of discussion to future projects. Not all focus group specialists recommend this approach. Casey and Krueger (1994), for example, feel that it may be confusing to respondents to have two moderators on an equal footing. They prefer the use of an assistant moderator, who can take care of latecomers, tapping, refreshments, props, and other details.

16.6.4 Debriefing: Avoiding Selective Listening and Premature Conclusions

One advantage of viewing focus groups is to hear actual consumer comments in their own words, with tone of voice, gestures, and body language. The observation can be compelling. However, the act of viewing groups entails a major liability as well. Selective listening may occur and people will often remember the comments that tend to confirm their preconceived notions about the issues. The immediate and personal nature of viewing a group discussion can often be quite compelling and much more so than any written report or numerical summary of a quantitative survey. Some observers will tend to form their opinions long before they see the report, and sometimes without the information from subsequent groups, which may be contradictory. It is also quite possible to skew the reporting of comments by extracting them out of context, in order to confirm a client’s favorite hypothesis. As noted by Stewart and Shamdasani, “Almost any contention can be supported by taking a set of unrepresentative statements out of the context in which they were spoken” (p. 110). One job of the sensory project leader should be to discourage selective listening and out-of-context reporting, as well as to caution against early conclusions and reports to management before the analyst can convert the data into information.

There are several ways to avoid this. If one observer is the biggest proponent of a project, concept, or prototype, that individual can be given the job of writing down every negative comment or consumer concern. Give the job of writing down positive information to the biggest skeptic. There is no rule against assigning tasks to observers, although whether you use the information later is optional. Of course, people who are used to passively listening to focus groups (or worse yet, making comments or even jokes about the participants) may not be receptive to the idea that this experience requires their complete attention (cell phones off!). Marlowe (1987) suggests that listening behind the glass takes discipline, concentration, self-control, and objectivity, especially toward negative attitudes that are difficult to swallow. A debriefing session is held just after the group is concluded and can promote a balanced view of the proceedings (Bystedt et al., 2003; Chambers and Smith, 1991; Marlowe, 1987). Asking, “Did you hear what I heard?” about key points can also remind people of comments they may have missed, since human attention will eventually wander during the observation. Peer debriefing can be an important tool in enhancing the trustworthiness of conclusions (Janas et al., 1996).

16.7 Analysis and Reporting

16.7.1 General Principles

The type and style of analysis should be driven by the purpose of the study. Once again the objectives of project are the key concerns. The analysis must be systematic, verifiable, sequential, and ongoing (Krueger and Casey, 2009). By systematic, we mean the analysis follows a specified plan that is documented and understood. By verifiable we mean that there is a sufficient trail of evidence and documentation of how conclusions were arrived at. Another researcher would arrive at the same or very similar conclusions.

Analysis follows a sequence; it has phases including note taking, debriefing, and writing summary notes and transcript evaluation. Analysis may be ongoing, as the design and questioning may be modified as the group’s progress. This flexibility is an asset. Eriksson and Kovalainen (2008) discuss various approaches to content analysis, including software programs used for text analysis in a variety of business applications. A detailed example of systematic and quantitative text analysis is given in Dransfield et al. (2004).

The data can take several forms including a full verbatim transcript, an abridged transcript, note-based analysis, and memory-based analysis. A full verbatim transcript is the most expensive and slowest but
simplest for researchers. Transcripts can be useful for lifting verbatim quotes to illustrate points. Stewart and Shamdasani (1990) suggest transcribing as a first step in analysis. This allows the analyst to cut and paste (either physically or on a word processor) to group comments of a similar nature. An abridged transcript must be done by someone familiar with the project and its goals (they may not be a skilled transcriber). It cuts out introductory material and comments that are deemed irrelevant or off-topic. Note-based analysis depends on ability of the note-taker. If notes are the main source it is important to also have the audio record for review. Data will also consist of assistant moderator notes, moderator summary notes, and any debriefing notes. Memory-based analysis requires the most skill. It may be done with highly experienced moderators who offer an on-the-spot summary to those watching behind the one-way mirror.

