

Effect of drug treatment during work release on new arrests and incarcerations

Clifford A. Butzin^{*}, Daniel J. O'Connell, Steven S. Martin, James A. Inciardi

Center for Drug and Alcohol Studies, University of Delaware, 77 East Main Street, Newark, DE 19716, United States

Abstract

Nearly 1,300 drug involved prisoners from the Delaware correctional system were followed for up to five years after release. Those who had participated in a work release therapeutic community treatment program, compared to a similar group in regular work release, were significantly less likely to have had a new arrest, or to have returned to incarceration, and had significantly longer times before arrest or return to custody, even when controlling for demographic differences and differences in criminal, drug use, and employment histories. In addition to the treatment effects, new arrests were most strongly related to criminal history, while return to incarceration was associated more generally with drug use and demographic differences. Those with a more extensive criminal history showed particular benefits from the treatment program, and those older from participating in aftercare following treatment.

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Introduction

The well-documented abundance of prisoners with substance abuse histories (Chaiken, 1986; Mumola, 1999) led most federal and state correctional systems to establish treatment programs for inmates. The most frequently used treatment model was the therapeutic community (TC), modified for the prison environment (Harrison & Martin, 2001; Inciardi, Martin, & Surratt, 2001). Shorter-term evaluations of therapeutic communities within correctional systems consistently found positive outcomes in terms of recidivism and/or substance use for the first year following release (Hiller, Knight, & Simpson, 1999; Inciardi, Martin, Butzin, Hooper, & Harrison, 1997; Wexler, De Leon, Thomas, Kressel, & Peters, 1999). For follow-up periods around three years after release, the

results not surprisingly, became more mixed (Knight, Simpson, & Hiller, 1999; Martin, Butzin, Saum, & Inciardi, 1999; Pelissier et al., 2000; Wexler, Melnick, Lowe, & Peters, 1999). Thus, while there is evidence of benefits from these programs in terms of relatively short-term recidivism and drug use, the question remains as to whether they represent any persistent long-term change. Whether for groups with lengthy histories of criminal and drug use behaviors, the intensive TC treatment program can produce changes in these chronic behaviors.

Two studies extended these evaluations to five years after release in examinations of data from California (Prendergast, Hall, Wexler, Melnick, & Cao, 2004) and Delaware (Inciardi, Martin, & Butzin, 2004). Those two studies produced rather different conclusions as to the persistence of the benefits of prison-based treatment. The Delaware study found significant benefits of the TC treatment for both recidivism and drug use, even in the context of multivariate control variables. The California study also found significant effects at five years after

^{*} Corresponding author. Tel.: +1 302 831 8828; fax: +1 302 831 3307.
E-mail address: butzin@udel.edu (C.A. Butzin).

release from prison for recidivism, but not for drug use, and the recidivism effects were no longer significant when examined in the context of multivariate controls. The studies, however, differed on three major dimensions: the mix of treatment experience within the correctional system, the manner in which recidivism was operationalized, and the use of cross-sectional or longitudinal analyses.

In the California study, all those in the treatment group had participated in treatment within prison, with about 30 percent of the treatment group also participating in treatment during transition back to the community. Positive effects were found for longitudinal survival analyses of reincarceration, though the effects became nonsignificant with control variables in the analysis. For the Delaware study, the sample examined in this study, all those in the treatment group had participated in work release, transitional treatment, with about 25 percent of those having also participated in treatment within prison. There were significant benefits for that treatment program five years later in terms of cross-sectional analyses of rates of those with new arrests, even when control variables were added. The stronger effects in the Delaware sample, compared to the California study, were consistent with previous work showing that participation in treatment during the period of transition from prison back to the community, as opposed to treatment inside prison, to be particularly effective (Butzin, Martin, & Inciardi, 2002; Wexler, Melnick et al., 1999). The difference in outcomes between the two studies, however, might be due to the difference in the mix of treatment experience, the use of new arrests rather than reincarceration as the outcome measures, or the use of cross-sectional analyses of those followed for the full five years rather than longitudinal analyses were also plausible reasons for such differences. The current study examined both arrest and reincarceration outcomes in longitudinal survival models that included all respondents with any follow-up in an attempt to address these issues.

