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This morning, I'd like to talk about a worrisome practice that I believe is becoming increasingly common in prosecutions of serious juvenile offenders: the characterization of the juvenile offender as a "psychopath," a "budding psychopath," or an individual with "psychopathic tendencies."¹ I do not have hard data to validate my suspicion that this practice has in fact become more common in recent years,² but my work on adolescent development and juvenile justice brings me into regular contact with prosecutors, defense attorneys, and judges, and the frequency with which I am asked questions about psychopathy and its diagnosis among juveniles has undoubtedly increased. Whether this reflects a genuine trend may depend as much on one's definition of psychopathy as it does on one's definition of what constitutes a trend. As some of you know, to a social scientist, one case constitutes an anecdote; two cases, data; three, a pattern; and four, a trend. At least four practitioners have asked me about this issue in the past year, so we may be talking about a trend.

Regardless of whether labeling some youngsters as true or incipient psychopaths affects 4, 40, or 4,000 juveniles a year, there is, nevertheless, good reason to worry about the practice, and there are many reasons to sound a note of caution within the juvenile and criminal justice systems about the potential overuse of psychopathy as a diagnostic label when applied to juveniles. Juveniles who are branded as psychopaths are more likely to be viewed as incorrigible, less likely to receive rehabilitative dispositions, and, if it is an option, more likely to be transferred to the criminal justice system to be tried as adults and face the possibility of adult sanctions, including incarceration in adult jails and prisons. We are not sure if the construct of psychopathy makes sense when applied to adolescents and children, we are not sure that measures of psychopathy are stable over the course of adolescence or between adolescence and adulthood, and we have no data on the predictive utility of the diagnosis when applied to juveniles. We are not ready—if indeed we ever will be-to base transfer or other dispositional decisions on diagnoses of psychopathy among juveniles.

Understanding Psychopathy

Let me begin with a brief introduction to the construct of psychopathy and its uses and misuses in clinical and forensic practice.

First, I want to distinguish between two similar words with different meanings for those who do not have a background in psychology or psychiatry. "Psychopathology" refers to any sort of psychological disorder that causes distress either for the individual or for those in the individual's life. Depression, schizophrenia, attention deficit hyperactivity disorder, alcohol dependency, conduct disorder, and bulimia are all forms of psychopathology. Most researchers use the term "psychopathology" loosely to refer to a continuum of problems that range from mild discomfort to full-blown psychosis. Psychopathology can be ascertained through the administration of standardized tests or questionnaires or through some form of diagnostic clinical interview. "Psychopathy," in contrast, refers to a very specific and distinctive type of psychopathology. Psychopathy is a type of personality disorder defined chiefly by a combination of antisocial behavior, callousness, and emotional detachment. As one set of writers recently noted—

Psychopaths are typically charismatic individuals who readily manipulate others and engage in risky behaviors designed to satisfy their own personal needs. They are undeterred by pangs of conscience and have little or no concern for the welfare of others. Their relationships tend to be shallow and they often meander from one opportunistic setting to another without much concern for the future.³

Although psychopathy is often treated as a unidimensional construct, current thinking indicates that what we call psychopathy is actually composed of two related, but independent, components. Factor I reflects a cluster of affective and interpersonal features best described as callous emotional detachment (e.g., glibness, egocentricity, superficial charm, and shallow affect), whereas Factor II represents the chronic unstable and antisocial lifestyle (e.g., irresponsibility, impulsivity, criminality, and proneness to boredom) associated with psychopathic individuals. The fact that psychopathy is defined by two factors—one having to do with emotional detachment and the other having to do with antisocial behavior—is very important in understanding why it may or may not be useful in predicting future dangerousness among juveniles.

As it is presently defined, psychopathy is very similar to what psychologists call a personality disorder—indeed, although it is not listed in the *Diagnostic and Statistical Manual–IV* (DSM) as a personality disorder, it has many characteristics in common with antisocial personality disorder, and some have argued that psychopathy should be viewed as a subtype of antisocial personality disorder.⁴ Personality disorders are unlike other forms of psychopathology, which are viewed as potentially treatable (or at least manageable) conditions.

In contrast to such disorders as depression or conduct disorder, psychopathy is presumed to represent a pattern of personality and behavior that is deep seated, originating in early experience and/or biological functioning, relatively stable over time, and resistant, if not absolutely immutable, to change.

Psychopathy is generally assessed via structured interviews. In studies of adults, the gold standard from which most other measures derive is the revised version of the Psychopathy Checklist or PCL, which was developed by Robert Hare, the North American authority on psychopathy and its assessment. A slightly revised version of this measure, the PCL Youth Version, is now available for use with adolescents. The PCL is based on a series of ratings a trained expert makes on the basis of the individual's interview responses and information taken from the respondent's file or official records. The ratings are made on 20 different dimensions (see exhibit 1). The rater assigns a score of 0, 1, or 2 for each of these 20 dimensions. The field generally uses a cutoff score of 30 to designate an individual as a psychopath.

