Antisocial personality disorder is on a continuum with psychopathy

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Abstract

Background: Antisocial personality disorder (ASPD) and psychopathy are different diagnostic constructs. It is unclear whether they are separate clinical syndromes or whether psychopathy is a severe form of ASPD.
Methods: A representative sample of 496 prisoners in England and Wales was interviewed in the second phase of a survey carried out in 1997 using the Schedules for Clinical Assessment in Neuropsychiatry, the Structured Clinical Interview for *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition* Axis II personality disorders, and the Psychopathy Checklist–Revised.
Results: Among those 18 years and older (n = 470), 211 (44.9%) received a diagnosis of ASPD, of whom 67 (31.8%) were classified as psychopaths, indicated by Psychopathy Checklist–Revised scores of 25 and above. Symptoms of ASPD and psychopathy both demonstrated low diagnostic contrast when comparing subgroups of ASPD above and below the cutoff for psychopathy. There were no differences in demography, Axis I comorbidity, and treatment-seeking behavior. Psychopathic individuals with ASPD demonstrated comorbid schizoid and narcissistic personality disorder, more severe conduct disorder and adult antisocial symptoms, and more violent convictions.
Conclusions: Psychopathy and ASPD are not separate diagnostic entities, but psychopathic ASPD is a more severe form than ASPD alone with greater risk of violence. Dimensional scores of *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition* personality disorders (other than ASPD) may be helpful in identifying this specific subgroup.
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1. Introduction

Psychopathy has traditionally been considered as a disorder of personality, particularly the component of affective deficiency [1]. Contemporary conceptualizations [2,3] cover the interpersonal, affective, and impulsive personality domains of psychopathy, but emphasize the additional relevance of criminal behaviors. In contrast, the criteria for antisocial personality disorder (ASPD) in *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition* (*DSM-IV*) and its predecessors are predominantly behaviorally based [4]. This results in overdiagnosis in forensic settings [5-7], although it has been emphasized that less than half of persons with ASPD demonstrated a significant arrest record [8,9] and that diagnosis of ASPD was strongly related to violent acts [10]. However, due to the emphasis on overt behaviors rather than personality traits, consideration was given to whether psychopathy should

replace ASPD in *DSM-IV* as a diagnostic category, but this proposal was excluded. The decision was made instead to shorten and simplify the old ASPD diagnostic criteria for use in *DSM-IV* and to note in the accompanying text that interpersonal and affective symptoms are associated features of ASPD that could be particularly useful in diagnosing the disorder in forensic settings [11]. Nevertheless, the question arises whether ASPD constitutes a personality disorder, distinct and separate from psychopathy, or whether psychopaths are merely demonstrating severe forms of ASPD. Recent research findings have suggested that ASPD with and without prominent psychopathic features may constitute 2 distinct syndromes [12]. However, the notion of a continuum between ASPD and psychopathy is supported by arguments regarding the underlying factor structure of psychopathy and that the construct should include overt antisocial tendencies, including criminal behaviors [13-16]. In contrast, it has been argued that antisocial tendencies, especially criminal behavior, should be excluded in the definition of psychopathy and that other behavioral traits, such as pathologic lying, conning, and irresponsibility, should be regarded as intrinsic and retained within the construct instead [17,18]. It has also

been argued that antisocial behavior is a secondary symptom, or the consequence, of the abnormal personality components of psychopathy [18].

The aim of the current study was to examine the associations between ASPD and psychopathy in a representative survey of prisoners carried out in England and Wales in 1997. If psychopathic ASPD constitutes a discrete syndrome, separate from nonpsychopathic ASPD, there should be differences in the associations observed between psychopathic traits, specifically those measuring abnormal personality and those measuring antisocial behavior, when correlated with the diagnostic criteria for ASPD. Second, prisoners with both ASPD and psychopathy should demonstrate distinct differences in terms of their antisocial criteria from those with ASPD who are not psychopathic. Third, the 2 ASPD groups should demonstrate further differences in their comorbid psychopathology.

