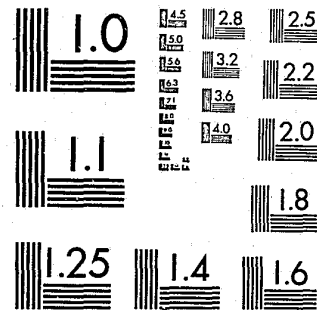


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THEORETICAL MODELS FOR SOME MEASURES OF
POST-RELEASE CRIMINAL ACTIVITY

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In this paper, we will briefly review the various models of criminal behavior which have been developed by psychologists and psychiatrists, sociologists, economists, and others interested in human behavior. The review of these models, reactions to them, and attempts to test them as well as other empirical work, will form the basis for developing an eclectic model of the major factors which will affect post-release criminal behavior. We must control these factors if we are to attribute a change in post-release criminal activity to a correctional program.

The outline of this paper is as follows. In Section 1, we briefly review the major theories of criminal behavior and in Section 2, we assess those theories on the basis of their completeness, universality, transferability, explanatory powers, data availability and understandability. In Section 3, we survey the empirical work which has explored the determinants of post-release criminal activity. In Section 4, we develop an eclectic model of the determinants of post-release criminal activity. The final section summarizes the paper and draws conclusions based upon it.

1. Theoretical Models of Criminal Behavior

Theoretical models of criminal behavior are characterized by two features which we believe tend to limit their usefulness. First, they are subject to waves of acceptance and rejection--faddism, if you like. As Conrad expresses it: "We used to be Freudians; now Bentham reigns again" (Rennie, 1978, p.x). Less kindly, a historian who has surveyed the field notes: "In penology no idea is so old but what it can be dusted off and sold as brand new merchandise" (Rennie, 1978, p.xviii). Monahan has aptly summarized the recent history of criminological theorizing: "The scientific study of criminal behavior was born in economics, had its infancy in biology and psychology, is currently experiencing

its adolescence in sociology and will shortly go home again to the discipline of its birth" (Monahan, 1980b, p.1). Monahan's description aptly introduces a second important feature of criminological theorizing--most have had the perspective of a single discipline rather than bringing the insights of a number of disciplines to the problem of understanding this complex behavior. In preparing to write this paper, the author was struck by the fact that, while it was possible to find a number of surveys of the theories of a particular discipline, attempts to survey the theories of a number of disciplines were rare and either done by multi-disciplinary groups (e.g., Panel on Research on Rehabilitation Techniques, 1980) or by individuals outside the disciplines usually associated with criminological modeling (e.g., Rennie, 1978). Further, theories which attempt to integrate the insights of a number of disciplines are even rarer, although such theorizing has recently been explicitly called for by a National Academy of Sciences Panel studying the prospects for offender rehabilitation (Panel on Research on Rehabilitation Techniques, 1980). To accord with the nature of existing research, our survey will be broken along disciplinary lines.

1.1 Sociological Theories

There have been a number of recent surveys of sociological theories of crime (Schrage, 1971; Rennie, 1978; Empey, 1978; Kornhauser, 1979; Empey, 1980). In addition, as many, if not most, current criminological textbooks are written by sociologists. These textbooks often provide useful surveys of sociological theories (e.g., Sykes, 1978). Various surveys classify sociological writing on crime into different categories. We will use Empey's (1980) classification as it appears to be quite comprehensive. Empey classifies sociological theories into six categories: (1) cultural deviance theory; (2) strain theory; (3) symbolic interactionist theory; (4) control theory; (5) labeling theory; and (6) radical theory. Table 1 lists the major factors suggested as causes of crime by each sociological theory.

