

An Introduction

Second Edition

Jack D. Fitzgerald Steven M. Cox

RESEARCH METHODS

__ IN ____

CRIMINAL JUSTICE

An Introduction

Second Edition

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PREFACE

THE PREPARATION OF A SECOND edition is both gratifying and stimulating. It is gratifying because enough people have purchased the first edition to make it at least a modest success and the publishers have confidence that a market for the book still exists. To instructors who assigned the text and to students who bought it and studied its contents, we are most grateful. We also owe a special debt of gratitude to those teachers, students, and colleagues who have offered critiques and useful suggestions as we prepared this new edition. We hope it deserves your continued attention and support. To the folks at Nelson-Hall, especially Richard Meade and Rachel Schick, who have been extremely patient as we have tried (often not very successfully) to balance our many other obligations while revising, thank you!

Second editions are stimulating because they offer authors the opportunity to refine what has been done before and to build upon that established base with additional materials. We have tried to do both here. Clarifications have been attempted and new materials have been inserted at many points in the text. The most extensive changes may be found in the discussion of evaluation research and the greatly expanded treatments of correlation and regression analysis. Discussions of the basic ideas underlying Student's t and one-way analysis of variance have also been added, at the suggestion of reviewers. Throughout, we have endeavored to retain the readability that many commentators on the first edition appreciated.

We remain very much interested in hearing from users of the text, whether faculty or students. We welcome critiques of this edition as well as ideas for future development.

Our thanks to Matthew and Melissa and to Jerry, whose love, companionship and support we treasure.

JACK FITZGERALD
STEVEN COX

RESEARCH METHODS

IN

CRIMINAL JUSTICE

NELSON-HALL SERIES IN LAW, CRIME, AND JUSTICE

Howard Abadinsky, Consulting Editor Saint Xavier University, Chicago

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CHAPTER 1

RESEARCH AND CRIMINAL JUSTICE

THIS BOOK IS ABOUT THE research process, which may be defined as disciplined inquiry. More particularly, it is about a kind of disciplined inquiry called scientific research. Doing scientific research involves seeking the most trustworthy answers possible to certain kinds of interesting or important questions. As we shall see, the "trustworthiness" of answers depends, in no small part, on the procedures used in obtaining them. Conclusions based only on anecdotes or haphazard "trial and error" processes, or hearsay, or "common sense," for example, are usually not regarded as very believable. To qualify as scientific, research must be guided by some generally accepted principles (empiricism and objectivity, for example) and a pre-established plan (called a research design). We shall have more to say about these principles and plans later; for now, it may simply be emphasized that abiding by the principles and following the plan provide the discipline that, in turn, enhances the credibility of the results produced by the research process.

Because answers obtained through scientific methods are regarded by many as more trustworthy than those derived in other ways, scientific research exerts a powerful influence on virtually all domains of modern society. It shapes the ideas and decisions of policymakers and impacts, both directly and indirectly, on all our lives in countless ways. Criminal justice is no exception. Consequently, it behooves us all to know something about the process of scientific research. This book is intended as a first step in developing your "research literacy."

As you are no doubt aware, the scientific approach has its critics. Even those who are persuaded that the scientific study of human behavior has some utility acknowledge that no human endeavor is foolproof and recognize that the various strategies included under the scientific umbrella have weaknesses as well as strengths. Achieving research literacy means, in part, being aware of some of the controversies and uncertainties that surround science as a way of generating knowledge and being able to distinguish between "better" and

"worse" research procedures as well as more and less credible research results.

