MKT 450
WEB NOTES

Exploratory Research

The Purpose of Exploratory Research: Good Research Questions

Years ago, before the advent of CAT scanners and other noninvasive medical diagnostic procedures, doctors who were stumped about a patient's symptoms might recommend "exploratory surgery." With little to go on but vague descriptions of symptoms, physicians would "open up" a patient to look around and see what needed fixing.

In market research, exploratory research plays a similar role. Marketers have no machines to peer inside a decision problem, so they may use certain research techniques to "open up" the problem and look around. Researchers use these techniques, which they refer to collectively as exploratory research, with a single broad purpose: clarify the research questions that guide the entire research project.

Importantly, the entire notion of "exploratory" research suggests that it precedes a larger, more formal research project. This is usually the case. The techniques we classify as "exploratory" generally provide information and insight to researchers as they prepare for larger research efforts such as surveys and experiments.

Sometimes businesses conduct entire marketing research projects using only exploratory techniques – especially focus groups. In such instances, the reason is usually budgetary; even expensive focus groups pale in cost next to large scale surveys. So firms willing to overlook the sometimes serious shortcomings off focus groups may find them an attractive way to conduct an entire research project.

When used to prepare for more extensive research studies, exploratory techniques assist in several ways. First, exploratory research can assist market researchers in finding possible causes to the symptoms communicated by decision makers. Recall that decision makers often approach researchers with symptoms to a problem (declining sales, falling share, etc.) and want to know what they should do. Researchers may conduct exploratory research to develop a list of possible causes to the problem. Additional more extensive research may then confirm which possibility or possibilities are most the likely causes.

Second, exploratory research can uncover possible avenues for reaching decision makers' objectives. For example, suppose a marketing manager receives an objective to increase product sales by fifty percent in the next two years. Deciding on strategy might first require developing a list of available strategies before estimating which stood the best chance of success. Developing a list of realistic strategy options might first require exploratory research. Then, once developed, a larger more formal study could estimate which was most likely to reach the sales objective.

Third, exploratory research answers questions about actually administering a large and expensive research project. For example, researchers can use exploratory research to learn words and phrases meaningful to the people being studied. They can also get a sense of how best to reach the people (e.g., mail versus telephone versus Internet).

In absolute dollars, exploratory research can be expensive, running into thousands of dollars. However, in the long run it can help decision makers and researchers save money. Despite its expense, most commonly used exploratory research techniques cost significantly less than large scale formal research such as surveys or experiments. Thus, if exploratory research helps researchers address the right questions and avoid mistakes in the conduct of these larger research projects, then they merit their expense.

The Nature of Exploratory Research Data

In order to better understand how exploratory research can and cannot be used, you should understand the kind of data most exploratory research procedures produce. And, to that end, you should also understand what type of data these procedures do not produce. Broadly speaking, data – and the research procedures that produce them – may be divided into two categories: qualitative and quantitative.

For most purposes, exploratory research produces qualitative data. Generally, exploratory research techniques simply involve conversations between a researcher and the people being studied. Although the researcher may guide the conversation across certain issues, the questioning is usually informal and semi-structured.

Thus, the data produced by qualitative research is textual. That is, the research produces a "text." Although the text is analyzed, the methods of analyses are not statistical; textual data are not numerical and do not lend themselves to statistical analysis.

This limitation is important. Researchers and decision makers alike often wish to generalize the conclusions of their research from their samples to some larger population of interest. Textual data do not permit this kind of generalization.

On the other hand, assuming other conditions are met, quantitative data may be generalized from a sample to a larger population. Making these generalizations and calculating the margins of error inherent in them requires that the data be numerical. Generally speaking, research procedures such as surveys and experimentation (often called confirmatory and causal research, respectively) produce the quantitative data needed for such analyses.

