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- Chapter 10: Conflict Theory has been expanded with an in-depth focus on racial disparity and bias in criminal justice decision-making

ABOUT THE AUTHORS

Ronald L. Akers is Professor Emeritus in the Department of Sociology and Criminology & Law at the University of Florida.

Christine S. Sellers is Professor and Director of the School of Criminal Justice at Texas State University.

Wesley G. Jennings is Chair and Professor of Legal Studies at the University of Mississippi, and a Fellow of the Academy of Criminal Justice Sciences.

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CRIMINOLOGICAL THEORIES

Introduction, Evaluation, and Application

Ronald L. Akers Christine S. Sellers Wesley G. Jennings

OXFORD UNIVERSITY PRESS

EIGHTH EDITION

Criminological Theories

Introduction, Evaluation, and Application

the

RONALD L. AKERS University of Florida

CHRISTINE S. SELLERS Texas State University

WESLEY G. JENNINGS University of Mississippi

EIGHTH EDITION

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Printed by LSC Communications, Inc. Printed in the United States of America This book is dedicated to the precious memory of my parents

Charles E. Akers (1920-1993) and Thelma Louise Akers (1921-2013)

and my son Ronald L. Akers II (1962-2014)

In loving memory of my dear parents

Donald Orville Sellers (1929-2012)

Sharon Mary Sellers (1931-2014)

To my loving parents and family and in heartfelt memory of my granny

Nancy D. Jennings (1925-2014)

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PREFACE

1

The purposes of this book are to review the basic concepts and principles of criminological theories and to evaluate their adequacy as explanations of criminal and deviant behavior and/or explanations of the criminal law and justice system. Although not exhaustive, the coverage of theories is comprehensive. We have included all the major theories that have been and continue to be subjects of most theory-testing articles in the leading criminological journals, the main theories that are of interest in the history of criminology, and the principal newer theories that have received attention in the literature.

The first goal in presenting each theory is to give a concise and clear exposition of its central concepts, assertions, and hypotheses. The intent is to provide an accurate, understandable introduction for readers who are not familiar with the theory and a review for those who are. In each case, an effort has been made not only to present the classic or original statements of a theory but also to show modifications and revisions of it, including the most recent and significant developments.

The second goal is to evaluate the theory. In Chapter 1, we review the main criteria by which the merits of a theory can be judged: logical consistency, scope, parsimony, applicability to policy, testability, and empirical validity. All of these are invoked at various points, but the central focus of the evaluation of each theory is the *empirical validity* of the theory. We review the research relevant to the theory and assess how well the findings support or contradict the main assertions of the theory. Before the empirical adequacy of a theory can be evaluated, of course, it must be testable, and a considerable amount of attention is given to questions of tautology and measurement.

The third goal is to extend this evaluation to the usefulness of each theory for guiding actions to control and prevent crime and delinquency. Classical and contemporary examples are given of how the theories have been or can be applied to policy and practice. Just as the empirical validity of a theory must be assessed by the research done to test it, its policy usefulness must be assessed by research on

xvi PREFACE

the effectiveness of programs related to it. Therefore, we report on relevant research and evidence to evaluate how well various programs work that explicitly or implicitly reflect identifiable theoretical principles.

In this eighth edition, each chapter has been updated and substantially revised in light of recent research and important changes in the theories. A more concentrated focus has also been devoted toward updating and incorporating discussion of new evidence-based programs and policies that have been informed by the theoretical principles of many of the perspectives covered in the book. Some noteworthy examples include: the New Jersey Adult Diagnostic Treatment Center (ADTC) (Chapter 4, Psychological Theories) and the Positive Behavioral Interventions and Supports (PBIS) Program (Chapter 5, Social Learning Theory). Finally, Chapter 10 (Conflict Theory) has been noticeably expanded to include contemporary discussion on racial disparity and bias in the criminal justice system.

The book is intended as the principal text in courses on theories of crime, delinquency, and deviance. It would also be useful as a supplemental text or one of several reading assignments in such courses or in general criminology, juvenile delinquency, deviance, criminal behavior, and similar courses. Although writing with a student audience in mind, we have not hesitated to draw on the scholarly and research literature, and we have not shied away from addressing central issues and controversies in the field. The text citations to the theoretical and research literature and the list of references are thorough and extensive. Therefore, we believe that other readers will find some value in the book, particularly academics and researchers who are actively engaged in scholarship testing criminological theories or utilizing criminological theory constructs in their empirical studies. It should also be useful to criminal justice practitioners looking for validated theoretical principles and relevant literature on which to build or enhance programs and policy. In addition, theoreticians will find some insights that may be of interest.

NEW TO THIS EDITION

- All chapters have been thoroughly revised and updated.
- Several chapters include new discussion of theoretically-informed, evidence-based programs and policies and related evaluations testing their effectiveness.
- Chapter 10 (Conflict Theory) has been expanded with an in-depth focus on racial disparity and bias in criminal justice decision-making.

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1

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CHAPTER 1

the

Introduction to Criminological Theory

WHAT IS THEORY?

To many students, criminal justice practitioners, and other people, theory has a bad name. In their minds, the word *theory* means an irrelevant antonym of *fact*. Facts are real, whereas theories seem to involve no more than impractical mental gymnastics. Theories are just fanciful ideas that have little to do with what truly motivates real people. This is a mistaken image of theory in social science in general and criminology in particular. Theory, if developed properly, is about real situations, feelings, experience, and human behavior. An effective theory helps us to make sense of facts that we already know and can be tested against new facts. Theories are tentative answers to the commonly asked questions about events and behavior. Why? By what process? How does it work?

In general, [scientific theories] make statements about the relationships between observable phenomena. (Bernard, Snipes, and Gerould, 2015:4)

Theories, then, are really generalizations of a sort; they explain how two or more events are related to each other and the conditions under which the relationship takes place. (Williams and McShane, 2018:2)

A theory is a set of interconnected statements or propositions that explain how two or more events or factors are related to one another. (Curran and Renzetti, 2001:2)

Note that these and other definitions of theory (see Gibbs, 1990; Tibbetts and Hemmens, 2018) refer to statements about relationships between actual events about what is and what will be. They are not answers to questions of what ought to be, nor are they philosophical, religious, or metaphysical systems of beliefs and values about crime and society (see the section on theory and ideology later).

Criminological theories are abstract, but they entail more than ivory tower or armchair speculations. They are part of the broader social science endeavor to explain human behavior and society. Understanding why people conform to or deviate from social and legal norms is an integral part of a liberal education.

Moreover, such understanding is vital for those who plan to pursue specialized careers in the law or criminal justice. Virtually every policy or action taken regarding crime is based on some underlying theory or theories of crime. It is essential, therefore, to comprehend and evaluate the major theories of criminology, not only for the academic or research criminologist but also for the educated citizen and the legal or criminal justice professional.

TYPES OF CRIMINOLOGICAL THEORIES

Edwin H. Sutherland (1947) defined *criminology* as the study of the entire process of lawmaking, lawbreaking, and law enforcing. This definition provides us with a starting point for classifying criminological theories. One such major type of theory addresses the first and third parts of this process: the making and enforcing of the law. Theories of this kind attempt to account for why we have the laws we have and why the criminal justice system operates the way it does. Another major type of theory explains lawbreaking. Such theories account for criminal and delinquent behavior. They are usually extended to explain any deviant behavior that violates social norms, whether or not such behavior also violates the law.

There are not as many different theories of the first kind (theories of law and criminal justice) as there are of the second kind (theories of criminal and deviant behavior). Therefore, although both are important, more attention is paid here to the second type of theory. Conflict, labeling, Marxist, and feminist theories are examples of theories that attempt to shed light on both criminal behavior and the law.

Theories of Making and Enforcing Criminal Law

Theories of making and enforcing criminal law (also herein referred to as theories of law and criminal justice) offer answers to questions of how or why certain behavior and people become defined and are dealt with as criminal in society. Why is a particular conduct considered illegal, and what determines the kind of action to be taken when it occurs? How is it decided, and who makes the decision, that such conduct is criminal? And how are the resources of the public and state brought to bear against it? Theories try to answer these questions by proposing that social, political, and economic variables affect the legislation of law, administrative decisions and rules, and the implementation and operation of law in the criminal justice system.

Theories of Criminal and Deviant Behavior

Theories of criminal and deviant behavior try to answer the question of why social and legal norms are violated. This question has two interrelated parts: (1) Why are there variations in group rates of crime and deviance, and (2) why are some individuals more likely than others to commit criminal and deviant acts?

The first question poses the problem of trying to make sense of the differences in the location and proportion of deviant and criminal behavior in various groups and societies. For example, why does the United States have a higher rate of crime than Japan but a lower rate than some European countries? Why do males as a group commit so many more violent and criminal acts than females? How do we explain the differences in homicide and drug use among different classes and groups within the same society?

The second question raises the issue of explaining differences among individuals in committing or refraining from criminal acts. Why are some individuals more likely to break the law than others? By what process or under what circumstances do people typically, and not just in a specific, individual case, reach the point of obeying or violating the law? Why does one person commit a crime, given a certain opportunity, while another does not, given the same opportunity? Why are some people more likely than others to commit frequent crimes or pursue criminal careers?

The first set of questions focuses on societal and group patterns, the second on individual differences. A theory that addresses broader questions about differences across societies or major groups in society is called a **macro** theory. Conversely, one that focuses specifically on small-group or individual differences is considered a **micro** theory (Alexander et al., 1987). Other terms have also been used to make a similar distinction between theories. Cressey (1960) referred to "epidemiology" (the prevalence and distribution of crime across groups and societies) and "individual conduct." Akers (1968, 1985) referred to such different theories as social structural and processual. These distinctions between macro and micro, structural and processual, refer not only to questions about groups and individual behavior but also to the kinds of answers a theory offers. For example, a theory that tries to account for the differences between male and female crime rates by relying on innate biological differences between men and women would still operate on the micro level.

In actuality, the two major questions of group and individual behavior are really just subtypes of the same general question: why people do or do not commit crime and deviance.

The dependent variable in macro-level theories is based ultimately on the same behavior that is the dependent variable in micro-level theories. Social structure and crime rates are embodied in the actions and reactions of real people. Crime rates are summary statements of relative amounts of individual behavior in different groups or social categories (Akers, 1998:330).

This is why theories of criminal behavior are neither strictly structural nor processual, although each type emphasizes one or the other. Theories emphasizing social structure propose that the proportion of crimes among groups, classes, communities, or societies differ because of variations in their social or cultural makeup. Most structural theories, however, also include implicit or explicit statements regarding the process by which these structural conditions produce high or low crime rates. Processual theories assert that an individual commits criminal acts because he or she has experienced a particular life history, possessed a

particular set of individual characteristics, or encountered a particular situation. Such theories also consider the deviancy-producing structures that an individual must encounter to increase the probability of his or her committing a crime.

There are other ways to classify criminological theories (e.g., see Tittle and Paternoster, 2000; Bernard and Engel, 2001; Jennings and Reingle, 2014, 2019). One common way is to refer not just to micro or macro but to several levels of explanation that ascend from the smallest to the largest unit of analysis. Such a classification typically categorizes the theories according to the general scientific discipline from which the explanatory variables are drawn. The most common classifications are biological theories that explain crime with one or more genetic, chemical, neurological, or physiological variables; psychological theories based on personality, emotional maladjustment, psychic disturbance, or psychological traits; social psychological theories that account for crime by reference to behavior, self, and cognitive variables in a group context; and sociological theories that explain crime with cultural, structural, and sociodemographic variables (see Jensen and Rojek, 1998; Bernard et al., 2015; Ling, Umbach, and Raine, 2019; Liska and Messner, 1999; Robinson and Beaver, 2009; Berg et al., 2012a, 2012b).

