Encyclopedia of Measurement and Statistics

Descriptive Research

Contributors: Lisa M. Given
Editors: Neil J. Salkind & Kristin Rasmussen
Book Title: Encyclopedia of Measurement and Statistics
Chapter Title: "Descriptive Research"
Pub. Date: 2007
Access Date: October 15, 2013
Publishing Company: Sage Publications, Inc.
City: Thousand Oaks
Print ISBN: 9781412916110
Online ISBN: 9781412952644
DOI: http://dx.doi.org/10.4135/9781412952644.n132
Print pages: 251-254

http://dx.doi.org/10.4135/9781412952644.n132

Descriptive research provides a detailed account of a social setting, a group of people, a community, a situation, or some other phenomenon. This kind of research strives to paint a complete and accurate picture of the world by focusing on the factual details that best describe a current or past event. Researchers engaged in descriptive studies set out to identify who participates in an event, where and when it occurs, and what happens, without exploring the causal relationships involved in that event. For example, a descriptive study may examine the types of services offered by a government agency, the living conditions of a homeless population in a large urban center, the experiences of teachers in elementary school classrooms, or the daily needs of individuals living with breast cancer. One common example of a descriptive study is a census, which sets out to document demographic (e.g., age, gender) and other details (e.g., housing costs) about individuals living in a particular community. Census data are often collected over many years, allowing researchers to examine changes in demographic and social patterns within a particular nation, city, neighborhood, or other identified social grouping.

In compiling descriptive facts about various phenomena, descriptive research is allied most closely with quantitative approaches (including the use of descriptive statistics), although descriptive approaches may also be used in qualitative research to provide valuable background information for analyses of individuals' attitudes, opinions, and personal experiences of particular phenomena. Descriptive research is the most commonly used approach in the human (behavioral) sciences because it allows researchers to **[p. 251 ↓]** examine conditions that occur naturally in the home, hospitals, classrooms, offices, libraries, sports fields, and other locales where human activities can be systematically explored, documented, and analyzed.

Descriptive Research Methods

In quantitative research, descriptive studies are concerned with the functional relationships between variables, hypothesis testing, and the development of generalizations across populations. The findings of descriptive studies are valuable in that they provide information that enables researchers and practitioners to define specific variables clearly, to determine their current situations, and to see how these variables may relate to other variables. In qualitative approaches, descriptive research is often referred to as a form of naturalistic inquiry; this type of research allows the researcher to observe, document, and detail specific activities within a defined social setting in order to point to transferable findings. In both quantitative and qualitative approaches, descriptive research is marked by its exploration of existing events and conditions that would have happened even if the researcher was not there to observe and document the details. A number of different research methods are commonly used in quantitative and qualitative descriptive studies; the sections that follow will briefly examine the goals of some of these approaches.

Questionnaires and Structured Interviews

Methods designed to survey individuals about their experiences, habits, likes and dislikes, or even the number of televisions in their homes are commonly used to gather data from a large sample of a given population at a particular point in time. These methods are designed to generalize to the larger population in order to document the current or past activities and experiences that surround a particular phenomenon. For example, a questionnaire may be designed to identify young people's familiarity with different media outlets, to explore parents' knowledge about treatments for the common cold, or to document the demographic characteristics of new immigrants in rural communities. Large-scale questionnaires and structured interviews typically use some form of probability sampling to select a representative sample of a particular population. These methods take many different forms and can be used across topic areas, including telephone polls (e.g., to solicit voting patterns), mail-in or Web-based questionnaires (e.g., personal shopping habits), and in-person surveys (e.g., in-store product assessments). Researchers must take care to ensure high response rates that will represent the population, as participation rates as low as 15% can be common, especially in e-mail or Web-based surveys.

One of the most common examples of this type of research is an opinion poll, which is typically designed to document demographic details about individuals (e.g., their highest level of education) as well as their opinions on such topics as children being required to wear uniforms in schools, Internet use in the home, mass media as a source of health information, or other issues of social relevance. Question response types may include yes/no, multiple choice, Likert scale, open-ended (short answer) questions, or other appropriate designs. The results of such polls are typically analyzed with fairly simple techniques designed to organize and summarize the findings, such as the calculation of the mean number of women versus men in favor of capital punishment.

Observation

Observing human behavior in natural settings (such as watching shoppers as they stand in line at the grocery store, or patients as they sit in an emergency waiting room) can elicit insightful data that could not be captured using other data collection methods. The data gathered using observational approaches consist of detailed descriptions of people's activities and behaviors, as well as physical details about the social settings that surround and inform those activities. Observational techniques may be covert or overt, and may even result from a researcher's involvement in the particular social scene being investigated (e.g., librarian researchers who work at the public library's reference desk); this latter technique is **[p. 252 ↓]** known as participant observation. Researchers employing observational methods not only document details about the individuals within the setting under study (say, in an emergency room), but also examine the physical (e.g., location of triage facilities) and organizational (e.g., management hierarchies) structures within that setting. Data collection may be restricted to a single site (e.g., one classroom) or may involve multiple sites (e.g., all classrooms within all schools in a district), but typically extends over a long period of time in order to gather valid and complete data.

