

# RESEARCH METHODS IN CRIMINOLOGY AND CRIMINAL JUSTICE

EDWIN S. JOHNSON



# **RESEARCH METHODS IN CRIMINOLOGY AND CRIMINAL JUSTICE**

**Edwin S. Johnson**

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# Preface

This text is designed for both future professionals and students in criminology and criminal justice. It is intended to meet the needs of those professionals who require a working knowledge of research and statistics. Many professionals require a day-to-day interpretation and analysis of masses of material that cross their desks. They read endless reports and are asked to prepare more. They are confronted by technicians whom they must direct or to whom they must reluctantly relinquish control. As a solution to these problems this book is provided as an aid in understanding research methodology, analyzing and preparing reports, and in gaining control by effective decision making.

It is also designed for the student who suddenly finds that he or she must complete research methodology for the degree requirement. In most universities and colleges this comes at the end of the third year or during the senior year. It also means that if the student wishes to go on for graduate work, he or she will continue the research program the following year. Often the student graduates with a bachelor's degree, only to discover that the research methodology already taken is barely sufficient for continuing. I have written this book with that in mind, namely that this text may be used sequentially from the appropriate years of the undergraduate to the continuing years of graduate school.

Although statistics is a requirement for research methods, an understanding of what statistics can do is more important. I have included in the text sufficient statistics to enable the student to progress to analysis and then, with this basic understanding, push on to more difficult work.

Many students will never become research methodologists, but they will all use research in some form or another. The plan of this book is to enable the bewildered student to comfortably find his or her way through the maze of research methodology. Some algebra and some math are necessary, but the course isn't complex; it

is more a course in using your mind for analysis—in thinking things out. I also had in mind that research methods should be taught much earlier in the student's career.

The text is designed to ease the student into a “research frame of mind.” We begin by discussing science and research, and criminology/criminal justice in particular. Then we discuss current topics and how to select topic material. From the informal topic, we develop propositions and hypotheses, and we begin to define variables. It is at this point that we make the testable research statement and discuss hypotheses in depth. This leads to examination of validity, triangulation, and the use of testing methods other than survey research.

Survey research is looked at in terms of design, data, and research objectives. Here we look at survey work that has been done in the criminal justice field and its value. If we are to examine new problems, verify old solutions, or challenge existing solutions, we must design a research project that will involve sampling, construction of an instrument, and procedure for gathering data. This leads to questionnaire design, interviewing techniques, and sampling techniques. Collection of data now proceeds to scoring, coding, and getting ready to analyze the data statistically. Chapters 9 through 14 cover writing SPSS programs, using statistics and bivariate analysis. Sampling theory and use of multiple samples and multiple variables are also discussed.

Analyzing the results calls for a particularly alert mind that is aware of the pitfalls ahead. Learning analysis is a matter of experience more than of reading. Once you have learned the basics, you can proceed to other methods of technology, such as terminals, programmable calculators, and minicomputers.

Finally, no matter what hardware or software you have used, you must present your findings in the proper form. Examples are given of the work of actual students to help you and to encourage you. These students had never had a course in research before, and they were with me for only one semester. You can do it too if you relax. Getting frustrated and excited only adds to problems that are already there. Follow the text sequentially; if you don't quite grasp some parts, go on to others. It will come to you if you keep at it.

The computer will do all the heavy math for you; you only do the program. However, you *must* be absolutely precise. I am sure that your first printout will give you tremendous satisfaction. Completing your first major project will give you even more.

Research is an exciting and challenging field. Now that you are beginning the research adventure, travel carefully. Challenge findings, especially your own, and do not rush to judgment or jump to conclusions. Research is an exercise in precision. We are not out to prove anything; we are out to discover everything.

# Acknowledgments

The writer of a textbook looks back, after the pain of rewriting, correcting, and re-writing, and wonders how he was ever persuaded to embark upon such an arduous endeavor. My primary debt is to those who intimidated me with their research methods classes and made me swear that I would never inflict such agony on my own students. Let them remain unknown. On the other hand, my own affection for research, especially in criminology, was encouraged by Dr. Vernon Fox and Dr. Alex Bassin of Florida State University. Alex Greene and Stephen Cline of Prentice-Hall persuaded me to keep going in the face of adversity. I wish to thank them both. I also owe John Duhring, editor, and Lori Wieseneck, production editor at Prentice-Hall, a further debt of gratitude for their patience and guidance.

