

The Prediction of Violent Behavior: Toward a Second Generation of Theory and Policy

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The "first generation" of research studies on the prediction of violent behavior found such prediction to be highly inaccurate. Many social policy changes were implemented or recommended on the basis of that research. More recently, a second generation of research and theory on violence prediction has begun to develop that emphasizes the limitations of the existing body of research, points to possible improvements in predictive technology, and evaluates public policies involving violence prediction only in the context of the feasible alternatives to those policies.

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A decade ago a national movement was afoot to revise the criteria for civil commitment away from an assessment of a "need for treatment" and toward a prediction of "dangerousness" to others or to self. So appealing to the legal mind was the libertarian logic of the dangerousness model that by the mid-1970s virtually every state had, if not entirely thrown over need for treatment in favor of dangerousness, at least grafted dangerousness on to its existing standards for commitment (1).

Also a decade ago, indeterminate prison sentences were the rule throughout much of the United States. Persons convicted of crime were sent to prison with brief minimum and lengthy maximum sentences—1 to 20 years, for example—and the decision about when within those broad constraints they were to be released was given to parole boards. These administrative agencies relied largely upon their own intuitive clinical judgments, sometimes aided by psychological and psychiatric reports, to know the moment at which rehabilitation had been achieved and the offender could be released without danger (2).

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These trends in mental health and criminal law were suddenly called in question by what might be called the "first generation" of research on the prediction of violent behavior. This research, consisting of perhaps five studies conducted in the early 1970s, seemed to show in a very dramatic way that psychiatrists and psychologists were vastly overrated as predictors of violence. Even in the best of circumstances—with lengthy multidisciplinary evaluations of persons who had already manifested their violent proclivities on several occasions—psychiatrists and psychologists seemed to be wrong at least twice as often as they were right when they predicted violence (3). Dark clouds began to form in our crystal balls.

Rarely has research been so uncritically accepted and so facilely generalized by both mental health professionals and lawyers as was this first-generation research on the prediction of violence. The careful qualifications the researchers placed on their findings and the circumscribed nature of the situations to which they might apply were forgotten in the rush to frame a bumper-sticker conclusion—"Psychiatrists and psychologists can't predict violence"—and paste it on every policy vehicle in sight. The American Civil Liberties Union (ACLU), for example, flatly stated that "it now seems beyond dispute that mental health professionals have *no* expertise in predicting future dangerous behavior either to self or others. In fact, predictions of dangerous behavior are wrong about 95 percent of the time" (4).

So it was claimed that scientific research had conclusively demonstrated that reliance upon predictions of dangerousness in involuntary commitment was, in my own unfortunate phrase, "doomed" (5). Some took such dire assessments as empirical support for the policy conclusion at which they had already arrived on other grounds, namely, that involuntary hospitalization should be abolished (6).

Others took this first-generation research as empirical support not to end commitment but to change the criteria by which it was invoked (7). In the debate between proponents of commitment standards based on dangerousness and commitment standards based on "treatability," the prediction research became a weapon in the hands of the advocates of treatment. "Whatever the appropriate criterion is for civil commitment," they could say, "we know from research that it is not dangerousness."

As influential as this first-generation research was in the mental health system, it had an even more profound impact on criminal justice. How could we send offenders to prison for indefinite periods in the belief that they would be let out when they were "safe," when in fact prison psychologists, psychiatrists, and parole boards had been shown to have little ability to distinguish the safe from the violent? Would it not be better to focus our attention backward, on the offender's moral blameworthiness in having chosen to commit a crime in the first place, rather than forward on his or her likelihood of doing it again? While many factors underlie the national move to abolish indeterminate prison sentences and, as it were, rehabilitate retribution as the guiding principle for allocating punishment, the research on the prediction of violent criminality has figured prominently among them (8).

SECOND-GENERATION THINKING

In the past several years, what might be called a second generation of thought on violence prediction has begun to evolve; it casts these policy developments in a considerably different light. This second generation of scholarship on prediction has no rallying cry. If its bottom-line conclusion were put on a bumper sticker it would read, "Little is known about how accurately violent behavior can be predicted in many circumstances, but it may be possible to predict it accurately enough to be useful in some policy decisions." It would require a large bumper to stick that on.

