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## Meta-Analysis of MRT Recidivism Research on Post-Incarceration Adult Felony Offenders

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Over the past decade, cognitive models have become the preferred treatment approach for offender populations (Little, Robinson, & Burnette, 1998). In general, offender treatment outcome evaluations have been based on the assumption that all cognitive-behavioral approaches are “equivalent,” however, more detailed analyses have shown this is not the case. Substantial differences exist in the method of programming, content, and outcome among the various cognitive methods utilized in the criminal justice system. For example, the Reasoning & Rehabilitation program (Ross & Fabiano) is delivered in educational style classes to enhance “cognitive skills.” A few short-term recidivism outcome evaluations have generally shown a modest beneficial effect using this approach, however, other studies have shown a decidedly negative effect. A Colorado Division of Criminal Justice evaluation (Pullen 1996) of Reasoning & Rehabilitation found that juveniles exposed to the program showed a 15% higher recidivism rate than controls. In addition, a 70-item pre- and posttest attitude measure yielded unexpected results that were in line with the increased recidivism rate: “As measured by this instrument, attitudes among offenders in the experimental group changed in the opposite direction than was expected—meaning that they got worse—on all 14 of the composite scales for the experimental group, and changed in the opposite direction in 12 of the 14 scales for the control group” (p. 37).

Another cognitive skills program (Youth Crossroads) has yielded results similar to those obtained from Reasoning & Rehabilitation. A few studies have found slightly lower recidivism following treatment, but other research has found significantly increased recidivism in treated groups (Leiber & Mawhorr, 1995).

The most widely utilized and researched cognitive behavioral approach in criminal justice is probably Moral Reconciliation Therapy (MRT®). The approach was gradually developed and tested between 1980 to 1985 by the present author within the Federal Bureau of Prisons and fully implemented in a county operated, prison-based drug therapeutic community in 1985 (Little & Robinson, 1988). It is currently employed in over 40 states and in several countries.

A recent review of MRT outcome research (Little, 2000) identified 65 published reports on the approach. The studies included 13,498 MRT-treated individuals and 72,384 nontreated controls. Approximately one-third of the reports evaluated changes in moral reasoning, self-esteem, and various other personality variables. Virtually all of these resulted in outcomes in the expected directions with the majority indicating significant changes. About half of the studies tracked posttreatment recidivism (rearrests and reincarceration) in drug offenders, DWI offenders, domestic violence perpetrators, violent offenders, juvenile offenders, and in drug court participants. Treatment venues included prisons, jails, community correction facilities, parole and probation sites, schools, and boot camps. Virtually all studies indicated that MRT treatment led to significantly lower recidivism for time periods up to 10 full years after treatment and release into the community. Of the 65 studies, 34 were conducted independently from the developers of MRT. The majority of MRT research has focused on adult offenders.

MRT was initially developed as a treatment method that could be employed primarily with incarcerated, adult offenders participating in drug abuse treatment therapeutic communities. Although substantial research has been completed in other venues, the majority of data comes from the postrelease outcomes of incarcerated adults. This study reports results from a meta-analysis conducted on recidivism of adult offenders treated with MRT during incarceration. Since the most common timeframe utilized in criminal justice recidivism research is one year after release, the present study focused on MRT recidivism reports using that timeframe.

## Sample of Studies

Of the 65 MRT studies identified previously (Little, 2000), seven reported recidivism rates in MRT-treated and nontreated controls at one year of release. All of these were adult offenders who were treated during incarceration and subsequently released. The only variable reported in this analysis is recidivism after one year of release. Recidivism was defined as a new arrest or actual reincarceration. The developers of MRT conducted only one of these studies.

Little, Robinson, Burnette, & Swan (1999) reported one-year reincarceration rates of 1,052 MRT-treated offenders and 329 nontreated controls at the Shelby County Correction Center in Memphis, TN (the original MRT implementation site). The treated group showed an 8.4% reincarceration rate as compared to 21% in nontreated controls.

Miller (1997) performed an independent evaluation on the Delaware Department of Corrections MRT implementation. MRT-treated offenders ( $N = 62$ ) showed an 8.1% rearrest rate after one year of release as compared to 34.9% in randomly selected controls ( $N=355$ ).

Krueger (1997) reported one-year rearrest rates on offenders who were treated during incarceration in an Ohio jail. MRT-treated offenders ( $N=401$ ) showed

an 11% rearrest rate as compared to 51% for all of the other offenders released from the jail during the same time period ( $N=6,727$ ).

