

An Evaluation of a Maximum Security Therapeutic Community for Psychopaths and Other Mentally Disordered Offenders*

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Psychopaths present serious problems for the criminal justice system because they are responsible for many serious crimes and appear to be very resistant to treatment. The present study was a retrospective evaluation of the efficacy of a maximum security therapeutic community program in reducing recidivism among mentally disordered offenders, some of whom were psychopaths. The study employed a matched group, quasiexperimental design. The results showed that, compared to no program (in most cases prison), treatment was associated with lower recidivism (especially violent recidivism) for nonpsychopaths and higher violent recidivism for psychopaths. The clinical and research utility of Hare's Psychopathy Checklist was strongly supported.

The therapeutic community evolved in psychiatric settings in England during the late 1940s, notably under the leadership of Maxwell Jones. Citizens of therapeutic communities care materially and emotionally for one another, follow the rules of the community, submit to the authority of the group, and suffer sanctions imposed by the group (Jones, 1956; 1968). Honesty, sincerity, and empathy for others are highly valued. Reports of the efficacy of therapeutic communities have been more testimonial than scientific (Fairweather, Saunders, Maynard, Cressler, & Black, 1969; Jones, 1968; 1976; Maller, 1971). Unfortunately, the few controlled studies evaluating the ability of therapeutic communities to increase postdischarge so-

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cialization or work skills, or to prevent rehospitalization, showed modest effects, at best, compared to more traditional hospital programs (Paul & Lentz, 1977). Therapeutic communities continue to be recommended for addictions, for mentally disordered offenders, and for criminal offenders (DeLeon, 1985; Reid, 1989; Toch, 1980).

Those offenders diagnosed as psychopaths occupy many beds in correctional and forensic mental health facilities. Wong (1984) found that as many as 30% of Canadian federal prisoners could be categorized as psychopaths, depending upon institutional security level. The treatability of psychopaths has long concerned criminologists and mental health experts. Early reports indicated positive effects of psychotherapy (Corsini, 1958; Lipton, 1950; Rodgers, 1947; Rosow, 1955; Schmideberg, 1949; Showstack, 1956; Thorne, 1959), but others were pessimistic about the prognosis for psychopaths with or without treatment (Cleckley, 1982; Darling, 1945; McCann, 1948; Meloy, 1988). Most recent investigators, upon critically evaluating the evidence, argued that treatment for adult psychopaths is ineffective (Cleckley, 1982; Hare, 1970; McCord, 1982; Woody, McLellan, Rubersky, & O'Brien, 1985).

Acknowledging pessimistic evidence, Hare (1970) suggested that a therapeutic community that reshaped the social milieu might change some of the basic personality characteristics and interpersonal behavior of psychopaths. Although not substantiated by comparative outcome data, there have been several positive reports for therapeutic community programs for psychopaths (Barker & Mason, 1968; Copas, O'Brien, Roberts, & Whiteley, 1984; McCord, 1982; Whiteley, 1967).

One of the major problems in evaluating the effectiveness of various treatments upon the recidivism of psychopaths relates to the circularity in the definition of psychopathy (and the closely related term *antisocial personality disorder*) in that criminal behavior has been identified both as a defining property and as a result of the disorders (Gunn, 1977). It is axiomatic that future behavior is best predicted by past behavior, and thus it is not surprising that those diagnosed as psychopaths have been reported to have worse outcomes than other offenders with less serious criminal histories. Although their instrument contains some items obviously related to criminal history, the Psychopathy Checklist developed by Hare and his associates (Hare, 1980; Hare & McPherson, 1984; Schroeder, Schroeder, & Hare, 1983) primarily comprises items conceptually quite distinct from criminal behavior. There is little doubt that it is currently the best developed tool for the assessment of psychopathy among correctional populations (Hare, 1983; 1985; 1986; Schroeder et al., 1983; Widiger & Frances, 1987), and it correlates highly with such other clinical-behavioral measures as Cleckley's (1982) criteria for psychopathy and the *DSM-III* diagnosis of antisocial personality disorder (Hare, 1983; 1985).

