# Major Mental Disorder and Antisocial Personality Disorder: A Criminal Combination

Sheilagh Hodgins, PhD; and Gilles Côté, PhD

Much evidence now suggests that patients with major mental disorders are at increased risk for crimes and violence. Leading experts in forensic psychiatry have proposed that the illegal behaviors are a consequence of these major disorders. Yet, longitudinal studies have consistently indicated that adult criminality is preceded by a childhood history of antisocial behavior. We hypothesized that among offenders with major mental disorders there are two groups: (1) the first group has a secondary diagnosis of antisocial personality disorder (APD), and a childhood history of antisocial and criminal behavior preceding the onset of the major disorder: (2) the second group do not meet the criteria for APD, and behave criminally only as adults. This hypothesis was tested on a representative sample of penitentiary inmates with major mental disorders. It was found that those with APD had a significant childhood history of criminal activity and antisocial behavior, endorsing, on average, eight of ten possible indices. In comparison, the mentally disordered inmates without APD endorsed on average two indices. The mentally disordered offenders with APD began their criminal careers earlier, and had significantly more convictions and more convictions for nonviolent offenses than those without APD. APD was not associated with violence among men with major mental disorders.

A number of recent studies have shown that many patients suffering from major mental disorders (schizophrenia and major affective disorders) commit crimes and crimes of violence.<sup>1</sup> One investigation of an unselected birth cohort followed to age 30, demonstrated that 47 percent of men and 18 percent of women with major mental disorders were registered for crime.<sup>2</sup> A number of follow-up studies of patients discharged to the community have found that they commit more crimes and more crimes of violence than the general population.<sup>3-13</sup> Several investigations have documented elevated prevalence rates for the major mental disorders among offenders.<sup>14-18</sup> A Danish study of all homicide offenders over a 25-year period revealed that 23 percent suffered from a major mental disorder.<sup>19</sup> A Swedish study of all homicide offenders in the Northern half of the country over an 11year period found that 53 percent suffered from a major disorder.<sup>20</sup> Other

Dr. Hodgins is affiliated with the Centre de Recherche Philippe Pinel and Department of Psychology, Université de Montréal. Dr. Côté is affiliated with the Department of Psychology, Université de Québec à Trois-Rivières. Reprint requests to Dr. Sheilagh Hodgins, Centre de Recherche, Institut Philippe Pinel de Montréal, 10905 est, boul. Henri-Bourassa, Montréal (Québec) H1C 1H1.

It has been proposed that the criminality and violence of persons with major mental disorders is a consequence of their illness.<sup>1, 13, 22</sup> Yet, longitudinal studies, conducted in several different countries and cultures, have consistently revealed that adult criminality is preceded by a childhood history of antisocial behavior.<sup>23-26</sup> This developmental perspective suggest that among offenders with major mental disorders, the antisocial behavior would precede the onset of the major disorder by many years. These two competing hypotheses may both be right, each applying to a different subgroup of mentally disordered persons. Individuals with both, antisocial personality disorder (APD) and a major disorder, would be expected to be antisocial, and even criminal, long before the onset of the major disorder. Their criminality and/or violence would be associated with the personality disorder rather than the major disorder. However, among the mentally disordered with no APD, the criminality or violence may be directly related to the symptoms of the major disorder. In two of the studies of incarcerated offenders, <sup>27, 28</sup> it was found that 66.4 percent and 67.8 percent of the male inmates with major mental disorders also met DSM-III<sup>29</sup> criteria for APD.

Whereas Robins<sup>30</sup> has always argued that the presence of APD indicates a pattern of antisocial behavior beginning in childhood and remaining stable to late adulthood, the DSM-III and DSM-III-R diagnosis of APD requires the presence of only three childhood indices of antisocial behavior. We wanted to find out if the diagnosis of APD did in fact identify, among offenders with major mental disorders, those with a significant history of childhood criminal and antisocial behavior. If validated, this distinction between offenders with major disorders who begin their criminal careers before the onset of the major disorder and those whose criminality is concurrent with the major disorder could be important for predicting and preventing crime and violence. It would certainly have implications for both, the assessment and the treatment of mentally disordered offenders.

We hypothesized that among men with major mental disorders who commit crimes and/or violence there are two groups. Those with APD have a history of antisocial behavior and criminality from childhood, long before the onset of the major disorder. Whereas the diagnosis of APD requires the presence of three childhood indices of antisocial behavior, we are proposing that most mentally disordered men with APD have demonstrated a pattern of antisocial and criminal behavior in childhood. Those without APD have no childhood history of antisocial or criminal behavior. Rather, these behaviors seem to be concurrent with the major disorder. We also hypothesized that among the mentally disordered, those with APD would commit more crimes than those with only a major disorder.<sup>30-32</sup> To verify these hypotheses, we studied a representative

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sample of incarcerated offenders with major mental disorders.

## Method

A random sample of 456 male inmates of penitentiaries situated in Québec were assessed with the Diagnostic Interview Schedule (DIS).<sup>33</sup> Criminality was documented by records from the Correctional Service of Canada. Details of subject selection, instruments and procedure are provided in Hodgins and Côté.<sup>18</sup> One-hundred-seven inmates received a diagnosis of a major disorder, and 71 of them also received a diagnosis of APD.

