A QUASI-EXPERIMENTAL EVALUATION OF AN INTENSIVE REHABILITATION SUPERVISION PROGRAM

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Over the past 20 years, an increased understanding has been developed of what interventions do and do not work with offenders. Treatment programs that attend to offender risk, needs, and responsivity factors have been associated with reduced recidivism. There is also a recognition that sanctions without a rehabilitative component are ineffective in reducing offender recidivism. This study evaluates a cognitive-behavioral treatment program delivered within the context of intensive community supervision via electronic monitoring (EM). Offenders receiving treatment while in an EM program were statistically matched on risk and needs factors to inmates who did not receive treatment services. The results showed that treatment was effective in reducing recidivism for higher risk offenders, confirming the risk principle of offender treatment. The importance of matching treatment intensity to offender risk level and ensuring that there is a treatment component in intensive supervision programs is reaffirmed.

The management of offender risk is perhaps one of the most important functions of the criminal justice system. Extensive resources are expended by the police, courts, and corrections in an effort to protect the public and decrease the risk some offenders pose to the community. However, the methods for controlling offender risk and ensur-

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ing public safety vary considerably. They range from severe controls of individual freedom with minimal attention to offender needs (e.g., incapacitation) to offender rehabilitation programs. Just as the range of risk management options varies, so does the effectiveness of these different interventions in reducing recidivism. The appropriate balancing of sanctions and rehabilitation often lies at the heart of debates on criminal justice policy.

REDUCING RECIDIVISM: OFFENDER REHABILITATION OR CRIMINAL SANCTIONS?

Martinson's (1974) review of "what works?" sparked a vigorous debate about the merits of offender rehabilitation. After reviewing 231 studies of interventions intended to reduce recidivism. Martinson concluded that there is "little reason to hope that we have . . . found a sure way of reducing recidivism through rehabilitation" (p. 49). Following this conclusion, Martinson and his colleagues (Lipton, Martinson, & Wilks, 1975) faced the question of what then was the alternative to treatment for reducing recidivism. Their answer was that deterrence offered a reasonable alternative. Even if research were to show that deterrence did not reduce recidivism, at least the judicious use of sanctions would ensure that justice was being served.

The growing conservative mood in the United States was fertile ground for a get-tough movement (Cullen & Gilbert, 1982). The phenomenal influence of the get-tough movement did not mean, however, that support for offender rehabilitation died. Rebuttals to Martinson's position quickly followed (Adams, 1975; Palmer, 1975). After all, 40% to 60% of the studies reviewed by Martinson reported reduced recidivism for some offenders. Treatment advocates recognized that not all rehabilitation programs were equally effective. The task for researchers and practitioners was to identify the conditions associated with effective rehabilitation. Gradually, a knowledge base was constructed outlining some of the important characteristics of effective treatment. Client × Type of Treatment interactions held the key to effective intervention (Palmer, 1975). Moreover, cognitive-behavioral interventions were most often associated with reduced recidivism (Gendreau & Ross, 1979, 1987). Throughout the 1980s, reviews of the offender rehabilitation literature painted a more optimistic picture.

The appearance of meta-analytic reviews of the treatment literature strengthened the conclusions of the narrative literature reviews (Andrews, Zinger, et al., 1990; Lipsey, 1992; Lösel, 1995). In general, results from the meta-analyses showed that treatment was associated with reductions in recidivism. Not only did some treatments clearly work but there also was an increased understanding as to what constituted effective treatment. Andrews, Bonta, and Hoge (1990) suggested that effective treatment consisted of programs that followed certain principles. Three of the more important principles were the risk, need, and the responsivity principles.

The risk principle suggests that the intensity of treatment should be matched to the risk level of the offender. That is, low-risk offenders require few (or no) services, and higher risk offenders require intensive levels of services. Andrews, Bonta, and Hoge (1990) have documented a number of studies showing that intensive services for low-risk offenders either had no effect on recidivism or actually increased recidivism. Intensive levels of services, on the other hand, produced decreases in recidivism for higher risk offenders. Because of the lack of well-controlled studies, Andrews and colleagues reserved judgment on whether intensive treatment programming with the very highest risk offenders would be effective.