Other Important Risk Factors

Among correctional populations in general, there have been many studies of the relationship between demographic and, more rarely, clinical variables and

later recidivism and violent recidivism (for recent reviews see Monahan, 1981; Nuffield, 1982; Quinsey, 1984). The variables most consistently related to recidivism (whether violent or not) in previous studies of correctional or mentally disordered offender populations are age (Hodgins, 1983; Mandelzys, 1979; Molof, 1965; Nuffield, 1982; Pruesse & Quinsey, 1977; Quinsey & Maguire, 1986; Quinsey, Pruesse, & Fernley, 1975a; Steadman, 1973; Wormith & Goldstone, 1984), offense history (Black, 1982; Hodgins, 1983; Mandelzys, 1979; Wormith & Goldstone, 1984), and type of index offense (Hodgins, 1983; Nuffield, 1982; Quinsey, Pruesse, & Fernley, 1975b; Steadman, 1973; Tong & MacKay, 1959; Wormith & Goldstone, 1984; see also Simon 1971). Among mentally disordered offenders, a diagnosis of personality disorder has often been reported to be associated with recidivism (Black, 1982; Quinsey et al., 1975a). Thus, any evaluation of treatment outcome for mentally disordered offenders must include methodological control for age, criminal history, offense, and diagnosis (especially psychopathy).

The Present Study

The present study evaluated an intensive therapeutic community for mentally disordered offenders that was thought to be especially suitable for psychopaths. The program operated for over a decade in a maximum security institution and drew worldwide attention for its novel approach to treatment (Barker, 1980; Barker & Buck, 1977; Barker & Mason, 1968; Barker, Mason, & Wilson, 1969; Barker & McLaughlin, 1977). In the present study, treated offenders were compared with untreated offenders matched with the treated subjects on those variables most consistently related to recidivism (age, criminal history, and index offense). The subjects of the study were a particularly serious group of offenders in that almost all had a history of violent criminality. Hare's Revised Psychopathy Checklist was used to identify psychopaths and nonpsychopaths in order to examine the interrelationships among treatment, psychopathy, and recidivism. In almost all cases, the comparison subjects were convicted of some offense(s) and served prison sentences. The outcome measures were criminal and violent recidivism and the average follow-up period exceeded 10 years.

METHOD

The Program

The therapeutic community program has been described at length elsewhere (Barker & Buck, 1977; Barker & Mason, 1968; Barker et al., 1969; Barker & McLaughlin, 1977; Maier, 1976; Quinsey, 1981). Briefly, the program was peer operated and involved intensive group therapy for up to 80 hours weekly. The goal was to create an environment where patients could develop empathy and responsibility for their peers. Patients participated in fixed and long-term daily sessions with one or two patients and sat on committees that monitored and structured all aspects of their lives. Patients who performed well in the program and who showed organizational talent were appointed to program leadership roles and led

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therapy groups and security and administrative committees. Patients participated in decisions about release and transfer.

There were other features of the program that may have been important. Patients had very little contact with professional staff. Very little effort was expended in organized recreational programs. Very few patients participated in academic upgrading or vocational training. Some patients worked in contract workshops, in the kitchen, or on cleaning gangs. However, such work was regarded as a temporary "rest" from therapy and such patients shared the wages they earned with the patients involved in intensive therapy. No programs were specifically aimed at altering procriminal attitudes and beliefs, teaching social skills or social problem solving, or training life skills. A small proportion of the patients were diagnosed as psychotic and were prescribed neuroleptic drugs, but efforts were made to keep doses as low as possible. One reason for including psychotic patients in the program was to give the psychopaths an opportunity to care for such individuals. Tight internal and external security was maintained by patients in cooperation with psychiatric attendants. Patients had very little opportunity for diversion; tight limits were imposed on viewing television, reading material, and even on social interaction among patients.