A second, related goal of this study examined differences in outcomes associated with differential treatment experiences. Since, as noted above, some of the Delaware sample also participated in treatment within prison, that participation provided a contextual variable for the evaluation of the separate benefits of treatment within prison. Also of interest was the impact of a partial treatment course represented by those who failed to complete the program, i.e., whether a partial dose of the treatment produced benefits. Finally, a comparison is provided between those who participated in an aftercare program after graduation, and those who graduated before such a

program was in place. The general benefits of such continuing treatment participation have not been uniformly supported (McKay, 2001), but have shown advantages in previous examinations of this sample (Inciardi et al., 2004; Martin et al., 1999).

Another goal of the study was to begin to approach drug treatment evaluation from the context of more mainstream criminological theory. While there existed a wealth of literature on the effectiveness of correctional treatment, and an equally impressive theoretical literature on the causes of criminal behavior, there had been little effort to merge these two lines of inquiry. The emerging theoretical focus on the process of desistance from crime made this task both more interesting and more accessible, because the treatment literature was, at its core, concerned with trying to bring about criminal desistance.

While the approaches to desistance were numerous (Laub & Sampson, 2001), focus here was on two that were logically antagonistic, and manifest themselves in variables related to drug treatment and recidivism. First were those said to take a population heterogeneity approach (Nagin & Paternoster, 2000). These theories posited that some individuals had an underlying propensity to commit crime, and that these propensities were stable and distinct throughout the life course (Gottfredson & Hirschi, 1990; Moffitt, 1993). This approach to criminal behavior suggested that treatment outcomes were really measuring differences in individuals' underlying propensities for crime, and a general effect of age (Gottfredson & Hirschi, 1990). Desistance, these theorists argued, applies to all offenders as a function of age, though for variants of the theory even age did not have an effect for certain groups (Moffitt's life course persistent offenders). These theorists argued that persons who were older, with increasingly higher levels of self-control, were more likely to have engaged in and completed the treatment process, *and* more likely to succeed in terms of measured outcomes. Thus, any treatment effect would have been the spurious outcome of one's underlying criminal propensity (Gottfredson & Hirschi, 1990). This argument was empirically supported by existing research that found that variables associated with recidivism and relapse, including age, were the same as hypothesized to capture underlying criminal propensity (Gendreau, Little, & Goggin, 1996). The effect of underlying propensities in regard to treatment was less clear, however. In fact, treatment effects have been shown in some cases to be largest for those with the most extensive criminal histories and highest risk for recidivism (Knight et al., 1999; Wexler, Melnick, & Cao, 2004), that those with the most evidence of a stable propensity were most likely to show change after treatment.

Opposing population heterogeneity theorists were those arguing a state dependence approach in which social context was suggested to lead to criminal desistance (Laub & Sampson, 2001; Warr, 1998). Generally these theorists focused on variables reflecting social bonds such as employment and marriage. The relationship between unemployment and negative outcomes, specifically crime and drug use, was both theoretically and empirically supported (Laub & Sampson, 2001; O'Connell, 2003; Petersilia, 2003; Platt, 1995; Ugen, 2000).

The treatment populations involved in studies of treatment in correctional settings had been generally very high risk, marked with extensive criminal and drug use histories, high unemployment, and marital instability. They were essentially populations that were lacking in the social supports that would be expected to lead to desistance, and indeed their histories were consistent with that expectation. In the terminology of the desistance literature, many of these clients had mortgaged their future (Sampson & Laub, 1993) through their past criminal and drug involvements, making them less desirable as spouses or employees—those very things speculated to lead to desistance. Most treatment programs placed at least some emphasis upon vocational issues, and often employment status was seen as a plausible outcome in evaluating treatment programs, though the reciprocal nature of outcomes and employment was equally plausible (Fiorentine, 1998). There was, however, some evidence that treatment effects were most pronounced in those individuals most lacking in the supports, such as employment, that had been considered most useful for behavioral change (Butzin, Scarpitti, Nielsen, Martin, & Inciardi, 1999).