The need principle makes a distinction between criminogenic and noncriminogenic needs. Offenders have many different needs, but not all needs are related to their criminal behavior. Treatment programs must target criminogenic needs to be effective. Targeting noncriminogenic needs (e.g., self-esteem, anxiety), unfortunately a feature of many counseling programs, was unlikely to have a significant impact on criminal behavior. Finally, the responsivity principle stresses the importance of matching the treatment modality to the cognitive and personality characteristics of the offender. In particular, cognitive-behavioral interventions as opposed to, for example, psychodynamic therapies were seen as the more effective style of intervention.

To test the validity of these treatment principles, Andrews, Zinger, et al. (1990) reviewed 80 studies of offender rehabilitation. These 80 studies yielded 154 effect size estimates. The phi coefficient, a measure of association for 2×2 contingency tables and interpretable along the lines of Pearson's r, was used as their measure of effect size. Pro-

grams that followed the treatment principles were categorized as appropriate treatments. For example, a behavioral treatment program delivered to higher risk offenders would be coded as "appropriate." On average, appropriate treatment programs were associated with a 53% reduction in recidivism ($\phi = .30$, n = 54).

Andrews and Bonta (1998) extended the 1990 meta-analysis to include 294 tests of correctional interventions. The average effect size (Pearson's r in this case) for appropriate treatment programs (n = 85) was .25. An effect size of this magnitude is clinically relevant, and as Rosenthal (1984) points out, simply squaring the r to calculate the "variance accounted for" is misleading. Using Rosenthal's (1984) binomial effect size display, an r of .25 represents a difference of approximately 24% between the treated and untreated groups. Furthermore, the effect size varied with the number of treatment principles evident in the programs. When only one of three treatment principles was present, the mean effect size was .03; it was .18 for two principles and .29 for all three.

The meta-analytic reviews by Andrews, Zinger, et al. (1990) are noteworthy for their analysis of other interventions intended to reduce recidivism. Programs that did not follow the clinically relevant treatment principles were categorized as inappropriate (e.g., intensive therapy for low-risk offenders, targeting noncriminogenic needs). The mean effect size in the 1998 meta-analysis was -.03 for inappropriate programs (n = 64), indicating a small increase in recidivism. Finally, criminal justice sanctions without any attention to offender risk and needs were also found to be associated with slight increases in recidivism (r = -.02, n = 79).

The results from the various meta-analyses not only showed that treatment can have positive effects on offender recidivism but also that the alternative sanctions were unrelated to reductions in recidivism. Others have also reached similar conclusions (Cullen, Wright, & Applegate, 1996; Gendreau & Goggin, 1996). Gendreau and Goggin (1996) conducted a meta-analysis involving 138 comparisons of different types of sanctions (e.g., fines, intensive probation services). The average effect size (r) was .00. They also found very little variation in the effectiveness of different types of sanctions. The most effective sanction was restitution, with a mean effect size of .06. Although some scholars remain pessimistic about offender treatment programs and conclude that "they don't work" (DeKeseredy & Schwartz, 1996, p. 458), the weight of the evidence now favors a rehabilitation agenda.

INTENSIVE REHABILITATION SUPERVISION

Despite the substantive body of evidence showing that offender treatment is effective in reducing recidivism, the get-tough approach dominates the political and criminal justice policy landscapes. It appears that legislators are quite ready to implement harsher penalties for a wider range of offenders even though it may not necessarily reflect what the public wants (Cullen, Skovron, Scott, & Burton, 1990; Sprott, 1998). Even juveniles are no longer protected from adult responsibilities and severe sanctions (Schiraldi & Soler, 1998). The draconian mandatory sentencing reflected in the three-strikes-and-you're-out laws are present in numerous states (Stolzenberg & D'Alessio, 1997), and a number of correctional systems have adopted no-frills prisons (Johnson, Bennett, & Flanagan, 1997). Newman (1995) has even argued for a return to the corporal punishment of offenders.