Thus, these two categories of research clearly rely on one another. That is, asking the right questions of the right people in the right way to produce generalizable statistical results requires knowing what to ask, who to ask, and how to ask. These facets of research are often uncovered through carefully conducted qualitative research, which explores decision problems in order to assure that research results are not a waste of money.

Commonly Used Exploratory Research Techniques

The notes on marketing decision problems introduced you to two primary data collection methods used in exploratory research: focus group interviews and depth interviews. Researchers use both methods to gather the qualitative information needed to better understand a decision problem and the research issues surrounding it.

<u>Focus Group Interviews</u>

Focus group basics. Recall that focus groups are small groups of six to ten participants plus one "moderator" brought together to discuss an issue or issues of interest to the researcher and decision maker. Typically, focus group interviews last from sixty to ninety minutes. Focus groups taking less time may not delve deeply enough into the subject matter. Longer focus groups may fatigue the participants. Moreover, the longer the time requirement, the more difficult recruiting participants becomes. Therefore, rarely should focus groups exceed ninety minutes.

Focus group interviews offer researchers and decision makers a variety of benefits. First, they can be assembled and conducted relatively quickly. Recruiting suitable participants may consume some significant time and effort, but because the number of total participants is small, even this task is not particularly daunting.

Second, even when professionally moderated, a single focus group costs relatively little to conduct. One “luxury” that can drive up costs is using a specialized focus group facility, which may include sophisticated equipment for recording and monitoring the interview. Although pricey, these facilities can prove useful when interested parties wish to observe the proceedings. However, in the final analysis, the only absolutely necessary equipment needed for focus group interviews are comfortable places to talk.

Third, the group format of a focus group holds the potential for more productive conversation. Indeed, the very idea behind group interviews is to produce a sense of synergy among the participants, which should in theory, result in a richer and more fruitful discussion.

Focus group interviews carry noteworthy disadvantages as well. As discussed briefly already, the small groups and the textual nature of qualitative data makes generalizing results to a larger population scientifically unfeasible, as do other practices common with focus groups that we will discuss at length in future topics.

Beyond this somewhat technical matter, most other limitations of focus group interviews revolve around poor focus group moderation. Because of their seeming simplicity, many marketers feel that conducting them well requires little skill; after all, how difficult can talking to people be? Well, truthfully, effectively drawing useful and unbiased information from a room full of strangers can be a daunting task, even for the most charming of conversationalists. Thus, hiring a reputable and experienced focus group moderator may be well worth the usually relatively small expense.

Planning focus groups. Whether conducting them themselves or hiring a professional moderator, marketing decision makers should understand some of the major issues involved with focus group interviews. Decision makers should provide guidance and input into the research process even when the actual research is conducted by professional researchers.

The first major issue involved with setting up and conducting focus group interviews is recruiting a suitable set of participants, which encompasses such matters as screening, group composition, and compensation. The main qualification for most focus group participants is that they be members of the group being researched and that they be able to speak intelligently on the subject being researched.

If the focus group interviews will apply to a fairly broad range of people, then it’s good practice to group similar people together in the same interview. In other words, people participants in a single focus group interview should be relatively homogeneous. This means that, within reason and depending on the subject mattter, group people of similar sex, race, age, or social class together.

People tend to speak more openly and less argumentatively when in groups of relatively similar people. This is particularly true when the subject being discussed is sensitive or controversial. For example, imagine how inhibited you would feel discussing personal hygiene habits in a group comprised of four men and four women, compared to a similar discussion in a group of eight people all of the same sex as you.

Focus group participants are rarely ever selected using random sampling procedures. The only normal reason for using these often difficult and complex sampling procedures is when the researcher wishes the results to generalize scientifically from the sample to the population from which it is drawn. Because qualitative data do not generalize anyway, the trouble and expense of random sampling would be wasted on focus group interviews.

Instead, focus group participants are generally selected on the basis of convenience. That is, researchers select the most available people who meet whatever screening criteria are used for selecting participants.