### 16.7.2 Suggested Method ("Sorting/Clustering Approach"), also Called Classical Transcript Analysis

The systematic analysis of a verbatim transcript can be a detailed and objective approach to dealing with a collection of consumer discussions. However, it is time consuming and may be a bit slow for some marketing research requirements. In this section we describe a simple straightforward method that requires no specialized software, but will require a serious time commitment. It is based on groupings of similar ideas, sometimes called “affinity analysis” in new product design. The transcript analysis proceeds as follows (abridged from Krueger and Casey, 2009):

1. **Setup:** Obtain two verbatim transcripts, a large room with a large table (or similar functionality), flip chart paper (or similar, about 18 × 24 in. minimum) for each of the 8–10 key questions or thematic areas, scissors, and tape. Label each large paper sheet with the key question or theme from the discussion guide. Number the lines on the transcripts sequentially by word processor, to be able to refer to where they came from. If you have multiple groups with multiple transcripts: use different colored paper for each transcript to be able to recover which group it came from.

2. **Extracting quotes:** Take one transcript and cut off the introductory material. Start with the first substantive comment. Does it offer any information? If so, slice it out and tape (or make a pile) under the appropriate key question or theme. If irrelevant or content free, discard. If uncertain, place aside in a pile to review later.

3. **Organize:** Continue to extract and categorize useful, information-rich quotes. As sub-themes emerge, organize quotes within sub-categories by dividing up each large sheet of paper into a matrix of sub-areas with a word or two describing each. If a quote seems to fall into two areas, photocopy it and place one in each area. Note: Do not worry if a sub-category has only one quote. One insightful idea may be quite valuable even if only one person thought of it.

4. After you have completed all transcripts, review the piles and sub-categories to make sure similar ideas are put together. Reorganize and make further sub-categories as needed. Be sure to review and contrast statements extracted earlier to insure that they are related, a method of “constant comparison” (Eriksson and Kovalainen, 2008).

5. If possible, have a second researcher review your work to see if there are ambiguities, points of disagreement, or outright differences in interpretation or groupings.

This simple cutting, pasting, and organizing task forms the basic information matrix from which you can begin to construct themes. Next, the analysis proceeds to written summaries and analysis of specific questions and themes as follows:

1. Write a descriptive summary of responses to each question and organize by sub-theme or category.

2. Contrast across groups if there are group differences (demographic, users versus non-users, gender, etc.).

3. Weight the importance of each theme using the following criteria:

   - **Frequency and extent:** Important themes tend to emerge repeatedly. Frequency is the number of times something is mentioned, extent is the number of people who voice that opinion or
comment. One person who continues to ramble may not be as significant as when similar comments emerge in different groups.

Specificity: Comments that are detailed, specific, and actionable rather than merely generalizations tend to be more useful.

Emotion: Opinions strongly voiced may be of greater importance.

Potential insight: Unanticipated, breakthrough, paradigm shifting, innovative, actionable.

(4) Develop the transcript summary using the weighted themes, organized by question or topic, then subtopic, and choose about three quotes to best illustrate each summary point. Use this transcript summary as the centerpiece of your written report.

There are a number of alternative analyses that can be done on a verbatim transcript. A similar approach can be done with a word processor instead of the physical cut-and-paste method. The researcher must be careful to “tag” the extracted quotes so that there is a record of what group they came from and what question or topic elicited that comment. An increasingly common technique is to use specialized software for text and content analysis (Dransfield et al., 2004; Eriksson and Kovalainen, 2008). A number of commercial packages are available for this purpose. They involve coding of various response types, categories, or sub-categories so that the text can be searched. This may require skill with the software program as well as skill in developing the codes. Programs also exist to analyze sound files. In a simple version of this, the researcher may be able to mark comments on the sound recording, to tag them for later analysis and sorting.

Once the transcripts are analyzed, one must return to the summaries that were written by the moderator or assistant back when the groups were initially conducted.

A good moderator will write a summary of key points immediately after each group (Casey and Krueger, 1994). These original summaries should be compared to the transcript summaries and combined and modified to begin the construction of the report. Any debriefing notes should also be considered. They should be reviewed one point at a time, usually in the order that issues arise in the discussion guide. In other words, read all of the summaries looking at a single issue and then write the overarching conclusion based on this impression.

16.7.3 Report Format

In general, for industrial reports, a bulleted style is recommended. Include a cover page, objectives, summary, key findings, interpretations (if needed), and recommendations. Append details of method, groups, locations, dates, etc. The discussion guide may be appended. A sample industrial report is shown in Appendix of this chapter. Some guidelines follow.

First, limit your points. Go from the most potentially important findings to the least. Within each category go from general ideas to more specific items (Casey and Krueger, 1994). The big ideas can form the basis for an executive summary if one is needed. Sometimes people will raise an issue in different contexts or different words, and these may fall under some general theme like packaging, convenience of preparation, concerns about nutritional content, and flavor. A good analyst will recognize overarching issues and organize the report around them. Such organization will make the report more digestible, actionable, and memorable to readers, as opposed to a disorganized list of opinions or quotes. Use verbatim quotes (limit of three) for each bullet point. This has high face validity and illustrates to readers of the report how consumers actually talked about the product or concept. The written report will normally summarize key points following the discussion guide and then raise new issues. If the report is an oral presentation or in electronic format, you may be able to illustrate with video clips which can be compelling.