Just as the categories of structure and process overlap to some extent, some theories will draw from two or more disciplines. For instance, contemporary biosocial theories do not rely exclusively on genetic or biochemical factors but also consider psychological or sociological variables. Other theories, such as social learning, are clearly social-psychological, incorporating both sociological and psychological variables.

The theories are arranged in the following chapters in an order derived roughly from both the structure-process distinction and the classification of theories as biological, psychological, and sociological. Chapter 2 introduces the classical and contemporary statements of deterrence theory and rational choice theory. Chapter 3 surveys early and recent biological theories. Psychological theories are surveyed in Chapter 4. The remaining chapters review the major sociological theories of crime. Social learning theory (Chapter 5), control theories (Chapter 6), and labeling theory (Chapter 7) are the more social-psychologically oriented of these sociological theories. Chapter 8 (social disorganization theory), Chapter 9 (anomie and strain theories), Chapter 10 (conflict theory), Chapter 11 (Marxist theories), Chapter 12 (critical theories), and Chapter 13 (feminist theories) discuss those theories that draw the most heavily from social structure and culture. Labeling, conflict, Marxist, and feminist perspectives are theories both of criminal justice and criminal behavior. Developmental and life-course theories are reviewed in Chapter 14. The final chapter (Chapter 15) examines the extent to which the differences and commonalities in theories can be reconciled and integrated. Whatever the classification of theory used, there will be some kind of overlap, shortcomings, and loose ends. No special case is made here for the order in which the various theories are presented, as the focus is not on how best to classify each theory but rather on introducing what each theory proposes and evaluating its validity.

CRITERIA FOR EVALUATING THEORY

How do we know if a theory offers a sound explanation of crime or criminal justice? Commonalities across theories can be found, but the various theories explored here provide different, sometimes contradictory, explanations of crime. How do we judge which explanation is preferable over another or which is the best among several theories?

If criminological theories are to be scientific, then they must be judged by scientific criteria. The most important of these is empirical validity—the extent to which a theory can be verified or refuted with carefully gathered evidence. However, there are several other major criteria by which theories should be assessed. These include internal logical consistency, scope and parsimony, testability, and usefulness and policy implication. (For discussions of the criteria for evaluating criminological theories, see Gibbons, 1994; Barlow and Ferdinand, 1992; Tittle, 1995; Kubrin, Stucky, and Krohn, 2009; Bernard et al., 2015; Lilly et al., 2018.)

Logical Consistency, Scope, and Parsimony

The basic prerequisite for a sound theory is that it has clearly defined concepts and that its propositions are logically stated and **internally consistent** (Budziszewski, 1997). For example, a theory that proposes that criminals are biologically deficient and that deficiency explains their criminal behavior cannot also claim that family socialization is the basic cause of criminal behavior.

The **scope** of a theory refers to the range of phenomena that it proposes to explain. For instance, a theory that accounts only for the crime of check forgery may be accurate, but it is obviously very limited in scope. A better theory is one that accounts for a wide range of offenses, including check forgery. A theory of juvenile delinquency that does not relate as well to adult criminality is more restricted than one that accounts for both juvenile delinquency and adult crime. A theory that explains only the age distribution of crime has a more limited scope than one that explains the age, race, sex, and class distributions of crime.

Parsimony, the conciseness and abstractness of a set of concepts and propositions, is also a desirable characteristic in a scientific theory. Scope and parsimony are interrelated in that a theory that explains a wide scope of events with a few succinct statements is scientifically preferable to one that relies on a complex set of propositions and variables that accounts for only a small range of events. The principle of parsimony is to use as few concepts and propositions as possible to explain the widest range of phenomena. For example, a theory that proposes that all crime and delinquency is caused by low self-control is much more parsimonious than a theory that requires a different set of multiple hypotheses to explain crime and delinquency, depending on the type of offense and the age, sex, or race of the offender or on a myriad of factors and their interaction across multiple units of analysis (for further discussion, see Lynch et al., 2013).

Testability

A scientific theory must be testable by objective, repeatable evidence. If a theory cannot be tested against empirical findings, it has no scientific value. It is not enough for a theory to fit known facts about crime or empirical evidence consistent with its propositions. It must also be possible to subject the theory to **empirical falsification**; in other words, it must be open to evidence that may counter or disprove its hypotheses with negative findings. If it is not falsifiable in this sense, it is not testable (Stinchcombe, 1968).

A theory may be untestable because the definitions of its concepts and its propositions are stated as a tautology. A tautology is a statement or hypothesis that is true by definition or involves circular reasoning (Budziszewski, 1997). If, for example, one begins with the definition of low self-control as the failure to refrain from crime and then proposes low self-control as a cause of law violation, then one's proposition is tautological. Given the definition of low self-control, the proposition can never be proven false because self-control is defined by the very thing it is hypothesized to explain. It simply says that a person who has low self-control has low self-control, or that a person who violates the law violates the law. A variation on a tautology that is true by definition is seen in the practice of placing a label on some behavior and then using that label to explain the same behavior. For instance, one may label serial killers as psychopaths, then assert that people commit serial murders because they are psychopathic. Such a statement does no more than repeat the label. Similarly, we may observe that a person drinks excessively and has problems with alcohol, so we theorize that the person overdrinks because he is an alcoholic. How do we know he is an alcoholic? We know because he drinks excessively and has problems with alcohol. We have come full circle.

Another way in which a theory may be untestable is that its propositions are so open-ended that any contradictory empirical evidence can be interpreted or reinterpreted to support the theory. For example, a theory may propose that males who rob banks are motivated by an irrational and unconscious impulse to resolve their guilt over their childhood sexual attraction toward their own mothers. This is a testable explanation of male bank robbery because it is not true by definition. If research finds enough bank robbers who fit this description, then the theory is supported. If research uncovers other cases where bank robbers claim their only motive is money and they have no such feelings toward their mothers, then that can be taken as falsifying the theory. However, the theory cannot be falsified if the claims of the latter bank robbers are dismissed by asserting that their very denial of these feelings in effect supports the theory because the same unconscious impulse that motivated them to rob banks also rendered them unconscious of their true motivations. Similarly, a theory may contend that criminal laws always serve the interests of the ruling capitalist elite. Even if laws are enacted to serve the interest of the working class, one could always reinterpret them with the argument that such laws only appear to serve the working class but in fact serve the ruling class. There is no way to falsify the theory. Hence a theory that can never be proven wrong, regardless of the findings, is not a testable theory.

A theory may also be untestable because its concepts are not measurable by observable and reportable events. A theory's concepts and propositions identify the explanatory events or independent variables that account for variations in the dependent variables, which are events or behavior to be explained. Even a nontautological theory cannot be tested if it is not possible to find observable events that can be taken as objective and repeatable measures of these concepts. Without such measures, the hypothesized relationships cannot be checked against actual events. If a theory proposes that people commit crimes because they are possessed by invisible demons, there is no way to prove whether such demons are responsible for the crime. If we cannot measure the existence of demons separately from the occurrence of criminal behavior, we may simply assume the existence of the demons from the existence of the crimes. We have a similar tautology if the dependent and independent variables are measured by the same events. For example, it is tautological to explain a high rate of delinquency as the result of social disorganization if one of the indicators of social disorganization is the delinquency rate itself. Both the events to be explained and the events used to explain them are the same thing. It is tautological to interpret an event as the cause of itself.

Not all concepts must be directly measurable for a theory to be testable, but one must be able to relate them in a logical and clear way to measurable phenomena. For instance, one part of social learning theory proposes that an individual's exposure to admired models who are involved in deviant or delinquent behavior will increase the chances that the individual will imitate those same behaviors. *Imitation* is defined as one engaging in acts after he or she has watched them being engaged in by others. It is quite possible to directly observe the behavior of adult or peer models whom adolescents are in a position to imitate, or to ask adolescents to report exposure to such models and then observe the extent to which their behavior matches that of the models. The concept of imitation refers to observable, measurable events; therefore, propositions about modeling are testable.

Empirical Validity

Empirical validity is the most important criterion for judging a theory, and it simply means that a theory has been supported by research evidence. For a theory to be logical, parsimonious, and non-tautological means little if it turns out to be false. It is seldom the case, however, that a theory is found to be entirely true or entirely false. Falsifiable theories may encounter some negative evidence without being judged as wholly invalid. The question is: What degree of empirical support does the theory have? Do the findings of research provide weak or strong support? Does the preponderance of evidence support or undermine the theory? How does its empirical validity compare with that of other theories?

For instance, deterrence theory proposes in part that offenders will not repeat their crimes if they have been caught and given severe legal punishment. If research finds that this is true for only a small minority of offenders or that punished offenders are only slightly less likely to repeat crimes than unpunished

offenders, then the theory has some, but not much, empirical validity. Labeling theory, on the other hand, proposes that the experience of being caught and processed by the criminal justice system labels offenders as criminal. This application of a stigmatizing label is hypothesized to promote their self-identity as criminals and makes them more likely, rather than less likely, to repeat their crimes. If research finds that, other things being equal, apprehended offenders are more likely to recidivate than those who have not been caught, then labeling theory has more empirical validity than deterrence theory.

Concepts of Causality and Determinism

Notice the terms *more likely* and *less likely*. Empirical validity does not mean that a theory must identify variables that *always* cause criminal behavior to occur or always explain the decision to arrest an offender. Traditional causality in science is based on the premise that cause X must precede and produce effect Y. To be a cause, X must be both a necessary condition, the absence of which means that Y will not occur, and a sufficient condition, so that Y always occurs in the presence of X. No criminological theory can meet these two traditional causation criteria of necessary and sufficient conditions. But that makes little difference because a **probabilistic causality** is more appropriate for assessing the empirical validity of criminological theories. The probabilistic concept of causation simply asserts that the presence of X renders the occurrence of Y more probable; that is, contemporaneous variations or changes in criminal behavior are associated or correlated with variations or changes in the explanatory variables identified in the theory. The presence of the variables specified in the theory precedes the occurrence of crime and delinquency, thereby predicting when they are more likely to occur or reoccur. The stronger the correlations and associations, the greater the theory's empirical validity.

Interpreting correlations as causation even in the probabilistic sense remains a problem because the direction of the relationship between two correlated variables may not be the same as specified in the theory. For instance, a theory may hypothesize that an adolescent engages in delinquent conduct as a result of associating with other adolescents who are already delinquent. Finding a correlation between one's own delinquent behavior and the delinquency of one's friends, therefore, could be taken as evidence in support of the theory. But the relationship may exist for converse reasons; that is, the adolescent first becomes delinquent and then seeks out delinquent variable, resulting from one's own prior delinquency, rather than the independent variable that increases the probability that the adolescent will commit delinquency. Further research would be needed to find out in which direction the relationship typically runs.