Students and/or practitioners of criminal justice, like yourselves, need research literacy for a variety of reasons. First, in order to keep abreast of current knowledge in your field, you must be able to understand and critically assess research reports. Second, you may find yourself doing research, either individually or as a member of a research team, in order to improve the effectiveness and efficiency of your work. Third, you may wish to make use of the research of others in deciding whether, for example, a policy or a program implemented elsewhere is worth trying. Fourth, you may be asked to become a research subject by completing a questionnaire or being interviewed or observed, for example. Knowing something about good research procedures makes deciding whether or not to cooperate with the researchers easier. Finally, your working environment is almost certain to be influenced by research used by supervisors as they make policy, program, and personnel decisions. In such circumstances, understanding research methods and statistics may be vital as a matter of self-defense.

Consider, for example, a director of a Department of Corrections who wants to know why personnel turnover is so high, or a juvenile court judge in search of some guidelines for making adjudicatory decisions, or a police chief in need of information about citizens' perception of her department and its officers, or a parole officer deciding whether or not to respond to a questionnaire sent by another governmental agency, or a member of a policy review committee contemplating changes in the organizational structure and task allocations of a criminal justice agency. These practitioners could (and often do) gather information based on hearsay, word-of-mouth, or other accidental contacts in order to arrive at their answers. However, their chances of obtaining accurate, reliable information would be greatly enhanced if their search was guided by the principles and plans characteristic of scientific research.

To those who believe that research methods and statistics are extremely complex and technical matters that are best left to the experts, we would offer the following observations. It is quite true that an in-depth study of research methods and statistical analysis would take years, but it is equally true that a student can achieve a basic understanding in a relatively short period of time. Furthermore, complicated research designs and sophisticated statistical procedures do not necessarily result in better or more useful research. Quite often, in fact, useful information can be gained through relatively simple research designs and elementary statistical analyses.

Basic and Applied Research

Basic research addresses general and fundamental questions that are not easily answered. What is the relative importance of heredity and environment

in explaining human behavior? How do people learn? How can human behavior be changed? Why do some people become mentally ill? Under what circumstances do people conform to rules, and under what circumstances are they likely to violate such rules? Because these questions are so fundamental and far-reaching in their implications, even partial answers are exciting. Social scientists often research these issues purely for the satisfaction derived from struggling with important questions and helping to fill in another piece of an important, basic theoretical puzzle, with little or no concern for how the research results might be used in a practical way. Basic research is often described as the pursuit of knowledge for its own sake.

Applied research, on the other hand, has a more practical aim. It addresses specific questions about how to accomplish a task better or more efficiently. It has become fashionable in recent years to divide applied research into a number of subcategories. Perhaps the most often cited of these is evaluation research. We will discuss some of these types of research in the next section. Here it will suffice to note that applied research examines connections among formulated goals, actions taken, and results obtained. Is psychological counseling more or less effective than incarceration in reforming offenders? Is arresting one or more of the participants in a family dispute a more or less effective strategy for preventing further family violence than insisting on a temporary separation without invoking the law? Does the frequency of personal contacts between parole officer and parolee make any difference in the frequency of parole violations? How effective are seat belts and infant seats in preventing injuries to children? These questions arise from practical concerns and problems, and their answers have immediate implications for policy decisions and the behavior of criminal justice personnel.

Basic research may, of course, lead to solutions of practical problems. and applied research may shed light on underlying, fundamental questions. The distinction between applied and basic research is sometimes hazy. Still, it is probably safe to say that most research with which criminal justice practitioners are concerned falls more toward the applied than the basic end of the research continuum. Insofar as criminal justice practitioners make day-to-day decisions about how to deal with their clients, and insofar as applied research assists them in making the best possible decisions, doing good research or critically evaluating the research of others is an important, relevant skill. In short, competent research can enhance the quality of day-to-day decisions and help administrators manage both human and financial resources in the most efficient and effective way possible. Good research can significantly improve the formulation and implementation of policies and programs as well as increase the likelihood that intended results will. in fact, be achieved.