There are three themes to this second generation of thought. The first concerns the limits of existing knowledge. Unquestionably, a great deal can be learned from the existing research on prediction, particularly from the carefully designed studies of the sociologist Henry Steadman (9, 10). But for a topic of such fundamental importance, the existing research base is remarkably shallow. The five studies that form the core of the knowledge base (9–13) all demonstrated that clinical predictions of violent behavior among institutionalized mentally disordered people are accurate at best about one-third of the time. While several methodological criticisms can be leveled against these studies, I believe that they can withstand critical scrutiny reasonably well (3).

The most telling criticism of the existing prediction research does not concern its methods; it concerns its scope. The studies deal with only one form of prediction, clinical prediction, and with only one setting for prediction, long-term custodial institutions. Other forms of prediction, emphasizing actuarial methods, and other settings for prediction, such as short-term community settings, have been largely unexplored. Yet it is precisely these other forms of and settings for prediction that are the most promising candidates for a workable level of predictive accuracy. The absence of evidence that violence can be validly predicted in some

situations should not be construed as evidence of the absence of such validity.

The second and related theme of this new generation of thought on violence prediction involves a guarded optimism that some improvement in predictive accuracy is possible. Several recent studies, for example, provide suggestions that may contribute to at least a marginal increase in the validity of clinical prediction. Rofman and associates (14) reported significant diagnostic correlates of those who assault and threaten ("younger paranoid schizophrenics") during emergency hospitalization. Roth (15) disputed their findings. Yesavage and associates (16) found that several scales on the Brief Psychiatric Rating Scale (BPRS) were significantly related to actual inpatient violent behavior, while only one BPRS scale—hostility—distinguished between patients predicted to be violent and those predicted not to be. These data suggest that "more valid short-term assessments of dangerousness of inpatients might be made if factors in addition to manifest hostility were taken into account" including "indicators of psychosis, such as conceptual disorganization, and indicators of agitated behavior" (p. 1149).

No one thinks that the prediction of violence is on the verge of attaining a validity comparable to that of the prediction of the weather. But fewer people are now convinced of the inevitability of ACLU-type evaluations of the field, that psychiatrists and psychologists are inaccurate "about 95 percent of the time." There may indeed be a ceiling on the level of accuracy that can ever be expected of the clinical prediction of violent behavior. That ceiling, however, may be closer to 50% than to 5% among some groups of clinical interest. And a growing number of people are choosing to light small but valid research candles rather than continue to curse the empirical darkness.

Finally, the second generation of scholarship on violence prediction is much more likely than its predecessor to evaluate public policies that rely on prediction in terms of relative rather than absolute moral and political values. There is coming to be an appreciation of the wisdom of Underwood's observation that "the assessment of predictive selection must take into account the nature of the plausible alternatives to predictive selection" (17).

It is not only that the uses to which prediction is put determine its value, but more fundamentally that moral and political assessments can be reached only when one takes into account how decisions will be made that do not rely upon prediction. Take, for example, the "new medical model" of civil commitment as originally proposed by Stone (7). In this treatment-oriented procedure, "dangerous behavior is returned to the province of the criminal law. Only someone who is irrational, treatable, and *incidentally* dangerous would be confined in the mental health system" (p. 70, my emphasis).

Returning dangerous behavior to the province of the criminal law, however, is easier said than done when that behavior is committed by persons who are plainly

mentally disordered (18). For one thing, the police are very reluctant to arrest persons they perceive to be seriously mentally disordered even if they have committed or threatened all but the most severe forms of dangerous behavior. One study suggested that this is "because police officers, like citizens generally, balk when obviously sick people are denied medical care" (19, p. 293). Another study of persons presented by the police for civil commitment as "dangerous to others" found that in more than half the cases in which an arrest was a technically viable option the officers did not even consider it (20). The officers gave two reasons for their unwillingness to subject obviously disordered persons to the criminal process: "no intent or motivation to commit crime"—what might be viewed as a form of "presumptive insanity defense"—and "in need of help not incarceration" (20, p. 513).

In those jurisdictions in which changes in commitment statutes have forced police to arrest people they would have preferred to commit, the results are equally problematic: These persons tend to be quickly transferred to jail psychiatric units (21) or to be sent to mental health facilities for evaluation of competency to stand trial (22).

