The Effect of Psychopathy on Outcome in High Security Patients

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The study aimed to examine the relationship between the total score on Hare's revised Psychopathy Checklist (PCL-R) and aspects of outcome for a nonrandom sample (n = 89) of male mentally disordered offenders treated in an English high security hospital. The subjects were all legally classified as suffering from "psychopathic disorder" and the majority were followed-up in the community. The methodology was retrospective, using existing case-file data, with follow-up lasting until discharge from statutory supervision. PCL-R scores were dichotomized and related to various outcome factors, including recidivism and aspects of social behavior. The results showed, in contrast to previous North American research, that the PCL-R did not predict any of the outcome factors. Because the PCL-R was able to identify psychopaths in this population but failed to predict their prognosis, it is possible that their outcome may have been improved by the treatment they received in hospital.

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In North America, clinicians and researchers use the term "psychopathy" to refer to a specific constellation of deviant traits and behaviors, as described by, among others, Cleckley.[1] Hare's Psychopathy Checklist (PCL and PCL-R)[2, 3] was designed specifically to reflect Cleckley's concept of psychopathy, tapping into and operationalizing the characteristics considered by Cleckley to characterize the psychopath, such as superficial charm, untruthfulness, lack of remorse or shame, impulsivity, and failure to follow any life plan.

Prison follow-up studies from North America have found the PCL to be a valid and reliable way of identifying those male offenders who are most likely to violently recidivate[4] and to be a predictor of other aspects of postrelease behavior.[5, 6] The PCL-R has also been found to be able to predict recidivism and adverse response to treatment in male mentally disordered offenders treated in, and subsequently discharged from, a Canadian high security psychiatric hospital.[7]

In Britain, psychopathic disorder has a variety of psychiatric meanings.[8, 9] The term is legally defined in the Mental Health Act, 1983 (England and Wales) as "a persistent disorder or disability of mind (whether or not including significant impairment of intelligence) which results in abnormally aggressive or seriously irresponsible conduct on the part of the person concerned." Those who meet this definition may be detained for treatment, provided that "such treatment is likely to alleviate or prevent a deterioration of his condition."

In England and Wales the majority of patients legally classified as suffering from psychopathic disorder who are sentenced to hospital are placed to one of three high security "special hospitals",[10] where from 1972 to 1995 they comprised 28 percent of the 4,155 male patients (Special Hospitals Case Register, personal communication). Although these men demonstrate a wide range of personality psychopathology, only a minority would be considered psychopaths using the PCL,[11, 12] and long-term outcome is variable.[13]

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The present study examined the relationship of the PCL-R total score to recidivism and various aspects of social outcome in a sample of mentally disordered men who had received treatment in an English high security hospital.

Methods

Subjects

The study sample consisted of 89 adult male patients, all of whom were detained in Broadmoor Hospital with the legal classification of "psychopathic disorder" (either alone or combined with another mental disorder category) under the Mental Health Act 1983 (England and Wales). Nearly all patients (85 men, 96%) had been sentenced directly to hospital by a court with the imposition of a restriction order, which adds a statutory requirement for post-discharge supervision to a hospital order. A small number (n = 4, 4%) had been transferred from prison to Broadmoor during the course of a life sentence; half of these men had reoffended while in custody and received a hospital order in addition to their existing life sentence. The patients were admitted to the hospital between May 1972 and November 1991.

Each condition ensured that follow-up information was nearly always available. Restricted patients who are discharged into the community are almost all, except for a few who are given an "absolute discharge" directly from the hospital, supervised by both a psychiatrist and a social supervisor under the conditions of their "conditional discharge." Life-sentenced prisoners in the United Kingdom usually do not actually spend the rest of their lives in prison but are eventually released under a "life license," the terms of which include statutory supervision when in the community.

While they were in Broadmoor, 12 (13%) patients developed sustained affective and/or psychotic symptoms. Three of these patients, originally classified as suffering from "psychopathic disorder," were later reclassified as having "mental illness"; one had a dual classification. The precise diagnoses were not recorded in the medical notes.