2. Methods

2.1. Sample

The sample comprised 496 participants in the second of a 2-stage survey of psychiatric morbidity among prisoners in England and Wales, aged 16 to 64 years, carried out by the Office for National Statistics in 1997 [19]. All 131 penal establishments were included, then containing 61 944 prisoners, including 46 872 male sentenced, 12 302 male remand, and 2770 women prisoners. Different sampling fractions were applied to assure the requisite number of interviews for each group of prisoners. This included 1 in 34 male sentenced prisoners, 1 in 8 male remand prisoners, and 1 in 3 women prisoners, either remand or sentenced. In the last 4 weeks of the survey, the sampling fraction changed to 1 in 50 male sentenced, as a larger number of this group had been interviewed. Samples were taken from all prison locations in the first phase to avoid oversampling or undersampling those with mental health problems in locations such as health care. Substitution of prisoners no longer available for interview, including those transferred or released, with new prisoners was performed for those on remand.

In the first stage, 3563 prisoners were selected, of whom 3142 (88%) completed full interviews. Thirty-seven failed to complete a full interview, 198 (6%) refused, and 53 (1%) could not take part, mainly due to language problems. Interviewers could not contact 118 (3%) and were advised not to interview 15 prisoners.

In the second stage, 661 prisoners, a 1 in 5 random subsample, were then selected for clinical interview, of whom 505 (76%) were interviewed; 105 (16%) could no longer be contacted, and 50 (8%) refused. Complete data were available for 496 prisoners, 391 men (78.8%) and 105 women (21.2%).

Ethical approval for the study was granted by the UK Home Office Prisons Ethics and Research Committee.

2.2. Diagnostic measures

Researchers (5 trained psychiatrists, 1 clinical and 1 research psychologists) were responsible for interviewing the 1 in 5 subsample. Axis I disorders were assessed using the Schedules for Clinical Assessment in Neuropsychiatry (SCAN) [20]. Axis II disorders were assessed using the Structured Clinical Interview for *DSM-IV* Axis II (SCID-II) personality disorders [21]. Categorical diagnoses were derived by applying the *DSM-IV* cutoff scores. Dimensional scores were computed by adding the criterion ratings (0 = absent, 1 = subthreshold, 2 = present) for each diagnosis.

Psychopathy was also measured in the second phase using the Psychopathy Checklist–Revised (PCL-R) [2] consisting of 20 items scored 0, 1, or 2 based on clinical interview and review of file information. The scoring of the PCL-R allowed us to present our results using continuous scores as well as categorical measures, including the recommended score of 30 as the cutoff score, above which a diagnosis of psychopathy is attributed. However, for the purpose of this study, a cutoff score of 25 was used to categorically define psychopathy for statistical analysis, we subsequently repeated the analysis at a cutoff of 30 to observe whether differing trends emerged using a higher cut score.

Researchers were trained in the administration of the SCAN, SCID-II personality disorders and PCL-R assessment procedures and their scoring. This involved the viewing of videotapes or assessment interviews to establish norms for scoring individual items. α Coefficients of total, male, and female PCL-R scores were within the acceptable range (total, 0.89; male, 0.88; female, 0.90) suggesting good internal consistency. Interitem correlations ($M = 0.29$, SD = 0.13, Md [median] = 0.29) also indicated satisfactory homogeneity.

2.3. Statistical analysis

Nonhierarchical categorical data were analyzed using logistic regression with reported odds ratios (ORs) as indicators of the magnitude of the relationship between variables. To gather information on independent associations, demographic variables were entered separately as well as simultaneously in the model to demonstrate the effects of confounds. Independent associations of comorbid psychopathology on Axis I and Axis II of the *DSM-IV* and the 2 ASPD groups were established including comorbid mental disorders in the model.

Differences in continuous variables on ratio level were established using analysis of variance and analysis of covariance to control for confounding variables.

Associations between continuous, interval-scaled scores of conduct disorder (CD), adult antisocial syndrome (AAS) and PCL-R total and facet scores were tested via bivariate Pearson correlation analyses. To control for confounding effects of interrelations between the facet scores, subsequent partial correlation analyses were carried out.