Yet within this harsh political context, treatment programs continue to be delivered to offenders. What is becoming increasingly common is the introduction of treatment services within the context of sanctions. Evaluations of popular get-tough programs such as boot camps and intensive probation services find reductions in recidivism only when offender treatment is a significant component of the program (Gendreau, Goggin, & Fulton, 2000; MacKenzie, Brame, McDowall, & Souryal, 1995; Petersilia & Turner, 1991). Consequently, pure punishment-oriented programs are becoming less popular.

Gendreau, Cullen, and Bonta (1994) recognized that the political climate would not permit a massive retreat from the get-tough interventions. They proposed an intensive rehabilitation supervision (IRS) model. IRS uses the close monitoring of offenders that characterizes intensive supervision programs to deliver direct human services. Intensive monitoring programs were seen as an opportunity to provide treatment services to higher risk offenders while under community supervision. Thus, IRS promised decreased offender recidivism and

reassured the public that higher risk offenders were being closely watched.

THIS STUDY

During the past two decades, Canada has been faced with rising prison populations. Interest in alternatives to incarceration has been high, and one such alternative adopted by a number of provinces is the electronic monitoring (EM) of offenders in the community. In 1996, the federal government undertook an evaluation of EM programs in three provinces (Bonta, Wallace-Capretta, & Rooney, 1999). This study deals specifically with the program in Newfoundland.

In the mid-1990s, the province of Newfoundland and Labrador was experiencing prison overcrowding. Provincial cells were operating over capacity; inmates nearing the end of their sentences were granted temporary absences to relieve overcrowding, and in some cases, offenders remained in federal Royal Canadian Mounted Police (RCMP) custody awaiting a prison bed (McNutt, 1995). As with many jurisdictions across North America faced with prison overcrowding, attempts were made to divert offenders from imprisonment. In Newfoundland, EM was seen as a way of placing moderate-risk inmates safely into the community.

EM began in 1984 in New Mexico as a means to enhance the control and monitoring of offenders placed on house arrest (Fox, 1987). The technology usually involves the wearing of an electronic bracelet that emits a signal to a correctional agency indicating the offender's whereabouts. EM programs have grown significantly in response to the prison overcrowding problem. Camp and Camp (1993) reported that approximately 10,000 offenders are in EM programs across the United States. Examples of other countries that have adopted EM as an alternative to incarceration include Canada (Bonta et al., 1999), the United Kingdom (Mortimer & May, 1997), and Sweden (Somander, 1996).

The EM program developed in Newfoundland has two features that set it apart from the other EM programs operating in Canada. First, the program, at least in policy, attempts to target moderate-risk inmates; most EM programs target lower risk offenders (Bonta et al., 1999;

Cullen et al., 1996). Second, all the offenders under EM are required to attend an intensive treatment program. Thus, the program prescribes to the IRS model described by Gendreau et al. (1994). Although the treatment program was developed to deal with offenders placed into EM, it is also available to offenders serving traditional probation sentences. Therefore, this study provides an evaluation of a treatment program for offenders under community supervision (EM offenders and probationers) and any additional benefits offered by EM.

METHOD

A quasi-experimental design was used in the evaluation study. There were three groups of offenders: (a) treated offenders under EM supervision, (b) treated probationers, and (c) released inmates. Equating the groups was achieved in two ways. First, the inmates were selected from regions where EM was unavailable but who fit the profile of the selection criteria for EM. That is, these inmates would have been assessed for placement into EM if the program had been available in their location. The selection criteria for EM included a nonviolent and nonsexual offense, a less-than-6-months sentence, and an assessment of moderate risk. These selection criteria were general guidelines, and exceptions could be made. The second method for ensuring that the groups were comparable was a post hoc statistical matching on offender risk-needs classification scores.

Given that the offender rehabilitation literature shows that not all treatments are equally effective, an independent review of the quality of the treatment program was conducted. The purpose of the review was to assess whether the treatment program had a reasonable expectation of success.