Before turning to questions about the appropriateness of using the psychopathy diagnosis for making dispositional decisions about juvenile offenders, a few words are in order about the use of this construct in making judgments about adults. First, there seems to be little disagreement about the utility of the construct "psychopath" in describing certain adult criminals. There is a substantial literature suggesting that criminals who score high on the PCL can be distinguished from their nonpsychopathic counterparts in theoretically meaningful ways on other personality measures and on measures of information processing and decisionmaking. Studies of neuropsychological functioning suggest that at least some portion of individuals who score high on the PCL may be "wired" in a way that could conceivably contribute to their criminality. Second, there is near consensus that the PCL is a valid and reliable way with which to measure psychopathy among adults, although several writers have suggested that there is room for improvement⁵ and others have argued that there are three, not two, underlying factors.⁶ Reliability here refers to agreement between raters who are assessing the same individual. Estimates of the reliability of PCL scores over time are more difficult to calculate, because at least some of the score an individual receives is based on facts that are in the individual's record. Because these facts do not change, certain

Exhibit 1: Items From the PCL-R (Youth Version)

Glibness/superficial charm Grandiose sense of self-worth Pathological lying Conning/manipulative Lack of remorse or guilt Shallow affect Callous/lack of empathy Failure to accept responsibility for actions Impersonal sexual behavior Need for stimulation/ proneness to boredom Parasitic lifestyle Poor anger control Early behavior problems Lack of goals Impulsivity Irresponsibility Juvenile delinquency Serious violation of conditional release Criminal versatility Unstable interpersonal relationships elements of the individual's PCL score remain fixed and therefore artificially inflate estimates of the reliability of the measure over time. Nonetheless, by conventional social scientific standards, the PCL is a more than acceptable psychological assessment tool.

Third, and most important, the PCL is unrivaled in its ability to predict future antisocial behavior; it is especially good at predicting future violence. For example, a recent meta-analysis of findings from several large-scale followup studies reported modest but significant correlations between scores on the PCL and general recidivism, violent recidivism, and sexual recidivism.⁷ Psychopathic individuals (i.e., those obtaining PCL scores of 30 or more) were approximately four times as likely to commit a future violent crime than were nonpsychopathic offenders. Moreover, the PCL "has been found in many studies to perform as well as (and in some cases better than) statistically derived actuarial measures designed specifically to predict future violence."⁸ In the MacArthur Violence Risk Assessment Project, the PCL was the single best predictor of future violence out of a set of 134 predictors.⁹ This does not mean that the PCL is fantastically accurate in predicting future criminal behavior, only that the PCL does a better job than other instruments designed for the same purpose.

Whether this level of accuracy is acceptable for making decisions about an individual is a more complicated matter, and one that, as experts in risk assessment like John Monahan¹⁰ have pointed out, is best determined by legal practitioners, not social scientists. One factor that must weigh heavily in any decision regarding the use of an imperfect risk assessment instrument is whether the consequences of a false positive classification—that is, the classification of an individual as high risk when he in fact is not—carry unintended harmful effects. If, for example, the outcome of being classified as

a psychopathic individual is long-term incarceration, it would not be advisable to accept a high false-positive rate. If, on the other hand, a classification of this sort is used simply to hold an individual for a few days pending further evaluation, the same false-positive rate may be acceptable in light of the potential benefits to community safety derived from identifying the small number of genuinely dangerous individuals. My concern is that assessments of juvenile psychopathy are not being used to recommend further evaluation but are instead forming the basis for definitive dispositional decisionmaking. The fact that assessments of juvenile psychopathy are being used to make decisions about the transfer of young offenders into the adult system decisions that necessarily imply judgments about the likelihood of individual rehabilitation and that effectively determine whether any attempt will be made to rehabilitate the young offender—makes any false-positive problem especially worrisome.

In sum then, at least when speaking about adults, we can say the following:

- It makes sense to characterize some criminals as psychopaths.
- It is possible to do so using the PCL.
- Knowing whether an individual scores high on the PCL is useful information to have when trying to predict an individual's risk for future criminality or violence.

It is against this backdrop that I want to consider the use of the PCL and other instruments designed to assess psychopathy to make decisions about juvenile offenders.

Juvenile Psychopathy Assessment in Historical Perspective

Psychopathy has become in recent years an attractive notion to those interested in serious juvenile offenders. It is instructive to examine the current interest in the juvenile psychopath in historical perspective because there are striking parallels between today's situation and that which existed in the early decades of the 20th century during the beginning years of the juvenile justice system. Historian Michael Willrich has written a marvelous description of what he calls "eugenic jurisprudence" in the early part of the 20th century,¹¹ and it is fascinating to read this while pondering the juvenile psychopathy question before us today.

It is the alignment of four factors today, as was the case 80 years ago, that is driving the contemporary search for the nascent Hannibal Lecter. These four factors are: (1) a problem; (2) a crisis; (3) a theory; and (4) a diagnostic tool.