TABLE 1

Causes of Crime as Suggested by Major Sociological Theories

Suggested Causes	Theory				
	Cultural Deviance Theory	Strain Theory	Symbolic Interactionist Theory	Control Theory	Labeling Theory
	Delinquent subculture: (1)adolescent gangs (2)city poverty areas (3)separate "deviant" group norms (4)limited legitimate opportunities	Lack of opportunity (1)lack of achievement (2)strain (3)identification with delinquent subcultures	Interaction with deviant groups: (1)importance of verbal interaction (2)importance of intimate group learning	Lack of attachment, commitment, involvement & belief in dominant moral values	Society's reaction to crime reinforces it: (1)stress on secondary deviance (2)being "caught" encourages crime (3)the "system" causes crime by labeling individuals "criminals"
					Crime an inherent product of the class struggle: (1)society defines what is criminal in itself interest (2)society creates conditions which make working class people criminals (3)society devises social control machinery

(3)

(4)

As can be seen in this table, sociological theories have tended to stress the degree to which criminological tendencies are inherent in the social, political, and economic organization of society. To an outsider, sociological theories appear to be vaguely formulated.¹ This makes testing very difficult and may explain the relatively limited use that has been made of these theories in either empirical work or rehabilitative settings. However, these theories do point up the importance of peer groups, small group learning, selective enforcement, legitimate opportunities and social attachment.

1.2 Psychological Theories

Surveys of psychological theories of crime have been less frequent at least partially because there are fewer psychological theories of crime. Crime and its causes do not appear to have been a major concern of the psychological and psychiatric professions in recent years, although the level of interest appears to be rising again. However, Rennie (1978), Monahan (1980b), and the Panel on Research on Rehabilitative Techniques (1980) do provide recent surveys. Traditional psychological approaches tend to stress the importance of the individual as a cause of crime, rather than social institutions as do many sociological theories. Partially as a result of this individual orientation, psychological theories of crime appear more pragmatic and less theoretical than sociological theories (Monahan, 1980b, p.23). One may classify psychological work on criminal behavior into four broad categories: (1) psychoanalytic or clinical; (2) criminal types; (3) social learning theory; and (4) stress theory. At present, it appears that many, if not most, psychologists working in the field find social learning theory to be the most fruitful avenue for understanding the causes of criminal behavior. Table 2 lists the major factors suggested as causes of crime by each psychological perspective.

(5)

TABLE 2
Causes of Crime as Suggested by
Major Psychological Theories

Suggested Causes	Theory			
	Psychoanalytic Clinical	Criminal Types	Social Learning Theory	Stress Theory
	Socialization Biological Factors Child-rearing Practices Parental Norms	Extroversion Neurosis Psychosis Undercon- trolled Overcon- trolled Present Orientation I.Q. as a Mediating Variable Aggressive	Observational Learning Direct Experience External Rein- forcement Current Environ- mental Factors Cognitive Media- tional Processes	Demands on Individual vs. Ability to Respond Appraisal of Events Expectations Coping Responses

As can be seen in Table 2, psychological theories tend to be explanations of human behavior in general rather than explanations of criminality per se. While stress theory and the psychoanalytic approach emphasize the way individuals respond to events, social learning theory points up the importance of the current circumstance in precipitating criminal behavior. Research on criminal types suggests that there are unique characteristics among those we punish by imprisonment. As a whole, psychological theories suggest that a comprehensive model of criminal behavior should include information about the family, learning opportunities and reinforcement, and the way in which the individual processes external observations.

1.3 Economic Theories

Economic approaches to criminal behavior contrast markedly with the sociological and psychological theories described above. While both sociological and psychological theories try to reflect the complexity of actual behavior, economists hypothesize very simple behavioral rules and observe the degree to which these simple models can predict actual behavior. Specifically, economists hypothesize that, "A person commits an offense if the expected utility to him exceeds the utility he could get by using his time and other resources at other activities" (Becker, 1968, p.176). Economists see the criminal activity decision like other human decisions, as made rationally by the individual, who weighs the relative costs and benefits of the different alternatives available. As rationality would have it, economists suggest that the individual will choose the alternative that has benefits which exceed costs by the greatest amount. This approach is simplistic and is most applicable to property crimes committed primarily for monetary gains, although a number of economists have suggested that the model also applies to violent offenses, such as murder (for examples see Ehrlich, 1975).

There have been two recent surveys of modern economic theories of crime

(Heineke, 1978 and Ehrlich, 1979). Heineke classifies economic modeling of criminal behavior into two broad categories: (1) wealth maximizing models; and, (2) time allocation models. Both of these types of models assume rationality and that the individual attempts to maximize utility. Further, both stress the importance of expectations about punishment and the size of legal and illegal returns in determining the individual's decision whether to commit a crime. The models differ mainly in their assumptions about the things from which an individual derives utility and the degree to which these things can be monetized. Table 3 contains a list of the major factors suggested as causes of crime by each economic theory.