It was possible to make DSM-III-R personality disorder diagnoses[14] retrospectively from the records for 54 (61%) of the men. All of the Axis II diagnoses were represented except avoidant and dependent. The most commonly diagnosed were borderline (29 men, 33%) antisocial (23, 26%) schizoid (15, 17%) and narcissistic (12, 13%), followed by paranoid (3, 3%) schizotypal (3) obsessive compulsive (1, 1%) and histrionic (1). Further clinical details of the entire sample are reported elsewhere.[12, 13]

Assessments

Data were obtained in 1993 (by D.R.) from Broadmoor Hospital and government case files, supplemented by contact with psychiatric supervisors and prisons. PCL-R scores were rated (by D.R., who had received formal training in the use of the instrument from one of Hare's colleagues) only on the information available early in the admission.

The PCL-R was originally intended to be scored on the basis of an interview combined with review of available collateral information.[3] The retrospective nature of the present study meant that the PCL-R scores had to be derived from file review alone. Case note-derived scores for the PCL/PCL-R have been found to have satisfactory interrater reliability, not significantly different from that determined when files and interviews were used together, as well as to correlate highly with the total scores determined when an interview is also used.[15, 16] Some authors have suggested that when total scores derived using case notes only are analyzed, the usual criterion of a score $\geq$ 30, indicating the presence of psychopathy, may tend to underestimate the number of "psychopaths."[17, 18] It has also been argued that file-based ratings are less precise and consequently have no entirely satisfactory single cut-off.[16] In the present study, the data were analyzed using the traditional cut-off of 29/30, which reduces the potential for false positives, to divide the sample into "nonpsychopathic" (NP; low scoring) and "psychopathic" (P; high scoring) groups.

Outcome factors examined included recidivism and mortality as well as a variety of social factors. Each patient discharged to the community was rated "good" on:

1. *Social interaction* if he (a) interacted adequately with acquaintances or (b) established an intimate relationship.

2. *Employment* if he (a) held a job for at least six months, (b) had not been unemployed continuously for 6 months or more, and (c) was not fired.

3. *Accommodation* if he (a) was never homeless, (b) remained in one residence for at least six months,

(c) was not evicted, and (d) either lived with his family or had his own home.

4. *Substance abuse* if he (a) used alcohol and/or cannabis at most socially and in moderation and (b) did not use other illicit drugs.

5. *Overall social outcome* if outcome was "good" on all four variables (1 through 4 above).

Statistical Analysis

Odds ratios were used to test for the increased frequency among nonpsychopathic patients, compared with the psychopathic patients, of the categorical variables.[19] For the continuous variables, where parametric statistics could be applied, the nonpaired *t* test was used.[20]

Results

Mental Illness

Only 2 (17%) of the 12 patients who were recorded as suffering from sustained affective and/or psychotic symptoms were returned to the community by the end of the follow-up period, compared to 54 (71%) of the men who did not show evidence of mental illness (OR = .1, 95% CI = .0–.4). One of the two men reoffended. Due to the low number of patients who were mentally ill and discharged into the community, further outcome details are not reported here.

PCL-R

Of the 89 men, 74 (83%) were in the NP group and 15 (17%) in the P group. The mean PCL-R score of the NP group was 16.4 (*SD* = 7.8) and the mean of the P group was 33.4 (*SD* = 2.6). Only one of the men who had been transferred from prison was in the P group.

Background Features

Details of age at admission to Broadmoor and IQ are given in Table 1. The sample was relatively young, with a mean age at admission of around 20 years. Mean IQ was similar to that in the general population.

Ethnicity, previous convictions, and index offenses for the two groups are detailed in Table 2. The sample was predominantly Caucasian. The P group had a highly significantly greater proportion of men who had at least one previous conviction for robbery. There were no other significant differences in either previous convictions or index offenses between the two groups.

