

**EVALUATION OF OHIO'S RECLAIM FUNDED PROGRAMS, COMMUNITY
CORRECTIONS FACILITIES, AND DYS FACILITIES: FY 2002**

CCF SUPPLEMENTARY REPORT

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EXECUTIVE SUMMARY

The purpose of these supplementary analyses and report was to provide a more in depth look at the effectiveness of the Community Corrections Facilities (CCF) in reducing recidivism. To do this, CPAI data on nine CCFs were used as a measure of program quality. Adherence to the risk principle, a characteristic of effective correctional programming, was measured by reviewing the percentage of higher-risk youth served by each facility. Program effectiveness was calculated for each CCF by comparing the recidivism rates of the youth that were served by a CCF to the recidivism rates of youth from the same or similar counties that were either placed in a RECLAIM program or in a Department of Youth Services (DYS) facility. Youth were also matched based on gender, race, risk, and offense type.

Results indicated that there was substantial variation in the effectiveness of CCFs in reducing recidivism. Changes in recidivism rates ranged from 28% increases in recidivism rates to 34% decreases in recidivism rates when comparing CCF participants with DYS youth. Similarly, when comparing CCF participants to RECLAIM youth a range in effectiveness from 26% increases in recidivism rates to 23% decreases in recidivism rates were noted. The first major finding from these additional analyses is that the CCF programs vary in effectiveness with some performing very poorly and others performing very well.

While the results were not consistent or conclusive, the data used for these analyses indicated that CCFs were possibly more effective when they directed their resources towards higher-risk youth. For example, when comparing CCF youth to RECLAIM youth and focusing on new conviction as the outcome measure, a trend

supporting the risk principle is noted. CCF programs where 75% or more of the youth served were higher-risk, on average, were associated with a 14% reduction in recidivism while those CCFs where less than 75% of the youth served were higher-risk were associated with a 1% increase in recidivism rates. The second major finding, and consistent with the original RECLAIM evaluation, is that the CCF programs might be best suited and most effective for higher-risk youth.

Finally, results of the supplementary analyses indicated that programs scoring higher on the CPAI demonstrated stronger treatment effects. For example, when comparing CCF participants to their matched DYS cases, programs that scored 70% or over on the CPAI, on average reduced recidivism by 10% while those programs that scored under 60% on the CPAI were associated with an 17 percentage point increase in recidivism rates. Similarly, when comparing CCF participants to RECLAIM youth, programs that scored over 70% on the CPAI were associated with a 14 percentage point reduction in recidivism while those programs scoring under 60% on the CPAI were associated with an 11 percentage point increase in recidivism rates.

Given the findings of these supplementary analyses, the authors recommend the following:

1. The DYS should assess all treatment-based programs with the CPAI-2000.
2. The DYS should provide technical assistance to programs throughout the state in an effort to increase correctional program integrity.
3. The DYS, along with representation from the counties, should develop a quality assurance process including program standards which can be used to evaluate the content and implementation of programs.
4. The DYS should begin using the developed program standards and CPAI-2000 as partial criteria when making funding decisions.

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SECTION I – INTRODUCTION

In 2004, the Ohio Department of Youth Services (DYS) contracted with the University of Cincinnati to evaluate recidivism rates of youth that went through the RECLAIM funded programs. The evaluation used an extended follow-up period, multiple measures, and compared the outcomes of RECLAIM youth to those of youth who were served by a Community Corrections Facility (CCF) or committed and released from a Department of Youth Services (DYS) institution.

The current report is a subsequent supplement to the evaluation of the RECLAIM programs. This report investigates two additional questions that were previously not addressed, such as the relationship between a program's integrity and effectiveness and the impact of adherence to the risk principle for CCF programs. The current research matches youth terminated from the Community Corrections Facilities (CCF) to youth terminated from a RECLAIM program or a DYS facility and compares them on measures of recidivism.

Research Questions

The present study will attempt to answer two research questions. The first question is whether there is a relationship between programs that adhered to the risk principle and programs' recidivism rates. Programs were considered as adhering to the risk principle if more than 75% of the youth served were classified as high risk. Research has indicated that programs which target moderate to high-risk offenders should be more effective in reducing recidivism. The current study will provide an

empirical investigation into the relationship between adherence to the risk principle and effectiveness among CCF facilities.

The second research question addresses how program integrity influences recidivism. While there has been extensive literature that states that fully implemented programs should reduce recidivism, there is relatively little empirical evidence which establishes this link. While the earlier RECLAIM study examined the overall relationship of program integrity on recidivism on a large number of cases, the present study matches cases on numerous variables to control for alternative explanations that might account for the variation between the programs. Also, the current study uses treatment effects, rather than recidivism rates, as the outcome measure.