As can be seen in this table, the two variants of the economic theory of crime are quite similar in their stress on the importance of the perception of the relative gains from legal and illegal activities. However, time allocation models also allow moral and ethical values to enter the criminal's decision calculus directly by the relative valuation which individuals place on alternative time allocations.

As noted above, economic theories tend to be simplistic, but as a result, tend to be formulated in such a way as to be subject to empirical tests with relative ease. Economic theories point up the importance of the perceptions that an individual has about the relative benefits and costs to be derived from legal and illegal activities. Time allocation models, further, stress the importance of moral and ethical positions to the criminal decision.

1.4 Biological Bases for Criminal Behavior

Research on biological bases of criminal behavior has been in disfavor for fifty years or more although it has continued, mainly outside the

TABLE 3
Causes of Crime as Suggested by
Major Economic Theories

Theory

Suggested
Causes

Wealth Maximization	Time Allocation
Low Perceived Probability of Apprehension Low Perceived Probability of Punishment Low Perceived Severity of Punishment High Perceived Gain from Criminal Activity Low Perceived Gain from Legal Activity	Low Perceived Probability of Apprehension Low Perceived Probability of Punishment Low Perceived Severity of Punishment High Perceived Gain from Criminal Activity Low Perceived Gain from Legal Activity Low Moral Reservations about Participation in Illegal Activities

United States. While the studies to date can in no way be considered definitive, they are suggestive. They suggest that there may be certain physiological and genetic factors which make criminal activity more likely. Mednick and Christiansen (1977), Rennie (1978), and Mednick (1980) present recent surveys of this work. Mednick concludes as follows:

1. Genetic factors are linked with the origins of crime; closer inspection of the data reveals, however, that the power of genetic factors in explaining crime is rather weak in the lower class and relatively great in the middle class.
2. A good deal of work in this volume discusses anatomic nervous system variables. These variables have been shown to explain important amounts of variance in crime....
.....As in the case of genetic factors, physiological variables have good explanatory power in the middle classes, but little in the lower classes. The relative failure of genetic and physiological variables in these classes suggest that economic and social deprivation are more critical in explaining crime in the lower classes. The middle class criminal seems to be more genetically and physiologically predisposed (Mednick and Christiansen, 1977, p.x).

While the findings reported above do not constitute a model of crime causation, they do alert us to the importance of incorporating variables which reflect genetic and physiological factors in our models of criminal causation. Given the overwhelming preponderance of lower class individuals among correctional releasees, however, we should not be too surprised if these variables prove not to be significantly related to post-release criminal behavior.

2. Assessment of Alternative Models of Criminal Behavior

In this section, we will assess the models described in Section 1 and the criteria listed in Table 4: completeness; universality; transferability; explanatory powers; data availability and understandability. Table 5 contains our evaluation using these criteria. As can be seen in this table, no single

TABLE 4

Criteria for Assessing Alternative Theoretical
Models of Criminal Behavior

<u>COMPLETENESS:</u> Does the model provide a thorough theoretical explanation of the particular outcome?	
Thorough	- The model provides a theoretically complete explanation of the outcome.
Moderately Thorough	- The model provides a moderately complete explanation of the outcome.
Unacceptable	- The model provides little insight into the outcome.
<u>UNIVERSALITY:</u> Is the model appropriate for national as well as local level outcome assessment?	
High	- The model can be used for both local level and national outcome assessment.
Moderate	- The model is appropriate for the national or local level but not both.
Low	- The model is appropriate only for local level assessment.
<u>TRANSFERABILITY:</u> Can the model be used for more than one major outcome measure?	
High	- The model provides insight for a number of major outcome measures.
Moderate	- The model provides insight for few major outcome measures.
Low	- The model provides little insight for major outcome measures.
<u>EXPLANATORY POWERS:</u> How well does the model explain individual differences in outcome measures?	
High	- Empirical tests indicate that the model explains the outcome measure relatively well.
Moderate	- Empirical tests indicate that the model explains the outcome measure only partially.
Low	- Empirical tests indicate that the model explains the outcome measure poorly.
<u>DATA AVAILABILITY:</u> Are the data currently available to estimate the model? Are or could the data for the model be collected at the national level? If data are not available, how difficult would it be to institutionalize the data collection procedures to regularly generate the data needed?	