The probabilistic concept of causality suggests that human behavior is neither completely determined by external forces nor completely an outcome of the unfettered exercise of free-will choices. Rather, behavior is best understood from the middle-ground perspective of "soft determinism" (Matza, 1964). **Soft determinism** allows for human agency and recognizes that various factors influence and limit actions but leave room for individual choices that cannot be completely predicted. Increasingly, criminological theorists have come to adopt this view (Gibbons, 1994; Akers, 1998; Walsh, 2002; Lilly et al., 2018):

Numerous theorists, however, have come to advance similar arguments in recent years. Versions of soft determinism or indeterminism are now advocated by control theorists, rational choice theorists, social learning theorists, conflict theorists, and others. . . . [P]eople may transcend previous experience through reflective thought, altering their preferences and developing unexpected and sometimes novel strategies for acting on those preferences. (Agnew, 1995b:83, 88)

Quality of Empirical Tests of Theory

Not all empirical tests of theories are of equal methodological quality. The better studies do a good job of measuring the variables derived from the theory (or theories) being tested, correctly specify the hypotheses about the relationships expected or predicted by the theory, measure all of the main concepts, use more than one measure of each concept, and use measures that correctly and reliably reflect the meaning of the concepts in the theory (Carmines and Zeller, 1979; Kubrin, Stucky, and Krohn, 2009). Such studies test the direct effect of the factors hypothesized by the theory to explain criminal behavior. But they also test, where appropriate, for indirect or interaction effects-that is, they examine how much the independent variables affect the dependent variables when other factors are controlled for or taken into account. For example, self-control theory proposes that those lower in self-control are more likely to commit crime when the opportunity for crime is high than when opportunity is low. The outcome of a study that allows for the interaction between self-control and opportunity (by testing the effects of low self-control, taking into account the relative presence or absence of opportunities) carries greater weight than the outcome of a study that models only the combined effects of self-control and opportunity or ignores the effect of opportunity altogether. Other issues related to the quality of empirical tests include whether or not the appropriate causal order and the linear or nonlinear shape of the relationships specified in the theory have been carefully examined.

Further, the research should be done with well-selected samples of subjects, respondents, or informants to which the theory applies. For instance, a sample of lower class urban boys is appropriate, whereas a sample of adults would be inappropriate, for testing a theory that hypothesizes the existence of an urban delinquent subculture among lower class male adolescents. Similarly, good studies use the proper unit of analysis, that is, individuals or small groups for micro-level theories and communities, nations, or societies for macro-level theories.

Usefulness and Policy Implications

Finally, the value of a criminological theory can be further evaluated by its usefulness in providing guidelines for effective social and criminal justice policy and practice (Nagin and Weisburd, 2013; Piquero, 2019; Sampson et al., 2013;

Tonry, 2013). Every criminological theory implies a therapy or a policy. The basic assumption in theory-guided practice is that the better the theory explains the problem, the better it is able to guide efforts to solve the problem.

All major criminological theories have implications for, and have indeed been utilized in, criminal justice policy and practice. Every therapy, treatment program, prison regimen, police policy, or criminal justice practice is based, either explicitly or implicitly, on some explanation of human nature in general or criminal behavior in particular (Barlow, 1995; Gibbs, 1995; Akers and Jennings, 2009, 2015). Every recommendation for changes in our legal and criminal justice system has been based on some underlying theory that explains why the laws have been enacted, why the system operates as it does, and why those who are in the system behave as they do.

The question, then, is not, can or should policy be based on theory? (It already is guided by theory.) But rather, how well is policy guided by theory, and how good is the policy and the theory on which it is predicated? In most public discourse about criminal justice policy, the underlying theoretical notions are ill-stated and vaguely understood. A policy may be adopted for political, economic, or bureaucratic reasons; then a theoretical rationale is formulated or adopted to justify it. Typically, the theoretical underpinnings of a program are not a single coherent and tested theory but rather a hybrid of several, sometimes conflicting, theoretical strands (Wright and Dixon, 1978). This understandably results from the effort to try any number of things to see what works. Utility and effectiveness, not theoretical purity, are the standard in policy and practical application.

Criminological theory has implications not only for official public policy and programs but also for what can be done informally in families, peer groups, neighborhoods, and communities. From a sociological perspective, this informal control system embedded in everyday life and interaction has more impact on behavior than formal criminal justice policy (Felson and Eckert, 2016). Of course, there is an interdependence of formal and informal actions and activities to combat crime and delinquency. In either case, the policy should not rest solely on its theoretical or philosophical plausibility or simply conform to common sense. Just as theories must be shown empirically to be valid, policy and practice must be shown empirically to work and produce the outcomes they are intended to have (prevention, control, or reduction of crime and delinquency). They must also meet ethical, legal, and moral standards of fairness, equity, due process, and appropriateness for a democratic society (Akers, 2005).

A clear, parsimonious, non-tautological, and empirically valid theory has even more to recommend if it can also guide programs and practice. If a program guided by that theory is instituted and is successful in achieving its goals, we gain additional confidence in the validity of the theory. Evaluation research is often conducted to assess the degree to which a program achieves its goals. However, like empirical tests of theory, not all evaluations are of equal quality. **Outcome evaluations** that utilize experimental designs, with both pre- and postintervention measures, and random assignment of subjects to treatment (experimental) and control conditions offer the most credible results. However, evaluations to verify a program's effectiveness, no matter how rigorous the design, may still produce an incomplete assessment of the program or policy. A **process evaluation** may also be done to see if the program has indeed been implemented in the proper manner and with the proper participants as specified by the theory and goals underlying the program. The program itself may be a poor adaptation of the theory's guiding principles. There may be practical or ethical roadblocks against carrying out the actions that the theory implies are needed to change criminal behavior, reduce recidivism, or make the system operate better (Jennings and Reingle, 2019).

The policy and program implications of some biological theories that involve chemical or surgical intrusion into a person's body are often seen as most objectionable and as involving the most severe ethical, moral, and constitutional problems. But the ethical, legal, and moral issues of fairness, equity, due process, and appropriateness are not qualitatively different from those faced by policy derived from any other theoretical perspective (Akers, 2005).

There may be political or economic factors that come into play to enhance or diminish the effectiveness of the program that have nothing to do with the validity of the theory. Therefore, the success or failure of policies and programs cannot be used by themselves to test theory. This does not mean such outcomes are irrelevant to theory development and modification:

The phrase "nothing is as practical as a good theory" is a twist of an older truth: Nothing improves theory more than its confrontation with practice. It is my belief that the development of applied social theory will do much good to basic theoretical sociology. This is obvious enough as we deal with those parts of theoretical sociology that are put to practical use; they become refined in the process. (Zetterberg, 1962:189)

Theory and Ideology

A theory to explain the existing operation of the criminal justice system is not the same as a judgment about what kind of legal system we should have. It is not a theoretical statement, for instance, to argue that we should have a fair, just, and effective criminal justice system. Such a statement offers desirable social goals about which the vast majority of citizens may agree. Other statements, such as the desirability of completely disarming the civilian population, generate controversy. But neither provides a scientific explanation of law and criminal justice. Arguments over the goals and purposes of the system—such as whether it should focus on crime control to protect society rather than due process to protect the rights of the accused or whether it should simply punish law violators as their just deserts or should attempt to rehabilitate them-constitute an ideology and are not theoretical arguments. Ideology in the form of philosophical and pragmatic debates over society's control of crime may be informed by theory and have relevance to the application of theory, but they are not themselves theoretical explanations of why laws are formulated and enforced or why people commit crimes (see Tonry, 2013). Theories attempt to explain the behavior of the participants in the legal system and the operation of the system itself. They produce hypotheses

about the factors that account for legal and criminal justice actions and decisions. Theories do not specify what are the correct, proper, and desirable values that should be exemplified in the system. Theories account for criminal behavior. They do not tell us what should or should not be considered criminal.

This is not to imply that those who are proponents of a particular theory are unaffected by their philosophical and value judgments. There is a relationship between theories of crime and criminal justice and philosophies that define the goals of a just, effective, and well-managed criminal justice system. Such goals partially direct which theories will be considered to be important, and those theories will help to develop strategies to reach these goals.

For example, one of the reasons that conflict theory is important in criminology is that its theoretical propositions about the operation of the system are relevant to the political and moral debates over the justness of that system. The goal of a just system is to treat everyone equitably based on legally relevant factors such as the nature of the criminal act and the laws relating to it. Conflict theory (see Chapter 10) hypothesizes that actions taken in the criminal justice system may be decided differentially based on such factors as the race, class, and gender of offenders rather than on the type of crime. The decisions of a criminal justice system that relies more on such social characteristics than on the nature of the crime is not a just system. Therefore, the extent to which conflict theory is supported or refuted by research evidence is critical to the debate over the fairness of the criminal justice system.

Further, one's political, social, religious, or other philosophical leanings may influence preferences for different theoretical perspectives or vice versa. As an example of this, Cooper, Walsh, and Ellis (2010) surveyed criminologists at a national conference on their political ideologies, the theories they favored, and which conditions or factors they considered to be important causes of crime. The findings (based on a low response rate) showed that most academic criminologists consider themselves to be politically liberal (60%) or moderate (27%), but some identify themselves as conservatives (5%) or radicals (8%). Not surprising, this last group favored Marxist, radical, and critical (see Chapter 11 and Chapter 12) or conflict theories (see Chapter 10). Criminologists who identify themselves as politically conservative tend to favor biosocial (see Chapter 3), self-control (see Chapter 6), and developmental and life-course theories (see Chapter 14). Political moderates tend to favor social learning theory (see Chapter 5), whereas liberals endorse social disorganization theory (see Chapter 8) and social control theory (see Chapter 6) as well as social learning theory (see Chapter 5). Thus, among this group of criminologists, one's theoretical stance is somewhat related to one's political philosophy. But the two are separable and incompletely related, as shown by the finding that social learning theory is endorsed by conservatives, moderates, liberals, and radicals alike. Moreover, there are certain key theoretical issues over which there is little disagreement regardless of one's political ideology; these issues include peer influences, unstable family life, alcohol abuse, and "hard" drugs as causes of offending (Cooper et al., 2010:340). More recent survey research with criminology and criminal justice (CCJ) scholars has also demonstrated that CCJ scholars tend

to hold more liberal positions compared to the general public when asked the same questions that are asked of the general public in Gallup public opinion polls (Griffin, Pason, Wiecko, and Brace, 2018).

The adequacy of a theory cannot be properly judged by the political or partisan ideologies of its proponents. Valid explanations of crime and criminal justice may be used for liberal, conservative, or radical policies. The weakest reason for accepting or rejecting a theory of crime or criminal justice is how well it conforms to or defies one's own beliefs, ideologies, or preferred policies.

Emphasis on Empirical Validity and Application of Theories

The primary criterion for judging a theory is its verification or refutation by empirical research (Gibbs, 1990), and this is emphasized in each of the following chapters. The policy implications and applications of theories are also important and are highlighted. Reference is made, where appropriate, to other criteria for evaluating criminological theories. But the emphasis in this book is on the following: (1) introducing the central concepts and propositions of criminological theories, (2) evaluating their empirical validity, and (3) assessing their application to policies and programs.