Researchers should expect to compensate focus group participants for their time. Compensation not only helps recruit focus group participants, but also motivates them to speak up and offer their opinions. Compensation varies depending on the time required and the subject matter, however, payment of fifty to one-hundred dollars is not uncommon.

The second major issue involved with planning focus groups is the location. As noted earlier, the only critical requirement for focus group locations is that it be a comfortable place to talk. Also, naturally researchers should choose a location easily accessible to the participants. However, in addition to these relatively straightforward matters, researchers must consider other criteria for location.

For example, researchers might decide to use a dedicated focus group facility as mentioned earlier. These facilities not only provide a relaxing and comfortable place to talk, but offer researchers, decision makers, and other interested parties the opportunity to observe the interview unseen from observation rooms. Seeing the interview may help decision makers develop a more accurate feel for how the participants responded to the questions than by simply reading them in a report.

Additionally, most quality focus group facilities are equipped to videotape and/or audiotape interviews unobtrusively. These electronic records of interviews frequently prove invaluable for gaining as much information from the discussion as possible. For that reason, no matter where interviews are held, focus group interviews should at least be audio taped, of course with the participants' knowledge and consent.

Besides dedicated focus group facilities, the most commonly used locations for focus group interviews are conference rooms, usually in offices belonging to the decision makers' firms. Focus group moderators should simply bring whatever equipment is needed to tape the interview.

Moderating focus groups. Because contributing effectively to research process requires some knowledge of that process, marketing decision makers should have a good grasp of effective focus group moderation even if they never actually moderate one.

Moreover, under some circumstances, marketing decision makers with a serviceable understanding of good focus group practice can assemble and moderate their own focus groups. However, when the decision problems are critical, sensitive, or controversial, or when participants would be more likely to open up to a moderator of a similar background, then professionals should moderate the focus groups.

In either case, knowing the basics of good focus group moderation helps marketing decision makers bring value to their role in the process. Therefore, in this section we'll examine some basics of focus group moderation, with an emphasis on asking open-ended questions.

Successful focus group moderation begins with making participants feel at-ease and willing to talk openly. As such, focus group moderators should keep two basic rules in mind. First, keep the tone conversational. Excessive formality or the use of jargon associated with the organization, field of study or market research in general will make participants feel apart from the proceedings and may be less forthcoming as a result. Keeping a friendly and conversational tone throughout the interview goes a long way toward keeping the participants comfortable.

Second, moderators must not become participants. Leading a group discussion does not mean joining it. Moderators should maintain an interest in what participants say while not influencing their opinions or offering their own.

One of the more difficult parts of focus group moderation is keeping the conversation going and on topic. Moderators must become artful in asking open ended questions and not permitting the interview to become more akin to a cross examination. Exhibit 1 presents examples and comments about common question types used to lead participants through the interview.

As presented in Exhibit 1, the questions suggest a progression through the interview; it follows a process rather than simply starts and ends. The various types of questions facilitate this progression by having participants reflect on different aspects of the topic as they move deeper into the discussion.

As the name implies, "opening questions" begin the proceedings. Typically, the moderator poses the question, answers it him or herself, and then goes around the table giving each person a chance to respond. The question often asks for a fact or a noncontroversial opinion in response. The idea is simply to get each person to speak, and thereby "break the ice."

Introductory questions begin the interview in earnest by introducing the topic in broad terms, and asking the participants to think about it. At this point, it's best not to go around the room but wait for someone to speak up. Going around the room for each question is inhibiting and an inefficient use of limited time.

Transition questions move the topic from the abstract to the concrete. Whereas introductory questions asked participants about the topic in general terms, transition questions get than to recall some personal experience or anecdote. Thus, transition questions make the topic both personal and concrete to the participants.

As you might have guessed, key questions drive the focus group interview; they address the issues that prompted the need for focus groups in the first place. For example, research often seeks to uncover what motivates consumers to buy. Focus groups help researchers to understand the range of motivations behind purchases. Therefore, key questions frequently ask participants to think of circumstances under which they would respond in a certain way to a marketing offer.