Sampson and Laub (1993), drawing on Elder (1988), suggested that turning points were events that occurred within a person's trajectory, or long-term pattern of behavior. They proposed that employment, marriage, or entry into the military could serve as a mechanism to turn people away from crime. Plausibly, given that treatment was designed to change behavior, drug treatment itself could be conceptualized as another turning point in these terms. Treatment evaluations were generally seen as interrupted time series designs—the individual was criminal before the intervening treatment and hopefully not criminal after. The treatment intervention, if effective, was altering the person's long-term trajectory, and was thus a turning point. Laub and Sampson argued that turning points functioned through an accumulation of social capital, conceptualized as systems of mutual obligation in social networks. It may be that among treatment clients a kind of sobriety capital was accumulated which, when combined with the social networks and

support developed in treatment communities, filled the role of social capital that so many of these clients lack. Treatment could thus function in lieu of social support in promoting changes in behavior that lead to desistance. The treatment experience may function as a turning point leading to long-term change for a group with reduced probabilities of more standard life changing events.

Thus, the study sought to answer three questions. First, did work release treatment produce long-term effects, or were the earlier results artifacts of the particular examination? Second, if effects were evident, did preceding treatment within prison, and/or aftercare following treatment show additional beneficial effects? Third, did treatment show effects independent of those variables predicted from general theories of criminal desistance?

Delaware work release treatment program

Treatment within the Delaware criminal justice system occurred at three levels: therapeutic community treatment within prison, therapeutic community treatment during work release, and an aftercare program. Within prison, TC treatment in a separate pod of the facility was provided for a twelve-month program. A transitional treatment program during the state's period of standard work release was also a residential TC for the last six months of prisoners' sentences. The aftercare program consisted of weekly outpatient group meetings and one day each month at the facility for the first six months of subsequent probation. Note that, while in the correctional treatment literature the term 'aftercare' was often used to refer to any treatment after that in prison, here it specifically refers to a continuing care program that was an extension of the work release program.

The work release program had been the centerpiece of the treatment program within the Delaware correctional system (Hooper, Lockwood, & Inciardi, 1993; Inciardi, Lockwood, & Martin, 1994; Lockwood, Inciardi, & Surratt, 1997). The Delaware work release TC examined here was physically adjacent to the regular work release center, both were part of the correctional campus, and correctional officers provided security for both buildings. Both the regular work release and the work release TC were six-month programs that included both men and women, with separate secured evening quarters. In regular work release, inmates were released during the day, with a mandated return to the dormitories each evening. Meetings of AA and NA were held in the evenings, and an on-site counselor was available. The transitional work release TC was similar to that of the traditional therapeutic community, with a "family setting" of individual chores and group responsibilities

and discipline. The clinical regimen was modified to address security concerns and the correctional mandate of work release to prepare clients for employment in the community (De Leon, 1997). In addition to intensive therapeutic community treatment, clients prepared for, and obtained employment in the free community. During the first three months, the TC participants were not employed in the outside community, but for the final three months followed the same regimen as regular work release participants, and were allowed access to the community for employment opportunities. This process allowed clients to establish bonds in the community, while still in a guided therapeutic program.

Methods

The present sample was drawn from those classified in the Delaware correctional system as approved for work release with a recommendation for drug treatment between 1991 and 1998. The number of those so classified exceeded the capacity of the treatment programs during that period; thus, those eligible were assigned to either treatment, or to regular work release, the “no treatment” group. Exceptions were that priority for entering the program was given to graduates of treatment programs within the prison, and to those with judicial sentencing orders that required treatment participation as a condition for release.

The research protocol included baseline and multiple follow-up interviews, with urine testing at each interview. The baseline interview was administered at the point of an inmate’s transfer to work release from prison. The first follow-up occurred at six months, corresponding with completion of work release. Subsequent interviews were conducted eighteen, forty-two, and sixty months after baseline. Interviews at baseline and each subsequent follow-up were lengthy, with participation in the research project compensated with up to \$50 at each of the testing intervals—\$25 for completing the questionnaire and \$25 for giving a urine sample. The research complied fully with the special protections for prisoners as research subjects.