The Problem

One of the most difficult problems facing practitioners in the juvenile justice system today is differentiating between serious offenders who are at risk of reoffending and those who are not. This is an especially important challenge to those making transfer recommendations, both because we want to protect the community from individuals who have a high risk of reoffending (especially if the risk is for violent reoffending) and because we do not want to expose relatively low-risk young people to the likely iatrogenic effects of adult sanctions. If it were possible to differentiate between juveniles who are at high risk of reoffending and juveniles who are not, we could, in theory, make far better decisions regarding transfer to the adult system, the decertification of juveniles charged as adults, and so forth.

The problem facing legal practitioners in the early 20th century was much the same: how to draw meaningful distinctions among offenders who had

committed similar offenses. As Harvard Law School professor Roscoe Pound noted early in the 20th century, "Criminals must be classified as well as crimes."¹² In 1909, the first court-affiliated psychiatric clinic was founded in Chicago, attached to the Nation's first juvenile court, and designed to "assist judges in devising a disposition or 'treatment' appropriate for each offender and to conduct policy-shaping clinical research into the 'root causes' of crime."¹³ Coincidentally, and ironically in light of today's discussion, the clinic was named the Psychopathic Institute; a sister clinic, the Psychopathic Laboratory, served the municipal court. As the chief justice of the municipal court explained—

[T]he idea [of the Psychopathic Laboratory] marks a turning point from the traditional policy of society of treating the delinquents as a single large class ... without consideration of the various individual characteristics which distinguish them, and are now seen to divide them into a number of sharply differentiated classes, each with its separate proclivities, potentialities, and prognostic characteristics.¹⁴

The Crisis

Each problem noted above was made more pressing by either a crisis or the public's perception of one. Today's sense of urgency over the need to determine which offenders are genuine psychopaths has its origins in the now infamously wrong prediction about the coming wave of superpredators made by prognosticators like John DiIulio.¹⁵ DiIulio has now softened his views on the inevitability of an epidemic of juvenile violence, but the legacy of the superpredator lives on today in the label of the psychopath.

If DiIulio had a counterpart in the early days of the juvenile court, it may well have been Harry Olson, the chief justice of Chicago's municipal court. Olson's speeches about the growing "menace of the feeble-minded"—a term

that was used to refer not only to the mentally retarded, but to individuals characterized by any number of mental deficiencies—sparked the same sort of panic and ill-informed changes in policy and practice as DiIulio's incendiary op-eds about superpredators¹⁶ would do some 75 years later. Indeed, as Willrich points out, "by the mid-teens, the discourse about 'the menace of the feeble-minded' had spilled over from the welfare circles and professional journals into popular culture"¹⁷ in much the same way that the inside-the-Beltway musings of DiIulio and other conservative pundits eventually found their way into *Time* magazine and onto the evening news.

There are parallels in practice between then and now as well. Just as today's prosecutors propose to use the diagnosis of psychopathy as grounds for the transfer of juveniles into the adult system, their forefathers advocated using feeblemindedness as grounds for commitment. In neither time period do practitioners pay much attention to the problem of false positives.

The Theory

Although warnings about the wave of superpredators in the 1990s and the epidemic of feeblemindedness in the 1920s were based more on rhetoric than reality, more on politics than precise evidence, the translation of rhetoric into policy and practice necessitated two other ingredients: a salable theory about the origins of the condition and an available diagnostic test to distinguish those who had the condition from those who did not.

Interestingly enough, during both eras the theoretical perspective that carried the most weight emphasized the organic bases of criminal behavior. During the early part of the 20th century, the work of the neurologist William James Hickson, whom Judge Olson recruited to direct the municipal court's Psychopathic Laboratory, was especially influential, at least in Chicago, and as juvenile justice practice went in Chicago at the turn of the century, so it went in the Nation. Hickson, who had studied in Europe with Emil Kraepelin and Eugen Bleuler, two of the most influential thinkers in the history of psychiatry, and in the United States with Herbert Goddard, who popularized the use of the Binet-Simon intelligence test in this country, created "a fascinating synthesis of organic psychiatry and eugenic criminology."¹⁸ Hickson believed that the central cause of criminality was not low intelligence (the conventional definition of feeblemindedness and at the time one of the presumed causes of criminal behavior) but an "affective defect" characterized by apathy, lack of remorse, and impulsivity, not unlike notions of "moral insanity" that had been popularized during the mid-19th century,¹⁹ and remarkably similar to the callous emotional detachment that defines one of the core components of psychopathy as it is assessed by the PCL. Hickson believed that this affective defect was inherited in the form of "dementia praecox," a catchall diagnosis for serious mental disorder popularized by Kraepelin. Hickson also believed that it was possible to pinpoint the anatomical site of the defect: the lower brain.

Although little is written today about the genetic basis of psychopathy, there is no shortage of references in current writing about antisocial behavior, or about psychopathy in particular, to the possible organic bases for the disorder. The notion that a subset of chronic offenders is biologically different from other offenders is central to the dominant theories of the development of antisocial behavior today, such as that put forth by Terrie Moffitt,²⁰ whose widely cited model of juvenile offending distinguishes adolescent-onset criminality (which presumably is environmental in origin) from life coursepersistent criminality (which, in addition to its earlier onset and later offset, is presumed to have a strong biological basis). The notion is also prominent in the works of leading writers on the subject of psychopathy, including Joseph Newman,²¹ Paul Frick,²² Adrian Raine,²³ and, of course, Robert Hare.²⁴ Psychopathy has been attributed in recent years to low serotonin levels, low autonomic reactivity, unusual patterns of physiological arousal, and prefrontal cortical dysfunction. It has become increasingly common at professional meetings to see "pictures" of criminal brains; whether this is genuinely informative or simply high-tech phrenology remains a matter of some controversy.