Finally, ending questions helps participants bring closure to interview by giving them one last chance to bring up unresolved issues or make comments they were unable to make earlier in the interview. Ending questions also permit moderators to ask participants to summarize their views

Exhibit 1. Focus Group Interview Question Types

Question Type	Examples	Comments
Opening	• "Tell us your name and how long you've lived in the Dayton area." • "Tell us your name and your favorite memory of summer."	• Designed to be answered in less than thirty seconds. • Based on fact or uncontroversial opinion • Intended as an "icebreaker" to get participants used to talking. • All participants answer this question. • Answers frequently not analyzed.
Introductory	• "When I say 'customer service' what immediately comes to mind?" • "What does good health mean to you?" • "What's your impression of the Ohio Council for the Arts?"	• Bring up the general topic of discussion. • Offer participants the chance to reflect on what they know about the subject. • Depending on time or response, need not give all participants chance to respond. • Unanticipated or insightful responses should be followed with probing questions
Transition	• "Can you describe your first experience having a car fixed?" • "Can you name three things you've tried in the past year to improve your health or fitness, whether you stuck with them or not?" • "Tell me about a time when you were particularly moved by art?"	• Logically links introductory and key questions. • Ask participants to move from broad and general impressions to specific experiences. • During these questions, participants begin to learn how their experiences compare to others.
Key	• "Tell me about the kind of automotive repair facility that you would trust." • "What would it take to get you to start living a healthier lifestyle and really stick to it?" • What would you like to get out of the local arts establishment in order to increase your participation?"	• These are the questions that drive the study; the reasons the study is being conducted. • Generally two, but no more than five key questions. • Getting satisfactory answers may require probing questions. • Addressing key questions should take at least half the available time if not two-thirds.
Ending	• "Which one thing that an auto shop does to win your trust is most important to you?" • "On the slip of paper, write down one word or brief phrase that sums up how you feel about your health?" • Is there anything we didn't talk about regarding the arts that you wish we had?"	• Help close the discussion, give participants a final word. • Allows moderator to be sure participants' positions are adequately represented. • Give participants a chance to summarize their positions and views.

and to assure moderators that they have correctly interpreted statements made by participants.

Exhibit 1 also mentions the need for asking "probing questions" during focus group interviews. Moderators use probing questions anytime they need elaboration or clarification of a participant response. These needs arise when participants answer in a vague or cryptic way or when they offer a particularly insightful response that the moderator wants to discuss further.

Two comments about probing questions are in order here. First, they should be used sparingly; not every interview question requires a probe. Overuse of probing questions wastes valuable interview time and may lead participants to make their initial responses more cryptic because they expect a probing question to follow.

Second, probing questions must be "nondirective." In keeping with moderator objectivity and neutrality, questions should not be phrased so as to direct participants to particular responses. Therefore, in general probing questions usually ask participants to say more about their previous response or to explain why they feel as they do. When asking participants to explain why they feel as they do, moderators do not ask "why" directly. Many favor an indirect approach in which respondents are asked what events in their lives led them to a particular opinion.

Below are examples of commonly phrased nondirective probing questions.

- "Would you explain a little further?"
- "Can you give me an example?"
- "Has anything happened in your life that has led you to feel that way?"

These notes cover the analysis of qualitative data later, after discussing the second major exploratory research data collection technique: depth interviews.

Conducting Depth Interviews

Depth-interview basics. Depth interviews share some similarities with focus groups. They both produce qualitative data; they both attempt to uncover the feelings and motives behind the marketplace actions of consumers; they both help explore research questions in preparation for larger data collection efforts.

However, many things differ between the two; depth interviews are not simply focus groups of one. As the name implies, depth interviews are intended to go more in-depth with individuals, uncovering deeper feelings and more detailed life experiences that may be relevant to their behaviors toward a product or brand.