The most relevant items in the interviews pertained to the time to new arrest, and the time to any return to incarceration. At each interview, respondents were asked whether and when they had been arrested during the reporting period. All data were thus from self-report, rather than official records. For an early sample of one hundred of the respondents, however, their reported arrests were compared to official state correctional records, with ninety-eight of the cases in agreement. The interviews were organized around residential periods,

with the respondents asked to report on the location and their behavior for each place they lived during the reporting period. The incidence and time to a new incarceration was derived from that interview format.

The analyses reported below each initially compared participants distinguished by intent to treat: those who had any participation in transitional treatment versus those who did not. Given significant effects of treatment, subsequent analyses explored differences among the treated groups in terms of completion of the treatment program, and participation in aftercare. Comparisons of treatment graduates with and without aftercare were possible because the aftercare component was not operational until 1996, whereas the other stages of treatment had been implemented several years earlier. Once aftercare was fully established, all graduates were expected to participate.

Of the original cohort of 1,319 interviewed at their prison release, 1,247, or 95 percent, were subsequently interviewed. Statistical analyses of the time to relapse used Kaplan-Meier methods for initial tests and descriptions of treatment effects, and subsequent multivariate tests used Cox multivariate regression methods. The Cox regression models included, in addition to treatment status, the baseline variables of gender, race, age, marital status, employment, religiosity, criminal history, and history of drug use as predictors of recidivism. Previous drug use was measured as the frequency of drug use in the three months before incarceration on a seven-point scale from 0 = “no use,” to 6 = “used several times a day.” Previous participation in drug treatment was measured as whether they had ever been in a drug treatment program before this incarceration. Religiosity was the response to “How much does religion influence your life?” on a scale from 0 = “not at all,” to 3 = “a great deal.”

Group means and percentages on these covariates are shown in Table 1. The “treatment” and “no treatment” groups differed significantly on the number of prior arrests, employment, and frequency of drug use prior to incarceration. The treatment group reported more frequent drug use, and more arrests, and less full-time employment prior to their latest incarceration.

Results

Five-year outcomes

Estimates from Kaplan-Meier analyses of time to new arrest for those respondents who participated in transitional, work release, treatment were significantly longer than for those not in treatment, with a mean of 47.8 versus 32.3 months, and a median of 43.7 versus

Table 1
Demographics and history for treatment and no treatment groups

	No treatment	Treatment
N	332	915
Male	20%	21%
African–American	75%	79%
Age (mean)	30.0	30.5
Ever married	29%	28%
Prior arrests (mean)	9.2	9.8
Age at first incarceration (mean)	22.0	21.2
Incarcerations (mean)	4.2	4.1
Any prior treatment	72%	71%
Prior drug use ¹ (mean)	4.2	4.7
Prior full time employment	64%	57%
Religiosity ² (mean)	2.1	2.2

¹ How often did you use drugs in the three months before prison? 4 = “several times a week” and 5 = “once a day.”

² How much does your religion influence your life? 1 = “not at all,” 2 = “somewhat,” and 3 = “a lot.”

19.3, $p < .001$, log rank test. Censored cases, representing respondents who reported no new arrests, were 27.4 percent of the no treatment group and 48.8 percent of the group who participated in transitional treatment.

Estimates from a Kaplan-Meier analysis of time to any reincarceration were also significantly longer for those respondents who participated in transitional treatment than for those not in treatment, with a mean of 27.7 versus 32.7 months, median of 16.1 versus 18.7, $p < .001$, log rank test. Censored cases, representing respondents who reported no new incarceration, were 22.3 percent of the no treatment group and 29.8 percent of the group who participated in transitional treatment.

