

Do we need theory for offender risk assessment?

by **James Bonta**¹

Policy Branch, Solicitor General Canada

The Correctional Service of Canada, like correctional systems around the world, depends on the reliable assessment of offender risk to make classification decisions. Decisions regarding institutional placement, releases and supervision levels are driven by assessments of whether offenders will be problematic in an institution, return from a pass or commit a new offence while under supervision. Some offenders are at a higher risk than others to behave in a certain way, and differentiating offenders along a risk continuum is fundamental to good correctional practice.

Over the years, researchers have been striving to improve the accuracy of risk prediction. It is now widely accepted that objective risk assessments perform better than subjective, non-structured assessments which rely on “professional judgement.” Although objective risk instruments are not perfect, their accuracy has improved over the last 20 years. Many of these devices involve the systematic collection of a standard set of information about the offender, assigning numerical values to the information and then evaluating whether the information is predictive of criminal behaviour.

This article discusses how the information used in risk instruments is chosen and the importance of this information being based in sound theory. The article concludes that a general personality and social psychological theory is very useful in the assessment and classification of offenders.

Dustbowl empiricism

One approach to constructing an offender risk scale makes minimal use of theory. It is referred to as “dustbowl empiricism.” In this approach, items for a scale are selected for no reason other than that the items demonstrate a relationship to criminal behaviour.

Take for example, the early research of Ernest Burgess.² He studied the records of over 3,000 men paroled from an Illinois penitentiary. From the records, he coded 21 “facts” (such as nature of the offence, length of sentence, age) and then evaluated whether or not the presence of a “fact” was associated with parole outcome. The facts selected were not derived from any theory of criminal behaviour. All that was required was that the variables predicted parole outcome. There was no attempt to explain, for example, why a factor such as type of offence would be related to parole outcome.

This atheoretical approach to risk scale development has served corrections well. There are a number of such scales that do reasonably well at predicting future criminal behaviour or recidivism. One example is the Statistical Information on Recidivism (SIR) Scale. Fifteen items comprise the SIR Scale, and these items (such as age, marital status, escape history) were chosen because they predicted recidivism among Canadian penitentiary inmates. At least with male offenders, scores on the SIR Scale predict both general and violent recidivism.³

Although the atheoretical actuarial risk scales have performed reasonably well, they can be improved by making better use of theory. At present, the atheoretical scales seem to have approached their limits in the prediction of recidivism. Risk scales like the SIR show correlation coefficient values (r) values around .30.⁴

There is another disadvantage to relying on atheoretical risk scales. Typically, items in these scales are static in nature. For example, age of first conviction and escape history will never change. Static factors may predict recidivism, but they provide no information on what needs to be changed to reduce offender risk. Information on dynamic, or changeable, risk factors are needed in our assessment instruments. But, where do we find help in selecting dynamic risk factors? The answer lies in theory.

Sociological and clinical theory

There are many different theories or explanations of criminal behaviour. Most theories can be grouped into three general perspectives of crime: some theories have a sociological perspective of crime, some a clinical perspective, still other theories follow a social learning approach. The first two perspectives have important things to say about the risk factors for criminal behaviour, but they also do not tell the whole story.

Sociological theories tend to view social-political-economic factors at the root of crime. Social inequities and biases, poor economic conditions and political oppression produce criminal behaviour. If we take these theories further, we can generate items to include in an offender risk scale. Examples of items may be social class and income.

Clinical theories place the causes for criminal conduct within the individual rather than with broad societal factors. People commit crimes because they have emotional, psychological or intellectual problems. From a clinical perspective, we may develop risk instruments that assess anxiety, self-esteem and psychotic symptoms. Although sociological perspectives suggest dynamic risk factors (such as income level, employment status), the emphasis is on factors which are very difficult to change (such as class inequalities). Clinical theories focus more on dynamic factors and less on static variables.

A theory-based risk instrument still needs to demonstrate empirical validity. It is insufficient to be satisfied with a tool based on theory and encompassing dynamic risk factors without validating it. Just how well do the variables proposed by the sociological and clinical perspectives predict recidivism?

Gendreau, Little and Goggin⁵ conducted a meta-analytic review of the literature on the prediction of recidivism. They reviewed over 100 studies and evaluated how well the various factors predicted recidivism. The table shows some of their results along with the associated theoretical perspective. The predictor groups are ranked by the value of the correlation coefficient (r).

Two important conclusions can be drawn from these results. First, some of the risk factors forwarded by sociological (employment, education, class) and clinical (personal distress) perspectives were not the best predictors of recidivism. At best, they were moderately correlated to recidivism and only antisocial personality was a potent predictor. Second, the two best sets of predictors (antisocial supports and antisocial thinking) are not well represented in these perspectives.

Considering the evidence on risk factors, it appears that sociological and clinical theories provide limited direction in offender risk assessment. This does not mean that theory is irrelevant. There is a theoretical perspective which accommodates the data and provides direction for the improvement of offender assessment instruments.

A general personality and social psychological perspective

A general personality and social psychological theory of criminal behaviour⁶ begins with the premise that criminal behaviour is learned like any other behaviour. Further, if we are to understand why an individual engages in antisocial behaviour in a particular situation then we must consider a variety of factors. There are no simple explanations of crime (for example, "poverty causes crime" or "he is sick").

The factors leading to crime include poverty and achievement failure as well as psychological stress and intellectual handicaps. Thus, explaining criminal behaviour from a general personality and social psychological perspective does not mean that we reject sociological and clinical explanations of crime. However, there are some important features added by the general personality and social psychological perspective.