Avoid the temptation to “count heads.” It is a very natural tendency to report results using phrases like “the majority of participants,” “most consumers agreed,” or “a minority opinion was that . . . .” Guard against such unintended quantitative comments, as these may sound like projections to the reader about the larger consumer population.

Concept maps or pictorial maps of the associational structure can be valuable. They can illustrate different results from different groups of individuals. For example, it may be desired to compare experts to novices for
some products, or culinary professionals to consumers, or groups of regular and infrequent purchasers of a product. Concept mapping is a method by which the ideas (nouns, mostly) are presented as nodes (boxes or circles in the display) and their relationships (verb phrases) are pictured by labeled lines connecting the nodes (Novak and Gowin, 1984). A good example of this approach was a comparison of consumers to fishing industry experts in their approach to seafood quality (Bisogni et al., 1986). Experts were concerned with a wider array of technical issues and processing factors, while consumers were more focused on sensory attributes. This difference was plainly obvious in the pictorial concept maps. Another example can be found in Grebitus and Bruhn (2008) who examined consumers’ concepts of pork quality. The individual maps were subjected to quantitative analysis to provide degrees of relationship between 15 key concepts. The complexity of the discussion, the information elicited, and its underlying conceptual structure can all be easily appreciated in this kind of pictorial display. A sample concept map from the previous case study on salt and health is shown in Fig. 16.2.

16.8 Alternative Procedures and Variations of the Group Interview

16.8.1 Groups of Children, Telephone Interviews, Internet-Based Groups

Krueger and Casey (2009) discuss several other variations on focus groups. Three areas are potentially useful in sensory evaluation and new product development: focus groups with children, telephone focus groups, and “discussion” groups held via the Internet. Each of these requires modification of the usual procedures for group discussions and a good deal of flexibility. As always, making sure the tool is appropriate for the project objectives is key. The following descriptions and guidelines are summarized from Krueger and Casey (2009).

In focus groups with children or teenagers, smaller groups need to be assembled and about six kids is a good number. The time of the group must be shorter, usually no longer than 1 h. Getting a good moderator that can relate to kids and make them comfortable...
talking to new acquaintances is important. Children must be of about the same age, no more than 2 years difference among the group. Avoid recruiting close friends who know each other. If possible, prescreen for kids that are willing to speak up. Food is a good idea. Groups should be conducted in a friendly and possibly familiar location, and one that is not associated with adults in authority such as a school if possible. Questions should be appropriate to the age of the children and yes/no questions should be avoided as usual. It is common to spend a good 15 min in warm-up talking about a popular topic like music or video games.

Telephone interviews allow for more geographic diversity in the group but they also have restrictions and special requirements. Because no travel is involved, incentives can be small or non-monetary. The disadvantage is that any body language or facial expressions are lost. Phone interviews are conducted like a conference call in which the participants call in via a pre-arranged service. Participants should be instructed to call in from a private, comfortable place in which they will not be tempted to be multi-tasking or doing other business during the call. The clarity of the connections should be carefully assessed when people sign in. Groups must be smaller (4–5 participants) and shorter (about an hour). People should state their names before comments, at least at first until it is clear by voice who is speaking. Be prepared to stimulate the discussion when silences occur and intervene when conversations seem to be stuck on one topic.

The Internet offers several options as alternatives to the traditional discussion group. There must be a secure, password-protected system. Like phone interviews, there can be geographic diversity but there are no visual observations of expressions or body language. There may be less spur-of-the-moment synergistic interactions because responses may be delayed. Before or during the group, images, sounds, complex concepts, and such can be posted on another website for viewing. The Internet interaction will avoid some of the issues of social dominance or hierarchies that can surface in a face-to-face group.

One option for the Internet is to set up a chat room with a specified time to enter and interact. Typically the chat room could have six to eight participants and last up to 90 min. A sequence of questions are posted often ahead of time for consideration. Information for inspection and comment before the group can be posted on another website. A chat room will tend to get more top-of-mind comments that may not be well thought-out responses. The format favors people who type fast and do not edit their thoughts, and such persons may dominate the exchange. Moderators should be careful to identify their own comments, questions, and probes, for example, by using all capital letters. Participants should be warned if time is running out on a topic so those who are waiting to respond can do so. An obvious advantage of the chat room is that it can provide a written record of all comments.