Aftercare and graduation effects

The treatment variable was expanded to discriminate those respondents who participated in regular work release ($n = 332$), who dropped out of work release treatment ($n = 302$), who completed treatment but did not participate in aftercare ($n = 257$), and those who completed and participated in aftercare ($n = 356$). The four groups were significantly different by log rank test ($p < .001$), with 27.4 percent of the comparison group with no new arrest, 33.3 percent of the dropouts, 52 percent of the graduates before aftercare, and 59.6 percent of the graduates with aftercare. The mean times to arrest were 32.3, 36.4, 46.1, and 55.4 months, respectively. The dropout and comparison groups were not significantly different across the time period, but both the graduate groups had significantly higher probabilities of no new arrest than did the comparison group. The two graduate groups were significantly different from one

another ($p < .05$, log rank test), with the aftercare group showing an increasing relative benefit over time.

The four treatment subgroups were also significantly different with respect to return to incarceration, by log rank test ($p < .001$), with 22.3 percent of the comparison group with no incarceration, 6.6 percent of the dropouts, 31.9 percent of the graduates before aftercare, and 47.8 percent of the graduates with aftercare. The mean times to incarceration were 27.7, 12.3, 35.9, and 47.5 months, respectively. The dropout group was substantially, and significantly, below the other groups across the time period, with the bulk of the dropouts reincarcerated during the first year of release. The graduate with aftercare group was significantly and consistently superior to the comparison group. The graduates without aftercare, while significantly better than those in regular work release, showed a different pattern. During the initial period after release, they were also substantially superior to the comparison group, but that difference narrowed over time, until reaching a level similar to the comparison group after five years.

Treatment in context of variables predicting desistance

Subsequent analyses were extended to examine both differential aspects of the treatment experience, and variables other than treatment possibly responsible for desistance. The analysis included 1,197 cases with complete data.

As shown in Table 2, the effect for treatment participation remained significant in the context of the other covariates, and as subgroups of treatment performance in a Cox regression analysis. Treatment participation was a substantial and significant predictor, with both groups who completed treatment significantly less likely to have had a new arrest than either the comparison or dropout groups. As could be expected, older respondents were less likely to have a new arrest, with each year of age reducing the likelihood of new arrest by about 3 percent. Criminal history, both in terms of the age at first incarceration, and the number of previous incarcerations and arrests, was also significantly related to the timing and likelihood of new arrest. The degree of reported religious influence was also a significant predictor. Neither the demographic variables of gender, ethnic group and marital status, nor drug use history as measured as frequency of use or previous treatment experience, were significantly related to arrest. Participation in treatment within prison was not a significant predictor.

The second order interactions between each of the predictors and the work release treatment variable were

Table 2
Cox proportional hazard regression results for time to new arrest

Independent variables	B	SE	Significance	Exp.(B)
Age	-.030	.007	<.01	0.97
Female	-.133	.101	.19	0.87
African-American	-.016	.079	.84	0.98
Married	-.055	.100	.58	0.95
Prior incarcerations	.050	.016	<.01	1.05
Age at first incarceration	-.016	.008	.04	0.98
Prior arrests	.005	.002	.01	1.01
Religiosity ¹	-.154	.048	<.01	0.86
Frequency prior drug use ²	.025	.021	.23	1.02
Any prior treatment	-.096	.092	.30	0.91
Treatment in prison	-.157	.108	.15	0.86
Prior employment	.022	.086	.80	1.02
Graduate/aftercare versus comparison	-.851	.112	<.01	0.43
Graduate/no aftercare versus comparison	-.626	.116	<.01	0.54
Dropout versus comparison	-.126	.101	.21	0.88

¹ How much does your religion influence your life? 1 = "not at all," 2 = "somewhat," and 3 = "a lot."

² How often did you use drugs in the three months before prison? 1 = "one or two times total" to 6 = "several times a day."

also tested. The only significant interaction was between the number of past arrests reported and treatment participation. The interaction reflects a muted effect of arrest history on subsequent arrest for those who participated in treatment. Those low on arrest history, at or below the median of seven previous arrests, were compared to those with a high arrest history, above the median. For the no treatment group, the difference in time to arrest associated with arrest history was over ten months, a mean of 32.2 months for those with a low history and 20.0 for those with a high history. For the work release treatment group the mean difference was less than a month, 32.4 for those with a low history and 31.6 for those high on previous arrests. This effect was similar for each of the work release subgroups, with each showing a difference of no more than 1.6 months between the different arrest histories. The interaction was less dramatic with respect to the proportions of those who had a new arrest, as opposed to the latency to that arrest. For the no treatment group, 80.0 percent of those with high previous arrests had a new arrest versus 63.3 percent of those low. For the treatment group, the respective values were 56.5 percent and 46.2 percent. The treatment experience seemed to counteract the expected effect of criminal history, at least with respect to arrest history.

