

CRIMINAL SOCIOLOGY, ETHICS, AND HUMAN RELATIONS

PART SEVEN

RESEARCH AND STATISTICS

TERMS TO PONDER

- **Criminological Research** - is defined as a careful, systematic study of knowledge in the field of criminology or criminal justice, undertaken to discover or establish facts of the crimes or causations of crime. The systematic process of collecting and analyzing data must find an answer to a problem, and to validate or test an existing criminological and victimization theories.
- **Descriptive Research** - descriptive type of study finds answer to the questions who, what, when, where and how. This type of research describes a situation or a given state of affairs in terms of special aspects or factors. What may be described are characteristics of individuals or groups, i.e., offenders, victims, etc. or physical environments, i.e., rural, urban, squatter, etc. or conditions, i.e., performances, effectiveness, etc.
- **Correlation Research** - correlation type of study goes beyond description of the problem or situation. It attempts to explain the possible factors related to a problem which has been observed in a descriptive study. This type of study answers the questions why and how? The factors related to the problem, however, need not viewed as real a –causes of the problem.
- **Intervention Research** - intervention type of study evaluates the effect or outcome of a particular intervention. It studies the –cause and effect of the relationship between certain factors on certain phenomenon under controlled conditions. The subjects of the study are randomly assigned to the experimental group and to the control group and both groups are exposed to similar conditions except for the intervention.
- **Pure Basic Research** - is concerned with the acquisition of new knowledge for the sake of science or the development of the field.
- **Applied Research** - is a practical research concerned with solving immediate policy problems.

- **Quantitative Research** - concepts are assigned numerical value.
- **Qualitative Research** - concepts are viewed as sensitizing ideas or terms that enhance understanding. Research methods in the social sciences, of which criminal justice is heir, have followed these two basic philosophical traditions.
 - **Exploratory** - is a loosely structured but valuable methodological strategy.
 - **Explanatory** - when scientists are interested in some phenomenon, but feel they need to know a great deal more about it before they can put together a well-organized and thorough study on it.
- **Concepts** - are abstract tags that are put on reality and are the beginning point in all scientific endeavors. It is symbolic creations or constructs that attempts capture the essence of reality.
- **Operationalization** - defines concepts by describing how they will be measured. Working definitions or operational definition are other terms used to refer to this process.
- **Variables** - are concepts that have been operationalized or —concepts that can vary or take on different values of a quantitative nature. They are the mortar and brick of scientific investigation.
- **Dependent Variables** - dependent or outcome variable is the variable that researcher is attempting to predict and by convention is denoted by the letter Y.
- **Independent Variables** - is designated by letter X. The behavior or attitude that is the subject of one's study.
- **Theories** - are attempts to develop plausible explanations of reality.
- **Hypotheses** - are usually general or broad statements regarding the relationship between, usually two, variables and are derived from more general theories.



- **Research Design** - is a plan, structure and strategy of investigation so conceived as to obtain answers to research questions or problems. The plan is the complete scheme or program of the research. It includes an outline of what the investigator will do from the writing the hypotheses and their operational implications to the final analysis of data.
- **Historical Research** - historical method of research is a process of selecting the area of topic to write the history about, collecting data about events that occurred in the area or about the topic, collating the data, shifting the authentic from non-authentic, and then making an interpretive narrative about or critical inquiry into the whole truth of the events.
- **Descriptive Research** - describes what is. It involves the description, recording, analysis, and interpretation of the present nature, composition or processes of phenomena. The focus is on prevailing conditions, or how a person, group, or thing behaves or functions in the present. It is also known as statistical research, describes data and about the population or phenomenon being studied.
- **Developmental Research** - as opposed to simple instructional development, developmental research has been defined as the systematic study of designing, developing, and evaluating instructional programs, processes, and products that must meet criteria of internal consistency and effectiveness. A fundamental distinction should be made between reports of actual developmental research—practice, and descriptions of design and development procedural models-theory.
- **Case or Field Study** - a research methodology common in social sciences. It is based on an in-depth investigation of a single individual, group, or event to explore causation in order to find underlying principles. It is also defined as a research strategy, an empirical inquiry that investigates a phenomenon within its real-life context.
- **Correlational Studies** - is a scientific study in which a researcher investigates associations between variables; frequently used in psychology research to look for relationships between variables. While it can suggest that there is a relationship between two variables—dependent and independent, finding a correlation does not prove that one variable causes a change in another variable.