Table 1 Age at Admission to Broadmoor and IQ for the NP Group (n = 74) and the P Group (n = 15)

	NP		P			
	Mean	SD	Mean	SD	t	p
Age at admission (years)	20.6	2.6	19.6	2.5	1.4	.16
IQ	100.5	13.1	99.1	9.7	.4	.69

Outcome

Outcome details in terms of placement, mortality, and reoffending are given in Table 2. Well over half of both groups were discharged to the community by the end of the study period. For those patients who eventually returned to the community, the mean length of hospital detention was 8.0 years (*SD* = 3.9) in the NP group and 8.4 years (*SD* = 5.3) in the P group (t = .26, p = .80).

Two NP men and one P man were absolutely discharged immediately from statutory supervision and lost to follow-up, leaving slightly smaller groups of men for whom follow-up information was available. For these subjects the mean length of follow-up was 4.5 years (*SD* = 3.1) for the NP group and 4.1 years (*SD* = 2.4) for the P group (t = .39, p = .70). Their mean length of time in the community was 3.6 years (*SD* = 2.1) for the NP group and 4.0 years (*SD* = 2.5) for the P group (t = .54, p = .59). Just over half of each group was living in the community at the end of the follow-up.

Similar proportions of both groups reoffended. Of those patients who reoffended, two NP men killed and five NP men were convicted of sexual offenses; no men in the P group killed or committed sexual offenses. Reoffending while still resident in hospital was not uncommon: one of the sex offenses was committed while the patient was still at special hospital (on an escorted day trip); the homicide and another sexual offense were committed while the men were still inpatients at other hospitals (both during unescorted leave).

Table 3 details reoffending and social outcome for those patients followed-up in the community. There were no significant differences in either reoffending or social outcome between the two groups.

Discussion

Our study has a number of important limitations. Its retrospective methodology means that it relies on

Table 2 Ethnicity and Index Offenses for the NP Group (n = 74) and the P Group (n = 15)

	NP		P			
	No.	%	No.	%	OR	95% CI
Ethnicity						
Caucasian	71	96	14	93	1.7	.0–22.7
Previous convictions						
Violence (nonsexual, including homicide)	23	31	7	47	.5	.1–1.9
Homicide	1	1	0	0		Undefined
Other violence	22	30	7	47	.5	.1–1.8
Sex offense	14	19	1	7	3.3	.4–148
Arson	6	8	2	13	.6	.1–6.5
Robbery	5	7	6	40	.1	.0–.5**
Nonviolent	54	73	14	93	.2	.0–1.5
Index offense						
Homicide	20	27	5	33	.7	.2–3.1
Other violence	28	38	2	13	4.0	.8–38
Sex offense	12	16	5	33	.4	.1–1.7
Arson	9	12	2	13	.9	.2–9.5
Robbery	1	1	0	0		Undefined
Other nonviolence	4	5	1	7	.8	.1–42
Outcome						
Returned to the community	48	65	9	60	1.2	.3–4.4
Followed up in the community	46	62	8	53	1.4	.4–5.1
Placement at end of follow-up						
High security hospital (not left)	15	20	4	27	.7	.2–3.5
Living in community	40	54	8	53	1.0	.3–3.6
Other hospitals	6	8	2	13	.6	.1–6.5
Prison/high security hospital (readmission)	8	11	1	7	1.7	.2–80.6
Dead	5	7	0	0		Undefined
Reoffending (all subjects)	17	23	3	20	1.2	.3–7.3

** $p < 0.005$.

data originally collected for purposes other than empirical research. The case records, particularly from the early years of the study period, often contained only limited information as to psychopathology and make it likely that the level of personality psychopathology is an underestimate. The relatively small sample size, which was determined by practical considerations, limits the power of the study. The study is also unable to give information on the specifics of outcome events, such as the mental state of the patient at the time of any reoffense and who the victims were. Given these factors, any conclusions drawn must be made cautiously, and the study is unable to serve as a test of the validity of the PCL-R.