What's important, though, is that at both the beginning and the end of the 20th century, a theory or set of theories suggested that there exists a subpopulation of serious offenders whose criminality is caused by an affective defect, based in an organic brain deficit, and deserving of special treatment within the justice system. In each historical period, the scientific legitimacy of the theory provided a foundation on which a change in practice and, by extension, policy was fashioned.

The Diagnostic Tool

The confluence of a problem, a crisis, and a theory about serious offenders might influence debate, but to influence day-to-day practice it is necessary to not only lead practitioners to the water but provide them with the cup from which to drink it. Nothing succeeds in this task so well as a test. Indeed, as Thomas Grisso, a member of our MacArthur Network and expert on the forensic assessment of juveniles, has argued, we typically think of practice as being driven by policy, but in many instances, the reverse is true. As new assessment tools become widespread, changes in practice made possible by the introduction of new measures or assessment instruments often lead over time to changes in policy.

In the 1920s, the search to identify criminals with the affective defect of dementia praecox was greatly facilitated by the availability of the Binet-Simon intelligence test, whose use had become increasingly widespread in the years following World War I. One would not think an IQ test would be very helpful in the search for affectively defective individuals, but in this case, necessity was the mother of misuse. Hickson, eager to please the judge who had appointed him (a judge who firmly believed that the menace of

feeblemindedness was epidemic), to build his own reputation as a theorist and diagnostician, and to promote the Psychopathic Laboratory, began using the Binet, which had been designed solely to measure certain aspects of intelligence for purposes of identifying children who needed special educational programs, as a means of identifying individuals with the affective defect presumed to underlie intractable criminality. On the basis of individuals' scores on one subtest of the Binet—a visual memory test—Hickson and his colleagues made diagnoses and recommendations to judges that were used to justify the incarceration of certain offenders. These psychiatric workups were especially important in cases involving juveniles and females because it was in these cases that the courts were most interested in assessing the amenability of the offender to rehabilitative intervention, which was precisely what Hickson believed he could assess.²⁵

All of the elements that led to interest in the diagnosis of dementia praecox among juvenile offenders in the early decades of the 20th century-the problem of prediction, the perceived crisis of epidemic feeblemindedness among inner-city youth, and the theory of organically based criminality were present in a more contemporary form at the end of the 20th century. And just as the existence of a diagnostic tool (in the 1920s, the Binet-Simon test of intelligence) concretized these elements into a practice that influenced legal decisionmaking early in the 20th century, the growing and, in some senses, well-founded popularity of the PCL as a diagnostic instrument in assessments of adults more recently has made the use of versions of the PCL (or adaptations of it designed for the assessment of juveniles) all but inevitable in the evaluation of juvenile offenders. Whether the use of these youth-friendly PCL instruments-now, there's an oxymoron if there ever was one-for purposes of making transfer decisions today is as problematic as was the use of the Binet-Simon intelligence test for making commitment decisions 80 years ago is the topic I turn to next.

The Utility of Juvenile Psychopathy Assessment

Using a measure based on a well-validated and reliable instrument designed to assess psychopathy among adult offenders to perform a similar task among juveniles is not the same sort of problem as using a test of visual memory to diagnose intractable criminality. I am not suggesting that researchers and practitioners who are using currently available measures of psychopathy with juvenile populations are committing the same sort of egregious mistakes that Hickson was making by using the Binet to make diagnoses of affective defect.

However, the translation of an instrument from one appropriate for use with one age group to one appropriate for use with another is far from worry free. The fact that a problem, a perceived crisis, and a theory about juvenile offending encourage us to grab onto an available diagnostic instrument should not make us ignore some very real dangers in doing so. Until certain fundamental questions about the use of the PCL and instruments derived from it are answered through systematic scientific research, practitioners should not be using such measures in forensic practice. Nonetheless, there is evidence that practitioners are using PCL-derived instruments for making transfer, sentencing, and decertification decisions, despite the cautions (some of them transparently half-hearted) raised by some of the researchers who are heavily invested in the use of these measures.

In my view, there are three questions that we must answer before encouraging courts to consider assessments of juvenile psychopathy in making sentencing, transfer, and decertification decisions:

1. Do measures of psychopathy mean the same thing when used in adolescent populations as they do when used in adult populations? This is the question of construct validity.

- 2. Are scores on measures of psychopathy derived during adolescence correlated with scores on measures of psychopathy derived during adult-hood? This is the question of stability.
- 3. Do scores on measures of psychopathy derived during adolescence predict antisocial behavior and violence during adulthood? This is the question of predictive utility.