Additional Cox regression analyses examined the effects of treatment subgroups and the other predictive variables on return to incarceration.

As shown in Table 3, treatment participation was a significant predictor, with both groups who completed treatment significantly less likely to have had a new incarceration than either the comparison or dropout groups. In contrast to the arrest data, however, for incarceration the dropout group was significantly worse than the comparison group. As with arrests, older respondents were less likely to have a new incarceration, with each year of age reducing the likelihood of new arrest by about 2 percent. The effects of the other variables, however, were quite different than they were with new arrests. Criminal history was related to reincarceration only as the number of previous incarcerations. The degree of reported religious influence was no longer a significant predictor. Gender, as well as employment and frequency of drug use before incarceration, were significantly related to reincarceration. Participation in treatment within prison again did not reach statistical significance.

The only significant second order interaction with the work release treatment variable was with the age of the respondent. Here the interaction reflected differences between the work release treatment subgroups. The treatment with aftercare group showed an enhanced effect of age with a mean time to reincarceration of 56.7 months for those above the median age at release of 29, compared to 37.4 for those younger. The effect of age was much more muted for the other groups. For the graduates without aftercare, the comparable means were 30.0 and 31.0, for the dropouts, 5.4 and 7.6, and for the comparison

Table 3
Cox proportional hazard regression results for time to return to incarceration

Independent variables	B	SE	Significance	Exp. (B)
Age	-.016	.006	.01	0.99
Female	-.271	.091	.01	0.76
African-American	-.008	.074	.92	0.99
Married	-.079	.090	.38	0.93
Prior incarcerations	.072	.014	<.01	1.07
Age at first incarceration	-.003	.007	.63	0.99
Prior arrests	.001	.003	.92	1.00
Religiosity ¹	-.052	.044	.24	0.95
Frequency prior drug use ²	.084	.019	<.01	1.09
Any prior treatment	.020	.081	.81	1.02
Treatment in prison	-.143	.094	.13	0.87
Prior employment	-.242	.078	.01	0.79
Graduate/aftercare versus comparison	-.771	.106	<.01	0.46
Graduate/no aftercare versus comparison	-.346	.103	<.01	0.71
Dropout versus comparison	.791	.092	<.01	2.21

¹ How much does your religion influence your life? 1 = "not at all," 2 = "somewhat," and 3 = "a lot."

² How often did you use drugs in the three months before prison? 1 = "one or two times total" to 6 = "several times a day."

group 26.5 and 18.6. Stated as a function of aftercare, older respondents with aftercare compared to those without aftercare had incarcerations delayed more than two years, while the aftercare effect was only about six months for the younger respondents.

Discussion

Participation in a treatment TC during the transitional period between prison and the community had a substantial impact on the incidence and timing of both subsequent arrests and return to incarceration. The proportion of those treated who were not subsequently arrested was on the order of twice the size as that for those without treatment. The time before arrest was more than 50 percent longer than for those without treatment. Substantial benefits, though not as large, were also evident for return to incarceration. The smaller effects of treatment participation on return to custody were likely the result of more frequent violations of probation for the treatment group. This increased attention from probation authorities toward treatment participants has been previously noted (Knight et al., 1999).

There were striking differences between the patterns for new arrests and for return to incarceration, both in terms of the impact of the work release treatment experience, and the other variables that were significant predictors of those patterns. For work release treatment, age and number of incarcerations were the only variables that significantly predicted both outcomes.

