9.3: Quantitative Interview Techniques and Considerations

LEARNING OBJECTIVES

- Explain the following laws within the Ideal Gas Law
  1. Define and describe standardized interviews.
  2. Describe how quantitative interviews differ from qualitative interviews.
  3. Describe the process and some of the drawbacks of telephone interviewing techniques.
  4. Describe how the analysis of quantitative interview works.
  5. Identify the strengths and weaknesses of quantitative interviews.

Quantitative interviews are similar to qualitative interviews in that they involve some researcher/respondent interaction. But the process of conducting and analyzing findings from quantitative interviews also differs in several ways from that of qualitative interviews. Each approach also comes with its own unique set of strengths and weaknesses. We'll explore those differences here.

Conducting Quantitative Interviews

Much of what we learned in the previous chapter on survey research applies to quantitative interviews as well. In fact, quantitative interviews are sometimes referred to as survey interviews because they resemble survey-style question-and-answer formats. They might also be called standardized interviews. The difference between surveys and standardized interviews is that questions and answer options are read to respondents rather than having respondents complete a questionnaire on their own. As with questionnaires, the questions posed in a standardized interview tend to be closed ended. See Chapter 8 "Survey Research: A Quantitative Technique" for the definition of closed ended. There are instances in which a quantitative interviewer might pose a few open-ended questions as well. In these cases, the
coding process works somewhat differently than coding in-depth interview data. We'll describe this process in the following subsection.

In quantitative interviews, an interview schedule is used to guide the researcher as he or she poses questions and answer options to respondents. An interview schedule is usually more rigid than an interview guide. It contains the list of questions and answer options that the researcher will read to respondents. Whereas qualitative researchers emphasize respondents’ roles in helping to determine how an interview progresses, in a quantitative interview, consistency in the way that questions and answer options are presented is very important. The aim is to pose every question-and-answer option in the very same way to every respondent. This is done to minimize interviewer effect, or possible changes in the way an interviewee responds based on how or when questions and answer options are presented by the interviewer.

Quantitative interviews may be recorded, but because questions tend to be closed ended, taking notes during the interview is less disruptive than it can be during a qualitative interview. If a quantitative interview contains open-ended questions, however, recording the interview is advised. It may also be helpful to record quantitative interviews if a researcher wishes to assess possible interview effect. Noticeable differences in responses might be more attributable to interviewer effect than to any real respondent differences. Having a recording of the interview can help a researcher make such determinations.

Quantitative interviewers are usually more concerned with gathering data from a large, representative sample. As you might imagine, collecting data from many people via interviews can be quite laborious. Technological advances in telephone interviewing procedures can assist quantitative interviewers in this process. One concern about telephone interviewing is that fewer and fewer people list their telephone numbers these days, but random digit dialing (RDD) takes care of this problem. RDD programs dial randomly generated phone numbers for researchers conducting phone interviews. This means that unlisted numbers are as likely to be included in a sample as listed numbers (though, having used this software for quantitative interviewing myself, I will add that folks with unlisted numbers are not always very pleased to receive calls from unknown researchers). Computer-assisted telephone interviewing (CATI) programs have also been developed to assist quantitative survey researchers. These programs allow an interviewer to enter responses directly into a computer as they are provided, thus saving hours of time that would otherwise have to be spent entering data into an analysis program by hand.

Conducting quantitative interviews over the phone does not come without some drawbacks. Aside from the obvious problem that not everyone has a phone, research shows that phone interviews generate more fence-sitters than in-person interviews (Holbrook, Green, & Krosnick, 2003). Holbrook, A. L., Green, M. C., & Krosnick, J. A. (2003). Telephone versus face-to-face interviewing of national probability samples with long questionnaires: Comparisons of respondent satisficing and social desirability response bias. Public Opinion Quarterly, 67, 79–125. Responses to sensitive questions or those that respondents view as invasive are also generally less accurate when data are collected over the phone as compared to when they are collected in person. I can vouch for this latter point from personal experience. While conducting quantitative telephone interviews when I worked at a research firm, it was not terribly uncommon for respondents to tell me that they were green or purple when I asked them to report their racial identity.

Analysis of Quantitative Interview Data

As with the analysis of survey data, analysis of quantitative interview data usually involves coding response options
numerically, entering numeric responses into a data analysis computer program, and then running various statistical commands to identify patterns across responses. Section 8.5 "Analysis of Survey Data" of Chapter 8 "Survey Research: A Quantitative Technique" describes the coding process for quantitative data. But what happens when quantitative interviews ask open-ended questions? In this case, responses are typically numerically coded, just as closed-ended questions are, but the process is a little more complex than simply giving a “no” a label of 0 and a “yes” a label of 1.

In some cases, quantitatively coding open-ended interview questions may work inductively, as described in Section 9.2.2 "Analysis of Qualitative Interview Data". If this is the case, rather than ending with codes, descriptions of codes, and interview excerpts, the researcher will assign a numerical value to codes and may not utilize verbatim excerpts from interviews in later reports of results. Keep in mind, as described in Chapter 1 "Introduction", that with quantitative methods the aim is to be able to represent and condense data into numbers. The quantitative coding of open-ended interview questions is often a deductive process. The researcher may begin with an idea about likely responses to his or her open-ended questions and assign a numerical value to each likely response. Then the researcher will review participants’ open-ended responses and assign the numerical value that most closely matches the value of his or her expected response.

Strengths and Weaknesses of Quantitative Interviews

Quantitative interviews offer several benefits. The strengths and weakness of quantitative interviews tend to be couched in comparison to those of administering hard copy questionnaires. For example, response rates tend to be higher with interviews than with mailed questionnaires (Babbie, 2010). Babbie, E. (2010). The practice of social research (12th ed.). Belmont, CA: Wadsworth. That makes sense—don’t you find it easier to say no to a piece of paper than to a person? Quantitative interviews can also help reduce respondent confusion. If a respondent is unsure about the meaning of a question or answer option on a questionnaire, he or she probably won’t have the opportunity to get clarification from the researcher. An interview, on the other hand, gives the researcher an opportunity to clarify or explain any items that may be confusing.

As with every method of data collection we’ve discussed, there are also drawbacks to conducting quantitative interviews. Perhaps the largest, and of most concern to quantitative researchers, is interviewer effect. While questions on hard copy questionnaires may create an impression based on the way they are presented, having a person administer questions introduces a slew of additional variables that might influence a respondent. As I’ve said, consistency is key with quantitative data collection—and human beings are not necessarily known for their consistency. Interviewing respondents is also much more time consuming and expensive than mailing questionnaires. Thus quantitative researchers may opt for written questionnaires over interviews on the grounds that they will be able to reach a large sample at a much lower cost than were they to interact personally with each and every respondent.

KEY TAKEAWAYS

• Unlike qualitative interviews, quantitative interviews usually contain closed-ended questions that are delivered in the same format and same order to every respondent.
• Quantitative interview data are analyzed by assigning a numerical value to participants’ responses.
• While quantitative interviews offer several advantages over self-administered questionnaires such as higher response rates and lower respondent confusion, they have the drawbacks of possible interviewer effect and greater time and expense.
Exercises

1. The General Social Survey (GSS), which we've mentioned in previous chapters, is administered via in-person interview, just like quantitative interviewing procedures described here. Read more about the GSS at http://www.norc.uchicago.edu/GSS+Website.

2. Take a few of the open-ended questions you created after reading Section 9.2 "Qualitative Interview Techniques and Considerations" on qualitative interviewing techniques. See if you can turn them into closed-ended questions.