For those mentally disordered people who are perceived to be dangerous to others without at the same time being in need of treatment for their own benefit—an admittedly small (23) but highly visible group—abjuring dangerousness to others as one criterion for civil commitment may place the police in what they perceive to be the inhumane position of arresting the sick. If pressed, they will do so, but only in order to invoke a more legally cumbersome form of criminal commitment that may land the hapless patient in the same mental hospital to which civil commitment was denied (24). Given this scenario, it is understandable that further revisions of the "new medical model" have reintroduced dangerousness to others as a secondary or back-up criterion to complement the primary emphasis on treatability (25).

As an even more pointed example of the necessity for evaluating policies that rely upon prediction only in the context of their feasible alternatives is the national movement toward determinate criminal sentencing based on what has come to be known as "just deserts" (8). In its pure form, this model holds that the length of an offender's prison term should be based on two factors alone: the seriousness of the crime committed and the degree of the offender's moral culpability for having committed it. Predictions of what an offender is likely to do when he or she gets out of prison, the argument goes, should be of absolutely no relevance in deciding how long to keep him or her incarcerated. On the date of sentencing an offender should know the date of release—5 years and 3 months hence, for example. Parole boards, along with their psychiatric and psychological consultants, would wither away. Indeed, in many states that have adopted determinate sentencing, they have already withered away.

As an abstract theory of sentencing, the just-deserts

model has many appealing attributes. It treats offenders as moral agents responsible for their own conduct, a stance likely to win the approval of Thomas Szasz. It promotes a more rational uniformity in sentencing. Best of all, it severs in one stroke the Gordian knot that utilitarian sentencing schemes based on predictions of recidivism have never been able to untangle: What factors are legitimate to rely upon in forecasting future crime? Can one, for example, rely upon such socially sensitive but scientifically relevant factors as age and gender? The just-deserts model simply disowns the problem by not making predictions at all.

Two problems have emerged, however, that make me wonder if we have not jumped from the frying pan of prediction into the fires of retribution. For one thing, it is less clear than it should be how one goes about measuring just what deserts are just deserts. With the prediction of criminal recidivism, at least the task was clear: Parole boards, psychiatrists, and psychologists knew what they were supposed to do, even if they couldn't do it very well.

But how does one go about reliably assessing something as inherently subjective as "moral culpability"? If the prediction of recidivism is a Herculean task, then the assessment of culpability is a divine one. The leading imponderable in this area is whether one should take into account the pressures of society in influencing a person to commit a crime when measuring his or her culpability for having done so. Many would argue, for example, that the victims of poverty and discrimination have less free choice to commit crime and therefore should receive a shorter sentence than their more privileged accomplices (26). The principal counterpoint to this argument is that justice, in the broadest sense of the term, requires that one consider not only the effects of sentencing upon offenders for the crime they have committed but also justice to the innocent people who will be the next victims of recidivists (27). If one defines justice in this broader way, a concern with predicting recidivism becomes an integral part of the assessment of moral culpability, not an alternative to it.

The Rorschach-like murkiness of the concept of just deserts, however, is only one of its difficulties. More directly relevant to the concerns of mental health professionals is the real possibility that, having no sooner been thrown out of sentencing and parole hearings because the law of determinate sentencing has no place for the predictions of recidivism they could offer, psychiatrists and psychologists will quickly be called back to offer assessments of factors that may mitigate moral culpability (28). Indeed, one of the principal reports that provided the impetus for determinate sentencing invites precisely this kind of mental health testimony. The Report of the Twentieth Century Fund, *Fair and Certain Punishment*, lists as a factor that can reduce an offender's determinate sentence by up to 50%: "The defendant was suffering from a mental . . . condition that significantly reduced his culpability for the offense" (29).

So it would seem that the psychiatrists and psychologists precluded by just-deserts theory from offering their opinions on offenders' future dangerousness need not fear unemployment. The same theory will effectively require that they step up their activities in offering opinions on the moral culpability of offenders for past acts. Indeed, given the vagaries of assessing culpability, juries and judges may be receptive to any reference point they can grasp, particularly one sounding of silence.

The problem, of course, is that if there is one mental health practice more controversial than the prediction of future crime, it is the assessment of culpability for past crime. It will be ironic indeed if all of the problematic predictions of future crime that just-deserts theory casts off are replaced by even more problematic psychiatric and psychological pronouncements about how much free will an offender had at his or her disposal in the unsuccessful effort to resist temptation.