Entry to and participation in the therapeutic community was not voluntary and stated willingness to participate was not a selection criterion. For example, an individual found not guilty by reason of insanity or convicted of violent crime and then civilly committed could be assigned to the program even if he did not wish to be. Once in the program, patients who refused to engage in detailed discussion of their offenses, backgrounds, and feelings were sent to a subprogram where they discussed their motivation, attitudes, and participation until they complied with program requirements. Though patients could leave the therapeutic community by convincing staff or an independent review board that they had made clinical progress, they could not get out simply by misbehaving. Noncompliance and disruption were regarded as symptoms to be changed and this form of attrition was not permitted. There were several aspects of the program that might be seen to violate patients' rights by today's standards, but the program was very favorably reviewed on both ethical and clinical grounds at the time (Butler, Long, & Rowsell, 1977; Canada, 1977). Our evaluation of the program was entirely retrospective and we had no control over any aspect of the program.

Subjects

The treated subjects in this study were all 176 patients who spent at least 2 years in the therapeutic community program during the period of its most active operation (January, 1968, to February, 1978). Being at risk to reoffend was defined as being released to the street or being held in an open psychiatric institution. Three subjects failed after leaving the maximum security program but while still in another secure hospital, and thereby failed though technically not yet at risk to do so.

For most treated subjects, a matched comparison subject was selected from among the many forensic assessment cases (>100) admitted each year. Because

the matching criteria were so strict, 30 treated subjects could not be matched. Preliminary analyses showed no differences between matched and unmatched patients. For the yoked pairs, the matching was performed according to several criteria: The treated and comparison subjects had to be (a) the same age within 1 year at the time of the index offense, (b) charged with the same index offense, (c) equivalent in criminal history for each of property and violent offenses according to a system developed by Akman and Normandeau (1967), and (d) charged with their index offenses no more than 2 years apart. In addition, comparison subjects could not have returned to the study institution for any treatment. Almost all (84%) comparison subjects spent some time in a correctional institution. $M = 50.7$ ($SD = 46.4$) months.

Procedure

A list of most of the study variables is shown in Table 1. All variables except those pertaining to outcome were coded from institutional files. These institutional files were exceptionally complete and included information from a variety of sources. These detailed files have been employed by other researchers in several studies (e.g., Quinsey & Maguire, 1983; 1986; Rice, Quinsey, & Houghton, 1990), but all variables were newly coded for this study. Outcome data were obtained from a variety of sources including the files of the Coroner's Office, the Lieutenant Governor's Review Board, the Royal Canadian Mounted Police (a national data base including INTERPOL reports), the National Parole Service of Canada, and provincial correctional and parole systems. In order to prevent inadvertent contamination of the historical variables by raters' knowledge of outcome, childhood history, adult adjustment, offense, and assessment variables were coded using only file information at the time the subject entered the program or was initially assessed, and outcome data were obtained only after all other variables had been coded. A randomly chosen 20 subjects were selected for an evaluation of the interrater reliability achieved.¹

Subjects were classified as failures if they had incurred any new charge for a criminal offense, or had their parole revoked or were returned to the maximum security institution for behavior that could have, in the judgment of the research assistants, resulted in a criminal charge. Violent failure comprised any new charge against persons, or any parole revocation or return to the maximum security institution for violent behavior.

RESULTS

Interrater Reliability

Interrater agreement was assessed for all study variables by computing mean Pearson correlation coefficients for continuous variables and kappa statistics for

¹ Details on the coding of all study variables can be found in Harris, Rice, and Cormier (1991) or by writing to the authors.

Table 1. Characteristics of 176 Treated (T) and 146 Comparison (C) Samples of Criminals and Differences Between Groups