TABLE 4
(continued)

High	- Data are now generally available and are or could be generated at the national level.
Moderate	- Data are not now available, but data collection could be relatively easily institutionalized.
Low	- Data would only be available with specialized collection efforts.

UNDERSTANDABILITY: Does the model make intuitive sense? Can it be understood by practitioners and the concerned public?

High	- The model can be relatively easily explained to the non-specialist.
Moderate	- The non-specialist can at least intuitively understand the model.
Low	- The model would be difficult if not impossible to explain to the non-specialist.

TABLE 5

Assessment of Alternative Models of Criminal Behavior

Model Criteria	Cultural Deviance Theory	Strain Theory	Symbolic Interactionist Theory	Control Theory	Labeling Theory	Radical Theory
Completeness	Moderate	Moderate to Unacceptable	Moderate to Unacceptable	Moderate to Unacceptable	Moderate to Unacceptable	Moderate to Unacceptable
Explanatory Power	Moderate	Moderate to Low	Moderate to Low	Moderate to Low	Moderate to Low	Moderate to Low
Universality	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate
Transfer- ability	Moderate	Moderate	Moderate	Moderate	Moderate to Low	Moderate
Data Availability	Moderate to Low	Moderate to Low	Low	Moderate to Low	Moderate to Low	Low
Understand- ability	High	High	High	High	High	High

(12)

TABLE 5
(continued)

Model Criteria	Psychoanalyt- ical/Clinical	Criminal Types	Social Learning Theory	Stress Theory	Wealth Maximization	Time Allocation	Genetic/ Physiological
Completeness	Moderate to Unacceptable	Moderate to Unacceptable	Moderate	Moderate to Unacceptable	Moderate	High to Moderate	Unacceptable
Explanatory Power	Moderate to Low	Moderate	Moderate	Moderate to Low	Moderate	Moderate	Moderate to Low
Universality	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate
Transfer- ability	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate
Data Availability	Low	Moderate	Moderate to Low	Low	Moderate to Low	Moderate to Low	Low
Understand- ability	High	Moderate	High to Moderate	Moderate	Moderate	Moderate to Low	Moderate

model attains consistently high ratings. We feel that this is mainly due to the fact that the theories surveyed tended to be developed within a given discipline. Further, different models are designed to explain different types of crime. For example, psychological and physiological/genetic models seem best adapted to explain crimes of violence while economic models are best adapted to property offenses.

3. Empirical Work on the Determinants of Post-Release Criminal Behavior

There is a vast literature which has empirically explored the determinants of post-release criminal behavior. Fortunately, Service (1972) and Monahan (1980a) provide surveys of this literature. Table 6 lists the factors Monahan found to be important in individual research. Service and others working with aggregate as well as individual data (See Blumstein, Cohen, & Nagin, 1978; and Gillespie, 1975 for surveys) suggest that some additional variables have been found to be related to post-release criminal behavior: (1) age at first arrest; (2) type of release (e.g., parole, half-way house, unconditional); (3) type and quality of correctional program participated in; (4) length of term served before release; (5) family stability, values and activities; and (6) the effectiveness of the criminal justice system.

TABLE 6

Factors Predictive of Future Criminal Conduct

- I. Prior Criminal Convictions
 1. Recent convictions
 2. Remote convictions
 3. Type of crime
- II. Supplemental Indices of Prior Criminal Behavior
 4. Arrests not leading to convictions
 5. Prison misconduct
- III. Indices of Juvenile Crime
 6. Juvenile arrests
 7. Juvenile adjudications
- IV. Indices of Criminal-Type Behavior Processed Through the Mental Health System
 8. Civil commitments for "dangerous" behavior
 9. Quasi-criminal commitments such as mentally disordered sex offender
- V. Social Attributes
 10. Socioeconomic status
 11. Employment stability
 12. Educational attainment
 13. Opiate or alcohol use
 14. Residential stability
 15. Marital status
- VI. Biological Attributes
 16. Current age
 17. Gender
 18. Race/ethnicity
 19. IQ

Source: Monahan (1980a)

4. An Eclectic Model of Post-Release Criminality

By combining the theoretical insights of Section 1 with the empirical results briefly previewed in Section 3, we arrive at the following model of the level and type of post-release criminal behavior. Note that the theory or theories which would suggest the inclusion of each variable is indicated in parenthesis after the variable.