It is one thing, however, to suggest that the prediction of future harm might reasonably play some limited secondary role in criminal sentencing (2) and another altogether different thing to hold, as the Supreme Court recently did in *Barefoot v Estelle* (30), that the imposition of the death penalty can rationally be made contingent upon such predictions. As Justice Blackmun, in dissent, noted, "In the present state of psychiatric knowledge, this is too much for me."

These three themes, then, characterize the second generation of research and theory on the prediction of violent behavior: We know less than we thought about the accuracy of predictions; what little we do know may be improved upon; and how useful this knowledge is depends upon what we do with it, compared with what we would do without it.

FUTURE DIRECTIONS OF RESEARCH AND POLICY

In the immediate future of scholarship in violence prediction we can expect these second-generation trends to continue. More studies concluding that psychiatrists and psychologists are relatively inaccurate clinical predictors of whether mentally disordered offenders who have been institutionalized for lengthy periods will offend once more are not needed. There are so many nails now in that coffin that I propose we declare the issue officially dead. Rather, what we need are, first, studies that vary the methods of prediction to focus on actuarial techniques, including those that incorporate clinical information in statistical tables and those that provide statistical tables to clinicians as an additional source on which to base clinical judgments; second, studies that vary the factors used in making predictive decisions to include situational items such as characteristics of the family environment, the work environment, and the peer group environment in which the individual is to function (3, 31); and, third, studies that vary the populations upon

which predictive technology is brought to bear, to include short-term predictions made in the community.

Public policies concerning the prediction of violent behavior are unlikely to change much in the near future, at least as far as the mental health system is concerned. Even under California-type dangerousness standards, the vast majority of people being involuntarily hospitalized in this country are believed to be actively or passively dangerous to themselves, not to others (23). A possible qualification to this complacent assessment is suggested by the Supreme Court's recent *Jones* decision (32), holding that individuals acquitted of crime by reason of insanity could be committed to a mental hospital as dangerous for longer than they would have spent in prison had they been found guilty. To Jones' argument that the crime of which he had been acquitted—attempting to shoplift a coat—was not indicative of dangerousness, the court replied that "crimes of theft frequently may result in violence from the efforts of the criminal to escape or the victim to protect property or the police to apprehend the fleeing criminal." Should such a Pickwickian definition be extended from insanity cases to general civil commitment, we may witness a reversal of the national trend toward increased specificity in the dangerousness criterion of commitment laws. The prediction of such "dangerous" acts as writing checks on insufficient funds (33), long thought to be a parody of statutory interpretation, may once again suffice to justify involuntary hospitalization.

One development in public policy regarding prediction that began in the mental health system some time ago is now starting to move to other areas of law. The *Tarasoff* decision (34) held psychiatrists and psychologists liable for civil damages when patients they "should have" predicted to be violent actually were violent. This vicarious liability rationale is now being applied to a wide variety of other situations in which one party is allegedly in a position to predict that another party will be violent but does nothing to prevent it or to warn others. Recent cases, for example, have considered the liability of employers for the violent acts of their employees. Did they have reason to suspect that the employee would be violent? Was the employer negligent for failing to screen all employees with psychological tests or psychiatric interviews at the time of hiring, for example, for failing to assess the "arson-prone personality" (35) in applicants for bus-boy positions in the hotel industry? Until the law is more settled in these areas, there may be something of a boom in psychiatric and psychological expert testimony on just when it is reasonable to expect non-professionals to predict violence on their own or to call for professional assistance. Recent extensions of the *Tarasoff* duty imposing liability even in the absence of an explicit threat of violence (36) may promote this development.

The real policy activity in the foreseeable future regarding dangerousness may be in the criminal justice system. The fact that the first task force commissioned

by the current administration was called the Task Force on Violent Crime (37) is indicative of the political priority being given this topic. Two things underlie the criminal justice system's heightened commitment to focus its efforts on persons believed to be dangerous. The first is the realization from several sociological research projects, most notably Wolfgang's Philadelphia cohort study (38), that the majority of crime in this country is committed by a very small group of what are coming to be called "high-rate" criminal offenders. Wolfgang, for example, found that 6% of the offenders in his study committed 54% of the crime. If we could somehow identify that 6% before they had a chance to perfect their criminal careers, it is argued, we would be well on our way to reducing the crime rate.