SUMMARY

Criminological theories are both theories of the making and enforcing of criminal law and theories of breaking the law. The former attempts to explain the content of the laws and the behavior of the criminal justice system; the latter tries to explain the commission, occurrence, and patterns of criminal and deviant behavior. Such theories best fit assumptions of probabilistic or soft determinism rather than strict determinism. Structural or macro theories focus on differences in group and societal rates of crime, whereas processual or micro theories address individual differences and social processes. The aim of criminological theory is to gain an understanding of crime and criminal justice. Theories are useful for addressing the issues of which policies are more or less likely to work, but they are not philosophical statements about what ought to be done. A theory may be evaluated, either on its own or by comparison with other theories, on the criteria of clarity and consistency, scope and parsimony, testability, practical usefulness, and empirical validity. Of these, the focus here is on a theory's empirical validity and its usefulness for guiding policy and practice.

KEY WORDS

macro micro internally consistent scope parsimony empirical falsification tautology empirical validity traditional causality necessary condition sufficient condition probabilistic causality soft determinism outcome evaluation process evaluation ideology

CHAPTER 2

the

Deterrence and Rational Choice Theories

CLASSICAL CRIMINOLOGY AND THE DETERRENCE DOCTRINE

Classical criminology refers primarily to the 18th-century writings of Cesare Beccaria in Italy and Jeremy Bentham in England.¹ Both were utilitarian social philosophers who were primarily concerned with legal and penal reform rather than with formulating an explanation of criminal behavior. In doing so, however, they formulated a theory of crime that remains relevant to criminology today.²

The system of law, courts, and penalties of the day that the classical criminologists wanted to change was marred in most European countries by arbitrary, biased, and capricious judicial decisions. It was common to use torture to coerce confessions and to inflict cruel punishments, including whipping, public hanging, and mutilation. The classical criminologists were intent on providing a philosophical rationale for reforming the judicial and legal system to make it more rational and fair. Their ideas converged with the developing interests of the rising middle classes of merchants and the economic philosophy promoting trade, commerce, and industry. They promoted reforms that many of the leading intellectuals of the day were advocating. Their arguments also fit well with developing political movements seeking greater citizen participation and democratic control of government. Many of the legal reforms proposed by classical utilitarian philosophers, such as doing away with cruel and unusual punishment and instituting the right to a speedy trial, were incorporated into the Constitution of the United States in its Bill of Rights amendments. Others, such as a legislatively fixed scale of punishment for each type and degree of crime, were incorporated into the new legal codes of France in 1791, following the French Revolution.

Deterrence: Certainty, Severity, and Celerity of Punishment

Severity and Fitting the Punishment to the Crime

The basic premise in classical criminology is that actions are taken and decisions are made by persons in the rational exercise of free will (Nagin, Cullen, and Jonson, 2018). All individuals choose to obey or violate the law by a rational calculation of the risk of pain versus potential pleasure derived from an act. In contemplating a criminal act, they take into account the probable legal penalties and the likelihood that they will be caught. If they believe that the legal penalty threatens more pain than the probable gain produced by the crime, then they will not commit the crime. Their calculation is based on their own experience with criminal punishment, their knowledge of what punishment is imposed by law, and their awareness of what punishment has been given to apprehended offenders in the past (see the discussion of specific and general deterrence that follows).

A legal system that is capricious and uncertain does not guarantee sufficient grounds for making such rational decisions. Such a system is not only unjust but also ineffective in controlling crime. To prevent crime, therefore, criminal law must provide reasonable penalties that are applied in a reasonable fashion to encourage citizens to obey rather than violate the law. The primary purpose of criminal law is deterrence. It should not be used simply to avenge the wrongs done to the state or the victim. Legislators enact laws that clearly define what is unlawful, prescribe punishment for law violation meant to be sufficient to offset the gain from crime, and thereby deter criminal acts by citizens. Judges should do no more than determine guilt or innocence and should use no discretion to alter penalties provided for by law. The punishment must "fit the crime." This may be interpreted as retribution: an eye for an eye, a tooth for a tooth. But to Bentham and Beccaria, fitting the punishment to the crime meant more than making the severity of punishment proportional to the harm caused to society. It meant that the punishment must be tailored to be only severe enough to overcome the gain offered by crime. Punishment that is too severe is unjust, and punishment that is not severe enough will not deter.

The assumption behind this argument is that the amount of gain or pleasure derived from committing a particular crime is approximately the same for everyone. Therefore, making the punishment fit the crime stands in contrast to the punishment fitting the individual. The law should strictly apply the penalty called for a particular crime, and the penalty should not vary by the characteristics or circumstances of the offender. The argument also assumes that the more serious or harmful the crime, the more the individual stands to gain from it; therefore, the more serious the crime, the more severe the penalty should be to deter it. In classical criminology, this concept of **proportionality** meant that the legislature should enact an exact scale of crimes with an exact scale of threatened punishment, without regard to individual differences. This was later modified to consider that age and mental capacity may affect one's ability to reason rationally.

Certainty and Celerity of Punishment

The deterrence doctrine does not rest on the severity of legal penalties alone. It further determines that to deter, punishment for crime must be swift and certain. **Celerity of punishment** refers to the swiftness with which criminal sanctions are applied after the commission of a crime:

The more immediately after the commission of a crime a punishment is inflicted, the more just and useful it will be. . . . An immediate punishment is more useful; because the smaller the interval of time between the punishment and the crime, the stronger and more lasting will be the association of the two ideas of crime and punishment. (Beccaria, 1972:18–19)

Certainty of punishment refers to the probability of apprehension and punishment for a crime. If the punishment for a crime is severe, certain, and swift, the citizenry will rationally calculate that more is to be lost than gained from crime and will be deterred from violating the law. Both Beccaria and Bentham saw a connection between certainty and severity of punishment. Certainty is more effective in deterring crime than severity of punishment. The more severe the punishment, the less likely it is to be applied; and the less certain the punishment, the more severe it must be to deter crime.

Specific and General Deterrence

There are two ways by which deterrence is intended to operate. First, apprehended and punished offenders will refrain from repeating crimes if they are certainly caught and severely punished. This is known as **specific deterrence**. Second is **general deterrence**, in which the state's punishment of offenders serves as an example to those in the general public who have not yet committed a crime, instilling in them enough fear of state punishment to deter them from crime (Zimring, 1971; Zimring and Hawkins, 1973; Nagin et al., 2018).

MODERN DETERRENCE THEORY

Studies of Deterrence

The principles of certainty, severity, and celerity of punishment; proportionality; and specific and general deterrence remain at the heart of modern deterrence theory (Zimring and Hawkins, 1973; Gibbs, 1975; Wright, 1993b; Paternoster, 2010; Nagin, 2013a, 2013b; Nagin et al., 2018). Furthermore, the deterrence doctrine remains the philosophical foundation for modern Western criminal law and criminal justice systems. The policy implications of deterrence theory evolved from the interest in changing the judicial and penal policy of the 18th century, and the theory continues to attract many adherents today because of its direct applicability to policy on law enforcement, courts, and imprisonment. The most common policy reaction to crime problems is to call for increased penalties, more severe sentences, additions to the police force so more arrests can be made, and the increased certainty of conviction and sentencing. These trends are

directly related to all the efforts by legislators to make criminal penalties more certain and severe, to reduce the recidivism of already punished offenders, and to deter new offenders. A policy of longer sentences, especially when selectively applied to habitual offenders, may also be based on the premise that imprisonment, even when it does not deter, will at least incapacitate offenders for a period of time (Blumstein, Cohen, and Nagin, 1978; Sullivan and Piquero, 2016). But the deterrence potential is always behind the policy on all criminal sanctions, from the death penalty on down (see the later section "Deterrence and Criminal Justice Policy").

Despite the long history and continuing importance of deterrence theory, empirical research designed to test it was rare until the late 1960s. Prior to that, most discussions of deterrence revolved around the humanitarian, philosophical, and moral implications of punishment rather than the empirical validity of the theory (Ball, 1955; Toby, 1964; Gibbs, 1975). According to Nagin (2013b), there were three main factors that fueled the early deterrence-based research in criminology in the 1960s:

One was technological: the growing availability of computers and statistical software for analyzing crime data, which were also growing in availability. The second was social: the steady growth of crime rates during the 1960s. The third was intellectual, especially within economics, with the publication in 1968 of Becker's seminal article "Crime and Punishment: An Economic Approach." (Nagin, 2013b:211)

Since 1970, however, deterrence has been one of the most frequently discussed and researched theories in criminology (see Gibbs, 1975; Tittle, 1980; Wright, 1993b; Paternoster, 2010; Nagin et al., 2018). Although there have been fewer deterrence studies in the past decade, considerable research and policy interest in deterrence continues (Pratt et al., 2006; Webster, Doob, and Zimring, 2006; Nagin, 2013a, 2013b; Loughran et al., 2012; Petrosino et al., 2013; Nagin et al., 2018).

The first studies on deterrence consisted primarily of comparisons between states that provided capital punishment for first-degree homicide and those that had no death penalty. The early studies also examined homicide rates in states before and after they abolished capital punishment. These studies found that the provision or absence of the death penalty in state statutes had no effect on the homicide rate (Sellin, 1959; Bedau, 1964). Most research since then has produced similar findings, and there is a consensus among leading criminologists that the death penalty has little general deterrent effect on homicide (Radelet and Akers, 1996). Furthermore, research from other countries, such as Japan, has also supported the lack of a deterrent effect for the death penalty on homicide (Kanji, Johnson, and Yano, 2018). Nevertheless, research by Gibbs (1968), Tittle (1969), and Chiricos and Waldo (1970) set the stage for many of the studies that followed and have continued to this day. Their studies moved beyond the effects of the death penalty to test the deterrent effect of certainty and severity of punishment

on a whole range of criminal and delinquent offenses. They did not include measures for celerity of punishment, however, and it has seldom been included in deterrence research since (see Nagin and Pogarsky, 2001; Nagin et al., 2018).

Objective Measures of Deterrence

Deterrence research measures the severity and certainty of criminal penalties in two ways. The first approach is to use objective indicators from official criminal justice statistics. The certainty or risk of penalty, for instance, is measured by the arrest rate (the ratio of arrests to crimes known to the police) or by the proportion of arrested offenders who are prosecuted and convicted in court. The severity of punishment may be measured by the maximum sentence provided by law for an offense, by the average sentence length for a particular crime, or by the proportion of convicted offenders sentenced to prison rather than to probation or some other nonincarceration alternative. Deterrence theory predicts an inverse or negative relationship between these official measures of legal penalties and the official crime rate measured by crimes known to the police. When the objective certainty and severity of criminal sanctions are high, according to the theory, official crime rates should be low (Gibbs, 1975; Tittle, 1980; Chiricos and Waldo, 1970; Ross, 1982; Pratt et al., 2006; Loughran et al., 2012; Nagin et al., 2018).

Perceptual Measures of Deterrence

The second approach is to measure individuals' subjective perceptions of legal penalties. The objective threat of legal punishment means nothing if citizens are not aware of the official sanctions or do not believe that there is any high risk of penalty if they were to commit a crime. There is evidence that one's perception of risk for violations is influenced somewhat by information regarding the objective certainty of sanction (Scheider, 2001). Most people, however, have a very limited knowledge of what the legal penalties actually are and often make very inaccurate estimations of the true odds of apprehension and incarceration. But a person's fear of punishment should have a deterrent effect on his or her decision to violate the law, even if that fear has no connection with objective reality. Ultimately, deterrence theory proposes that it is what people believe about the certainty, severity, and swiftness of punishment, regardless of its true risks, that determines their choice of conformity or crime.