Research by Elizabeth Cauffman and Jennifer Skeem is about to be launched to examine these questions. When or until this work is completed, if the answer to any of these questions is "We don't know," the use of psychopathy assessments to make important decisions about juvenile offenders is premature. If the answer to any of these questions is "No," the use of psychopathy assessments to make important decisions about juvenile offenders is bad perhaps even unethical—practice.

To look at these questions of construct validity, stability, and predictive utility more closely, first consider the conceptualization and measurement of psychopathy among adults. As noted earlier, the construct of psychopathy is predicated on the notion that psychopathic individuals have a deep-seated, unchanging pattern of personality and behavior that has its roots in early experience and/or biology. The pattern is characterized by two broad factors: callous, emotional detachment, which includes such traits as grandiosity, manipulativeness, shallow affect, and failure to accept responsibility for one's own actions; and an unstable antisocial lifestyle, which includes such traits as impulsivity, irresponsibility, delinquency, and proneness to boredom. Callous, antisocial individuals are presumed to be at higher risk for continued antisocial behavior and violence.

Construct Validity

Let me begin with the question of construct validity. Do the indicators of psychopathy when assessed in adolescence mean the same thing as they do when assessed in adulthood? A different way of asking this is to ask whether the correlates of psychopathy are the same during different developmental periods.

We know that it is not always the case that traits assessed at one point in development have the same meaning as they do at a different point in development. Consider, for example, an individual who refuses to cooperate with other people. During early childhood, this may indicate healthy independence; during adulthood, this may indicate selfishness or antisocial behavior. Or consider this: Imagine that we separate a mother from her child for 10 minutes and then we reunite them. Clinging behavior in a young child indicates a strong and healthy attachment, which is correlated with a variety of measures of positive functioning; the same clinging behavior in an older child may indicate insecurity and would likely be correlated with indicators of emotional and behavioral problems.

One worry I have about the assessment of psychopathy among adolescents is that many behaviors we associate with normal adolescent development are the same behaviors we associate with psychopathy in adults. To be sure, some of the items used to judge psychopathy likely apply to younger as well as older offenders. These include pathological lying, manipulativeness, shallow affect, and poor anger control. For the most part, I think that these constructs mean similar things when observed in an adolescent as they do when observed in an adult. (The appropriateness of these items in assessments of preadolescent children, where they may in fact be problematic, is not addressed here.) But many items that are central to the definition of psychopathy among adults may erroneously be viewed as indicators of psychopathy in an adolescent population and confused with normative adolescent development. These items include grandiosity, proneness to boredom, lack of remorse or guilt, impersonal sexual behavior, goallessness, impulsivity, irresponsibility, failure to accept responsibility for one's actions, and unstable interpersonal relationships. I say this both as the parent of a nonpsychopathic 16-year-old and the coinvestigator of a longitudinal study that tracks serious juvenile offenders over time. Because my son does not permit me to discuss our personal life in public (owing to the fact that he is glib, grandiose, egocentric, and impulsive), I will comment only on our experiences in the research.

The MacArthur Foundation Research Network on Adolescent Development and Juvenile Justice, which I direct, is conducting a number of studies aimed at understanding the ways in which information about normal and atypical adolescent development can improve the quality of decisionmaking concerning young offenders in the juvenile and criminal justice systems. Among these projects is a large-scale study of adolescents' competence to stand trial, a comparison of the impact of juvenile versus adult sanctions on serious offenders, several studies of the ways in which adults judge adolescents' criminal culpability and blameworthiness, research on legal socialization (how young people acquire attitudes about the law), and a longitudinal study of "pathways to desistance." (More information about the Network and its projects is available on our Web site, www.mac-adoldev-juvjustice.org.)

In our study of pathways to desistance, we are tracking 1,200 juvenile felons in Philadelphia and Phoenix to understand how they are affected by their experiences in the juvenile and criminal justice systems. Among the measures of individual functioning we use in this study is the Youth Version of the Psychopathy Checklist (PCL–YV), which is considered the state of the art in the assessment of psychopathy among adolescents. At our site in Philadelphia,

we struggle often over how to interpret the behavior of the 14- to 17-year-olds in our sample in light of the items that compose the PCL–YV. Does a 14-year-old who blames his friends for dragging him into a robbery qualify for a rating of failing to accept responsibility for his actions, or is he accurately describing a heightened susceptibility to peer pressure that is characteristic of teenagers at this age? Is a 15-year-old who does not know what he wants to do with his life goalless, or is this indicative of an individual in the midst of an adolescent identity crisis? Is a 16-year-old who has a new girlfriend every other week someone who has unstable interpersonal relationships, or is he merely trying to figure out who he is and what he wants in a romantic partner? Is a 17-yearold who believes that he can drive while high grandiose or suffering from adolescent egocentrism?