For new arrests, additional significantly predictive variables were the other criminal history variables of number of incarcerations and age at first incarceration, as well as the reported influence of religion. The predictors of past criminal behavior and age were consistent with the identification of those individuals with the strongest propensity for continued crime. The effects of the work release TC and religious feelings suggest that that propensity may be at least somewhat malleable. Most supportive of this malleability was that those respondents with a more extensive history of criminality, as expressed particularly as number of lifetime arrests, were those that showed the largest effect of treatment. The TC experience appeared to dampen the expected negative outcomes associated with more serious criminal histories, presumably for those with the higher propensity for continued criminal behavior. This interactive effect was consistent with results from other examinations of correctional-based TC's (Knight et al., 1999; Wexler, Melnick et al., 2004).

The data for return to incarceration showed a much different pattern of predictors. Return to custody resulted

from not only criminal arrests, but also behavior detected as violations of probation and parole (in this case, only probation, since Delaware has no provisions for parole). In contrast to arrest, reincarceration was associated with gender, histories of drug use, and unemployment. Of the criminal history variables, only number of incarcerations was a significant predictor. It would appear that in this case, the probation violations were much more influenced by more general cultural variables than the specific criminal history. Older males with poor employment histories and relatively heavy drug use were those most at risk for probation violation. These older respondents were also those who showed the most relative benefit from an aftercare component of work release treatment. Arguably, the more lengthy incarceration careers of these older individuals were more likely to have dissipated their family support structures, leaving them more dependent upon the social structures of the street, and more vulnerable to the visible criminal violations of that street culture. Thus, the aftercare program provided them with an alternative social milieu.

In a sense, the data could be seen as supporting each of the two general theoretical approaches to criminal desistance. Those variables significantly related to new arrests, age and the measures of criminal history, were indeed those consistent with arguments that individual propensity is the driving force in continuing criminal behavior. The interaction of arrest history with treatment effects, however, suggests that those individuals most likely (according to those theorists) to have a persistent propensity towards criminality were those who showed the most benefit from treatment.

The return to custody results were much more supportive of those who argue for the importance of social context. Employment and abstinence from drug use became important predictors of desistance in terms of avoiding incarceration. Of particular relevance was the interaction of age with the treatment subgroup variable. The older participants showed a dramatically increased benefit from the aftercare component of the treatment programs. Anecdotally, from discussions with treatment staff, the benefit of aftercare was to provide an alternative to the criminogenic social network. Spending time at the treatment facility, rather than hanging on the corner with the old cohort, was a crucial beneficial aspect of aftercare. Those older clients have arguably less flexibility in the available social context, especially when their past networks are in the context of unemployment and heavy drug use.

The life course perspective in criminology has depicted desistance from illegal behavior largely as a product of social ties, most clearly demonstrated by job stability and

marital attachment (Laub & Sampson, 2001; Warr, 1998). The extensive criminal history of this cohort is supportive of that notion, given there is only a small minority that have even ever been married, and who have full-time employment of any sort. The evidence of the effectiveness of a transitional TC is thus particularly impressive, though also consistent with the perspective of TC treatment, particularly that of De Leon (1997, 2000). That perspective stresses that the focus of treatment need be upon the whole person, rather than the specifics of drug abuse; that ‘habilitation’ rather than ‘rehabilitation’ is the goal, given the individual’s history of negative patterns of behavior. In this view of the functioning of therapeutic communities, they serve to produce a new family, or social structure for the individual; much as, say, those social structures that may be produced by a new marriage or a new job. Or, stated in the terms of Laub and Sampson, that the TC experience can function as a turning point in the lives of the participants.

As with several previous studies, treatment within prison, as opposed to during the transition from prison, had a much smaller impact on outcomes. Treatment while in prison had no significant effects on new arrest or return to incarceration. One could speculate that the superior impact of treatment in the transitional period is twofold: the contextual milieu of that treatment is much more similar to the community context in which the participants must maintain their sobriety, and/or the timing of the treatment provides support when risks of returning to previous behaviors are much stronger.

The results show clear benefits from work release treatment programs, and suggest that such benefits, at least in terms of new criminal behavior, may be maximized by targeting the programs toward those most at risk of recidivism, particularly those with the most extensive criminal histories. The inclusion of a continuing care, or aftercare, component to the program also was shown to make the benefits more likely to persist, and to be particularly advantageous for the older participants.

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