- **Causal-Comparative Designs** - attempts to identify a causative relationship between an independent variable and a dependent variable. However, this relationship is more suggestive than proven as the researcher does not have complete control over the independent variable. It is an ex-post facto designs to look at existing outcome and after the fact attempt to trace back and determine what may have predicted these outcomes.
- **True-Experimental Designs** - a method or procedure involving the control or manipulation of conditions for the purpose of studying the relative effects of various treatments applied to members of a sample, or of the same treatment applied to members of different samples. It consists of manipulating an experimental variable under highly controlled conditions to determine how and why a particular event occurs.
- **Quasi-Experimental Design** - design that attempt to approximate the true experimental design but lack random assignment to experimental and control group. Most field experiments in natural settings, such a foot patrol investigation, are of this type. The term refers to a type of research design that shares many similarities with the traditional experimental design or randomized controlled trial, but specifically lacks the element of random assignment.
- **Inferential Study** - is used to make inferences about an unknown variable based on known descriptions. This is also intended to generalize findings from a study group to a larger population. This research design is concerned with making larger inferences about social phenomena. This can include associations between variables, how well the sample represents a larger population, and cause-and-effect relationships.
- **Action Research** - is a reflective process of progressive problem solving led by individuals working with others in teams or as part of a "community of practice" to improve the way they address issues and solve problems. Action research can also be undertaken by larger organizations or institutions, assisted or guided by professional researchers, with the aim of improving their strategies, practices, and knowledge of the environments within which they practice.
- **Cross-Sectional Studies** - also known as one-shot studies, are the most commonly used design in social sciences. This design is being suited to studies aimed at finding out the prevalence of a phenomena, situation, problem, attitude or issue, by taking a cross-section of the population.



- **Before-and-After Studies** - also known as the test and post-test designs, is that it can measure change in a situation, phenomenon, issue, problem or attitude. It is the most appropriate design for measuring the impact or effectiveness of a program.
- **Longitudinal Studies** - determines the pattern of change in relation to time, for example, when studying the proportion of people adopting a program in relation to time. Longitudinal studies are also useful when there is a need to collect factual information on a continuing basis.
- **Retrospective Studies** - investigates a phenomenon, situation, problem or issue that has happened in the past. They are usually conducted either on the basis of the data available for that period or on the basis of respondents recall of the situation.
- **Prospective Studies** - refers to the likely prevalence of a phenomenon, situation, problem, attitude or outcome in the future. Such studies attempt to establish the outcome of an event or what is likely to happen. Experiments are usually classified as prospective studies.
- **Retrospective-prospective Studies** - focused on past trends in a phenomenon and study it into the future. A study is classified under this category when researcher measures the impact of an intervention without control group. Trend studies, which become the basis of projection, fall into this category.
- **Data** - refers to any kind of information researchers obtain on the subjects, respondents or participants of a study. In research, data are collected and used to answer the research question or objectives of the study. Data are the things the researchers are thinking with.
- **Observation** - is one way to gather primary data. Observation is a purposeful, systematic and selective way of watching and listening to an interaction or phenomenon as it takes place. There are many situations in which observation is the most appropriate method of data gathering.

Participant Observation - when a researcher participates in the activities of the groups being observed in the same manner as its members, with or without their knowing that they are being observed. For example, to study the life of prisoners, pretend to be a prisoner to do this.



Non-Participant Observation - when the researcher does not get involved in the activities of the group but remains a passive observer, watching and listening to its activities and drawing conclusions from this.

- **Interview** – is a commonly used method of data gathering from people. In many walks of life information can be collected through different forms of interaction with others. Any person-to-person interaction between two or more individuals with a specific purpose in mind is called an interview.

Structured Interviews - sometimes called closed interview, usually consist of check-off responses to questions that are either factual or to which most responses easily fit an expectable pattern.

Unstructured Interviews - interviews with many variations depending on the purpose. Sometimes referred to as focused, clinical, or non-directive interviews, they provide for open-ended responses to questions.

In-Depth Interviews - is a more intensive and detailed interview, usually of fewer subjects than is the case in a standard survey, and is particularly useful to life histories or case studies. In a depth interview, the researcher has a general list of topics to be explored, but exercises great discretion and flexibility in the manner, timing, and direction of questioning.

- **Case Studies** - data-gathering strategies that represent a commitment to a qualitative or sensitizing strategy when approaching subject matter. Although more quantitative approaches aim to provide a more macro-criminological view or big picture of the subject matter, these methods provide micro-criminological or in-depth close-up of only one or a few subjects.
- **Unobtrusive Measures** - refers to clandestine or non-reactive methods of data gathering. Although a variety of methods, including physical traces, observation, analyses of existing data or archives may be subsumed, the key distinction is that the subjects are not aware that they are being studied.

Physical Trace Analysis - is the study of deposits, accretion of matter, and other indirect substances produced by previous human interaction. The criminal justice researcher attempts to reconstruct, after the fact, the substance of the phenomenon.



Archival Records - are memoirs, diaries, and historical documents contains much of the information that can provide a historical overview of criminological issues. It does not only comprise the analysis of official statistics and records.

Simple Observation - involves strategies in which the researcher's participation with the subjects is kept at a minimum and the investigator carefully records the activities of the subjects.

Disguised Observation - researcher covertly studies groups or individuals by temporarily misrepresenting his or her role.

Simulation - entails a variety of gaming strategies that attempt to imitate a more complex social reality.

