

**ALTERNATIVE INCARCERATION FOR JUVENILE OFFENDERS:
THE ELECTRONIC MONITORING AND
DETENTION ALTERNATIVES FOR RESPONSIBLE TEENS
PROGRAMS IN UTAH**

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EXECUTIVE SUMMARY

The Question: How effective are alternative incarceration programs at reducing the criminal behavior of juveniles?

The Study: Youths served in the NYC Region II Detention Alternative for Responsible Teens (DART) and Region I Electronic Monitoring (EM) programs during FY '96 were located in the NYC database/state mainframe interface. In addition to basic recidivism rates for each program, the difference between the number of charges one year before and after services was examined through calculating suppression rates, and through tests of statistical significance.

Results: One year recidivism on any charges for EM was 54.2%, and for DART it was 68.3%. It is unknown how much technical charges contributed to this recidivism rate. Between one year pre to post services, EM subjects had a 59.1% suppression rate for charges, and DART subjects had a 42.7% suppression rate. Additionally, the reduction in the amount of charges subjects from both programs received was statistically significant. During services, only 17.2% of DART and 13.6% of EM subjects received new charges, though these rates were of admittedly brief periods of time. DART subjects had an average length of service of 24.4 days, and EM subjects had an average of 12.4 days. In terms of containment of criminal activity while youths are in these programs, and in terms of suppression of the level of charges post services, these programs seem to be serving public safety effectively.

Recommendations: These recidivism rates are comparable to what was found in a recent evaluation of a mental health oriented community based treatment program. Such treatment programs are more costly than are EM or DART, so EM and DART may be considered cost-effective. On the basis of containment and suppression of criminality, coupled with cost-effectiveness, these programs should continue to operate, though more research is needed in terms of the contribution of technical charges to recidivism rates, and the role that specific program activities have in suppressing criminal behavior. Further development of NYC databases, such as a wide area network system can contribute to answering these research questions.

Background Utah experienced a rapid increase in juvenile crime during the early part of the 1990's. There was also an accompanying increase in number of youths coming to the attention of Utah's Division of Youth Corrections (DYC). Policy changes, such as the enactment of the 1994 Serious Youth Offender Law served to take the most severe juvenile offenders out of the DYC system, yet the need to develop alternative incarceration strategies for the swelling number of youths remains.

In addition to using community placements when appropriate, DYC has implemented programs such as Electronic Monitoring (EM), and Detention Alternative for Responsible Teens (DART). These programs incorporate intensive community supervision, restitution to crime victims, and the development of competencies in youthful offenders. This approach is consistent with the objectives of the restorative justice approach, where the aim is not solely to provide treatment or punishments to offenders, but to restore individual victims, offenders, and communities to a peaceable state (Bazemore & Umbreit, 1995).

Study Rationale The three main components in a restorative justice approach are accountability, competency development, and public safety (Bazemore & Maloney, 1994). These programs involve their youths in performing restitution work projects, group counseling, and psycho educational classes. Additionally, program staff members make frequent contact with youths and their families, both in person and by telephone. These program activities address the accountability and competency development components of restorative justice.

The present study specifically addresses the public safety requirements which complete the restorative justice approach. Public safety was examined in three ways. First, overall rates of criminal activity that offenders engage in while in these programs are reported to describe their containment effects. Second, recidivism rates, reflecting the number of subjects who had a cessation of criminal charges, for offenders during their first year subsequent to participating in the programs are reported. Third, the degree to which these programs have the effect of suppressing criminal activity is explored. This is accomplished through comparing the number of charges offenders accrue for one year prior to and one year following receipt of program services. This comparison will be reported in terms of suppression rates of criminal charges (Empey & Lubeck, 1971), and by using a test for statistical significance.

While most delinquency intervention programs do not entirely eliminate criminal behavior on the part of their clients, some have been demonstrated to suppress such criminal activity. Rates of suppression of criminal behavior have been used by previous researchers (Empey & Lubeck, 1971; Murray & Cox, 1979; Spergel, Reamer, & Lynch, 1981), and refer to the percentage of difference between pre and post service amounts of criminal charges. Suppression rates have been typically thought of as a more accurate measure of delinquency program effectiveness for three reasons (Murray & Cox, 1979). First, recidivism criteria based on cessation do not capture major changes in behavior, such as a change from eight pre intervention arrests to two during a year post intervention. Second, cessation may be too ambitious of a goal where delinquent youth are returned to the very environment which contributed to their delinquency initially. Third, cessation criteria are vulnerable to false readings. Youth who are known to be involved with the correctional system may be subject to a higher level of scrutiny from law enforcement personnel in their communities, and may hence be more likely to accrue charges. Researchers studying the Utah juvenile justice system (Austin & Krisberg, 1987) have included suppression effects within their data, citing similar reasons for its inclusion.