The second factor is an acute awareness of the limits of the resources that society wishes to expend in controlling crime. There are not enough police officers to arrest everyone who commits a crime and not enough prosecutors and judges to try them if they were arrested. And it would make little sense to prosecute every offender to the extent allowed by law, since there is surely no place in our bulging prisons to put them. Nor is there any indication that voters wish to tax themselves to provide the resources that a full enforcement policy would require.

So the option of selectively applying the force of the criminal justice system takes on political appeal. And who should be selected to be the recipients of this full-court press but those high-rate offenders designated as dangerous? Policies for concentrating police, prosecutorial, and prison resources on dangerous offenders are coming off the drawing boards and being presented to legislative committees (39, 40). It is here that behavioral scientists, including psychiatrists and psychologists, are being called upon. We are increasingly being asked to separate dangerous from nondangerous offenders.

Should these policy initiatives for selective incapacitation come to pass, I hope that our professions will have the wisdom to learn from their experience in making predictions for the purpose of civil commitment and resist the temptation to utter conclusory judgments that this man or woman "is dangerous." We should decline to launder for the legal system the social and demographic factors that anticipate future crime and decline to let judges fob off on us the moral balancing of competing claims for the offender's freedom and the predicted victims' safety. We may be of some help in assessing the probability of future violence, at least in some cases. But whether a person is dangerous "enough" to justify preventive confinement is not for us to say (41). That buck should stop at the judge's bench, not at the witness box.

CONCLUSIONS

There have been three generic attacks on psychiatrists and psychologists who offer predictions of an

individual's violent behavior (3). To the first attack—that, as an empirical matter, violent behavior is simply impossible to predict in all circumstances—the second generation of research and theory on violence prediction offers some significant qualifications. The empirical foundation for the nihilist approach is less secure than many have believed.

To the second attack—that, as a political matter, prediction violates the essential liberties of persons who are the subjects of predictive assessments—the second generation of research and theory gives the same answer the man gave when asked, "How's your wife?": "Compared to what?" The point here is that political evaluations of policies that rely upon prediction can be made only in the context of the feasible alternatives to prediction, alternatives that, experience is showing, are not the exemplars of libertarian virtue they once seemed.

What of the final attack, that predicting dangerousness destroys the essential "helping role" of the mental health professions and turns psychiatrists and psychologists from healers of psychic pain into agents of social control?

Here, it seems to me, a rethinking of prediction also counsels that the strident rhetoric which sometimes passes for rational discourse in this area be toned down. All human service professions have a social control component to them. Teachers, for example, whose role is to improve the welfare of their students, surely view themselves as transmitters of knowledge and culture. Yet they frequently function as disciplinarians whose tasks include expelling those whose conduct is detrimental to the learning of others and acting as society's gatekeepers by withholding diplomas needed for jobs and further education from those who do not meet socially defined standards of academic performance. It is as the agents of society, not for the welfare of the individual pupil, that teachers perform these functions.

Likewise, and more to the point, nonpsychiatric physicians perform a variety of social control functions with little adverse effect on their primary help-giving role. They can initiate the involuntary detention of persons who through no fault of their own carry contagious diseases. In many states they are bound to report to the police whenever they suspect child abuse.

While one would hope that the community protection role of mental health professionals would be minimal relative to their helping functions (as it is with teachers and nonpsychiatric physicians), it does not seem to me to be unreasonable of society to ask that a limited social control function remain.

When some social scientists use the term social control, they do so with a sneer. The image evoked is that of culturally or ideologically different people being punished when they deviate from middle-class norms. The government's real goal in controlling its citizens, according to the more colorful proponents of this perspective, is to turn everybody into clones of Donny and Marie Osmond.

But we are not talking in this context of psychiatry and psychology being manipulated to play an improper role in controlling more or less harmless deviations from social norms. We are talking of murder, rape, robbery, assault, and other forms of violent behavior. There is a widespread social consensus which transcends political, racial, and economic groupings that such activities tear at the already frayed social bonds holding society together. It seems to me that when we lend professional assistance, however marginal, to improve society's control of those who will murder, rape, rob, and assault—provided that we do not let the nature of that assistance be overstated or distorted—we have nothing for which to apologize.

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