Even Cleckley, whose groundbreaking description of the psychopathic personality formed the basis for the PCL worried about this:

Confused manifestations of revolt or self-expression are, as everyone knows, more likely to produce unacceptable behavior during childhood and adolescence than in adult life. Sometimes persistent traits and tendencies of this sort and inadequate emotional responses indicate the picture of the psychopath early in his career. Sometimes, however, the child or the adolescent will for a while behave in a way that would seem scarcely possible to anyone but the true psychopath and later change, becoming a normal and useful member of society. Such cases put a serious responsibility on the psychiatrist.²⁶

In the same way that Moffitt²⁷ argues that we cannot distinguish between adolescence-limited offenders and life-course persistent offenders by observing them only during adolescence, because their observable behavior may be identical, I wonder whether we can distinguish between psychopathic and nonpsychopathic teenagers on the basis of their scores on the PCL. The problem is that some items on the PCL describe characteristics that, while potentially indicative of problems among adults, may indicate normative development (or at least development within the normative range) among adolescents—transitory characteristics that disappear in most individuals by young adulthood. However, by definition, psychopathy is not something that individuals grow out of. Which brings me to the issue of stability.

Stability

Assertions about the presence of psychopathy among the young are necessarily based on the presumption that scores on measures of psychopathy are stable over time. To my knowledge, we do not really know if this is true among adults, but the fact that we do not have data at all on the stability of PCL scores among juvenile offenders over time is particularly problematic, since adolescence is inherently a time of change. I should note that the DSM does not permit the diagnosis of antisocial personality disorder, the closest diagnosis in the psychiatric lexicon to psychopathy, among individuals under the age of 18. It is not clear why the diagnosis of antisocial personality disorder among adolescents is problematic but the diagnosis of psychopathy is not.

Furthermore, it is not simply that psychopathy is presumed to be stable over time; it is also presumed to be resistant to change. Unfortunately, the stability of traits over time is generally studied under constant contextual conditions. Assertions that aggression or impulsivity or antisocial behavior are stable traits are generally derived from longitudinal studies that do not consider whether the individual's social environment remained unchanged during the same time period. For obvious reasons, indicators of stability under constant conditions may not provide accurate estimates of stability under changing conditions. Therefore, saying something is stable under natural conditions (i.e., if nothing else changes) is not the same as saying it is immutable. To research this, we need more than studies that simply measure psychopathy at two points in time. Before we use assessments of adolescent psychopathy to draw inferences about the amenability of young offenders to rehabilitation, we need experiments that assign putative juvenile psychopaths to treatment and attempt to change them. We have some evidence that this is difficult to do in adults, but no evidence either way in adolescents.

Predictive Utility

My final worry concerns the predictive utility of the PCL in juvenile populations. The question is whether scores on the PCL that are derived during adolescence are predictive of antisocial or violent behavior in adulthood. At first glance, this appears to be the easiest of the three questions to answer, because it requires only that we assess psychopathy during adolescence and antisocial or violent behavior during adulthood and see if the first predicts the second. Indeed, at least one team of researchers has done this, and the results indicate that adolescents' scores on the PCL are predictive of the number of times they are convicted for violent offenses before age 21.²⁸ It is not quite so simple, however, to judge the predictive utility of the psychopathy assessments.

The reason for this difficulty inheres in the two-factor structure of the PCL. (Factor I refers to the emotional and interpersonal aspects of psychopathy and Factor II refers to the antisocial aspects of psychopathy.) We know from a vast literature on antisocial behavior that the single best predictor of future antisocial behavior is past antisocial behavior and that the single best predictor of future violence is past violence. At issue here, then, is whether psychopathy in adolescence per se is an especially good predictor of future antisocial or violent behavior. Demonstrating that individuals who have offended in the past are at greater risk of offending in the future is not exactly the stuff that Nobel Prizes are made of. To the extent that the predictive utility of the PCL or any other measure of psychopathy inheres solely in the well-established link between past and future antisocial behavior, we might

as well just assess past antisocial behavior and forget about trying to distinguish between psychopathic and nonpsychopathic individuals. And if this is the case, high scores on the PCL tell us nothing about individual amenability, which is the sort of inference that is being drawn from the PCL. Another way of thinking about this is to ask whether there is any "value added" to be gained by assessing the elements of psychopathy that are not indicators of current or prior antisocial behavior, such as those items that make up the factor defined by callous, emotional detachment.

Unfortunately, extant research does not provide a clear-cut answer to this question. Although the connections between current psychopathy and later offending are real, the links are due largely to the predictive significance of the antisocial factor, which demonstrates what we know all too well: that earlier offending is predictive of later offending. In samples of adults, the links between the non-antisocial variables-grandiosity, glibness, shallow affect, and so on-and subsequent offending are statistically significant but very modest in size.²⁹ Before we can recommend the use of psychopathy assessments in dispositional decisionmaking regarding juveniles—especially in dispositional decisionmaking that is based on assumptions about amenability-we need more research that looks specifically within the adolescent population at the predictive utility of those elements of psychopathy that are not themselves indicators of current antisocial behavior. Questions about the stability and predictive utility of the PCL and related measures can be answered with well-designed longitudinal studies. Although we do not have such research yet and, although such studies are time-consuming and expensive to conduct, they are clearly within the realm of scientific possibility.