	T	C	Test
Childhood history			
Highest grade	8.99 (2.24)	8.40 (2.24)	2.24
School maladjustment	2.22 (1.21)	2.29 (1.17)	—
School leaving age	14.7 (5.63)	14.9 (4.17)	—
Teen alcohol abuse	1.08 (1.06)	1.55 (1.01)	3.59
Socioeconomic status	313 (174)	308 (140)	—
Behavior problems	3.15 (2.77)	2.99 (2.50)	—
Childhood aggression	2.84 (1.84)	2.95 (1.79)	—
Ever suspended or expelled (%)	19	26	—
Arrested under 16 (%)	38	34	—
Separation from parents (%)	46	52	—
Parental criminality (%)	7	11	—
Parental psych history (%)	13	12	—
Parental alcoholism (%)	34	56	12.83*
Adult history			
Longest job (months)	33.9 (119)	50.8 (149)	—
Times in corrections	1.45 (2.02)	1.34 (2.21)	—
Psychiatric admissions	1.25 (1.71)	.67 (1.27)	3.26
Aggression score	3.34 (1.99)	3.34 (1.91)	—
Psychopathy Checklist	19.23 (9.76)	18.93 (8.58)	—
Property charges	7.42 (16.2)	6.92 (12.6)	—
Violent charges	4.93 (11.6)	4.81 (9.82)	—
Level of Superversion			
Inventory	17.8 (8.46)	18.9 (9.14)	—
Alcohol abuse score	1.51 (1.19)	1.83 (1.12)	2.30
Unemployed (%)	51	58	—
Previous violent offense (%)	27	30	—
Ever married (%)	27	41	6.74
Lived alone (%)	57	62	—
Offense assessment variables			
Age at offense	23.4 (6.53)	23.2 (6.25)	—
Number of victims	1.58 (1.60)	1.35 (1.06)	—
Victim injury	3.81 (2.34)	3.85 (2.35)	—
Offense seriousness	23.0 (30.2)	19.6 (17.8)	—
Elevated MMPI scales	3.56 (2.14)	3.51 (2.51)	—
Alcohol involved (%)	34	58	17.36*
Volunteered for treatment (%)	23	22	—
Expressed remorse (%)	21	26	—
Attitude supported crime (%)	40	43	—
Female victim (%)	53	60	—
Weapon used (%)	32	40	—
Sexual motive (%)	28	5	26.71*
MMPI elevated scale 4 (%)	32	31	—
Schizophrenia (%)	27	2	36.04*
Personality disordered (%)	49	60	3.99

Note. For continuous variables (those not followed by a % sign), the numbers under T and C are means with standard deviations in parentheses. For dichotomous variables (those followed by a % sign), numbers under T and C are percentages. Numbers under Test are statistically significant ($\alpha = .05$) *t* ($df > 100$) scores (for continuous variables) or χ^2 values (for dichotomous variables). The actual number of observations for each test varied slightly because of missing observations. Asterisks indicate statistically significant ($\alpha = .001$) differences after the application of a conservative Bonferroni correction.

categorical variables. For both, the reliability criterion was .70 and individual variables not reaching this criterion were dropped from the study with the exception of Childhood Aggression ($r = .68, p < .01$). For all variables retained, mean correlation coefficient was .90 and mean kappa was .83. Because it formed the basis for several important analyses, we note that the mean interrater correlation for the Revised 20-item Psychopathy Checklist was .96.

Treated versus Untreated Subjects

Table 1 lists all study variables and indicates those on which the comparison of the two groups of matched subjects yielded statistically significant differences. The table also provides considerable detail on the demographic, clinical, social, and criminal history of the 292 matched subjects. Generally, the table indicates that these were a relatively serious group of offenders with lengthy criminal histories, emotional problems, and extensive social maladjustment. Probably the only important difference between the two groups was that the treated group comprised more psychotic (almost always schizophrenic) individuals. Further analyses explored the effect of this variable. There were a few other smaller differences between the groups; some might be hypothesized to represent higher risk for the treated subjects (e.g., sexual motive to index offense, less often married) while approximately the same number suggest the reverse (e.g., degree of alcohol abuse, educational achievement).