Compared to focus groups, depth interviews provide an ideal means of gathering this kind of information. First, interview time need not be shared among several individuals. Time is available to delve into an individual's psychological relationship with a product or brand. Second, because depth interviews occur between only two people, they offer a much more receptive venue for discussing sensitive or potentially embarrassing topics.

As is true for focus groups, researchers need only provide a quiet and comfortable place to talk – often simply an office or sitting area. The room, however, should be relatively small and not excessively ornate. Depth interviews should not emphasize power relationships or social stratification between interviewer and participant.

Likewise, the physical sitting arrangement for depth interviews should not place the participant in an "inferior" position relative to the interviewer. In focus groups, it's not uncommon for the moderator to sit at the head of a conference table because he or she is the "leader" of that discussion. In depth interviews, the interviewer should be more like a partner in the discussion. Therefore, the interviewer should never sit behind a desk from the participant. Similarly, interviewer and participant should sit in identical chairs.

Many focus group facilities also offer smaller interview rooms for depth interviews. These rooms may be equipped with observation and taping capabilities. However, if the depth interview covers sensitive or potentially embarrassing topics, taping may inhibit candid discussion, even if the participant permits taping.

Recruiting for depth interviews adheres to many of the same principles covering focus groups. Samples should consist of target market members able to speak intelligently on research topic and participants should be compensated for their time. And for the same reasons as with focus groups, rarely are depth interview samples drawn randomly.

Focus groups and depth interviews depart substantially in their methods of questioning. Because the interview involves only one participant, depth interviews can get to the point of the interview more quickly. Less time is spent transitioning into the heart of the topic.

This is not to say that interviewers abruptly dive into a topic; they do transition into the heart of topic. The main difference is that less time is spent in transition and more time is spent dealing with the main issues.

Another difference with focus groups in how to question participants revolves around how to get participants to reflect on and talk about the topic. Focus group moderators can usually rely on a talkative participant to get the conversation going. Such is not the case with depth interviews. Not only do depth interviews lack the group dynamic, they also tend to be used for topic better discussed one-on-one. Therefore, interviewers rely on other techniques to question participants.

Projective techniques. Projective techniques have become a staple of depth interviews as they have left the realm of psychoanalysis and entered the realm of marketing research. These methods for questioning interview participants gained in popularity through the 1970s for several reasons. One, marketers began to better appreciate the emotional bond some consumers feel toward the brands of products they buy. Two, marketing researchers recognized that interview participants might be reluctant or unable to express those emotions in terms useful to marketers.

With their origins in psychoanalysis, projective techniques provide an ideal set of tools for exploring the emotional connection between consumers and brands. Moreover, the nature of projective techniques helps put interview participants at ease regarding revealing their feelings.

When using projective techniques, interviewers ask participants to "project" themselves into a fictitious or contrived circumstance or ask them to assume the role of a fictitious person. In this way participants feel they are speaking in hypothetical terms or feel they are speaking about someone other than themselves. This makes them feel less vulnerable and ironically leads to more candid conversation.

Projective techniques are relatively easy to use (though the interpretation of their results can be complicated). Interviewers can present participants with a wide variety of visual or written material and ask the participants to comment. In marketing research, interviewers favor a few of the many possible methods available with projective techniques.

One favorite is sentence completion, where participants complete sentences about products, people or consumption situations.

- "Members of AAA are. . ."
- "Bud Light hosted a party last night and. . ."
- "After work, doctors like to. . ."

Interviewers read the responses, then use probing questions to uncover their underlying psychology. The probing questions typically seek more concrete details about the initial response, which may be fairly vague.

Another projective technique favored by marketers is cartoon interpretation. Participants receive a carton drawing and are asked to provide some or all of the dialogue. Exhibit 2 gives an example.

Exhibit 2. Cartoon Interpretation

The Recently Divorced Businessman

In this example, the interview participant is asked to describe what the man says, and then also tell what he thinks to see if participants perceive a difference between the two.