Table 3 Reoffending and Social Outcome for NP Group (n = 46) and P Group (n = 8) Followed Up in the Community

	NP		P			
	No.	%	No.	%	OR	95% CI
Reoffending	14	30	3	38	.7	.1–5.4
Social outcome (good)						
Occupational	21	46	4	50	.8	.1–5.1
Social interaction	40	87	7	88	1.0	.0–10.1
Substance abuse	35	76	3	38	5.3	.8–38.4
Accommodation	35	76	6	75	1.1	.1–7.1
Overall social outcome	12	26	2	25	1.1	.2–12.1

Another important consideration is that of possible criterion contamination, as the same person conducted the record review for the PCL-R ratings and collected the outcome measures. Although criterion contamination is a theoretical possibility, in practice, it is unlikely to have influenced the results because the PCL-R ratings were performed prior to the collection of the outcome data, and the latter were derived from objective criteria.

We found that scores on the PCL-R did not predict recidivism or social outcome for our sample of mentally disordered offenders treated in an English

high security hospital. This is in contrast to the existing North American outcome research which has consistently reported the instrument to be one of the best predictors of recidivism in a range of offender populations.[4]

It may have been that our study had too few subjects to show significant differences (Type II error), particularly when the higher cut-off was employed. However, as there was not even a trend toward poorer outcome in the psychopathic men, we think this is probably not the cause of our findings.

In view of the North American origin of the majority of existing outcome research, the possibility that the concept of psychopathy may be culturally specific also needs to be considered. However, the PCL-R has been examined in several British samples and has been shown to have construct validity among a variety of prisoners, in both custodial and therapeutic prison environments.[21–23]

A third explanation for our findings may be that the antisocial behavior of the English sample simply attenuated over the time that they were detained in hospital, but the mean length of stay of about 8 years (for those who were discharged during the study period) would seem somewhat short for this effect to take place given the long-term stability of PCL-R ratings.[24]

Another reason for the similar outcome of the two groups might be poor outcome in the NP group rather than good outcome in P patients. However, overall, the outcome is relatively good, given the predominantly violent index offenses and serious psychopathology of the patients.

Our final explanation for our findings is that the high scoring "psychopathic" patients were successfully treated at Broadmoor Hospital. The supervision that they received after discharge may also have played a significant role in their rehabilitation. Most of the North American studies were conducted on prison samples who had not received therapy,[4–6] while the Canadian secure hospital study involved psychotherapeutically oriented treatment within an extremely unorthodox, unique, maximum security therapeutic community.[7] In the latter study, psychopaths who had received treatment actually had a higher rate of violent failure than untreated psychopathic controls, but this may have been a reflection of treatment inappropriate for the condition rather than an indication of untreatability.

If individuals with severe personality disorder are to be offered treatment, it is important not to reject those who may benefit. How best to make this judgment accurately remains unclear, but care must be taken to avoid basing it prematurely on potentially inaccurate perceptions. If our findings are an indication that with appropriate therapy even "Hare psychopaths" may be successfully treated, then perhaps some of the pessimism associated with treating those with severe personality disorders may be unwarranted.

Summary and Conclusions

North American research has shown that offenders who are classified as "psychopaths" according to Hare's PCL/PCL-R have a poorer prognosis in terms of recidivism and other outcome factors.[4–7] Our retrospective follow-up study of a population of mentally disordered offenders with the English legal classification of psychopathic disorder, treated in a high security hospital, has found that the psychopaths (as defined by their high PCL-R scores) had outcomes that were equivalent, in terms of recidivism as well as various social measures, to those of the rest of the patients. Because the PCL-R, a well validated instrument,[3] identified psychopaths in this population but failed to predict their prognosis, it is possible that their outcome may have been improved by the treatment they received in hospital. This finding has practical implications for the management and treatment of personality-disordered offenders.

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