Finally, the treatment program was evaluated with respect to postprogram recidivism. Recidivism was defined as a reconviction within 1 year of completion of treatment or release from prison. The reconviction data were taken from provincial and federal RCMP criminal history records. There are a number of possible recidivism measures that researchers can use (e.g., arrest, incarceration, etc.), and researchers often must select one over the others. We chose reconviction as our measure because it is based on a court finding of

guilt. Therefore, conviction as a recidivism measure reduces the possibility of overcounting criminal behavior.

TREATED OFFENDERS

Two groups of male offenders attended treatment. The first group consisted of 54 inmates released into the community under EM who were required to attend treatment. We refer to this group as the IRS offenders. The IRS offenders spent very little time in prison, an average of 2 to 3 days for processing (McNutt, 1995). The second group consisted of 17 probationers referred to treatment by their supervising officers. The probationers voluntarily attended the same program as the IRS offenders but without the EM condition. The IRS offenders and probationers were approached by treatment staff and asked to participate in the study. No one refused to participate.

The IRS participants were selected from the local prison in the city of St. John's. One of the intentions of the IRS program was to target moderate-risk inmates for community placement. Low-risk inmates were to be given temporary absences with the normal reporting conditions. The assessment of offender risk, as practiced, was variable and problematic. The province uses a modification of the Wisconsin classification system (Robinson & Porporino, 1989). However, it is policy to use the instrument only in probation, and consequently, risk-need scores were unavailable for many of the offenders coming directly from the prison. In addition, features of the system such as an automatic high-risk designation for an assault offense and the override potential of the unvalidated need scale lead to overclassification. Consequently, many assessments of risk were influenced by officer judgment. This situation gave few assurances that the selection of offenders for the IRS program would accurately reflect moderate risk. It therefore became necessary to adopt another standardized offender risk assessment for this evaluation (described later).

NONTREATED OFFENDERS

A comparison sample was drawn from two prisons located in jurisdictions where IRS was not available. Institutional records were reviewed and inmates selected using the criteria for the IRS program (i.e., moderate risk, nonviolent, less than 6 months in sentence). All 100 inmates who were approached by research staff volunteered to participate in the study. They each received a \$10 honorarium deposited into their institutional accounts.

THE TREATMENT PROGRAM

The Learning Resources Program (LRP) is an intensive treatment service offered by the John Howard Society of Newfoundland, a nongovernmental agency that provides services to offenders. The LRP operates four mornings per week for a total of 9 hours. Anger management, criminal thinking, and substance abuse groups are conducted using a highly structured, cognitive-behavioral approach. Relapse prevention plans were also developed in all groups. In addition to the group programs, individual counseling is provided to deal with more specific personal needs.

An independent review of the quality of programming provided by the LRP was conducted by Gendreau (1996) using the Correctional Program Assessment Inventory (CPAI). The CPAI (Gendreau & Andrews, 1996) provides a quantitative summary of various aspects of a program and its correspondence with the principles of effective rehabilitation. Six general areas are measured: (a) program implementation, (b) client preservice assessment, (c) program characteristics (e.g., targeting criminogenic needs, using cognitive-behavioral interventions), (d) staff characteristics (e.g., education and level of training), (e) incorporation of an evaluation strategy, and (f) ethical and reliable client information protocols. An assessment using the CPAI requires a site visit, reviews of program manuals and procedures, and semistructured interviews with treatment staff and offenders.

OFFENDER RISK-NEEDS ASSESSMENT

This study was part of a larger evaluation of EM programs in Canada. All EM programs in the country operate under provincial authority, and each province conducts offender risk assessments in its own way. To ensure uniformity in the national evaluation project and to address the problems already noted with the classification system in

Newfoundland, the assessment of the offender's level of risk and needs was provided by a self-reported version of the Level of Service Inventory-Revised (LSI-R). The LSI-R is an empirically based instrument that surveys the risk and criminogenic needs of offenders (Andrews & Bonta, 1995). There are 54 items categorized into 10 subcomponents (e.g., criminal history, employment and education, companions, etc.). The psychometric and predictive validity of the LSI-R has been well established with a variety of offenders in different settings (Andrews & Bonta, 1998). In a meta-analytic review conducted by Gendreau, Little, and Goggin (1996), the LSI-R produced higher correlations with recidivism than did other offender risk measures (including the Wisconsin classification system).