Recognizing this crucial cognitive dimension of deterrence, researchers have utilized subjective measures of the risks and severity of legal penalties as perceived by individuals. This is measured, for example, by asking respondents on questionnaires or in interviews questions such as, "How likely is it that some-one like you would be arrested if you committed X?" Most research on deterrence since the 1970s has used these perceptual measures, typically relating individuals' perceptions of risk and severity of penalties to their self-reported delinquency and crime.³ The higher the risks of apprehension and the stiffer the penalties for an offense perceived by individuals, the theory predicts, the less likely they are to commit that offense. In addition, recent research has suggested that there may be

a tipping point where the perceived risk of punishment deters crime only once a certain threshold is reached. For example, Loughran et al. (2012) relied on a sample of serious youth offenders and calculated this threshold to be at an estimated risk of punishment of 30-40%, and they also noted a considerably large and accelerated perceived deterrent effect for those youth who reported their perceived risk of punishment at the high end of the risk continuum (closer to 100%).

Do Criminal Sanctions Deter?

If there were no criminal justice system and no penalties provided by law for harmful acts against others and society, obviously laws prohibiting certain behavior would carry no threat for violation. The laws could maintain some moral suasion, and most people would probably still obey the law and refrain from predatory acts. But lawlessness would be more rampant than it is now. Indeed, a formal control system of laws and government is essential to social order in a modern political state. In this sense, the mere existence of a system that provides punishment for wrongdoing deters an unknown amount of crime. This effect of the chance of punishment versus no punishment at all has been referred to as **absolute deterrence** (see Zimring and Hawkins, 1973; Gibbs, 1975; Wright, 1993b; Nagin et al., 2018).

However, absolute deterrence is not the relevant issue in deterrence research. Most people, most of the time and under most circumstances, conform to the law because they adhere to the same moral values as those embodied in the law, not because they are worried about imprisonment. We do not steal and kill primarily because we believe such acts are morally wrong. We have been educated and socialized to abhor these things. Our socialization comes from the family, church, school, and other groups and institutions in society and partly from the educative effect of the law itself, simply by its formal condemnation of certain acts (Andenaes, 1971; see Gibbs, 1975, for a review of other preventive effects of law beyond deterrence). Therefore, the important question that research on deterrence attempts to answer is: Does the actual or perceived threat of formally applied punishment by the state provide a significant marginal deterrent effect beyond that assured by the informal control system (Gibbs, 1975; Zimring and Hawkins, 1968)?

The best answer seems to be *yes*, but not by very much. Studies of both objective and perceptual deterrence often do find negative correlations between certainty of criminal penalties and the rate or frequency of criminal behavior, but the correlations tend to be low (D'Alessio and Stolzenberg, 1998; Tonry, 2008). Moreover, even the weak effects of perceived risk of arrests on criminal and delinquent behavior are conditional upon one's own moral attitudes, peer behavior, and other variables (Foglia, 1997; Matthews and Agnew, 2008: Roche, Wilson, and Pickett, 2019). Severity of punishment has an even weaker effect on crime, whether among the main body of criminal offenders (Smith and Akers, 1993) or among a special category such as those convicted of white-collar offenses (Weisburd, Waring, and Chayet, 1995). Celerity has little effect (Nagin and

Pogarsky, 2001). With some exceptions (Cochran and Chamlin, 2000), neither the existence of capital punishment nor the certainty of the death penalty has been shown to have a significant effect on the rate of homicides. Findings show that there is some deterrent effect from the perceived certainty of criminal penalties, but the empirical validity of deterrence theory is limited. In fact, informed by recent literature reviews that were commissioned by the National Research Council (Chalfin, Haviland, and Raphael, 2013; Charles and Durlauf, 2013; Donohue and Wolfers, 2005, 2009), Nagin and Pepper (2012) concluded:

Research to date on the effect of capital punishment on homicide is not informative about whether capital punishment decreases, increases, or has no effect on homicide rates. Therefore, the Committee recommends that these studies not be used to inform deliberations requiring judgments about the effect of the death penalty on homicide. Consequently, claims that research demonstrates that capital punishment decreases or increases the homicide rate by a specified amount or has no effect on the homicide rate should not influence policy judgments about capital punishment. (Nagin and Pepper, 2012:3)

This conclusion arrived at by the National Research Council committee regarding death penalty deterrence research is supported not only by the reports of single studies but also in meta-analyses of findings from many studies. Furthermore, these same conclusions for death penalty deterrence research largely apply to deterrence research in general. Specifically, Pratt et al. (2006) reported that "many of the variables specified in macro-level tests of the deterrence perspective-such as increased police size/police per capita, arrest ratios and clearance rates . . . were consistently among the weakest predictors of crime rates across virtually all levels of aggregation" (Pratt et al., 2006:368). Also, their meta-analysis of studies that used perceptual measures found that, on average, there is no significant deterrent effect of perceived severity of legal punishment. Further, the average deterrent effect of perceived certainty of punishment, although statistically significant, is fairly weak. "The mean effect sizes of the relationships between crime/deviance and variables specified by deterrence theory are modest to negligible . . . typically between zero and -. 20 ... [and] much weaker than those found in meta-analysis of the relationship between criminal/deviant behavior and peer effects and self-control" (Pratt et al., 2006:383).

One reason for the weak evidence in support of deterrence theory may be the extent to which subjects in the research are deterrable to begin with. Pogarsky (2002:432) identifies three types of individuals: "acute conformists," who comply with the law simply because it is right to do so; "incorrigible offenders," who are so committed to crime that nothing would forestall them from engaging in it; and "deterrable offenders," the only group for whom the threat of sanctions has the potential to dissuade them from crime. Jacobs (2010) expands on the notion of deterrability by conceptualizing it as risk sensitivity. Those who take certain precautions in the course of committing crimes, such as hiding their identity, choosing secluded places to engage in crime, and other efforts to evade detection,

demonstrate high risk sensitivity and are therefore more deterrable than those who display low risk sensitivity. At present there is little empirical research to test whether deterrent effects of perceived sanction threats are greater among those who are higher in risk sensitivity. However, Jacobs and Cherbonneau (2018) provided qualitative findings that hinted at a "channeling effect," where deterrence for carjacking was reported by auto thieves because of their sensitivity to the risk of formal and information sanctions such as higher perceived sentences and victim resistance and retaliation, respectively.

Deterrence and Experiential Effects

Paternoster et al. (1984:471) concluded from their research that "the effect of prior behavior on current perceptions of the certainty of arrest, the *experiential effect*, is stronger than the effect of perceptions of certainty on subsequent behavior, the deterrent effect" (emphasis added). Those respondents with "little prior experience in committing an offense have higher estimates of the certainty of punishment than those with experience" (Paternoster, 1985:429). In other words, the more frequently respondents have been involved in law violations in the past, the lower their perceived risk of sanctions in the present. Paternoster et al. (1983) concluded that the relatively weak negative correlations between perceived risks of punishment and criminal behavior reflect the experiential effect of behavior on the perceptions of risk more than the deterrent effect of perceived sanctions on behavior.

They failed to recognize, however, that their findings on the experiential effect may not in fact contradict the principle of specific deterrence. If respondents had previously committed offenses but had not been punished for them, the principle of specific deterrence would predict a subsequently low level of perceived certainty. Individuals who are involved in repeated crimes without suffering punishment should have lower perceptions of risk because they have gotten away with it so often. This in turn should be related to repeating offenses in the future (Stafford and Warr, 1993). Specific deterrence is supposed to operate based on persons getting caught and punished for criminal acts. If they are not, the theory argues, then they will come to believe that the certainty of punishment is low. In this sense, then, deterrence theory predicts the very experiential effect that Paternoster et al. (1983) found.

It would be contrary to the principle of specific deterrence if the research had found that respondents who reported frequent offenses followed by arrests in the past still had perceptions of a low risk of criminal sanctions. Paternoster et al. (1983) asked only about prior behavior. They did not measure past experience with arrest and punishment, so we do not know the extent to which their finding of an experiential effect contradicts deterrence theory.

If specific deterrence is based on being punished (or avoiding punishment), then general deterrence is based on the "vicarious" experience of seeing others punished (or avoiding punishment). Both of these should be related to offending and perceptions of risk (Stafford and Warr, 1993).

Punishment avoidance acts as a negative reinforcer (i.e., the suspension of an unpleasant consequence, or punishment) which should increase the likelihood of future offending. Thus, when viewed in the context of the social learning perspective, the decision process underlying offending behavior is subject to an operant conditioning response (either a punisher or negative reinforcer), either through personal experience or the "modeling" behavior exhibited by others, which will influence individuals' future cost/benefit analyses for engaging in crime or deviance. (Pratt et al., 2006:372)

Piquero and Pogarsky (2002) found effects of both personal and vicarious punishment experience. However, in their study, experience with punishment had an "emboldening effect"; that is, it was positively related to future offending. This finding may be the result of more frequent offenders having a greater chance than nonoffenders of being punished but, contrary to both deterrence and experiential hypotheses, having neither their offending nor perceptions affected by the direct or vicarious punishment experience. Rather, it may be that "prior experience with punishment serves to identify the most committed offenders, who then, not surprisingly, report a greater inclination toward future offending" (Piquero and Pogarsky, 2002:178). Unlike Piquero and Pogarsky (2002), Sitren and Applegate (2007) found effects of both personal and vicarious punishment avoidance but not punishment experience—on the likelihood of offending. In addition, Carmichael et al. (2005) utilized data from a self-report survey of 2,000 high school students and reported that experiential effects specifically and deterrent effects in general operate more similarly than differently for males and females.

Anwar and Loughran (2011) provided a fairly comprehensive examination of experiential effects derived from a sample of 1,300 serious youthful offenders from Arizona and Pennsylvania. In their thoughtful analysis, they found that while being arrested did increase the youths' subjective probability of punishment, the magnitude of this effect was far less for more experienced offenders. Specifically, the experienced offenders placed more weight on their prior subjective probability of punishment, and this prior subjective probability was affected little by subsequent arrests. Comparatively, the inexperienced offenders upgraded their subjective probability of punishment in response to a recent arrest. Finally, Anwar and Loughran also demonstrated that the effect of these subjective probabilities of punishment were crime-specific, such that being arrested for violent crimes had little effect on the youth's subjective probability of punishment for incomegenerating crimes. Indirect experiences with crime and punishment avoidance such as having family members who have committed crime and who were caught, or having family members who have committed crime and who were not caughtaffects one's own perceptions of risk (Wilson, Paternoster, and Loughran, 2017).

Modifications and Expansions of Deterrence Concepts

Another aspect of the study by Paternoster (1985) points to the movement by many researchers to expand deterrence concepts beyond legal penalties. Paternoster included variables from social bonding theory (i.e., moral beliefs and attachment to parents and peers) and social learning theory (i.e., the perceived risk of informal sanctions from family and friends and association with offenders; see Chapters 5 and 6). When these other variables are taken into account, the already weak relationship between the perceptions of risk of legal penalties and offense behavior virtually disappears (see also Pratt et al., 2006).