In closing, I want to return to what I think is the most difficult of the three questions I raised: whether high scores on the PCL during adolescence indicate genuine psychopathy or something that is less worrisome.

Many years ago, Anna Freud, the pre-eminent psychoanalytic theorist interested in adolescence, wrote what now is considered to be a classic article, "Adolescence as a Developmental Disturbance."³⁰ Although few experts in adolescent development continue to hold the view that we should see the period as one of temporary insanity, at least some of what Freud implied in this article is worth heeding. Many behaviors that adolescents engage in are behaviors that, if demonstrated by an adult, would indeed be indicative of psychopathology, if not necessarily psychopathy. Psychopathy is, by definition, not something that individuals grow out of. Adolescence, by definition, is. It is important that we do not confuse one with the other.

Question-and-Answer Session

Jenni Gainsborough, Senior Policy Analyst, The Sentencing Project, Washington, D.C.: I actually have three quick questions about the way the PCL is being used. First of all, is the PCL being widely used to decide whether juveniles should be transferred into the adult system? Second, you talked about a youth version of it; does the youth version take into account the specific characteristics of adolescence that are problematic? And third, we know that a lot of the fear about "superpredators" was racially based, and also we know that an extraordinarily high percentage of juveniles being transferred into the adult system are African-Americans; do these tools look at racial differences in any way?

L.S.: Yes, no, and no. First, the PCL is being very widely used in Canada now. Robert Hare and his associates are Canadian and the popularity of the instrument has always been greater north of the border. It is becoming more widely used in the United States. No one has any data on this; but I receive calls regularly from public defenders asking if, in fact, this is a valid test. As to

the second question, the attributes characteristic of normal adolescent development are identical to the youth version of the PCL (exhibit 1). The translation of the adult version to the youth version simply substituted words like "relationships" for "marriage" or minimized the importance of "work" and substituted "long-term goals." It is virtually the same instrument.

The third question on race is a very important one. Some studies suggest that the instrument performs differently among African-American and white offenders in adult samples. That is to say that it is somewhat less useful in studies of African-Americans than in studies of white offenders. We do not know the answer to this question for the juvenile version. It has not been studied to my knowledge.

Devon Brown, Deputy Trustee, Office of the Corrections Trustee of the District of Columbia, Washington, D.C.: The PCL is being used here in this country. In fact, just north of our border at the Patuxent Institution, its use is widespread. But my comment has to do with Robert Hare. The strength of his instrument, when applied to adults, is also its weakness when used with juveniles. Hare argues that sociopathy is due to a developmental lag. In both his manual and his research findings, he bases that instrument on this theory—that the characteristics (as you point out) are typical of adolescent behavior. It's just that they are demonstrated within an adult population. So in terms of your presentation, you need to be aware of that.

L.S.: Thank you. Then I find it very curious that Hare is one of the coauthors of the youth version of the Psychopathy Checklist and is one of the team that is marketing it as a measure that can be used with juveniles. Either he has changed his theory or he is doing something that is inconsistent with what he has written.

Lisa Greenman, Staff Attorney, Mental Health Division, Public Defender Service, Washington, D.C.: I wanted to ask you to comment on two things

that you have mentioned during your talk. One has to do with the extraordinary nature of the marketing of these instruments. And actually the last question reminds me that in addition to the youth version there is now a Hare P-Scan version. I would like to hear more about the very aggressive marketing. My other question has to do with the significance of a very high false positive rate in the use of the PCL-R with adults, which is where it makes its strongest showing. I know some of your colleagues like Ed Mulvey have described it as the strongest in a field of weaklings. I wondered if you could expand on this subject. My first exposure to the construct of psychopathy and the use of the PCL-R for predicting future violence was in death penalty cases, where prosecutors were arguing that high PCL scores should be used by a jury to sentence an individual to death rather than to life without parole. In that context, I learned that the false positive rate (among people who were high scorers on the PCL) was, in many studies, shown to be less effective than a coin toss in predicting future violence. In some studies it was slightly more than 50 percent effective. But the false positive rate was right around 50 percent and sometimes even greater. I would like you to comment on the rate of false positives and how it affects your recommendations on how much courts should rely on this instrument in a forensic context.

L.S.: First, there are, in fact, other measures being marketed for use in identifying juvenile psychopaths, some of which their creators market as usable with people as young as 10. These are sometimes questionnaire versions of a lengthy clinical interview administered to the respondent either directly or through parents or teachers. I think that if you look into this, you would find that the individuals who are developing these measures give—as I noted in my talk—a kind of half-hearted caution that these measures should be used for research purposes only but, at the same time, urge practitioners to "send your check to this company and we will gladly send you the measure." What happens next is that the measures find their way into the hands of practitioners who may or may not read the fine print that this is a research tool and not a proven clinical instrument. They then use it to make a diagnosis; they present it in court to a judge who doesn't know, and perhaps shouldn't be expected to know, the difference between a research instrument that is still in development and a diagnostic tool that has clinical validity. I think that if the people who were developing these instruments were in the room they would argue that there is a caution on the cover of their instrument that states it is a research tool. But nevertheless, by selling it to other individuals they are leaving open a very, very wide door for prosecutors and other legal practitioners to walk through.