The self-report version of the LSI-R is a paper-and-pencil questionnaire that consists of 78 items. The offenders complete the questionnaire, and the information is verified by a review of offender files. Scoring of the items follows the 0-1 format, and the questions are converted to the standard 54 items of the LSI-R. Prior research has shown that LSI-R scores can be reliably scored from the self-report questionnaire and that the results predict recidivism (Motiuk, Motiuk, & Bonta, 1992).

PROCEDURE

Upon entry into the LRP, treatment staff invited the offenders to participate in the research project. The offenders were asked for their permission to allow research staff to review their files and to complete the self-report questionnaire for the LSI-R. The questionnaire was returned to the counselor in a sealed confidential envelope that was opened only by the research staff. Offenders with reading comprehension difficulties were given an audiotaped version of the LSI-R.

The nontreated prisoners were approached in a similar manner but contact was entirely through a research assistant. The research assistant first conducted a file review to select offenders who would meet the criteria for IRS if the program was available to them in their location. The inmates were then interviewed and asked to consent to a more in-depth review of their files and to complete the self-reported LSI-R questionnaire.

RESULTS

REVIEW OF THE TREATMENT PROGRAM

The CPAI assigned a score of 66% (a "satisfactory" rating) to the LRP. Compared to approximately 200 programs assessed by the CPAI, the LRP performed in the top 10% with an expected reduction in recidivism in the range of 15% to 25% (Gendreau, 1996). The program scored particularly well in the areas of implementation, client preservice assessment, and ethical and reliable client protocols. One of the concerns raised by the assessment was whether the program was receiving enough high-risk offenders to show a benefit from the treatment service. Nevertheless, the overall assessment suggested that the LRP was a promising offender treatment program.

GROUP EQUIVALENCE

Before evaluating the impact of treatment, it was necessary to show that the various offender groups were similar on variables that could be associated with outcome. The initial selection of the nontreated inmate group was based on the criteria used for identifying inmates for the IRS. The referrals from probation were chosen by probation officers who judged the offenders as needing treatment. Therefore, the first step in the program evaluation was to assess the comparability of the IRS participants, the probationers, and the inmates.

Table 1 summarizes the criminal history and personal demographic characteristics of the three groups of offenders. Very few differences between the groups were found. The IRS offenders were less likely to have committed a violent offense when compared to the probationers, but they had a more extensive criminal history. More important, there were no significant differences in LSI-R scores, F(2, 166) = 2.27. Furthermore, the LSI-R was a predictor of recidivism for the total sample (r = .31, n = 171). Of the two variables that differentiated the groups, only prior convictions is a reliable predictor of recidivism. A violent index offense is a poor predictor of recidivism (Quinsey, Harris, Rice, & Cormier, 1998). The lack of meaningful differences between the IRS offenders and probationers permitted grouping these offenders into one treatment group for most of the subsequent analyses.

Variable	IRS	Probationer	Inmate	F or χ ²
Unemployed (%)	72.2	62.5	71.0	0.58
History of social assistance (%)	84.6	81.3	81.4	0.25
Alcohol abuse (%)	50.9	56.3	42.0	1.84
Drug abuse (%)	37.7	43.8	37.0	0.27
Emotional problems (%)	22.6	50.0	24.5	5.16
Age (years)	28.6	28.3	28.0	0.08
Education (grade)	9.3	10.3	9.9	2.71
Single (%)	53.7	58.8	48.0	0.93
Violent offense (%)	17.0	56.3	29.3	9.61*
Prior conviction (%)	98.1	75.0	90.0	8.50*
LSI-R score	25.1	25.4	22.6	2.27

TABLE 1: Characteristics of Offenders

NOTE: IRS = intensive rehabilitation supervision; LSI-R = Level of Service Inventory-Revised.

PROGRAM OUTCOME

The two groups of treated offenders received similar levels of treatment. On average, the IRS offenders received 65.1 hours of treatment. and the probationers received 73.5 hours (t = 1.03, df = 69, n.s.). The IRS offenders, however, were more likely than the probationers were to complete the four major modules of the treatment program. Of the IRS offenders, 87% completed treatment compared with 52.9% of the probationers ($\chi^2 = 9.02$, df = 1, p < .01). The high completion rate for the IRS offenders reflects the fact that failure to attend program sessions could result in a return to prison. For the probationers, program attendance was voluntary.