The research by Paternoster (1985) followed up previous studies (Akers et al., 1979; Grasmick and Green, 1980) in which the concept of deterrence was expanded beyond the strictly legal or formal sanctions to include informal deterrence. **Informal deterrence** refers to the actual or anticipated social sanctions and other consequences of crime and deviance that prevent their occurrence or recurrence. This research has found that the perceptions of informal sanctions, such as the disapproval of family and friends or one's own conscience and moral commitments, do have deterrent effects. Indeed, they have more effect on refraining from law violations than the perceived certainty of arrest or severity of penalties (Green, 1989; Grasmick and Bursik, 1990; Pratt et al., 2006).

Zimring and Hawkins (1973) have argued that formal punishment may deter most effectively when it "sets off" or provokes these informal social sanctions. An adolescent may refrain from delinquency not only out of fear of what the police will do but also out fear of what his or her parents will do once they learn of his or her arrest. Williams and Hawkins (1989) expanded on this notion of the deterrent effects of informal sanctions that may be triggered by the application of formal criminal justice sanctions. They found in their study that the arrest of an abusing husband or boyfriend may have a deterrent effect, in part because of a concern over the negative reactions of friends, family, neighbors, or employers toward him based on their knowledge that he has been arrested. In this instance, fear of arrest may be a deterrent, not only because of the negative experience of the arrest itself but because of other negative consequences evoked by the arrest. These may include the informal costs of severed relationships, damage to one's reputation, and the possible loss of current or future employment. Williams and Hawkins argued that the general concept of deterrence should be expanded to include these informal negative sanctions. Subsequent research by Nagin and Paternoster (1991b) does not support this argument, however, when it is applied to delinquency. They find a very small deterrent effect from the perceptions of formal sanctions, and this effect is not increased at all as a result of informal costs that may be related to the formal sanction. Instead, the informal sanctions have an independent effect on delinquent behavior that is stronger than the effect of perceived formal sanctions. Nagin and Pogarsky (2001) also find significant deterrent effects from informal consequences of behavior and propose a model of general deterrence that includes "extralegal" and legal consequences (along with the individual's "present orientation"). Pratt et al. (2006) also report that perceived certainty of "non-legal" sanctions had somewhat stronger deterrent effects than perceived certainty of legal sanctions.

That the informal sanction system may be more effective in controlling crime than legal sanctions should come as no surprise. But does research evidence that

informal sanctions on criminal and delinquent behavior have a deterrent effect on crime increase the empirical validity of deterrence theory? In our opinion, it does not. Deterrence theory refers only to the threat of legal punishment:

The proper definition [of deterrence] . . . is narrow. In a legal context, the term "deterrence" refers to any instance in which an individual contemplates a criminal act but refrains entirely from or curtails the commission of such an act because he or she perceives some risk of legal punishment and fears the consequences. (Gibbs, 1986:325–326)

There is no room in deterrence theory for variations in the rewards for crime, the social consequences of actions, individual or group propensities toward crime, and a whole range of other variables. The question to be answered about deterrence theory is not whether punishment of any kind from any source deters but whether the threat of punishment by law deters. The more the deterrence theory is expanded to include informal sanctions and other aspects of the social environment beyond the law, the less it remains a deterrence theory and the more it begins to resemble other theories that already include these variables. It is more appropriate, therefore, to interpret positive findings on informal sanctions, weakened social bonds, and similar variables as supporting the other theories (e.g., social learning and social bonding), from which the variables have been borrowed, than it is to conclude that such findings support an expanded deterrence theory that includes these borrowed variables.

RATIONAL CHOICE THEORY

Deterrence and Expected Utility

The expansion of the concept of deterrence has been most associated with the introduction into criminology in the 1980s of *rational choice theory*.⁴ Rational choice theory is based on the **expected utility principle** in economic theory. The expected utility principle simply states that people will make rational decisions based on the extent to which they expect the choice to maximize their profits or benefits and minimize their costs or losses. This is the same general assumption about human nature made in classical criminology.

The obvious affinity between deterrence and rational choice theories stems from the fact that they both grew out of the same utilitarian philosophy of the 18th century (see Gibbs, 1975). The former was applied to the law and the latter to the economy. Despite this long historical connection, rational choice theory of crime has only relatively recently been introduced in criminology. Except for the use of such concepts as "aleatory risk" in delinquency research by sociologists (Strodtbeck and Short, 1964; Short and Strodtbeck, 1965), rational choice was introduced to criminology primarily through the analyses of crime by economists.⁵

Some criminologists, who had been conducting deterrence research for some time, began in the 1980s to refer to the economic model of rational choice as part of the movement to expand the deterrence doctrine beyond legal punishment. However, rational choice theorists claim much more than just an expansion of deterrence theory. The theory is proposed as a general, all-inclusive explanation of both the decision to commit a specific crime and the development of, or desistance from, a criminal career. The decisions are based on the offender's expected effort and reward compared to the likelihood and severity of punishment and other costs of the crime (Cornish and Clarke, 1986; Newman, Clarke, and Shoham, 1997; Loughran, Paternoster, Chalfin, and Wilson, 2016).

Research on Rational Choice Theory

Before choosing a course of action, do offenders calculate that the effort and costs of crime are less than the expected reward in the way predicted by rational choice theory? The answer depends on whether one believes this theory assumes that pure or partial rationality operates in crime. Does the theory hypothesize that each person approaches the commission of a crime with a highly rational calculation of pleasure versus pain before acting on or refraining from the crime? Does an offender choose to commit a crime with full knowledge and free will, taking into account only a carefully reasoned, objectively or subjectively determined set of costs and benefits? If it is this kind of pure rationality that rational choice theory assumes, then the theory has virtually no empirical validity. The purely rational calculation of the probable consequences of an action is a rarity even among the general conforming public. Moreover, even offenders who pursue crime on a regular, businesslike basis typically do not operate through a wholly rational decision-making process.

For instance, in a qualitative study of repeat property offenders (Tunnell, 1990, 1992), offenders thought that they would gain income from their crimes and would not be caught, or they believed that they would not serve much prison time if they did get caught. Furthermore, they were not afraid to serve time in prison because the prison lifestyle was not threatening to them. These findings would seem to be in line with rational choice theory because the expected benefits were perceived as outweighing the expected costs of the crime; hence the decision was made to commit the crime. However, the process whereby offenders reached a decision to attempt another crime did not fit the model of a purely rational calculation of costs and benefits. They did try to avoid capture, but their actions and assessments of the risks were very unrealistic, even to some extent irrational. They were unable to make reasonable assessments of the risk of arrest, did little planning for the crime, and were uninformed about the legal penalties in the state where their crimes were committed. Moreover, all of the offenders in the study

reported that they (and nearly every thief they knew) simply do not think about the possible legal consequences of their criminal actions before committing crimes.... Rather than thinking of possible negative consequences of their actions, those offenders reported thinking primarily of the anticipated positive consequences.... They simply believed that they would not be caught and refused to think beyond that point.

The decision-making process appears not to be a matter of rational evaluation or calculation of the benefits and risks. . . . [R]isks (1) are thought about only rarely or (2) are considered minimally but are put out of their minds. (Tunnell, 1990:680–681)

Similarly, in an ethnographic study of burglars, Paul Cromwell and his associates found that "a completely rational model of decision making in residential burglary cannot be supported" (Cromwell, Olson, and Avary, 1991:43). Rather, professional burglars engage in only partially rational calculation of gains and risks before deciding to burglarize a house, and "research reporting that a high percentage of burglars make carefully planned, highly rational decisions based on a detailed evaluation of environmental cues may be in error" (Cromwell et al., 1991:42):

Most of our burglar informants could design a textbook burglary. . . . [T]hey often described their past burglaries as though they were rationally conceived and executed. Yet on closer inspection, when their previous burglaries were reconstructed, textbook procedures frequently gave way to opportunity and situational factors. (Cromwell et al., 1991:42)

De Haan and Vos (2003) concluded from their interviews and focus group sessions with street robbers that robbing is done for the "rational" reason of getting money, but other factors that one ordinarily would not describe as elements of rationality ("release of tension," impulsivity, desperation, moral ambiguity, emotions) are equally important motivations for the robbers. Dugan, LaFree, and Piquero (2005) inferred some support for rational choice hypotheses from their findings that a decrease in airplane hijackings is related to increased certainty of apprehension and harsher punishment, but all of the relationships found in their study were relatively weak and few were statistically significant. Further, there was no measure of the actual rational cognitive process assumed to underlie hijackers' decisions. Shover and Hochstetler argued,

White-collar criminals generally behave more rationally than street offenders; the latter routinely choose to offend in hedonistic contexts of street culture where drug consumption and the presence of other males clouds judgment and the ability to calculate beforehand. Many white-collar workers by contrast live and work in worlds that promote, monitor, and reward prudent decision making. (Shover and Hochstetler, 2005:3)

This remains an assumption because the empirical evidence is still lacking as to how purely rational the decision-making process is for white-collar offenders or whether the process is any more rational than for other offenders.

The empirical validity of a purely rational explanation of crime may not be important, however, because rational choice theorists seldom put forth such pure models. Instead, they have developed models of partial rationality that incorporate limitations and constraints on choices through lack of information, moral values, and other influences on criminal behavior. Although rational choice theorists often refer to the "reasoning criminal" and the "rational component" in crime, they go to great lengths to point out how limited and circumscribed reasoning and rationality are. The empirically verified models in the literature are based on the assumptions of a fairly minimal level of rationality (e.g., see De Haan and Vos, 2003; Matsueda, Kreager, and Huizinga, 2006).

Raymond Paternoster and Greg Pogarsky (2009) introduce the idea of **thoughtfully reflective decision making** (TRDM) into the rational choice framework:

TRDM refers to the tendency of persons to collect information relevant to a problem or decision they must make, to think deliberately, carefully, and thoughtfully, about possible solutions to the problem, apply reason to the examination of alternative solutions, and reflect back upon both the process and the outcome of the choice in order to assess what went right and what went wrong.... TRDM, then, describes the process of good decision making. (Paternoster and Pogarsky, 2009:104–105)

Paternoster and Pogarsky (2009) hypothesize that TRDM is positively related to healthy outcomes such as pursuit of higher education and negatively related to maladaptive outcomes such as crime. They further hypothesize that the relationship between TRDM and crime is mediated by the intervening mechanism of capital accumulation (Paternoster, Pogarsky, and Zimmerman, 2011). Those who engage in good decision making are more likely to gain human capital (useful skills such as an education), social capital (access to social support through relationships), and cultural capital (access to prestigious resources such as a preferred communication style), which lead to positive life outcomes. Although their research provides some evidence for the linkages among decision making, capital, and crime, Paternoster et al. (2011) never relate these theoretical concepts back to rational choice considerations of costs and benefits. The association between rational calculation of costs and benefits and thoughtfully reflective decision making is merely assumed rather than measured and confirmed by empirical evidence; it is thus unclear whether TRDM offers any enhancement to rational choice theory. More recent research provides little evidence in support of the contention that good decision-making skills are related to either perceptions of risk or the choice to offend. Maimon, Antonaccio, and French (2012) found that TRDM is useful in reducing violent behavior only in students attending schools where discipline is lax; in schools that already provide a strict disciplinary structure, TRDM had no impact on students' involvement in violent offending. Additionally, in a study using a hypothetical drunk-driving vignette, Mamayek, Loughran, and Paternoster (2015) failed to find a significant relationship between TRDM and either perceptions of risk or willingness to offend.