Treatment, Outcome, and Psychopathy

The mean duration of follow-up was 10.5 ($SD = 4.94$) years and there were no differences in mean follow-up time for treated versus untreated or for psychopathic versus nonpsychopathic subjects. Of the 176 subjects treated, 169 were at risk to fail for some time (or failed anyway) during the follow-up period ending in April, 1988; and of the 146 untreated yokes, 136 were at risk to fail. Considering any failure, 97 (57%) of the treated and 93 (68%) of the comparison subjects failed, $\chi^2(1, N = 305) = 3.87, p < .05$. However, of those 140 treated and yoked subjects at risk to fail, 82 (59%) failed, $\chi^2(1, N = 280) = 2.86, p < .10$. Considering violent failure there is even less evidence of an overall effect of treatment. The corresponding rates of violent failure were 39% and 46% for treated and untreated subjects respectively, and 40% for matched treated subjects.

Because the therapeutic community had been regarded as an especially promising treatment for psychopathy, treatment and outcome were compared for psychopaths and nonpsychopaths separately. Psychopathy Checklist scores were based solely on file information rather than on a combination of file and interview information. Wong (1984) reported that use of the customary cutoff of 30 when using file information alone underestimated the number of psychopaths, and that a cutoff of 25 would be more appropriate. He also showed that the correlation between the two ways (file only versus file plus interview) of scoring the Checklist was very high ($r = .93$). In view of Wong's findings, we adopted a cutoff of 25 out of 40. In an earlier paper, we examined whether our choice of cutoff affected the results obtained and found it did not (Harris, Rice, & Cormier, 1991).

For the 46 treated matched psychopaths (with opportunity to fail) and their comparison subjects, the rates of overall recidivism were 89% and 81%, respectively ($\chi^2 < 1$). The corresponding rates of violent recidivism were 78% and 55%, $\chi^2(1, N = 92) = 5.49, p < .05$. These results suggest that, especially for violent failure, the therapeutic community treatment was associated with poorer outcome for psychopaths. However, most treated psychopaths were matched to comparison subjects who did not themselves meet the criterion for psychopathy. Table 2

Table 2. Recidivism Rates of Treated and Untreated Psychopaths and Nonpsychopaths

	Treated	Untreated	χ^2 (1)
Psychopaths			
Any failure	87 (53)	90 (29)	<1
Violent failure	77 (52)	55 (29)	4.12*
Nonpsychopaths			
Any failure	44 (116)	58 (90)	3.87*
Violent failure	22 (114)	39 (90)	6.97*

Note. For each cell, rates are expressed as percentages and total n appears in parentheses.

* $p < .05$.

examines the effects of treatment on outcome for psychopaths and nonpsychopaths separately. All treated (not just those who had been yoked) and untreated subjects who had an opportunity to fail were included in this analysis. As can be seen in Table 2, there was, in the case of violent failure, an interaction of treatment with psychopathy upon recidivism such that treatment was associated with lower recidivism for nonpsychopaths but higher recidivism for psychopaths. A log-linear analysis yielded χ^2 (1, $N = 285$) = 9.92, $p < .002$ for the interaction.

In order to evaluate the importance of this interaction, a multiple discriminant analysis was performed in which the predictor variables were psychopath (or not), treated (or not), and the interaction of these two; and the dependent variable was violent failure or not. The analysis showed that treatment made no significant contribution to the discriminant function but the other two variables (psychopath or not, and the interaction of psychopathy and treatment) yielded a statistically significant solution, regression $R = .346$, $F(2,289) = 19.59$, $p < .0001$. Setting the selection ratio equal to the base rate produced a 64% correct classification rate, and a relative improvement over chance (Loeber & Stouthamer-Loeber, 1986) of 27%, $p < .001$, using two variables alone to predict violent outcome.

Although the two study groups were very closely matched overall, the subgroup of treated psychopaths may have exhibited higher pretreatment risk of recidivism than the untreated psychopaths and such a confounding could have been responsible for the surprising results shown in Table 2. Thus, the two groups of psychopaths were compared on all study variables shown in Table 1. Though both groups had equivalent mean Psychopathy Checklist scores (29.4 vs. 30.0), untreated psychopaths had significantly worse teenage and adult alcohol abuse scores, were more often married, were less likely to be sex offenders, and had worse Level of Supervision Inventory scores (all p 's $< .05$). Of the variables yielding nonsignificant differences between groups, the majority showed a trend in favor of higher risk for the untreated psychopaths. Thus, the differences between the two subgroups clearly do not support any contention that the treated psychopaths exhibited *higher* pretreatment risk of recidivism.