Conclusions Of 180 subjects served during fiscal year (FY) 1996 in the DART program, only 31 (17.2%) received new charges during services. For the 59 subjects in the EM program during FY 1996, only 8 (13.6%).. One caution in interpreting this result lies in the brevity of service. The average length of service for EM subjects was 12.4 days, and the average length of service for DART subjects was 24.4 days. In terms of containing criminal activity, it appears that both of these programs serve to provide for public safety during the time periods which subjects are with them.

The recidivism rate for the DART program was 68.3%, with 31.7% of subjects remaining free of any criminal charges for one year following DART services. For the EM program in NYC Region I (Northern Utah), the recidivism rate was 54.2%, with 45.8% of subjects remaining free of any charges one year following electronic monitoring. As the database is currently constructed, the extent to which purely technical violations contributed to this recidivism rate could not be determined. It is possible that youths within intensely supervised

programs such as EM and DART may accrue a larger amount of technical charges than would other youths who are supervised in the community. Some context for the relative meaning of these numbers may be useful. In a recent evaluation of a large, mental health oriented residential and day treatment program, a recidivism rate of 72% was observed (Byrnes, Hansen, Malloy, Carter & Curry; unpublished manuscript, 1997).

When amounts of subject's's criminal charges were compared from one year pre services and one year post services, both programs had the effect of suppressing crime. The 59 EM subjects accrued a total of 261 charges during their one year prior to services, and a total of 107 charges during their one year post services, resulting in a suppression rate of 59.1%. The 180 DART subjects accrued 574 charges during their one year prior to services, and 329 charges during their one year post services, for a suppression rate of 42.7%. Subjects from both the DART and EM programs showed a statistically significant reduction in their amounts of criminal charges from pre to post services. A more detailed presentation of the statistical findings is included in appendix A, following the reference section of this report. This finding seems remarkable when one remembers that the teenage years are typically a time when criminal behavior is thought to escalate (APA, 1994).

Two recommendations are implied by these findings. First, both the DART and EM programs should be continued. As they are at least as cost-effective as some community based mental health programs, expanding these programs to serve more youths should be considered. Public support for such continuation and expansion may be readily present. In a recent study by Umbreit (1989), over 90% of crime victims queried reported that the rehabilitation of youthful offenders is an important part of their understanding of fairness. Second, in an effort to better understand which specific program components are most effective in reducing criminal activity, some improvements in data base availability should be considered. Specifically, DYC can be outfitted with a wide area network (WAN) system. This would allow for staff at all of DYC's program sites to record data about offender's participation in groups aimed at competency development, and for data on program attendance to be recorded more readily and in more detail as to specific program. A separate category of data which distinguishes technical violations should be recorded on DYC youth in order to more accurately determine sources of recidivism

rates.

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APPENDIX A:
METHODOLOGY and STATISTICAL ANALYSIS

METHOD

Subjects were youths who had participated in either of two DYC programs during FY 1996. These were the Region II (Salt Lake area) DART program, and the Region I (Northern Utah) EM program. Of 239 non-recurring cases, 59 (24.6%) subjects had received EM program services in Region I, and 180 (75.4%) subjects had receive DART program services in Region II. The mean (average) length of service for EM cases was 12.4 (SD=9.49), and for DART cases the mean length of stay was 24.4 (SD=17.3) days. The mean number of charges for one year pre service for EM subjects was 4.4 (SD=8.6), and for DART subjects this mean was 3.2 (SD=2.5).

Programs The EM program provides electronic monitoring of youths in the form of ankle bracelet transmitters. Additionally, EM program staff maintain daily contact with youths, in person and by telephone. EM youths families are contacted at least weekly in person by EM program staff, where family behavior management services are provided. EM youths are typically involved with DYC parole officers, case managers, or diversion programming staff in addition to services provided by EM staff.

The DART program operates on-site six days weekly. Youths are involved in education, restitution, community service, psycho educational and counseling groups during these days. Additionally, DART youths and their families are visited conjointly by DART counselors. During these visits family counseling is provided to assist youths and their families in developing alternative problem-solving strategies in order to decrease youth's criminal behavior.