Proponents often contrast rational choice theory with what they label "traditional criminology," because, in their view, all other criminological theories assume that criminal behavior is irrational. But they are mistaken about other criminological theories. In reality, except for psychoanalytic theory (see Chapter 4) and some versions of biological theory (see Chapter 3), all other criminological

theories assume no more or less rationality in crime than do those that are selfdescribed as rational choice theory.

Furthermore, the rational choice models that have been supported by research evidence do not stick strictly with measures of expected utility. They incorporate various psychological and sociological background and situational variables taken from other theories to such an extent that there is little to set them apart from other theoretical models. In fact, some of the studies purporting to find evidence favoring rational choice theory actually test models that are indistinguishable from other, supposedly nonrational choice theories. The clearest example of this is the research by Paternoster (1989a, 1989b). He tested the effect on delinquent behavior of several variables in what he calls a "deterrence/rational choice" model. This model consists of the following variables: affective ties, costs of material deprivation, social groups and opportunities, informal social sanctions, perceptions of formal legal sanctions, and moral beliefs about specific delinguent acts. There is nothing in this set of variables that distinguishes it as a rational choice model. All the variables are taken from social learning and social bonding theories. Paternoster's finding that these variables are related to delinquent behavior, therefore, tells us little about the empirical validity of rational choice theory. However, it does tell us about the validity of social learning and social bonding theories (see Chapters 5 and 6).

The broadening of rational choice theory has the same consequence as the expansion of deterrence theory—it becomes a different theory. When rational choice theory is stated in its pure form, it does not provide an adequate explanation of criminal behavior (De Haan and Vos, 2003). It provides a more empirically verified explanation of crime when it is expanded to include variables beyond rationally expected utility. Opp (1997) claims that the "narrow" rational choice model that assumes maximum rationality has been falsified by empirical research. He maintains criminal behavior is better explained by a "wide" model that assumes limited rationality and leaves room for "soft incentives" as well as tangible and intangible constraints found in informal social networks. However, when rational choice theory is modified in this way, the level of rationality it assumes is indistinguishable from that expected in other theories, and it incorporates explanatory variables from them. When the modifications reach this point, it is no longer appropriate to call the result rational choice theory (Akers, 1990).

Matsueda et al. (2006) found some empirical support for a model of adolescent theft and violence that incorporates both "experiential learning" and "rational choice." Although they called this a rational choice model, they recognize that such modified models are quite similar to other social psychological theories:

Individuals begin with a *prior* subjective probability of an event, such as the risk of arrest, based on all the information they have accumulated to that point. They then collect or come into contact with new information—such as learning of a friend's arrest or being arrested themselves—which they use to update their probability estimates.... Such a process is consistent with general social learning theories of crime. (Matsueda et al., 2006:97–98; emphasis in original)

Ultimately, Loughran et al. (2016) have recently summarized some of the issues surrounding the rational choice perspective and its history of empirical research:

We think that the reluctance of many criminologists to embrace a rational choice model is that it has been misunderstood by critics who frequently claim that the rationalist assumptions of the theory are unreasonable for criminal behavior and that its conceptual net is cast too narrow, including only the formal costs and benefits of offending. Part of this mythos about rational choice theory must also, however, be understood to have been reinforced by the way the theory has been empirically specified even by its proponents. Empirical models of so-called rational choice theory have only rarely moved beyond the consideration of what are really deterrence variables. Loughran et al. (2016:106)

DETERRENCE AND CRIMINAL JUSTICE POLICY

Detection, apprehension, conviction, and punishment of offenders are all based on the theory that legal penalties are the chief deterrent to crime:

The deterrence doctrine is an instructive example of a criminological theory that has immediate policy implications. It is not just that the doctrine identifies possible determinants of offending (individual offending, including recidivism, and the crime rate); additionally, *some* properties of legal punishments can be manipulated by officials. (Gibbs, 1995:74; emphasis in original)

Legislation and executive policy outlawing certain acts and providing punishment for committing those acts is based on deterrence theory-that is, swift, certain, and severe sanctions for criminal acts will reduce crime in society through specific and general deterrence. Of these properties of punishment, most attention has been paid by policymakers to enhancing severity. The belief that the threat of more severe punishment produces a greater deterrent effect (along with retribution, just deserts, and incapacitation) is the primary justification given for a whole range of "get tough" criminal justice policies that have been enacted since the 1970s (Lynch and Sabol, 1997; Cullen, Fisher, and Applegate, 2000; Pratt et al., 2006; Webster et al., 2006; Nagin, 2013a, 2013b; Nagin et al., 2018). Examples of such policies are as follows: restoration of capital punishment; abolishment of parole and indeterminate sentencing; ending or restricting good time and gain time reductions in sentences for prison inmates; restriction of judicial sentencing discretion through sentencing guidelines and mandated sentences; longer prison sentences for drug and violent offenses; "three-strikes-and-you're-out" life sentences for habitual offenders; direct filing of juvenile offenders to adult criminal courts; and stricter intermediate sanctions such as home confinement, which controls offenders in the community more than traditional probation does.

The clearest effect of these policies has been the enormous increase in the number of prisons and the unprecedented growth in the number of Americans in

prison and under criminal justice supervision. As of the end of 2017, there were nearly 1.5 million inmates in federal or state prisons and local jails, with an incarceration rate of 440 inmates per 100,000 population (Bronson and Carson, 2019). The policies have greatly increased the proportion of prisoners who are African American and Hispanic (Guerino, Harrison, and Sabol, 2011; Lynch and Sabol, 1997; Haney and Zimbardo, 1998).⁶

The extent to which these policies have also increased marginal deterrence of crime in the United States is not yet known. During much of the past 35 to 40 years as these policies were instituted, the crime rate was not substantially reduced; it remained the same or increased. Beginning in the 1990s, the official crime rate started to decline as the number of persons in prison continued to increase. Although there have been some recent increases in the national crime rate, there have also been decreases, and it is still at the lowest levels since the 1960s. It is a plausible hypothesis, therefore, to attribute the reductions in the official crime rates to the type of policies outlined earlier. Some policy analysts (Reynolds, 1998) are convinced that the decrease in official crime rates is the direct result of the increased imprisonment and harsher penalties for both adult and juvenile offenders. Such analyses, however, rely only on observing recent trends in crime rates and imprisonment without controlled evaluations of outcomes of specific policies. The evaluations that have been done find insufficient evidence that the policies have had the intended effects of reducing recidivism and lowering the crime rate (Lynch and Sabol, 1997; Haney and Zimbardo, 1998; Nagin, 2013a, 2013b). For instance, although some research found a deterrent effect following voter approval of a referendum providing for increased sentences for repeating certain offenses in California, subsequent research found that the rates for those crimes had already started to decline before, and actually increased in some of the years subsequent to, the policy being put into place (Webster et al., 2006; Levin, 2006).

It may be that the increases in actual or threatened criminal penalties have been sufficiently threatening over the years to deter criminal behavior and reduce crime. On the other hand, it may be that lower crime rates reflect other programs, policies, or social changes unrelated to increased severity of criminal penalties. The years that have seen increases in incarcerated populations have also seen large increases in the number of offenders who have been sentenced to probation, parole, community supervision, treatment, rehabilitation, and other alternatives to prisons that do not rely on the deterrent effects of punishment. Even within prisons there is a range of educational, vocational, drug/alcohol, behavior modification, and other group and individual rehabilitation programs. The larger number of prison inmates means that a larger number than in the past have participated in these programs. The goals of these programs are better reintegration into the community and reduction in criminal offenses after release. Could the overall reductions in the crime rate be attributed to the fact that the goals of these programs are being realized? Other social changes have taken place that may have reduced the crime rate. For instance, the proportion of young males (the

most crime-prone demographic category) in the population has decreased. Moreover, the unemployment rate among this age group, particularly among minorities and in large cities, dramatically decreased over the last decade of the 20th century. Without well-controlled evaluation research, which of these criminal justice policies, which social changes, or which combination of factors are responsible for any demonstrated decreases in crime is unknown.

The limited evidence for the deterrent effects of the actual or perceived penalties for crime may result from the fact that the "main engine for creating deterrence ... has been the basic case-processing mechanisms of the criminal justice process" in which "most crimes are neither reported to nor observed by the police . . . and the majority of crimes that are reported do not result in an arrest" (Kennedy, 1998:4). At the same time, there is some evidence that extra police patrols can reduce crime in certain "hot spots" in the city (Sherman et al., 1998). It may be that new criminal justice strategies that have specific targets such as gang violence by chronic offenders will enhance deterrence, but careful evaluation of such programs has not yet been done (Kennedy, 1998). Whereas other kinds of police crackdowns often do not work (Sherman et al., 1998), studies have shown that police crackdowns on drunk driving can have at least short-term deterrent effects (Ross, 1982). The longer term reduction in alcohol-related automobile accidents seen in the past three decades may be due to more certain and severe penalties for drunk driving. It is just as likely, however, that this downward trend is due to the public campaigns by groups such as Mothers Against Drunk Driving (MADD) to increase the moral abhorrence of drunk driving, designated driver programs, and other changes in public attitudes and behavior (Akers, 1992). It should be noted, however, that these downward trends in offending, although relatively long term, are not necessarily going to continue. What conclusions can be reached if the policies, to which crime reductions are credited, continue in effect while the crime rate begins to increase?

SCARED STRAIGHT, SHOCK INCARCERATION, AND BOOT CAMPS

In 1978 a documentary film, *Scared Straight*, received cinematic awards and aroused enormous attention from the public and governmental officials. It appeared to offer a simple but highly effective way of deterring juvenile delinquency and preventing juveniles from pursuing adult criminal careers. The film was shot in Rahway Prison, New Jersey's toughest maximum security penitentiary. It featured 17 adolescent boys who were bused to the prison for one day to undergo an intensive confrontation by hardened Rahway prisoners. The prisoners yelled at the kids, physically confronted them, and laid out in graphic language the harsh realities and horrors of life in prison that are the consequences of crime. The point of the film was that such a reality shock would literally scare the youngsters straight. "Efforts to scare juveniles straight were firmly grounded in the deterrence approach to juvenile delinquency, especially the idea that fear of severe punishment suppresses delinquency" (Lundman, 1993:151).

The youth in the film were just a handful of the over 13,000 juveniles who took part in New Jersey's Juvenile Awareness Program. A success rate of 90% was claimed for the program, but a careful evaluation showed that most of the youth who visited prisons under the auspices of the program were recruited from the general school populations of middle-class communities. They were not at much risk of delinquency or crime anyway. Moreover, a follow-up study found that juveniles who took part in the program later committed four times as many offenses as a control group that did not participate (Finckenauer, 1982). It may be that the exposure to criminals by youth who otherwise would have no contact with them backfired, with the unintended consequence of increasing rather than decreasing risk of delinquent behavior. Such programs in other states evaluated in the 1980s also showed no deterrent effect (Jensen and Rojek, 1998).