Because retrospectively coded *DSM-III* diagnosis was one of the few variables on which the treated and untreated groups differed at the outset, this relationship was examined further. The rates of violent failure among matched treated

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and untreated psychotic (schizophrenia or affective disorder) subjects were 15% and 25%, respectively; whereas among nonpsychopathic nonpsychotics, the comparable rates were 26% and 40%. Although neither comparison was statistically significant, they indicated that the main results in Table 2 are not due to differences in the diagnoses of the nonpsychopathic groups.

Psychopaths in the Therapeutic Community

The final analyses concerned the variables specific to the treatment program. These were variables that pertained at least in a general way to the patient's adjustment to the institution, his success in the program, and the degree to which he was trusted by the program's clinical staff. The results are summarized in Table 3. The interesting comparisons involved the ways in which psychopaths and nonpsychopaths differed. Psychopaths showed much poorer adjustment, assessed in terms of problem behaviors, both in their first year and in their last year. However, when variables that reflect the degree of trust by clinical staff are considered, psychopaths and nonpsychopaths showed no differences. Interestingly, the first set of variables, reflecting patient's behavior rather than staff trust, were consistently related to outcome.

DISCUSSION

Overall, the results showed no effect of the therapeutic community in reducing recidivism. However, the most important finding of this study was the differ-

Table 3. Differences Between Treated Psychopaths and Treated Nonpsychopaths

Variable	Nonpsychopaths	Psychopaths	Test
Months in treatment	70.5 (45.8)	62.0 (38.4)	—
*Confinements first year ^a	1.18 (1.71)	1.82 (2.26)	2.03
Negative entries first year ^b	8.53 (7.72)	11.29 (8.48)	2.07
*Confinements last year ^a	.34 (.95)	.72 (1.66)	1.89
*Negative entries last year ^b	3.65 (4.41)	6.79 (8.75)	3.10
*Disciplinary subprogram ^c	1.19 (1.77)	2.57 (2.84)	3.62
Months to positive rec. ^d	32.9 (43.5)	45.9 (44.9)	—
Number of positive rec's. ^d	.68 (1.1)	.67 (.59)	—
Months as a program leader	4.89 (11.3)	4.84 (5.92)	—
Months on work ward	18.3 (24.6)	13.2 (15.9)	—
*Nonfailure misbehaviors (%)	25	46	5.19

Note. For continuous variables (those not followed by a % sign), the numbers under Psychopaths and Nonpsychopaths are means with standard deviations in parentheses. For dichotomous variables (those followed by a % sign), numbers under Psychopaths and Nonpsychopaths are percentages. Numbers under Test are statistically significant ($\alpha = .05$) t ($df > 100$) scores (for continuous variables) or χ^2 values (for dichotomous variables). The actual number of observations for each test varied slightly due to missing observations. Asterisks indicate variables that yielded a significant relationship with failure and/or violent failure.

^a Total number of times subject was placed in seclusion for violent or disruptive behavior.

^b Total number of notations in subject's clinical record that he had engaged in any disruptive or countertherapeutic behavior.

^c Times referred to the disciplinary subprogram.

^d Recommendations by hospital staff (to the Review Board) that the patient be released.

ential effect of the program. Psychopaths who participated in the therapeutic community exhibited higher rates of violent recidivism than did the psychopaths who did not. The opposite result was obtained for nonpsychopaths, and it should be noted that the nonpsychopath groups comprised both psychotic and nonpsychotic individuals. Although there were more psychotics among the treated subjects, and although psychotic subjects showed lower rates of failure overall, those differences alone cannot explain the interaction of treatment and psychopathy. The interaction is especially surprising because the program was explicitly designed to effect positive changes in the psychopathic personality based on a solid theoretical background provided by the existing literature, and it provided extensive opportunities for patients to gain insight into their own behavior and to learn to be caring and empathic.