## Results

The ten items from the DIS that are indicative of childhood behaviors are presented in Table 1. As can be observed, in nine of ten childhood behaviors there are highly significant differences between the mentally disordered offenders diagnosed with APD and the mentally disordered offenders with no APD. Of those with APD, 87 percent reported having a juvenile arrest record as compared with 28 percent of those without APD. Similarly, on the two items tapping illegal activities, the proportions of subjects with APD who endorsed the items far exceeded the proportions without APD. Of those with APD, 92 percent reported stealing and 59 percent reported vandalism, as opposed to 44 percent and eight percent of those without APD.

Although the diagnosis of APD requires the presence of only three of these childhood characteristics, most of the mentally disordered offenders with APD had many more. By according one point for each behavior present, a score of childhood antisocial behavior ranging from 0 to 10 was calculated. Those with APD received a mean score of 7.8 (SD = 2.3) while those without APD received a mean score of 2.8 (SD = 2.2) (t (105) = 10.83, p = .000).

The mentally disordered inmates with APD had a mean age of 30.3 years (SD = 7.5) at the time of the diagnostic interview, considerably younger than the mentally disordered inmates without APD who had a mean age of 36.9 years (SD = 10.8) (t (52.93) = -3.30, p =.002). Consequently, to evaluate group differences in criminality, each subject's number of convictions in adult court was divided by the number of years between his 18th birthday and the date of the diagnostic interview. Mentally disordered inmates with APD, as compared with those without, had more convictions (M = 2.28; M = .71; t (101.57) =3.29, p = .001), more convictions for nonviolent offenses (M = 1.71; M = .26; t(76.92) = 3.59, p = .001), and approximately equal numbers of convictions for violent offenses (M = .57; M = .44; t(54.53) = .51, p = .611). The mean age at first sentence to a penitentiary for those with APD was 24.7 years (SD = 5.9), and 30.4 years (SD = 9.6) for those without APD (t (49.04) = -3.31, p = .002).

# Discussion

Among incarcerated male offenders with major mental disorders, most of those with a secondary diagnosis of APD have a childhood history of antisocial

	Major Mental Disorder		
	Presence of APD (n = 71)	No APD (n = 36)	
Did you frequently get into trouble with the teacher or principal for misbehaving in school?	81.4%	14.7%	$\chi^2$ (1, N = 104) = 42.32***
Were you ever expelled or suspended from school?	70.0%	25.7%	$\chi^2$ (1, N = 105) = 18.51***
Did you ever play hooky from school at least twice in one year?	91.4%	68.6%	$\chi^2$ (1, N = 105) = 8.98*
Did you ever get into trouble at school for fighting?	54.9%	28.6%	$\chi^2$ (1, N = 106) = 6.55
Before age 18, did you ever get into trouble with the police, your par- ents, or neighbors because of fight- ing (other than for fighting at school)?	52.1%	11.1%	χ² (1, N = 107) = 16.99***
When you were a kid, did you ever run away from home overnight?	70.4%	33.3%	$\chi^2$ (1, N = 107) = 13.48 <sup>**</sup>
Of course, no one tells the truth all the time, but did you tell a lot of lies when you were a child or teen- ager?	70.4%	13.9%	$\chi^2$ (1, N = 107) = 30.56***
When you were a child, did you more than once swipe things from stores or from other children, or steal from your parents or from anyone else?	91.5%	44.4%	$\chi^2$ (1, N = 107) = 28.81***
When you were a kid, did you ever intentionally damage someone's car or do anything else to destroy or severely damage someone else's property?	59.2%	8.3%	$\chi^2$ (1, N = 107) = 25.32***
Were you ever arrested as a juvenile or sent to juvenile court?	87.3%	27.8%	$\chi^2$ (1, N = 107) = 38.48***

Table 1 Comparisons of Childhood Behavior of Mentally Disordered Offenders with and without APD

\*p = .05 corrected by the Bonferonni formula to avoid Type I error = .005. \*\*p = .01 corrected by the Bonferonni formula to avoid Type I error = .001. \*\*\*p = .001 corrected by the Bonferonni formula to avoid Type I error = .0001.

behavior and 87 percent reported having a juvenile record. They endorsed, on average, eight of ten childhood indices of antisocial behavior. Comparatively few of those without APD had a history of childhood antisocial behavior, reporting on average only two of those behaviors. Not surprisingly then, the mentally disordered inmates without APD began their criminal careers significantly later than those with APD. These results confirm our hypothesis of the existence of two types of mentally disordered offenders. The criminal careers of these two groups of mentally disordered offenders differed. Those with APD had

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more convictions and more convictions for nonviolent offenses than those without APD. Among these mentally disordered offenders, APD was not associated with violent crime.

If replicated, these results have a number of important clinical implications. First, they demonstrate the need for complete clinical workups to document the presence of all concurrent disorders. Second, when APD is diagnosed in combination with a major disorder, the patient's risk of crime is increased as compared with patients with only a major disorder. However, the patient with a major disorder and APD is no more likely than a patient with a major disorder and no APD to behave violently. Third, pharmacological treatment of the symptoms of the major disorder would be expected to affect the criminal behavior only of those patients with a major disorder and no APD. Consequently, treatment teams in forensic settings must set realistic treatment goals for patients with both a major disorder and APD.

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