The recidivism rates were 31.5% for the IRS offenders, 35.3% for the probationers, and 31% for the inmates ($\chi^2 = .12$, df = 2, n.s.). For the treated offenders (IRS and probationers combined), the recidivism rate was 32.4% (23 of 71 offenders recidivated). LSI-R scores ranged from 13 to 43 for the treated offenders and from 5 to 38 for the untreated, prison group. To test the risk principle, low- (n = 86) and high-risk (n = 83) groups were constructed for both the treated offenders (IRS and probationers) and the inmates using the median score on the LSI-R of 23. A statistically significant interaction was found between treatment and risk level F(1, 165) = 6.99, p < .01. Table 2 dis-

p < .01.

Risk Level	Treatment					
	Yes (IRS)		No (Prison)			
	Percentage	n	Percentage	n		
Low	32.3	10	14.5	8		
High	31.6	12	51.1	23		

TABLE 2: Recidivism as a Function of Offender Risk and Treatment

NOTE: IRS = intensive rehabiliation supervision.

plays the recidivism rates for the treated and nontreated groups as a function of offender risk level. As seen in Table 2, low-risk offenders who received treatment demonstrated higher recidivism rates, whereas high-risk treated offenders showed decreases in recidivism.

DISCUSSION

The evaluation of the LRP used a quasi-experimental methodology. Ideally, the random assignment of offenders would have been preferred. However, because this was not possible, comparable groups were constructed using a priori selection procedures and post hoc statistical controls for offender risk factors that may influence outcome. In addition, a review of the LRP using the CPAI (Gendreau & Andrews, 1996) concluded that the treatment program could be expected to have a positive effect in terms of recidivism. Thus, with two important ingredients present—a reasonable evaluation methodology and a promising treatment program—we were in a position to evaluate the effects of the LRP.

At first glance, it appeared that treatment had no effect on recidivism. A comparison of the treated offenders to the nontreated inmates found no differences in recidivism rates (32.4% vs. 31.0%). However, a more detailed analysis led to a far different conclusion than that treatment did not work. It has long been recognized that treatment has different effects depending on the type of offender (Palmer, 1975). The risk principle postulates that treatment will have a differential impact depending on the offender's risk level (Andrews & Bonta, 1998). Given that the stated policy of targeting moderate-risk offenders did not translate into practice, we had a range of offenders ranging

from low to high risk. When the treated and nontreated groups were categorized into low- and high-risk offenders using the LSI-R, a significant interaction effect was found (a similar effect was found for just the IRS offenders).2 The high-risk offenders who received relatively intensive levels of treatment showed lower recidivism rates than untreated high-risk offenders (31.6% vs. 51.1%). Following Rosenthal's (1984) binomial effect size display, this 19.5% difference corresponds to a r of .19 between treatment and recidivism. This correlation is almost identical to the projected correlation of .18 (confidence interval = .14 to .21) based on the CPAI (P. Gendreau, personal communication, July 6, 1999), which is clinically relevant and consistent with some of the results reported in the offender rehabilitation literature (e.g., Andrews, Zinger, et al., 1990).

The finding that the low-risk offenders who received intensive levels of treatment demonstrated higher recidivism rates (32.3%) than nontreated low-risk offenders (14.5%) was not entirely surprising. In general, treatment provided to low-risk offenders has shown little effect on recidivism (Andrews & Bonta, 1998). However, there are reports that intensive treatment provided to low-risk offenders may result in increased recidivism (Andrews, Bonta, & Hoge, 1990). For example, O'Donnell, Lydgate, and Fo (1971) found arrest rates increased for first-time juvenile offenders receiving extensive services from paraprofessionals.