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I gratefully acknowledge the permission of my wonderful students, Nadine Young (project on escape), and David LiBassi (Casino Gambling Survey), and others in my classes who, advertently or inadvertently, contributed to this text.

I wish to express my appreciation to SPSS, Inc., for permission to include examples of their programs and program sequences for use in research methodology, to International Business Machines Corporation for permission to show illustrations of IBM cards and techniques, and to Appleton-Century-Crofts, Basic Books, Chas. C. Thomas, Consumers Union, Dorsey Press, McGraw-Hill, Prentice-Hall, Rand McNally, and Wadsworth, for permission to quote from their various publications as cited in the text.

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*Edwin S. Johnson*

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# 1

## Introduction

### SCIENCE AND RESEARCH

We have often heard the expression, "I've got it down to a science." We accept this without any philosophical analysis and instinctively know that the person is referring to success, progress, and satisfaction. Whether he is talking about business, sports, cooking, or driving, it means that whatever he is doing, he can repeat it again and again with a reasonable certainty of the result. To get to this point, he has practiced, often by trial and error, until most of the uncertainty has been eliminated from the outcome. The person has thought about the activity, carefully considered each move, reduced the problem to points of specific inquiry, and gained mastery.

*Science is a systematic mastery of facts, principles, and laws.* And even though the person who has "got something down to a science" has done it in a most unorthodox manner, his methods have followed the *principles of basic research* upon which all science depends. He has developed precision of measurement, sophistication of control (removal of error), and probability of prediction of outcomes.

Research as we know it is barely 300 years old. When we consider the 2 million years of man's existence, and the 6,000 years of known records, we can see research is only a mark on the line of time. The indefinable spirit of inquiry that has taken man out of the caves and the jungle has moved him into a world of contemporary science. The last century alone has seen man leap from a pedestrian-equestrian-agricultural age to a jet-powered nuclear space age. Because of research we are surrounded by the marvels of plastics, lasers, modern medicine, satellite TV, supersonic speed, computers, and microprocessors.

It would appear that the social sciences have lagged behind the physical sciences. Ogburn called this “cultural lag.”<sup>1</sup> The pressure of survival and an emphasis on time must lead us to intensify our research efforts in the social sciences, in order to improve the quality of life, and to ensure the peaceful direction of social change.

## The Traditional View

The scientific method means defining the problem, gathering data, testing the hypotheses, and presenting our findings. Research is the foundation of the scientific method—indeed, the rock upon which science is built. Research is a useful tool; it can do many things. It helps us:

- Explain natural phenomena
- Investigate cause and effect
- Inquire into differences observed
- Question beliefs, superstitions, and myths
- Examine unacceptable “accidents”
- Interpret the unknown
- Predict possible future trends and outcomes

Research requires that the researcher:

- Challenge accepted findings and “absolutes”
- Develop innovative procedures
- Attempt conclusions based upon facts
- Explore new frontiers
- Confirm prior research by replication
- Solve problems
- Ensure the continuation of scientific thought

Research touches every part of our lives, from vital statistics to school records, Society Security, tax returns, medical records, credit cards, bank deposits, passports, and every type of information that is fed into a computer. It is an integral and essential part of modern civilization. In our technological society, research depends upon:

- Collection of data
- Flow of information (communication)
- Verification of facts
- Methods used in the research process
- The sophistication of electronic equipment
- The level of statistical analysis
- Logical and conceptual analysis and findings

The researcher in the behavioral sciences will observe, discover, and formalize. He will use findings to generalize, to make inferences and predictions, and occasion-

<sup>1</sup>William F. Ogburn, “Cultural Lag Theory,” *Sociological and Social Research*, 41 (January 1957).

ally to construct theory or solve problems. He is dealing with human beings, few known laws, ambiguous definitions, and variation caused by time and personal subjectivity.