As to the problem of false positives, as I mentioned before, it depends on what you do when somebody scores positively. Any instrument that measures anything, even forecasting the weather, will have false positives associated with it. If the danger of a wrong forecast is that you carry your umbrella to work when you didn't need to, then that false positive is not especially problematic. If the danger of a false positive in the PCL assessment is that we are going to want to further assess this individual because we think he might be psychopathic, then I can live with a 50 percent false positive rate. If the danger of a false positive assessment is that the person gets a capital sentence, then I can't live with a 50 percent false positive rate. So, I think you can't separate questions about whether the false positive rate is high or low without asking what the consequences of a false positive assessment will be. I have argued the same point about the increasing use of Mosaic and other kinds of profiling programs to identify at-risk kids in schools because these assessments also have tremendously high false positive rates. The issue really is, what are we going to do with a kid who is rated at risk for violence? If the consequence of that assessment is suspension from school, that false positive rate is not acceptable. If the consequence is to talk to this kid a little more and learn a little more about him, then I can live with a false positive rate. So I think that the answer is: Yes, the PCL is the strongest measure in a field of "weaklings"—we are very bad at predicting violent behavior. But people need and want to make predictions and this is the best tool currently out there.

Robert Stephenson, Director, Division of Workplace Programs, Center for Substance Abuse Prevention, U.S. Department of Health and Human Services, Washington, D.C.: You had not identified substance use or abuse as any one specific measure in your discussion. Could you briefly discuss the relationship of substance use or abuse in the PCL and pyschopathy, both in a youth version and an adult perspective? And are there any specific drugs or patterns of use that might be more predictive than others?

L.S.: Drug use, in and of itself, is not an item that is used to predict psychopathy. There is an item on the list, you may recall, for juvenile delinquency (and in the adult version for past criminality) and drug use, particularly criminal drug use. I am not aware of any research that suggests that either drug use in general or the use of specific drugs is indicative of psychopathy. We do know, of course, that individuals who use and abuse drugs and alcohol are more likely to be involved in a range of antisocial activities. But to my knowledge it does not make them at heightened risk for psychopathy.

Joanne Wiggins, Program Analyst, Planning and Evaluation Service, U.S. Department of Education, Washington, D.C.: You mentioned racial differences in the use of the instrument. Can you say something about differences between males and females?

L.S.: There are very, very few females who score high on the PCL. It's not a completely male disorder, but it is not very often found among females and, to my knowledge, I don't know any studies that would allow us to really make a statement about its differential utility in males and females.

I was asked to comment on what judges ought to rely on if they can't rely on this assessment tool. I think that individualized assessments of serious juvenile offenders—assessments done by skilled, developmentally sensitive forensic and clinical evaluators—can be very useful in helping judges formulate appropriate dispositions or sentences for juvenile offenders. But there is a danger when we begin to rely on standardized instruments that may become widely used in practice by individuals who don't have a great deal of training and who simply will turn over a score to a judge and say, "This person scored a 32; therefore, he is a psychopath." I certainly believe that psychology and psychiatry should play a role in helping courts formulate sentencing and dispositional decisions; I just worry that handing out a test and using people's scores on a test that has unproven validity in this population is not wise practice.

Denise M. Juliano-Bult, Chief, Systems Research Program, Services Research and Clinical Epidemiology Branch, National Institute of Mental Health, Washington, D.C.: Could you say anything briefly about inroads to effective treatment for adolescents who do score high on the PCL?

L.S.: I don't think we know anything about it. You know there have been literally a handful of studies of kids who scored high on the PCL. To my knowledge, there has never been a study done that has looked at interventions designed for kids with high PCL scores to see how that affects their behavior. My point, today, is not to provide definitive answers about this, but to raise cautions and questions about a practice that is just beginning to burgeon, but one that I think we need to be thoughtful about.

Barbara T. Roberts, Senior Policy Analyst, Office of National Drug Control Policy, Washington, D.C.: You mentioned cautioning people against looking at a score and making certain cursory diagnostic determinations. What ethical responsibilities do you think should be imposed on people who may be in the field and still purport to make such recommendations? How do you propose to curb that?

L.S.: Well, I guess for starters, I don't think it's wise to be distributing—in fact selling—unvalidated instruments. Assessing psychopathy in juveniles may or may not turn out to be useful. I am not saying here today that I am

certain it is not useful; I am saying we simply don't know. We need the kind of longitudinal research that I discussed earlier to look at how this tracks over time, to look at what it predicts, to look at how stable it is, before we move from research into practice. The fact that it is being used in practice now indicates to me that the individuals who developed these measures are not being appropriately cautious.

Notes

- 1. I am grateful to Elizabeth Cauffman, Thomas Grisso, Daniel Seagrave, and Jennifer Skeem for graciously making available to me prepublication drafts of manuscripts on closely related topics. I draw heavily on their insightful analyses here. Thanks as well to Elizabeth Cauffman, John Monahan, and Jennifer Skeem for their comments on an earlier draft of this paper.
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