Level and Type of Post-Release Criminal Behavior	=	f(family stability, perhaps measured by marital status or changes therein, job and residential stability (Control Theory, Strain Theory, Social Learning Theory); family values and activities (Psychoanalytic Theory, Social Learning Theory, Control Theory); criminal record (Cultural Deviance Theory, Symbolic Interactionist Theory, Labeling Theory, Social Learning Theory, Economic Theory); mental health commitments (Psychoanalytic Theory, Criminal Types, Labeling Theory, some biological research); socioeconomic status perhaps measured by occupation, wages educational attainment, and employment stability as a measure of work satisfaction (Strain Theory, Symbolic Interactionist Theory, Control Theory, Social Learning Theory, Stress Theory, Economic Theory); opiate or alcohol abuse (Cultural Deviance Theory, Strain Theory, Symbolic Interactionist Theory, Control Theory, Social Learning Theory, some biological research); age (Cultural Deviance Theory, Control Theory, Criminal Types, Economic Theory, some biological research); sex (Control Theory, Criminal Types); race (Cultural Deviance Theory, Strain Theory, Symbolic Interactionist Theory, Control Theory, Social Learning Theory, Stress Theory, Economic Theory); IQ (Strain Theory, Labeling Theory, Criminal Types, Stress Theory, Economic Theory); age at first arrest (Cultural Deviance Theory, Symbolic Interactionist Theory, Control Theory, Labeling Theory, Social Learning Theory);
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type of release (Cultural Deviance Theory, Strain Theory, Symbolic Interactionist Theory, Control Theory, Social Learning Theory, Stress Theory); type and quality of correctional programs (different theories appropriate for different types of programs), length of time served before release (Cultural Deviance Theory, Strain Theory, Symbolic Interactionist Theory, Control Theory, Labeling Theory, Social Learning Theory, Stress Theory, Economic Theory); genetic and physiological factors (biological research); and the environment in which the individual currently finds her or himself (Social Learning Theory, Radical Theory).

The last item has not, as far as we are aware, been used in previous attempts to empirically model post-release criminal behavior. However, the importance of the "current situation" to behavior has been stressed by a number of psychologists and psychiatrists (Monahan, 1978; American Psychiatric Association, 1974). It would be very interesting to include at least crude measures of situational factors. If situational factors are important, altering such factors could be a major activity of probation and parole officers and community treatment centers.

5. Summary and Conclusions

In this paper, we have surveyed theories of crime causation developed by sociologists, psychologists, and economists. In addition, we briefly reviewed recent research on the association between genetic and physiological factors and criminality. Our assessment of these various theories indicated that no theory received consistently high ratings, rather, all theories appeared to only partially explain the level and type of criminal activity which an individual undertakes.

To supplement our theoretical survey, we reviewed empirical work which has explored the determinants of post-release criminal activity. This work has been largely atheoretical, although many variables found to be significantly related to criminality could be justified by one or more theories.

In Section 4, we combined the insights of theoretical and empirical work to develop an eclectic model of the level and type of post-release criminal activity. This model suggests that the level and type of post-release criminal activity in which an individual will engage will depend upon: (1) family experiences as a child; (2) genetic and physiological factors (e.g., IQ, autonomic nervous system functioning, susceptibility and attraction to drugs, physical size); (3) peer group norms (provided in part by previous criminal record and extent of alcohol and drug use); (4) emotional, social, and psychological stability (perhaps provided by residential, family and job stability); (5) success at legal pursuits (provided in part by marital status, occupation and wages); (6) age; (7) sex; (8) race; (9) type of release; (10) type and quality of correctional programs; (11) length of time served before release; (12) the effectiveness of the criminal justice system; and, (13) the immediate environment in which an individual finds her or himself.