Meta-analyses of such scared straight and similar "juvenile awareness" programs confirm that they are "not effective as a stand-alone crime prevention strategy. More importantly, . . . these programs result in an increase in criminality in the experimental group when compared to the no-treatment control group" (Petrosino, Turpin-Petrosino, and Buehler, 2006:98). In fact, in a more recent and updated meta-analysis, Petrosino et al. went so far as to say:

We conclude that programs like "Scared Straight" are likely to have a harmful effect and increase delinquency relative to doing nothing at all to the same youths. Given these results, we cannot recommend this program as a crime prevention strategy. Agencies that permit such programs, however, must rigorously evaluate them not only to ensure that they are doing what they purport to do (prevent crime)—but at the very least they do not cause more harm than good to the very citizens they pledge to protect. (Petrosino et al., 2013:7)

The scared straight theory also underlies "shock incarceration" or "shock probation" policies in which youthful and minor offenders first are given short prison time and then released to complete their sentence under probation supervision. Boot camps are based to a great extent on this shock incarceration model. These are military-style, short-term institutions, some for juveniles and some for adult offenders, with a regimen of drills, strict discipline, and military decorum that is meant both to teach self-control and to produce a deterrent fear of incarceration. Boot camps became very popular in the 1980s and continue with the support of both federal and state correctional policymakers (Peters, Thomas, and Zamberian, 1997). But evaluations of their effectiveness have been disappointing. Boot camps seem able to maintain good discipline and behavior among their inmates under confinement but are not able to reduce recidivism. In fact, boot camp releasees do not do as well as comparison groups in avoiding subsequent offending, arrest, and incarceration (MacKenzie and Piquero, 1994; MacKenzie and Souryal, 1994; Bourque, Han, and Hill, 1996; Jensen and Rojek, 1998; Zhang, 2000; Paretta, 2018).

ROUTINE ACTIVITIES THEORY

Deterrence and rational choice theories are considered micro-level explanations because they emphasize the factors that influence the decision to commit a crime at the level of the individual offender. Other micro-level explanations contextualize offender decision making by taking into account not only the perceived costs and benefits of offending but also the specific (micro-level) conditions under which these costs and benefits are most likely to occur. Crime opportunity theories such as routine activities theory identify crime-generating situations or circumstances related to both the timing and the location of crime events.⁷

Felson and Cohen: Offenders, Targets, and Guardians

Marcus Felson, in collaboration with Lawrence Cohen (Cohen and Felson, 1979), took the basic elements of time, place, objects, and persons to develop a "routine activities" theory of crime events. For a personal or property crime to occur, there must be at the same time and place a perpetrator and a victim or an object of property. The occurrence can be facilitated if there are other persons or circumstances in the situation that encourage it, or it can be prevented if the potential victim or another person is present who can take action to deter it. Cohen and Felson placed these elements of crime into three categories of variables that increase or decrease the likelihood that persons will be victims of "direct contact" predatory (personal or property) crime.

The three main categories of variables identified in routine activities theory are (1) motivated offenders, (2) suitable targets of criminal victimization, and (3) absence of capable guardians of persons or property. The main proposition in the theory is that the rate of criminal victimization is increased when there is a "convergence in space and time of the three minimal elements of direct-contact predatory violations" (Cohen and Felson, 1979:589); that is, the likelihood of crime increases when there are one or more persons present who are motivated to commit a crime, a suitable target or potential victim is available, and an absence of formal or informal guardians who could deter the potential offender. The relative presence or absence of these elements is variable, and "the risk of criminal victimization varies dramatically among the circumstances and locations in which people place themselves and their property" (Cohen and Felson, 1979:595). The theory derives its name from the fact that Cohen and Felson began with the assumption that the conjunction of these elements of crime are related to the normal, legal, and "routine" activities of potential victims and guardians. "The spatial and temporal structure of routine legal activities should play an important role in determining the location, type, and quantity of illegal acts occurring in a given community or society" (Cohen and Felson, 1979:590).

Routine activities as defined by Cohen and Felson are "recurrent and prevalent activities that provide for basic population and individual needs . . . formalized work, as well as the provision of standard food, shelter, sexual outlet, leisure, social interaction, learning, and childbearing" (Cohen and Felson, 1979:593).

They hypothesized that changes in daily activities related to work, school, and leisure since World War II placed more people in particular places at particular times that both increased their accessibility as targets of crime and kept them away from home as guardians of their own possessions and property.

Felson (1994; see also Felson and Eckert, 2016) continued to develop and apply routine activities. He downplayed the significance of formal guardians because "crime is a private phenomenon largely impervious to state intervention" (Felson, 1994:xii-xiii). Rather, he emphasized the crime prevention and deterrence that naturally occur in the informal control system, the "quiet and natural method by which people prevent crime in the course of daily life. This control occurs as people interact and bring out the best in one another" (Felson, 1994: xii-xiii). The police are not the only capable guardians. Indeed, guardians who prevent or deter crime are more likely to be ordinary citizens, oneself, friends, family, or even strangers. The vulnerability of property to theft is affected by a number of physical features, such as its weight and ease of mobility and how much physical "target hardening" (e.g., installing better locks) has been done. But sights and sounds, being in dangerous and risky places, routines of the family and household, and one's personal characteristics have an effect on the risk of victimization for both violent and property crime. Felson (1994) also extended the theory beyond predatory crimes to such offenses as illegal consumption and sale of drugs and alcohol and white-collar crime.

Felson's emphasis on the informal control system does not distinguish routine activities theory from the general sociological view (discussed earlier) that conformity to the law comes more from the informal system of socialization and control than from the formal control system. This perspective has also been applied to drug use. "The general reduction in drug use in American society [from the late 1970s to the early 1990s] may be the result of changes in social norms and the informal control system unrelated to conscious and deliberate prevention, treatment, or law enforcement efforts" (Akers, 1992:183). The validity of routine activities theory, therefore, does not rest on the relative importance of the informal and formal control systems in crime but on how well hypotheses about the effect of the three main elements (motivated offenders, suitable targets, and absence of guardians) of the theory on crime are supported.

Routine activities theory has generated additional theoretical work, including the "crime pattern theory" of Paul and Patricia Brantingham (1984). Drawing on principles from rational choice and routine activities theories, Brantingham and Brantingham propose a series of "rules" by which to understand "the patterned non-uniformity and non-randomness that characterizes real criminal events" (2008:79). Essentially, as offenders carry out criminal activities, they make decisions that form a "crime template" when those activities become regularized. Crime templates can be further influenced by affiliations with others in the offender's network. Offenders commit crime when they encounter a target or victim that fits their crime template; encountering a target is facilitated by the offender's (and target's) routine spatial and temporal movement patterns. Brantingham and Brantingham (2008) emphasize the importance of the environmental "backcloth" in which the convergence of potential offenders and victims occurs. This backcloth includes both the movement along streets or sidewalks as well as "nodal activity points" at which large numbers of people aggregate. Crimes will cluster in places characterized by "crime generators" and "crime attractors." Crime generators are areas in which people gather for reasons unrelated to their willingness to engage in crime. Areas such as shopping malls, entertainment districts, or sports venues draw in people who may become opportunistic targets of crime. Crime attractors are places that specifically draw in people intending to commit crime because of well-known criminal opportunities. Such places include prostitution strolls, drug marketplaces, or public transit stations. In either case, crimes are likely to be committed by offenders whose daily routines bring them into contact with these crimegenerating and crime-attracting places. Crime pattern theory utilizes principles from both rational choice and routine activities theories but seems to be an extension or elaboration of routine activities theory rather than a separate crime opportunity theory.

Empirical Validity of Routine Activities Theory

Routine activities theory has been tested at both the macro level and at the micro level of analysis. As a macro-level explanation, the theory would predict that a change in any one of the three main elements would change the crime rates but that the presence of all three would produce a multiplier effect on crime rates. The early research by Cohen and Felson (1979), however, focused on only two of the three elements: suitable targets and the absence of capable guardians. They presented data on trends in family activities, consumer products, and businesses and found that these correlated with trends in the rates of all major predatory violent and property crimes. They recognized that these were not the direct measures of the concepts in the theory but concluded that the findings are consistent with the theory. They did not rule out that the "routine activity approach might in the future be applied to the analysis of offenders and their inclinations as well" (Cohen and Felson, 1979:605). Nevertheless, the neglect of "motivated offender" variables in the development, application, and testing of routine activities theory continues to this time (see Felson and Eckert, 2016, and the review of routine activities studies in Bernburg and Thorlindsson, 2001).

Cohen, Kluegel, and Land (1981) later presented the theory in a more formalized fashion, renaming it "opportunity" theory and testing its propositions with data from the National Crime Victimization Surveys. The formal theory refers to exposure, proximity, guardianship, and target attractiveness as variables that increase the risk of criminal victimization. But, again, these are not measured directly. They are assumed from variations in age, race, income, household composition, labor force participation, and residence in different areas of the city. Although inconclusive on some, their findings are consistent with most of the hypotheses; consequently, they conclude that the theory is supportable.

Messner and Tardiff (1985) linked theoretically predicted sociodemographic characteristics of victims to variations in location (at home, 10 blocks from home) and type (family, stranger) of homicide. For example, they found that females, presumably due to gender-stratified routine activities, were more likely than males to be murdered at home and by a family member. Sherman, Gartin, and Buerger (1989) also reported findings consistent with routine activities theory in their study of the "hot spots" of predatory crime. Their research focused on the "criminology of place" by using Minneapolis police "call data" (i.e., crimes reported to the police by telephone) to locate concentrations (i.e., hot spots) of such calls at certain addresses, intersections, parks, and hospitals. They found that reports of each of the major types of predatory crime were concentrated only in a few locations. Sherman et al. (1989) do not know what it is about these places that makes them hot spots, but they believe that there is something about them that relates to the convergence of victims and offenders in the absence of guardians.

Research on routine activities theory has also been conducted at the micro level of analysis, typically examining the characteristics and routine activities of individuals and linking these factors with victimization experiences. Kennedy and Forde (1990) found that victimization varies by age, sex, and income but also varies by the extent to which persons stay at home or go out at night to bars, work, or school. They believe that the routine activity of leaving home at night renders these persons more vulnerable as victims and less capable as guardians over their property. Mustaine and Tewksbury (1998) reported similar findings in a sample of college students. Involvement in a number of legal activities (e.g., eating out frequently, leaving home frequently, not locking doors) and *illegal* activities increased the risks of both minor and serious theft victimization. However, these activities did not increase the risk very much, and many other routine activities included in the study were not related to victimization.

Studies that test routine activities theory often focus on general predatory crime patterns at the confluence of motivated offenders, suitable targets, and absence of guardians. However, some studies have applied routine activities theory to specific types of offending, such as homicide (Messner and Tardiff, 1985; Kennedy and Silverman, 1990), sex offending (Schwartz et al., 2001; Tewksbury, Mustaine, and Stengel, 2008), robbery (Smith, Frazee, and Davison, 2000), and burglary (Robinson, 1999). More recently, a number of studies (van Wilsem, 2011, 2013; Pratt, Holtfreter, and Reisig, 2010; Hutchings and Hayes, 2009; Holt and Bossler, 2009; Bossler, Holt, and May, 2012; Reyns, 2013; Howell, Burruss, Maimon, and Sahani, 2019) have tested the routine activities approach to "virtual," online, or "cybercrime" victimization.

For example, Pratt, Holtfreter, et al. (2010) report some support for routine activities theory as an explanation of "targeting" of potential victims of Internet fraud. The development and widespread use of the Internet would fit into the kind of technological changes that Cohen and Felson (1979) thought would affect the routine activities of the general population in a way that increases their