## A Contemporary View

The purpose of modern research in the social sciences appears to be:

- The examination and investigation of contemporary everyday phenomena
- The evaluation of historical data
- Evaluation of the growth and change caused by characteristics of the phenomena
- The search for logical explanations of causality
- The development of experimental or controlled situations to anticipate trends or outcomes
- The development of theory and law
- Improvement of the quality of life

Although research is generally categorized as *pure* (seeking information and knowledge for its own sake) or *applied* (using knowledge to solve problems), it can also be *historical* (analyzing past records), *experimental* (manipulating outcomes), and *descriptive* (examining current phenomena). Research may also be *speculative* (simulation).

*Research is an aid in constructing theory, which is really an extension and continuation of research. Theory integrates research findings into an organized set of related postulates to explain phenomena.* Theory is based upon qualitative (abstract) and empirical (measured) reasoning. It should be simple, clear, parsimonious, logical, and applicable. Theory should contain the built-in quality to generate new research and, ipso facto, new theory.

Research can be a restriction on theory, and vice versa. Most research is based upon theory and usually has a strong underpinning of theoretical structure. When this is the case, the research is designed to discover only what is permitted within the theoretical parameters.

## LIMITS AND HORIZONS FOR RESEARCH IN CRIMINOLOGY

When research is not theoretically directed and is merely investigative, the findings (especially if a multifactor approach is used) may be so varied that the researcher is unable to find a particular direction from any of them. Too many factors may be as limiting as single-factor research. For example, if we were researching robbery profiles in the inner city, we would miss entirely (1) why robbery was used as a form of social adjustment, and (2) socioeconomic opportunities for vertical racial mobility; whereas if we were investigating these, we would easily miss the robbery

profile we were originally seeking. Research would appear to discover only what it is intended to discover. It is not that the researcher intentionally blinds himself to all the possible issues, but that theoretical immersion, or too broad a base, can lead to ignorance of the issues.

Good research, while considering the extremes, opts for a central position. The researcher:

- Considers extreme theoretical considerations and is conservative
- Considers extreme empirical positions and limits the research to manageable size
- Does not attempt to seek “world reform,” “cures for terminal diseases,” or “final solutions”
- Considers the end relation of findings to theory
- Considers the possibility of replication/verification
- Evaluates the consequences of the research
- Considers the ethical and philosophical questions involved concerning people, progress, and the quality of life

Great care must be taken in beginning the research adventure, in that preparation should include thinking out what you really want to do, rather than being persuaded to pursue a particular direction.<sup>2</sup>

Research is performed by people—people who have feelings and are motivated and stimulated by emotions as well as intellectual curiosity. We should be aware, as researchers, that the very source of our own personal interests can also be a limitation because of personal opinion, bias, prejudice, and value judgment. Our own humanity contains both the strengths to build research and the weaknesses to destroy it. In researching crime and deviance, we need to be fully alert to our own propensities and deviant human traits. Our inquiries into every uncensored part of human existence should not exclude ourselves, nor should we determine the parameters of our research in our own favor.

Good research will examine the whole spectrum of criminology, from religion to politics, from perversion to morality, from social reality to social pathology,<sup>3</sup> and from ethics to evil. It will examine the causes, the spread, the meaning, and the impact of crime, and the changes in society caused by crime. It will observe and question treatment, modification, rehabilitation, reparation, and medical programs. It will investigate police, legal, probation, and parole administration. Research will inquire into:

- The etiology of crime (the causes of criminal pathology)
- The epidemiology of crime (the control of the spread of criminal social dysfunction)
- The administration of the criminal justice system, including the courts, the police, and corrections

<sup>2</sup>Robert S. Clark, *Fundamentals of Criminal Justice Research* (Lexington, Mass.: Heath, 1977), p. 30. Clark states, “Research design is the tactical plan of the research.”

<sup>3</sup>Criminal pathology as used here means the study of suffering from the social dysfunction caused by crime; also, the study of the effects of crime.