Other projective techniques frequently used in marketing research include picture captioning, role playing, sketching exercises, and making collages. Importantly, to be a projective technique, the exercise must ask of interview participants that they "project" themselves into situations different from their own or ask them to take on the role of another person.

Analyzing Focus Group or Depth Interview Results

Unfortunately, no straightforward rules exists to guide the analysis of qualitative data. Because qualitative data are largely textual, statistical procedures do not apply. Thus, researchers must base their analysis on the personal interpretation of words rather than the objective evaluation of probabilities. This makes qualitative data analysis much more artful, and done well, much more rigorous. Indeed, as I emphasized earlier, critical or complex projects utilizing either of these exploratory research techniques should not only be conducted by experienced moderators or interviewers, the data analysis should too.

Preparation for effective analysis. Good preparation even before the focus group interview occurs can go a long way toward enhancing the effectiveness of the data analysis. First, get background information from the participants. If possible, obtain this information in advance of the interview rather than wasting valuable time at the interview itself. At a minimum, participants should provide simple demographic data such as age, education, occupation, and income. Additionally, researchers may also wish to collect participant information that may be relevant to the study topic.

Second, if practicable, arrange to tape record the interview. Videotape is best, though the cameras can be obtrusive except in dedicated focus group facilities, where they're frequently hidden. Failing this, audiotape the interview. Relying on notes alone when reporting the interview results often proves unreliable.

Conduct the interview with analysis in mind. How the interview itself is conducted can significantly affect the effort required to analyze the data. One important factor for setting up an easier analysis is the use of probing questions. Good use of probing questions can add significantly to the quality of the analysis following the interview and the ease with which the analysis is conducted.

Two important instances when probing questions are a must. One, use probes when responses are vague. A vague response is lost information. Researchers cannot infer the possible meaning behind a vague or uninterpretable response, so unless the moderator or interviewer asks for clarification, the true meaning behind the vague response is lost and cannot be part of the results.

Two, use probes when participants contradict themselves. This actually occurs fairly frequently, especially during focus groups. As participants have time to reflect on their initial responses or hear the responses of other participants, they may voice an opinion contrary to their views earlier in the interview. Moderators and interviewers should be alert to these instances, and ask about them when they occur. Understanding how a participant came to change his or her mind often provides a useful bit of insight into the psyche of consumers.

Beyond probing, another important way to assist data analysis during the interview is to ask planned questions in the order they were planned. Both focus groups and depth interviews should follow a preset sequence of questions that call on participants to reflect some on the topic before answering the key questions that drive the research. Skipping around denies participants the opportunity to think deeply about the topic, which may affect their answers.

Analysis and coding after the interview. Certainly common sense guides much of the analysis after the interview is completed. More often than not, understanding what people say simply requires that we listen to them. Thus, much of what researchers write about when they report focus group or depth interview results simply reflects what the participants said.