Godwin, Stone, & Hambrock (1995) reported one-year rearrest rates on offenders who were treated during incarceration in a Florida jail. MRT-treated offenders ( $N=98$ ) showed an 11.25% rearrest rate as compared to 29.67% for all of the other offenders released from the jail during the same time period ( $N=5,119$ ).

Grandberry (1998) evaluated one-year rearrest rates in 109 high-risk offenders treated during incarceration in Washington State prisons and compared them to 101 nontreated controls. This was the only study that did not find significantly lower recidivism rates in the MRT-treated group. Treated offenders showed a 44% rearrest rate as compared to 40% in controls.

Hanson (2000), collected one-year rearrest rates in drug offenders treated with MRT during incarceration in a Washington State correctional facility. Random assignment was made to treatment ( $N = 175$ ) and nontreatment conditions ( $N = 96$ ). Treated offenders showed a 19% rearrest rate compared to 29% in controls.

In an independent evaluation of the Oklahoma Department of Correction's massive implementation of MRT, MacKenzie, Brame, Waggoner, & Robinson (1995) compared the one-year postrelease rearrest rates of MRT-treated offenders ( $N=1,409$ ) to offenders treated in other Oklahoma Department of Correction programs ( $N=5,222$ ). A monthly survival analysis was performed that allows for a cumulative analysis of recidivism over different time periods. The monthly rearrest rates reported in that study were subsequently converted into a one-year rearrest rate. The MRT-treated group showed a one-year recidivism of 12% as compared to 39.6% in offenders treated in other programs. It should be noted that this study also indicated that offenders assigned to MRT treatment had a significantly higher risk of recidivism prior to MRT treatment. That is, Oklahoma assigned the most "risky" offenders to MRT treatment while less risky offenders were assigned to other programs.

## **Statistical Analysis & Results**

A "quality" weighing of the studies included in this analysis was initially considered but then ruled out. Several of these reports were essentially "population" studies, which included the entire inmate population. Three studies attempted a form of randomization or matching, however, given the problems of randomizing within the "real world" of offender treatment, the best that can be stated is that quasi-randomization was achieved in a few. Finally, two of these reports deliberately assigned offenders with the highest risk of recidivism to MRT. Thus, lending more weight to one study or another was deemed inappropriate. Given the general consistency of the obtained data in these studies, and substantially the same findings occurring with more than 20 other reports from probation, parole, and community correction agencies, it was assumed that the quality of all of the research was essentially similar.

A meta-analysis on the difference between proportions was conducted on data from the seven included studies. The studies contained a total of 21,225 subjects. The META program (Kenny, 1999) was utilized with an arcsin transformation. Results showed a significant effect size of .2315 with a transformed effect size of .2295 ( $t_6 = 3.78, p > .01$ ).

## Discussion

Results from the present report indicate that MRT treatment of adult offenders during their incarceration leads to significantly reduced recidivism for the one-year time period after release. In general, MRT treatment leads to a 23% decline in expected recidivism during that time frame. However, this reduction is substantial and significant since the expected rates of recidivism are 30-50% during that period. Thus, it can be stated that MRT cuts the expected one-year recidivism rate in half or substantially more.

One of the most serious drawbacks of recidivism research is the timeframe typically employed in collecting data. It is not uncommon in criminal justice literature to have 3-month recidivism rates from programs compared to 5-year recidivism data from another. In addition, few researchers have continued to follow treated groups for extended timeframes following treatment. MRT providers and researchers have provided several studies of 5-year recidivism data as well as 10-year data (Little, 2000). The results indicate that lower recidivism rates persist to at least the 10-year period.

Another essential issue in offender treatment recidivism research is cost-effectiveness. This administrative and politically important issue is often posed to treatment providers. If the short-term benefits in costs savings do not exceed the treatment costs, relatively few criminal justice systems will provide treatment to large groups of offenders. The cost-benefits of MRT have been analyzed in several studies. For example, the Washington State Institute for Public Policy conducted a large, independent evaluation of 18 programs typically employed with adult offenders (Aos, Phipps, Barnoski, & Lieb, 1999). For each \$1 spent on MRT treatment, the report determined that \$11.48 was saved in eventual criminal justice-related costs. MRT was cited as the most cost-effective program. The next-best program was job counseling/job search programs for inmates about to be released. For each \$1 spent on that program, \$4 was eventually saved. Other "cognitive" programs did not fare well. While Reasoning & Rehabilitation saved \$3.51 for each \$1 spent, life skills and cognitive skills approaches actually lost money.

Few offender programs have been scrutinized and evaluated to the extent that MRT has. Results are consistent across all of the research areas investigating MRT's effects.

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