- Therapy, behavior-modification, and reparation programs
- Political and governmental systems
- The social and cultural environment
- Social change, trends, and progress in all these areas

## PRINCIPLES GUIDING THE RESEARCHER

A researcher is guided by three objectives: He seeks (1) order in the universe, (2) an explanation for natural events, and (3) truth that is independent of himself. Four more objectives should be present in the actual research:

1. *Succinctness*. The research should be clear, concise, lacking in irrelevancies, brief and to the point, nonspurious, consistent, showing related concepts.
2. *Specificity*. The research must demonstrate precision in measurement, methods, and conclusions.
3. *Logical sequentiality*. Rationality and common sense should be the central theme of major research. In the social sciences, problem solving should dominate other considerations.
4. *Verifiability*. The research should be truthful, utilitarian, provable, and accurate. Facts can be checked.

Although not all research is verifiable, no research should be closed to verification. Every scientist, as Blalock has said, should bend over backward to prove himself wrong.<sup>4</sup> The research imagination is backed by an attitude of inquiry, not one of confusion, or aggressiveness and hostility, or of consensus agreement. The research attitude is to find out why things happen, to try things out, to experiment, to explore, to observe, to diligently seek out, and to discover. The researcher aims to advance human knowledge and thereby improve the quality of life. Advancing human knowledge, by inference, means sharing one's findings and avoiding absolutism, which implies that the last word has been said and thus inhibits further research on the subject. All research findings should be treated as tentative, and all should be open to modification.

## CRIMINOLOGY AS PART OF THE SOCIAL SCIENCES

### Definitions

Before beginning research, it is essential to define the discipline itself. Social science is a systematic explanation of social phenomena. Criminology as a discipline is one part of the social-science spectrum. This becomes more apparent in the definitions of criminology. The following definitions give some idea of its scope.

Sutherland and Cressey have defined criminology:

<sup>4</sup> Hubert M. Blalock, *Social Statistics* (New York: McGraw-Hill, 1972).



Criminology is the body of knowledge regarding delinquency and crime as social phenomena. It includes within its scope the process of making laws, of breaking laws, and the reacting toward the breaking of laws. These processes are three aspects of a somewhat unified sequence of interactions. Certain acts which are regarded as undesirable are defined by the political society as crimes. In spite of the definition, some people persist in the behavior and thus commit crimes; the political society reacts by punishment, treatment, or prevention. This sequence of interactions is the subject matter of criminology.

Criminology consists of three principal divisions, as follows:

- (a) the sociology of law
- (b) criminal etiology
- (c) penology (including methods of social control)<sup>5</sup>

Note that the definition above outlines three “principal divisions,” which may be broadly interpreted as law, crime, and corrections. Donald Taft and Ralph England write:

The term “criminology” is used in both a general and a special sense. In its broadest sense, criminology is the study (not yet a complete science) which includes all the subject matter necessary to the understanding and prevention of crimes and to the development of law, together with the punishment or treatment of delinquents and criminals. In its narrower sense, criminology is simply the study which attempts to explain crime, to find out “how they get that way.” If this latter, narrower definition is adopted, one must recognize related fields, including penology, concerned with the treatment of adult criminals, crime detection, the treatment of juveniles and the prevention of crime.<sup>6</sup>

Taft and England have added the idea of criminal behavior, “how they get that way,” to the definition.

Hermann Mannheim gives a much lengthier definition, which I have abbreviated:

Criminology, in the narrower sense in which it is used in this book, means the study of crime. In its wider sense it also includes penology, the study of punishment and of similar methods of dealing with crime, and the problem of preventing crime by nonpunitive measures . . .

The study of such [criminal] behavior can assume three basic forms:

1. The descriptive approach . . . the observation and collection of facts about crime and criminals.
2. The causal approach . . . the interpretation of the observed facts can be used to search for causes of crime either in general or individual cases. . . . This aspect is called the etiology of crime.

<sup>5</sup> Edwin H. Sutherland and Donald R. Cressey, *Criminology*, 9th ed. (Philadelphia: Lippincott, 1974), p. 1.

<sup>6</sup> Donald R. Taft and Ralph W. England, Jr., *Criminology*, 4th ed. (New York: Macmillan, 1964), p. 11.