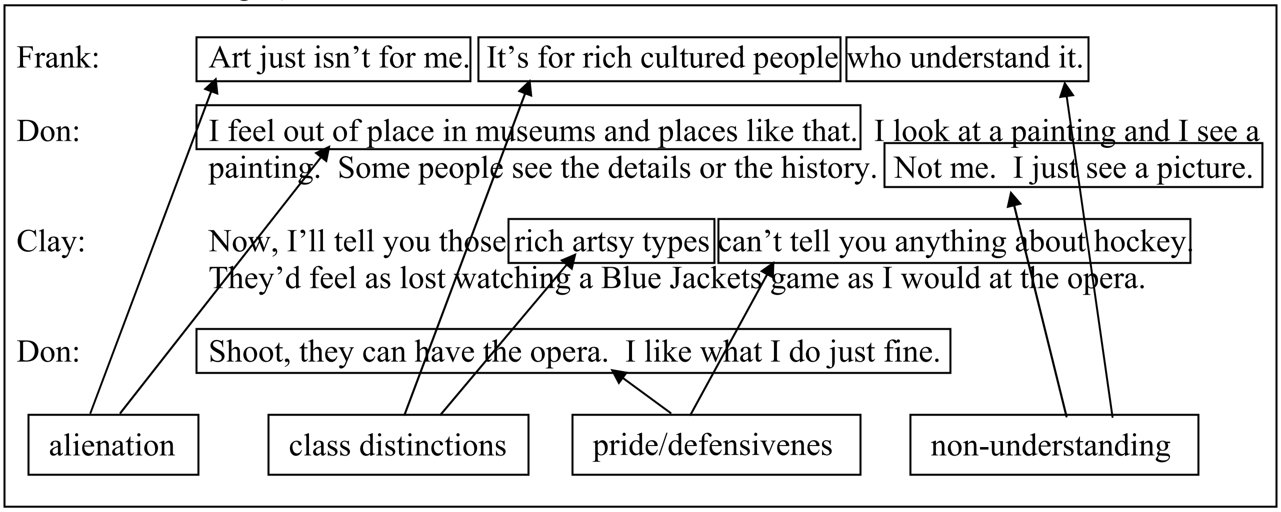
However, professionally analyzing qualitative data requires more than simply reporting the content of conversation. The analysis should look for important themes and subtexts that reveal more than the spoken word. Coding the qualitative data helps provide the insights that lead to understanding these themes and subtexts.

Coding qualitative data follows a simple and straightforward process, but one that relies on intuition. Therefore, while the process is relatively easy to do, it's difficult to do well. Done well, however, good coding of qualitative data can lead to the insights that make exploratory research techniques so useful.

Optimally, coding requires both a written transcript and a tape recording of the focus group or depth interview. Therefore, as soon as possible after the interview, the tape recording should be transcribed. This is no small task. An hour long interview can produce a fifty page transcript.

The researcher doing the coding – optimally the moderator or interviewer – should begin by reading the transcript while listening to the tape. The researcher should make note of interview features not captured by the transcript such as the demeanor of the

Exhibit 3. Coding Qualitative Data



participants and the emotion with which they speak.

Coding begins in earnest with the researcher categorizing each statement made by the research participants. Therefore, as the researcher reads the transcript, he or she devises categories for the statements made during the interview and places each applicable statement into the appropriate categories.

Exhibit 3 shows how coding works using a small portion of a focus group interview about what art means to many working class males. The exhibit makes several noteworthy points. First, quite a bit of useful content can be found in a relatively small amount of discussion. The participants packed quite a bit of meaning into only a few seconds of dialogue. Second, a single statement often reflects more than one attitude or feeling. Indeed, this is true for most of the statements in the exhibit.

Of course, effective coding of qualitative data relies heavily on accurate inference of attitude or feeling into a statement. Researchers who specialize in collection and analysis of qualitative data develop a intuitive feel for the nuances of focus group or depth interview dialogue.

Therefore, as emphasized throughout, when the topic of discussion is complex or the research is of critical importance, decision makers and researchers unfamiliar with these research techniques should turn to the expertise of professional qualitative researchers.

Conclusion

Many decision makers rely on focus group and depth interviews as their chief method for collecting primary data – often because of budgetary factors. In many, if not most instances, this stretches the strength of the data to its limits. The small samples and text-based nature of qualitative data leave its generaliability suspect at best.

Debate exists within the marketing research profession about the usefulness of qualitative research methods beyond their traditional exploratory role. Many researchers who specialize in qualitative methods feel that these methods unfairly take a back seat to quantitative methods such as surveys and experimentation.

I tend agree with the more traditional view of qualitative research as best suited for exploring research problems. But I do not believe that this role "shortchanges" their value at all. Well defined research problems and well formulated research questions serve as the foundation upon which useful research is built. Without this strong foundation, the research activities that follow stand a good chance of becoming a monumental waste of money.