First, many variables suggested by the sociological and clinical theories are viewed as playing a minor role, and other factors are thrust to the forefront. Yes, poverty makes life extremely difficult and some may steal to escape economic hardships; however, many people who live in poverty do not steal. And yes, using illegal drugs may be a solution for some who feel overwhelmed by life's stresses but the majority of such individuals search for non-criminal solutions to personal anguish. Consider also that there are offenders who come from financially stable backgrounds and lack significant mental health problems. Obviously, a great deal more is needed to explain criminal conduct.

Andrews and Bonta⁷ identify four sets of factors (the Big Four) which play a prominent role in the general personality and social psychological theory of criminal conduct. One of these factors borrows from the clinical perspective: antisocial personality. Antisocial personality is broadly defined and describes an individual who is impulsive, self-centred, callous toward others and seeks excitement and self-gratifying pleasure. Other clinical variables (such as anxiety, self-esteem) do not play major roles.

The second of the Big Four is derived from learning theory. If people are rewarded for a certain behaviour, they will behave in that manner again. Behaviour that is repeated many times not only suggests that there are numerous rewards associated with the behaviour but also that a behavioural habit has developed. In the absence of rewards, behaviour with a lengthy history of reinforcement will continue. As often said, the best predictor of future behaviour is past behaviour.

According to the table, antisocial personality and criminal history are two of the best predictors of criminal behaviour. Antisocial personality was suggested by clinical theory, while criminal history was atheoretical ("dustbowl empiricism"). Now at least, we can give criminal history a more theoretical basis. The two other important predictors, antisocial supports and antisocial thinking, find their theoretical "home" in the general personality and social psychological theory. This theory, like all social learning theories, places emphasis on learning within social groups. A person's "significant other"

Table 1

Rank Order of Risk Factors

Risk Factor	r	Theoretical Perspective
Antisocial supports	.21	—
Antisocial thinking	.18	—
Antisocial personality	.18	Clinical
Criminal history	.16	—
Employment/education	.13	Sociological
Age/gender/race	.11	Sociological
Intelligence	.07	Clinical
Lower class	.05	Sociological
Personal distress	.05	Clinical

Source: from Gendreau et al., 1996.

may provide a model for behaviour and may reward or punish certain behaviour. An individual learns criminal behaviours from watching and imitating the antisocial behaviour of offenders and receiving their approval.

Individuals can, and do, learn ways of thinking that support antisocial behaviour. They can learn that saying "it is O.K. to steal because he is insured," will earn their friends' approval. If they describe a victim as deserving of harm, then they can hurt that individual without feeling guilty. Individuals learn these ways of thinking about others and evaluating their own behaviour through interaction with others who model and reward these sentiments. With repeated reinforcement, these cognitions and sentiments can become as habitual and easy to do as tying a shoelace.

Summary

A general personality and social psychological perspective of criminal conduct proposes that many factors are involved in the production of criminal behaviour. It is not enough to assess only one or two predictor domains. Offender risk assessments require a comprehensive assessment process. A good example is the extensive front-end assessment process of the Correctional Service of Canada. This process requires considerable time and effort to collect a diverse range of information on the offender. It is theoretically relevant.

Not all offender risk factors are created equal. Some are more important than others. Andrews and Bonta⁸ proposed four factors that may be particularly important. For purposes of offender risk assessment, the theory indicates that, at the very minimum, we should assess criminal history, antisocial supports, antisocial thinking and antisocial personality. Not only are these variables important theoretically, but the research also shows that they are empirically important. Also noteworthy is the fact that three of the Big Four (antisocial personality, antisocial support and antisocial thinking) are dynamic factors. They can therefore, serve as treatment targets for reducing offender risk.

The title of this article poses a question about the value of theory in offender risk assessment. Theory will help improve risk assessment by directing us to new areas for assessment. Theory can also give us information on what aspects of the offender and the offender's situation need to be changed to reduce the chances of further crime. In the final analysis, both the offender and the community benefit. ■

¹ Solicitor General of Canada, 340 Laurier Avenue West, Ottawa, Ontario, K1A 0P8.

² E.W. Burgess, "Factors Determining Success or Failure on Parole," in *The Working of the Indeterminate-sentence Law and the Parole System in Illinois*, A.J. Harno, E.W. Burgess and J. Landesco (eds.) (Springfield, Illinois: State Board of Parole, 1928).

³ J. Bonta, W.G. Harman, R.G. Hann and R.B. Cormier, "The Prediction of Recidivism among Federally Sentenced Offenders: A Re-validation of the SIR Scale," *Canadian Journal of Criminology*, 38 (January 1996): 61-79. See also J. Nuffield, *Parole Decision-making in Canada: Research towards Decision Guidelines* (Ottawa: Communication Division, Solicitor General of Canada, 1982).

⁴ P. Gendreau, T. Little and C. Goggin, *Predicting Adult Offender Recidivism: What Works! User Report* (Ottawa: Solicitor General of Canada, 1996). A common statistic used to measure the association between scores on a risk scale and recidivism is the correlation coefficient or r. A perfect association, which is never seen, has a value of 1.0. An r of 0 indicates no association.

⁵ P. Gendreau, T. Little and C. Goggin, *Predicting Adult Offender Recidivism*.

⁶ D.A. Andrews and J. Bonta, *The Psychology of Criminal Conduct* (Cincinnati: Anderson, 1994).

⁷ Andrews and Bonta, *The Psychology of Criminal Conduct*.

⁸ Andrews and Bonta, *The Psychology of Criminal Conduct*.