FOOTNOTE

1. Apparently insiders perceive a similar tendency: "With the rise of the sociological view, there was a corresponding decline in testability, especially with reference to the characteristics of the offender, and there followed a lengthy period of theoretical development virtually independent of research" (Hirschi and Rudisill, 1976, p.14).

REFERENCES

- American Psychiatric Association, Task Force on Clinical Aspects of the Violent Individual. Task Force Report 8 (July, 1974).
- Becker, G. "Crime and Punishment: An Economic Approach", Journal of Political Economy, Vol. 76, (March/April, 1968), 169-217.
- Blumstein, A., J. Cohen, and D. Nagin (eds.). Deterrence and Incapacitation: Estimating the Effects of Criminal Sanctions on Crime Rates. Washington, D.C.: National Academy of Sciences, 1978.
- Ehrlich, I. "The Deterrent Effect of Capital Punishment: A Question of Life and Death", American Economic Review, vol. 65 (June, 1975), 397-417.
- Ehrlich, I. "The Economic Approach to Crime: A Preliminary Assessment", in S.L. Messinger and E. Bittner (eds.). Criminology Review Yearbook, vol. 1. Beverly Hills, Ca.: Sage Publications, 1979.
- Empey, L. American Delinquency: Its Meaning and Construction. Homewood, Ill: Dorsey, 1978.
- Empey, L. "Constructing Crime: Evolution and Implications of Sociological Theories," in Panel on Research on Rehabilitative Techniques. Report II. Washington, D.C.: National Academy of Sciences, 1980, forthcoming.
- Gillespie, R.W. Economic Factors in Crime and Delinquency, final report submitted to the National Institute for Law Enforcement and Criminal Justice, 1975.
- Heineke, J.M. "Economic Models of Criminal Behavior: An Overview", in J.M. Heineke (ed.). Economic Models of Criminal Behavior. Amsterdam: North-Holland, 1978.
- Hirschi, T. and D. Rudisill. "The Great American Search: Causes of Crime 1876-1976", Annals of the American Academy of Political and Social Science, vol. 423 (January, 1976), 14-22.
- Kornhauser, R. R. "Underlying Assumptions of Basic Models of Delinquency", in S. L. Messinger and E. Bittner (eds.). Criminology Review Yearbook, vol. 1. Beverly Hills, Ca.: Sage Publications, 1979, pp. 638-667.
- Mednick, S.A. and K.O. Christiansen. Biosocial Bases of Criminal Behavior. New York: Gardner Press, 1977.
- Mednick, S.A. "Biosocial Bases of Morality Learning", in Panel on Research on Rehabilitative Techniques. Report II. Washington, D.C.: National Academy of Sciences, 1980, forthcoming.

- Monahan, J. "The Prediction of Violent Criminal Behavior: A Methodological Critique and Prospectus", in A. Blumstein, J. Cohen and D. Nagin (eds.). Deterrence and Incapacitation: Estimating the Effects of Criminal Sanctions on Crime Rates. Washington, D.C.: National Academy of Sciences, 1978, 244-269.
- Monahan, J. The Clinical Prediction of Violent Behavior. Washington, D.C.: U.S. Government Printing Office, 1980a, forthcoming.
- Monahan, J. "Psychological Approaches to Criminal Behavior" in S. Messinger and E. Bittner (eds.). Criminology Review Yearbook. Beverly Hills, Ca.: Sage Publications, 1980b, forthcoming.
- Panel on Research on Rehabilitative Techniques. Report II. Washington, D.C.: National Academy of Sciences, 1980, forthcoming.
- Rennie, Y. The Search for Criminal Man. Lexington, Mass.: Lexington Books, 1978.
- Schrag, C. Crime and Justice: American Style. Rockville, Md.: National Institute of Mental Health, 1971.
- Service, P. The Recidivism of Persons Released from Facilities of the North Carolina Department of Correction during January-July, 1968. Raleigh, N.C.: North Carolina Department of Correction, 1972.
- Sykes, G. M. Criminology. New York: Harcourt Brace Jovanovich, Inc., 1978.

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