One example of an observational technique used for gathering information about individuals in a particular social context is the “seating sweeps” method that was developed for use in a public library context. This method involved the use of checklists to document basic demographic information about library patrons (e.g., gender); the activities in which they were engaged (e.g., computer use, reading); where they engaged in those activities (e.g., private study carrels, computer lab); and the materials that these patrons carried with them (e.g., briefcases, writing materials). A number of general patterns emerged about human behavior in the library using this observational technique, including the number of men who used the library at various times of the day and week, and the prevalence of personal entertainment devices used by library patrons.

In-Depth Interviews

In-depth interviews allow researchers to examine issues at length from the interview respondent's personal perspective, and they are commonly used in qualitative research approaches. The data gathered during interviews typically consist of verbatim responses to the interviewer's questions, which are designed to elicit descriptions of personal behaviors, and the opinions, feelings, and attitudes that inform those behaviors. Interviews typically last from 60 to 90 minutes, although the length varies depending on the scope of the project and the availability of participants. Common themes and patterns that emerge from the data derived from these interviews can guide researchers in the assessment of existing programs and services and in the exploration of various social issues. Transferable findings generally occur at the point of saturation of themes in the data, which typically arise with a minimum of 15 to 18 participants. Increasing the number of interviewees is one way to enhance rigor in data collection and to speak more authoritatively about the findings under study. However, it is also worth noting here that anomalies in the data (such as the experiences of a single individual who provides details about an experience that is unlike that of other interviewees) can also be extremely valuable to qualitative researchers. These singular experiences can highlight individuals' particular needs, especially in settings where policies and practices have been designed for majority populations, and often point to areas that require additional research. In-depth interviews can also be combined with other methods (e.g., structured computer tasks used to assess Web site usability, quantitative questionnaires designed to elicit factual data) to provide a more complete picture of the phenomena under study.

Focus Groups

Focus groups also fall into the interview category and may be either highly structured (i.e., quantitative) in nature, or designed to be more of a personal dialogue between participants (i.e., qualitative). In either case, the defining feature of these interviews is that they occur with groups of individuals (typically five to eight people, with one or more groups in total) whose comments are focused on a particular issue of interest to the researcher. Participants are typically fairly homogeneous group members (e.g., new immigrants living in a particular city, undergraduate students using campus recreational facilities) who are asked to reflect on a series of questions or to react to new products or policies. These interviews can be more challenging to conduct than individual interviews because of the need to manage group dynamics (e.g., ensuring that all group members are able to speak their minds without feeling silenced by other group members). These interviews are best run by a trained facilitator, often require a more formal setting (such as a boardroom), and may take more time to coordinate than other survey methods.

[p. 253 ↓]

Personal Journals and Diaries

Asking individuals to document their daily activities (such as when or how often they have used an organization's Web site) can be an effective way to document human behavior. One benefit of this approach is that data are collected as they happen, so that researchers need not rely on the accuracy of individuals' memories of events (as in interviews, questionnaires, or other methods where individuals are asked to discuss their behaviors). For example, this method can be used by physicians to track patients' meals and other activities related to personal health, or by education researchers to track students' study habits. Personal journals and diaries allow individuals to document quantitative elements of their activities (such as how often they go to the grocery store and how much money they spend per trip), as well as their thoughts, feelings, and experiences of shopping in particular stores or for particular items. Participants typically need some instruction in the researcher's expectations (e.g., how much detail to provide, how often to write an entry, what topics to include), but can often provide much more detail than is possible to gather using an interview or other research method. Individuals may keep diaries for a period of a week or more, and may write on a variety of topics, which can then be examined further with other, follow-up methods (e.g., personal interviews).

Whether used on their own or in conjunction with one another, all of these methods are useful tools for gathering data on various elements of human behavior. Descriptive research provides valuable insight into the social scenes that surround and inform our lives. The knowledge that we gain about social settings, people, specific experiences and activities, and other elements of social behavior are useful to practitioners (such as hospital and school administrators, or government officials), but also inform other research approaches. Descriptive research can act, for example, as a first step in a more detailed and complex study of social behavior, providing valuable background details about individuals or information on variables that require more advanced study. However, descriptive studies also stand in their own right as a means to examine, where document, and reflect on the world and illuminate the social phenomena that inform individuals' personal and work-related lives.

Lisa M. Given

http://dx.doi.org/10.4135/9781412952644.n132
See also

Further Reading

Given, L. M. and Leckie, G. J. “Sweeping” the library: Mapping the social activity space of the public library. Library & Information Science Research vol. 25 no. (4) pp. 365–385 (2003).

Ruane, J. M. (2005). Essentials of research methods: A guide to social science research. Malden, MA: Blackwell.

Sarafino, E. P. (2005). Research methods: Using processes and procedures of science to understand behavior. Upper Saddle River, NJ: Pearson-Prentice Hall.