The present results give strong support to the importance of the concept of psychopathy and to the Psychopathy Checklist as a way to measure psychopathy. The Psychopathy Checklist score was strongly related to recidivism (more strongly than *DSM-III* diagnosis), but most importantly, it was a powerful predictor of response to treatment. Subjects who scored high (>25) on the PCL-R showed a negative effect of treatment while those who scored lower benefitted from the therapeutic community program. To our knowledge, this is the most powerful predictor of response to treatment yet reported in the area of criminal behavior and recidivism. The present results also lend support to the method employed in arriving at a PCL score using very complete case files. We hypothesize that interviews may actually increase measurement error with especially glib, manipulative psychopaths.

Given the pervasive pessimism about whether psychopaths can change in any significant way, the finding that participation changed the rate of violent recidivism (albeit for the worse) is remarkable. The finding belies conventional wisdom about the immutability of psychopathy and shows that an inappropriate institutional environment can actually increase criminal behavior. The results strongly suggest that the kind of therapeutic community described in this article is the wrong program for serious psychopathic offenders. It must be noted, however, that these psychopaths were an especially serious group of offenders; almost all (85%) had a history of violent crimes. This, in part, may be the reason that, in this study, violent recidivism was a more informative outcome variable than was general recidivism. It is unclear whether such a program would have the same results with a group of less violent, less criminal psychopaths. The present results are consistent with those of another study on the effect of therapeutic community treatment upon the recidivism of psychopaths (Craft, Stephenson, & Granger, 1964). Although the two studies used very different operational definitions of psychopathy, the combined results suggest that a therapeutic community is not the treatment of choice for psychopaths, particularly those with extensive criminal histories.

It is important to note too that our results show a positive effect (compared to prison) of the therapeutic community program in reducing recidivism for nonpsychopaths. These results lend support to those clinicians who employ therapeutic community treatment and suggest that, compared to prison, a therapeutic

community is a clinically sound institutional environment for psychotic and non-psychotic offenders as long as they are not psychopaths. Because, overall, psychopaths make up the minority of persons in institutions, the present results are good news for clinicians in such settings as long as treatment candidates can be properly selected.

Why did the therapeutic community in the present study have different effects on psychopaths and nonpsychopaths? The ways in which psychopaths and nonpsychopaths performed in the program lead to some speculation. Hare (1986) discussed the results of a lie detection study that suggested that psychopaths are especially interested in social cues in order to learn how to "read" people. Compared to prison, where it has been reported that offenders learn surprisingly little (Zamble & Porporino, 1988), we hypothesize that both psychopaths and nonpsychopaths in the therapeutic community learned how to perceive the feelings of others, take the perspective of others, use emotional language, act in a socially skilled manner, and delay gratification. However, such experiences represent a double-edged sword. To persons with generally prosocial, anticriminal values (nonpsychopaths) such new abilities would be associated with successful marital, family, social, and vocational adjustment. However, to psychopaths with antisocial, procriminal values, such new abilities could facilitate the manipulation and exploitation of others and could be associated with novel ways to commit violent crime.

We speculate, then, that patients learned a great deal from the intensive program but that the psychopaths put their new skills to quite unintended uses. What could the clinical staff have done to prevent this? An obvious suggestion comes from the finding that psychopaths were much more likely to be coded as having antisocial values compared to nonpsychopaths and that this was also related to violent outcome (Harris et al., 1991). According to modern behavioral formulations of differential association theory (Andrews, 1980), criminals behave as they do because they associate with other criminals and are thus exposed to criminal rather than anticriminal models. It has been suggested (Elliot, Huizinga, & Ageton, 1985) that therapeutic community programs fail because they place offenders in highly intensive interaction with one another and thereby foster rather than inhibit criminal identification and subsequent recidivism. Although there are no outcome data with adult psychopaths, one could predict on the basis of differential association theory that programs that involve highly structured interaction with prosocial models who demonstrate anticriminal attitudes and ways of thinking would be a more promising treatment approach (e.g., Andrews, Kiessling, Robinson, & Mickus, 1986; Wormith, 1984).

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