Another alternative is an Internet bulletin board. This functions like a chat room extended over time with posted comments. Participants must agree to spend 15–30 min per day reading and posting throughout the duration of the project and they should be informed of the duration. The extended timetable may entail some attrition as personal schedules change or emergencies arise. Bulletin boards can evoke more reflective in-depth comments than a chat room. Participants are urged to post comments on the general topic of the day as well as respond to comments of others. The moderator may summarize a previous day’s findings for further commentary or amendments.

**16.8.2 Alternatives to Traditional Questioning**

Within classical focus groups, there are a number of special activities that can be done that involve more “doing” than “talking.” There are no rules that prohibit the use of tasks or consumer interactions with sample products or sensory experiences. Bystedt et al. (2003) list a variety of techniques as alternatives to traditional question and answer. These include free association (what comes immediately to mind when I say X?), mind-mapping (drawing a map of your ideas similar to the concept map discussed above), making collages of the product image from magazine cutouts, responding to a pre-arranged deck of visual images (which of these pictures is associated with the product concept?), various techniques for laddering, and several other methods to stimulate imagery and probe associations.

Sometimes tasting or using a product may help bring to mind advantages and concerns. To facilitate
discussion, participants can be asked to bring along a similar product or one they regularly use from the category. Having been presented an idea or prototype, they can be asked to write down three positive and three negative aspects of the product, in their opinion. This can provide some time for reflection and if written, can be collected later to see if they voiced the actual items they wrote down. Such information could be presented to subsequent groups for their commentary. Building from recorded positives and negatives is very much in the tradition of Merton, who originally focused his group discussions on the positive and negative comments recorded during the playing of the radio programs (Stewart and Shamdasani, 1990). Writing down comments on index cards to be passed to the moderator can allow anonymous opinions to be opened for discussion.

Interaction with products can involve other organized tasks. For example, participants can be asked to sort a group of items into clusters or pairs and give the reasons for their categorization. This can be done individually or as a group exercise. They can be given triads of items, as in the repertory grid method (McEwan and Thomson, 1988) in which they describe the reasons why two of the three items are similar to each other and different from a third. Alternatively, they can be given pairs and asked to describe similarities and differences. Another method for exploration is a product placement or mapping task, in which participants place objects on the table to represent their similarities, differences, dimensions of difference, and perhaps categorical relationships (Bystedt et al., 2003; Light et al., 1992; Risvik et al., 1994). The reverse task of dividing up the group sequentially can also be performed. Participants are asked to divide the product first into two piles, to discuss the reasons for this division, and then further divide the piles if possible (see Ellmore and Heymann, 1999 and Olson, 1981 for examples).

Probing information on underlying attitudes and motivations can also benefit from some special techniques. Additional tools have been borrowed from the projective techniques in psychoanalysis (Stewart and Shamdasani, 1990). These are called projective in the Freudian sense in that respondents need not couch their responses in terms of their own feelings, but state them as belonging to someone else. For example, participants could describe the type of house or household that a person who would use the product would have. “Making up a story” about the product or user is another approach (Bystedt et al., 2003). Seemingly unrelated aspects can give insights into how the product is perceived in relation to attitudes. What kind of car does the person drive who would buy this? What sports do they like? What TV shows do they watch? The line of questioning can include constructing a complete story about the potential user of the product. Participants may be asked to draw a stick figure of the person and label/describe them. Another common projective technique is “filling in bubbles.” This describes a partially blank or ambiguous picture, such as a consumer thinking, and a “bubble” appearing above her as in a cartoon or comic strip. In this way, participants can place the attitudes outside themselves onto the person in the picture. Many variations on these techniques are available and more continue to be developed.

16.9 Conclusions

Some people consider observational or qualitative methods “soft” science or not even scientific at all, that is, an unfortunate and unduly pejorative view of this form of research, which can be systematic and verifiable (see discussions of “grounded theory” in Eriksson and Kovalainen, 2008). The dominant model for scientific research over the past 150 years has been that of controlled experimentation and logical hypothesis testing. This “positivist” model has served us well, but it is not the only way to gather useful information. Almost all science begins with observation of some phenomenon in order to develop a framework for later experimentation and tests of theory. Field biology using observational methods to study animal behavior is one example, and in principle, it is not unlike the kinds of methods discussed in this chapter (except perhaps that there is more interaction of the observed and the observer). As always, the key is to find the right tool to address the objectives of the study or research project:

The decision to use a focus group or some other research tool must be based on the appropriateness of the method for obtaining answers for specific research questions. It has been noted before that to a man with a hammer,
everything is a nail. . . . Focus groups are useful for particular purposes and specific situations — for exploring the way particular groups of individuals think and talk about a phenomenon, for generating ideas and for generating diagnostic information. For these purposes, focus groups represent a rigorous scientific method of inquiry (Stewart and Shamdasani, 1990, p. 140).