- **Questionnaire** - is a written list of questions, the answer to which is recorded by respondents. In questionnaire respondents read the questions, interpret what is expected and then write down the answers. The only difference between an interview schedule and a questionnaire is that, in the former it is the interviewer who ask the questions, and if necessary, explain them, and record the respondent's replies on an interview schedule.
- **Psychological Test** - an instrument designed to describe a sample of certain aspects of human behavior. It yields adjective and standardized descriptions of behavior, quantified by numerical scores. A psychological test may be used to compare the behavior of two or more persons at different times. It is characterized by the use of samples of behavior in order to assess psychological construct(s), such as cognitive and emotional functioning.
- **Library Technique** - is the gathering of data is another way which the researcher can employ in order to realize the objectives of his research study. Various materials in the library are used by investigator, including books, magazines, periodicals, or pamphlets. In his search for data needed for his research project through the library method, the investigator must know and apply one important element, i.e., the fundamentals in the use of library.
- **Social surveys** - means of data gathering which involve asking a segment of population their attitudes or reported behavior. Social surveys, although often associated with election polls, opinion polls, and marketing surveys are also powerful tools for obtaining quantitative data for both descriptive and inferential studies and for addressing the issue of causality.



- **Fixed-Alternative Questionnaire** - requires the respondents to choose an answer from a printed list of choices. Such questionnaires may include a simple –yes or no or –true or false response, a multiple-choice list, or a series of degrees of agreement or disagreement in relation to a variety of assertions.
- **Open-Ended Questionnaire** – allows respondents to answer in the own words. This can mean greater detail and a broader range of responses. However, it can also mean lower response rates because the respondent must think and write more than would be a fixed alternative instrument. Furthermore, the information obtained may be very difficult to analyze and summarize.
- **Sampling** - as measuring a small portion of something and then making a general statement about the whole thing. It is a procedure used in research by which a selected sub-unit of a population is studied in order to analyze the entire population.
- **Population** – includes all people or items with the characteristic one wish to understand. Because there is very rarely enough time or money to gather information from everyone or everything in a population, the goal becomes finding a representative sample of that population.
- **Sample** - is a subset of a population, and it represents a subset of manageable size. It is collected and statistics are calculated from the samples so that one can make inferences or extrapolations from the sample to the population.
- **Sampling Design** - is the process of selecting the sample from the population.
- **Sampling Unit** - is the material source for the mathematical abstraction of a "random variable". This is that element or set of elements considered for selection in some stage of sampling, it is the same as the elements, in a simple single-stage sample. In a multi-stage sample, the sampling unit could be blocks, households, and individuals within the households.
- **Sampling Frame** - is synonyms to "sample frame" or "survey frame" - the actual set of units from which a sample has been drawn. In the case of a simple random sample, all units from the sampling frame have an equal chance to be drawn and to occur in the sample. In the ideal case, the sampling frame should coincide with the population of interest.



- **Sample Statistics** - is the basis of estimating the prevalence of a characteristic in the study population or a part of a population which is actually observed. In statistical inference, there must be a way of assigning known probabilities of selection to each sample. If the probabilities of different samples are all equal, it is called simple random sampling.
- **Population Parameter** - a quantity or statistical measure that, for a given population, is fixed and that is used as the value of a variable in some general distribution or frequency function to make it descriptive of that population, i.e., the mean and variance of a population are population parameters, and it is the population characteristics being investigated in the conduct of study.
- **Probability Sampling** - refers to sample that permit estimation of the likelihood of each element of the population being selected in the sample.

Simple Random Samples - are samples in which each element of the population or universe has an equal probability of being selected. This method provides a way for selecting a sample in which each and every unit or person in the population has the same or equal chance of appearing in the sample.

Stratified Random Samples - relies on the knowledge of the distribution or proportion of population characteristics to choose a sample that assures representativeness. Such characteristics are generally demographic in nature, such as age, sex, social class, or of pertinence to the study.

Cluster Samples - generally used in surveys that involve field interviews and is most useful in studies that involve widely dispersed subjects. The population to be surveyed is divided into clusters, for example, census, blocks and sections, and then a probability samples of clusters is selected for the study.

Systematic Samples - in systematic samples every n th item in a list is included in the sample. In the language of statistics, n represents every second, third, fourth, or n th case. Sampling intervals are selected by the ratio of sample size to population size. By choosing every n th, theoretically every name in the population list has an equal probability of being chosen so long as one uses a random start.



Multi-Stage Samples - cluster and/or simple random samples or other sampling procedures. For example, a national survey of neighborhood crime might stratify first on the basis of region. Within regions, clusters are randomly selected, and within the selected regions, cities and/or municipalities are randomly selected for door-to-door household interviews.

- **Non-Probability Sampling** – such as

Quota Samples - a non-probability stratified samples. The researcher attempts to ensure that the sample proportions, for example: age, sex, and ethnic origin, resemble those of the population.

Accidental Samples - are the favorite – person on the street interviews where the researcher makes little attempt to ensure the representativeness of the sample.

Purposive Samples - judgmental samples, represent the selection of an appropriate sample bases on the researcher's skill, judgment, and needs.

Snowball Samples - is a type of strategy employed particularly in exploratory studies of little known or hard-to-obtain subjects. It basically entails obtaining a first subject and, on the basis of this subject, obtaining and introducing to a second subject and a third and so forth. Gradually, as many subjects as practicable are accumulated.

- End of Part 7 -