Evaluation Research

Evaluation research, an important component of policy analysis, ¹ represents an attempt to determine the extent to which a given program is achieving (has achieved) intended goals, whether the program is (was) cost effective compared to alternative programs, and whether the program should be continued. This type of research is frequently utilized to evaluate the impact of social interventions. ² It is a form of applied research used to provide scientific information that may be used to help guide public policy. "Evaluation research aims to provide feedback to policymakers in concrete, measurable, terms." The feedback (product) provided consists of information collected while adhering to the principles of scientific research (process).

Evaluation research is *not* another sort of research different from the (traditional) types of research. . . . Fad, fashion and catchwordism run wild in science And with recent demands by the holders of grant pursestrings that social science be 'relevant' and 'responsive to current social needs,' there emerged the label 'evaluation research' which seems super-relevant and responsive. . . . Every economic study of the effect of a minimum-wage law on employment and earnings of poor people is evaluation research, evaluating the effects of such legislation. Every medical and anthropological study tracing the impact of Western culture on an isolated tribe's physical and mental hygiene is evaluation research. . . . There does not exist a distinct kind of research known as evaluation research.

While Simon and Burstein are technically correct, the label "evaluation research" has stuck and does appear to describe an increasingly popular and common subcategory of research within the broader category of applied research. Evaluation researchers use the same types of research designs and data-collection techniques and have the same concerns with reliability and validity as other researchers. Perhaps more directly than most other researchers, however, they are subject to political pressures and hidden agendas. That is, personnel involved in administering the program being evaluated welcome the research and the publication of findings when they reflect well upon the program and its administrators. They may be far less enamored, for obvious reasons, with evaluation research that indicates that the program has not achieved its stated goals, or is not cost effective, or should be discontinued. In such instances, the need for ethical conduct and objectivity on the part of the researchers may be questioned by those with vested interests in keeping the program alive.

Types of Evaluation Research

There are two basic types of evaluation research. The first, **process** or **formative research**, is basically concerned with how a program works and

often relies upon qualitative research techniques (e.g., participant observation) to collect information concerning ongoing programs on a continuing basis. This information is then provided to program personnel so that they can modify their program. The second type of evaluation research is **outcome**, **impact**, or **summative research**. Here the concern is with whether a program that has been in place for some time, or has been completed, has accomplished what it was designed to accomplish. Outcome researchers tend to depend more upon quantitative data and experimental or quasi-experimental designs, to be discussed in greater detail later. ⁵ Both types of evaluation research involve the same basic considerations.

Considerations in Evaluation Research

Some programs are extremely difficult to evaluate because they have no well-defined goals, or because the goals are so amorphous that they cannot be operationalized, or because no data have been collected and preserved over the course of the program. Others are difficult or impossible to evaluate because program personnel are unwilling to cooperate in the process. Still other program administrators simply have no desire to evaluate their programs. All of these factors should be considered before undertaking evaluation research in order to avoid the possibility that the researcher's time and effort will be wasted.

Once it has been determined that evaluation research is desirable and practical, the process begins with a review of the program to be evaluated. This review focuses on the stated goals or objectives of the program, activities conducted to achieve these goals, anticipated outcomes of these activities, and comparisons with other known programs designed to achieve the same goals. Program goals/objectives, activities, and outcomes must be operationalized or defined in such a way that we can recognize and measure them. Suppose, for example, that the goal of the program being evaluated is to reduce reported commercial burglaries in a specific geographic area by 50 percent over a 12-month period. And suppose we attempt to achieve this goal by painting the walls of buildings separated by alleys white up to a height of ten feet in the belief that patrol officers will be better able to see people after dark in these alleys, making it more difficult to gain unauthorized entry into businesses. At the end of the specified time period, we would examine the alleyways to be sure they had been painted, count the number of commercial burglaries reported in the specified area, and compare the number of burglaries with the number committed in the 12-month period prior to painting the buildings. If the number of burglaries reported in the relevant time period increased or remained the same, the program has not achieved its goal and may not be worth continuing. If the number of reported burglaries decreased by 50 percent or more, we might be tempted to say that the program is effective and should be continued.