A number of myths surround the use of focus groups (Krueger and Casey, 1994). One common misconception is that they are inexpensive. If three groups are conducted in each geographic location or three groups of each demographic segment, the budget will grow quite large in a hurry. A second myth is that they give rapid feedback. If one considers all the steps from recruitment, hiring test agencies or moderators, conducting the study and the analysis, it can easily take a minimum of 6 weeks to get the information needed. Another common notion is that a one-way mirror is required. With video transmission this is hardly necessary and the situation may seem more natural to the participants without it. Giving up the one-way mirror allows a greater flexibility for the kinds of locations that can be used for the study. Finally, there is the question of whether one needs an expert facilitator (or conversely that anyone can run a focus group). Certainly some skills are needed, particularly that of being a good listener.

Qualitative research methods have become important tools for consumer research in the methods available to sensory specialists. For uses such as exploring important sensory attributes and issues related to functional product characteristics (packaging, use directions, convenience, etc.) they are quite valuable. As sensory specialists become more a part of cross-functional teams during product development, they will be exposed to an increasing array of consumer-centric qualitative and quantitative methods, many of which are used for conceptual optimization (Moskowitz et al., 2006). It is important for sensory professionals to understand these tools and how they are used, in order to make the best use of the information. Conducting qualitative research is in some ways like sailing a boat or taking a hot air balloon ride. Some things are under your control, many others are not, and each experience provides some surprises. They are almost always valuable learning experiences.
Appendix: Sample Report Group Report

Boil-in-bag Pasta Project Followup Groups

Abstract

Three discussion groups were conducted following a home use test of the boil-in-bag pasta product. Potential areas for improvement were identified in bag strength, sauce formulation and usage instructions. The convenience aspect of the product was perceived as a major point of attractiveness to the participants. There was some interest in a low calorie version of the product.

Objective

To assess consumer reactions to the boil-in-bag pasta product in an in-depth group interview, to allow further probing of issues identified during the formal in home test and quantitative questionnaire.

Methods

[appropriate methods would be described here or appended]

Results

1. The major consumer-perceived advantage was the product’s convenience:

   “I really liked the product since you could just pop the thing in boiling water and pull the bag out five minutes later with a completely cooked dish with sauce and everything. You just throw the pouch away and cleanup was easy.”

   “I liked the speed of preparation. When I get home from work, my kids are screaming for their dinner, and well, you know, my husband doesn’t lift a finger to help, so I need to get this done to keep the kids from rioting.”

2. Problems were seen with the sauce flavor, particularly regarding salt level:

   “The pasta was nice and firm, but I thought the sauce was, you know, way too salty. My husband is on a low salt diet for high blood pressure, and he just went right through the roof.”

   “The herb sauce was just too strong. It didn’t seem like an authentic Italian dish to me. My mother’s version was much more subtle.”

3. Problems were seen with the bag strength:

   “With both the products I tried, the bag broke. I would never buy a product like this again if that happened just once. It makes a terrible mess and besides, is just a waste of money since you can’t do anything with the food once it gets into a whole pot of hot water.”

4. Usage instructions were not clear, especially regarding done-ness:

   “It says to cook until firm. But, uh, you know, like how do I tell its firm when its inside a bag and in a pot of boiling water?”
5. There was some interest in nutritionally-oriented versions of the product:

“I liked the taste, but when I read the nutritional information, I was surprised at the fat level as well as the sodium. I mean, if we can have lite beer and lite everything else these days, we should have a line of these products that’s better for you, too.”

Conclusions

[appropriate conclusions would appear here]

Recommendations

[appropriate recommendations would appear here]
[in some companies, they will appear at the top of the report]
[abstract may then be replaced with “executive summary”]

Disclaimer

“Qualitative research provides a rich source of information in clarifying existing theories, creating hypotheses and giving directions to future research. This research is based on a limited non-random sample of participants. Such qualitative research is not projectable. No statistical inferences should be drawn from these results. Any results should be viewed as tentative without quantitative corroboration.”
References