The precise reasons for the increase in recidivism for low-risk offenders is unclear. One possible explanation may be the impact of the shift in association patterns for the low-risk offenders due to treatment participation. That is, low-risk offenders who have minimal exposure to criminal thinking and criminal modeling were brought into contact with higher risk offenders who may demonstrate the very behaviors that are criminogenic. Criminological (e.g., Sutherland, 1947) and social-psychological theories of crime (Andrews & Bonta, 1998) both predict that alterations in social group membership will influence criminal attitudes and behavior. Indeed, there is experimental evidence in support of this theoretical prediction (Andrews, 1980).

One practical implication of the observed treatment-by-risk interaction is the importance of carefully assessing offenders before treatment. For many of the offenders who were referred to the LRP, objective assessments of offender risk level were not conducted. Screening for the LRP was dependent on a mix of actuarial assessment (the Newfoundland-Wisconsin classification instrument) and professional judgment. As the results showed, not only were some of the offenders relatively low risk but also treatment for them may have been contraindicated. Evidence on the predictive accuracy of professional judgment typically finds that such assessments do not perform as well as actuarial assessments of offender risk (Bonta, 1996; Quinsey et al., 1998). In most situations, actuarial risk assessment instruments are used for release and supervision decisions. However, the findings from this study also suggest that actuarial risk instruments may be important for the allocation of treatment services.

The treated offenders were exposed to intensive programming, and for the majority, there was close surveillance through EM. The use of EM raises the question of what potential benefits are provided to the offender, the public, and the correctional system by this method of correctional control. With respect to offender recidivism, EM appeared to have little impact. The probationers had similar recidivism rates to the IRS offenders (35.3% vs. 31.5%). Although the sample of probationers was small (n = 17), this finding parallels the general literature on the effectiveness of EM. Gendreau and Goggin's (1996) review of eight EM programs found an average recidivism rate of 7.1% for offenders in EM programs and 9.9% for the comparison offenders. The differences were nonsignificant. The lower recidivism rates observed by Gendreau and Goggin may be traced to the low-risk levels of offenders typically assigned to EM. Furthermore, a national evaluation of EM programs in Canada found that EM had no effect on the recidivism of offenders (Bonta et al., 1999).

Although EM demonstrated little effect on recidivism, it may serve other important functions. From an operational perspective, EM provides prison officials with an option for releasing moderate-risk inmates into the community and minimizes public safety concerns. The public may see EM as a tough program for offenders and a reassuring method for detecting problems and intervening before crime occurs. Within the IRS model described by Gendreau et al. (1994), an opportunity is given for delivering community treatment services to those in need. From a direct service perspective, when used as a condition of release, EM may increase the likelihood of offenders remaining in treatment. Most of the offenders under EM completed treatment

(87%), but the completion rate for probationers was only 52.9%. The fear of being easily detected for failing to comply with EM conditions may have motivated the offenders to remain in treatment. However, because the EM offenders were all inmates released on temporary absences, it is just as likely that the threat of being returned to prison for treatment noncompliance was sufficient to avoid treatment dropout. It remains for future research to see if there are other methods for ensuring treatment compliance than the threat of detection and punishment.

In summary, this evaluation of the LRP showed that offender treatment was effective in reducing recidivism for higher risk offenders. Thus the findings not only add to the large literature on treatment effectiveness but also give further confirmation to the importance of the risk principle. The introduction of offender treatment services within the context of intensive community monitoring (i.e., EM) offers promising avenues for the management of higher risk offenders in the community. Without a doubt, the potency of the LRP program gives currency to the concept of intensive rehabilitation services. The merging of rehabilitation services with close supervision may be a vehicle for focusing community services on those most in need.

NOTES

- 1. A test of the Risk × Treatment interaction was also conducted using the full range of data. An interaction term was constructed (group by Level of Service Inventory-Revised [LSI-R] scores) and entered into a multiple regression analysis along with group (treated and untreated) and risk (LSI-R scores). The interaction term was significant ($\beta = .687$, t = 2.52, p < .01).
- 2. A similar analysis was conducted for the intensive rehabilitation supervision offenders only, and a significant Risk \times Treatment interaction was found, F(1, 149) = 4.22, p < .05. However, we discuss the results for the combined treated groups to capitalize on a larger sample size.

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