RESULTS

Of the 59 EM subjects, 32 had received charges during the first year post services,

resulting in a recidivism rate of 54.2%, with 45.8% of EM subjects remaining free of any charges. Of the 180 DART subjects, 123 had received charges, resulting in a recidivism rate of 68.3%, with 31.7% of DART subjects remaining free of any charges.

Suppression rates of criminal charges were calculated using the method first employed by Empey and Lubeck (1971). The number of one year post service charges was divided by the number of one year pre service charges. This resulting quotient was subtracted from one to arrive at the percent of reduction of criminal charges from pre to post services. The 59 EM subjects accrued a total of 261 charges during their one year prior to services, and a total of 107 charges during their one year post services, resulting in a suppression rate of 59.1%. The 180 DART subjects accrued 574 charges during their one year prior to services, and 329 charges during their one year post services, for a suppression rate of 42.7%.

For EM subjects, the mean number of one year pre service charges was 4.4 (SD=8.6), the mean number of one year post service charges was 1.8 (SD=2.2), and the mean difference pre to post was 2.6 (SD=9.1). This difference in pre to post amounts of criminal charges was statistically significant ($t=2.2$, $df=58$, $p<.05$). For DART subjects, the mean number of one year pre service charges was 3.2 (SD=2.5), the mean number of one year post service charges was 1.8 (SD=2.0), and the mean difference pre to post was 1.4 (SD=3.0). The difference in pre to post numbers of criminal charges was statistically significant for both DART ($t=6.2$, $df=179$, $p<.001$) and EM ($t=2.2$, $df=58$, $p<.05$) subjects.

The mean length of service for EM subjects was 12.4 days (SD=9.49), and for DART subjects the mean length of stay was 24.4 (SD=17.3) days. For EM subjects, the length of service contributed to .5% of the variance within the difference between pre to post service

charges ($R^2=.005$). For DART subjects, the length of service also contributed to .5% of the variance within the difference between pre to post service charges ($R^2=.005$). The use of a block regression analysis found no statistically significant relationship between the length of service and the difference in pre to post service criminal charges for subjects in either program.

Within the sample of EM subjects, there were 48 (81.4%) males and 11 (18.6%) females. There were 29 (49.2%) White, 22 (37.3%) Latino, and 4 (6.8%) African-American subjects within the EM sample, with 4 (6.8%) subjects whose race was not recorded. Within the sample of DART subjects, there were 138 (76.7%) males and 42 (23.3%) females. There were 111 (61.7%) White, 39 (21.7%) Latino, 7 (3.9%) African-American, 7 (3.9%) Asian/Pacific Islander, and 3 (1.7%) Native American subjects within the DART sample, with 12 (7.7%) subjects whose race was not recorded. A repeated measure, full factorial multi variate analysis of variance (MANOVA) found no statistically significant main or interaction effects between race and gender on the difference in pre to post service charges.

STRENGTHS AND LIMITATIONS

The major strength of this study is that the outcome measure, criminal charges, was a clearly behavioral one. Behavioral measures are not as susceptible to statistical anomaly as are psychometric instruments, observer ratings of behaviors, or measures of perceptions.

Additionally, the absence or presence of criminal charges can be easily understood by all stakeholders in the justice system. Further, this study examines the suppression of criminal activity, which may be a more sensitive measure of outcome than are rates of recidivism.

Lundman (1986) posits that “because use of the traditional cessation measure of delinquency control can easily mask important reductions in the total volume of delinquency, first priority

should be given to the collection and calculation of suppression effects measures”.

A limitation of this study is the absence of a control group. The creation of control groups through random assignment of subjects to treatment conditions presents an ethical dilemma where public safety issues are concerned. The issue of public safety rightfully takes precedence in this dilemma. Also, Murray and Cox (1979) state that “in a research sense, chronic delinquents must serve as their own control, for our justice system is so constructed that they have no other”. That the behavior of adolescents was studied over time opens the possibility of maturation playing a role in the outcome. When one considers that adolescence is a time where criminal behavior typically escalates rather than decreases, the direction of the findings demonstrate that a maturation threat appears to be mitigated here. The absence of a control group also raises the issue of regression towards the mean, a statistical artifact (Maltz,). The underlying assumption for this threat is that there exists a mean level of criminal activity which behavior fluctuates around. As stated above, adolescence is a time where delinquent behavior increases (APA, 1994), and there appears to be a rising mean rather than a static one (Murray & Cox, 1979).

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