SECTION II – METHODOLOGY

To conduct this study, data from the DYS RECLAIM database were provided electronically to the University of Cincinnati by DYS. Missing data and additional data elements were collected from offender files maintained by the various programs and agencies included in the study. Once all data were collected, they were analyzed using several different techniques. The methods employed for data collection and analysis, as well as study participants, are described in this section.

Sample – Participants

The participants in this study included youth terminated from a CCF during FY02. These youth were then matched and compared to youth terminated from a RECLAIM funded program, or released from a DYS institution (DYS Release) during fiscal year 2002. Youth were matched based on race, sex, risk, category, offense type, and county

of supervision or county population when an exact match with county of supervision was not possible.¹ There were a total of 348 terminations from CCF in the 2002 fiscal year. Out of those 348 youth, 298 of those youth could be matched to RECLAIM cases, and 241 were matched to DYS releases.

Sample - Correctional Programs

Program data were collected from 9 CCFs. At the time of start of the evaluation there were 10 CCFs currently in operation, and all but one had been previously evaluated using the CPAI. The CPAI evaluations had been conducted between 1998 and 2003 with all but one conducted prior to or during FY02.

To thoroughly evaluate the nine CCF programs, the data generated were subjected to two main analyses. First, the CCFs were categorized by the percentage of higher-risk youth served in the program. Second, the CCF outcomes were analyzed using the composite CPAI score as an independent measure. The distribution of the programs, based on adherence to the risk principle, can be seen in Table 1, while the distribution on CPAI scores can be seen in Table 2.

Table 1. Distribution of risk between programs

Adherence to Risk Principle	<i>N</i>	%
Yes (Less than 25% low risk)	6	60
No (More than 25% low risk)	4	40

¹ While an attempt was made to match all youth on county of supervision this was not possible. To increase the number of youth in the treatment group with a matched case in the comparison group, after first attempting to match on county of supervision, we then matched on county population size. This ensured that youth released to and supervised in larger urban counties were compared to youth in similar counties while those youth in small rural counties were compared to youth from a county similar in size.

Table 2. Distribution of CPAI scores between programs

CPAI	N	%
Unsatisfactory (<60)	2	22
Satisfactory but improvement needed (60-69)	2	22
Satisfactory (70+)	5	56

Procedures for Data Collection

Data for this project were collected from various sources including the DYS RECLAIM database, case files, DYS adjudication and intake databases, Ohio Department of Rehabilitation and Correction's intake database, offender files maintained by the programs and agencies, and previously conducted CPAI assessment results.

Measures – Individual Level

Demographics. Demographic data and criminal history data were collected for youth in each program. Consistent with the original report by Lowenkamp and Latessa (2004) demographic variables included age at release, sex, race, employment, and school status. After reviewing case files for the fiscal year, cases were matched by both individual and county level variables. To control for various individual characteristics between cases, risk and sex were matched. To control for differences between youth which might be explained by community differences, matching by county was required. However, it was the case that not every youth could be matched to a RECLAIM or DYS youth from the same county. As such, counties were collapsed into categories based on population size. Youth, if not matched to a RECLAIM or DYS youth from the same county, were matched to youth from different counties that were similar in size. The

county population categories used for matching were: 1) 0-49000, 2) 50000-99000, 3) 100000-224000, or 4) 225000-399000.

Criminal History and Risk. To account for differing methods of assessing or assigning risk between the programs Lowenkamp and Latessa (2005) created a risk measure from available information that was collected. Included in the measure was the onset of delinquency, severity of past offenses, severity of the current offense, and the number of prior adjudications. A complete description of the construction of the measure was recorded in the earlier report (see Lowenkamp and Latessa, 2005).

Recidivism. Recidivism data were gathered using two sets of databases. The first measure captured new criminal behavior and included any new felony adjudications as a juvenile or entry into the CCISWEB database as an adult. The felony adjudication database includes all felony adjudications reported by juvenile courts to DYS through fiscal year 2004. Researchers at the University of Cincinnati developed a computer program to search the database for each youth flagging adjudications that occurred after the termination date from a RECLAIM program, CCF, or DYS. Researchers at the DRC queried the CCISWEB database for entries into the database after the termination date for each youth in the sample. The CCISWEB database is used to track CCA program utilization and payment to CCA programs. CCA programs include probation, intensive supervision, day reporting, community based correctional facilities, halfway houses, electronic monitoring, work release, and other residential and non-residential programs. While this measure is not a comprehensive measure of criminal behavior, it is a measure that allowed us to track older offenders into the adult system. This measure includes entries after the termination date from the youth program up until July

17, 2004. If a youth appeared in either the felony adjudication or CCISWEB database he/she was given a value of 1 on the conviction measure.

The second recidivism measure developed captured commitments to a DYS facility or a DRC facility. Both of these databases were queried by researchers at the respective agencies and include entries that occurred after termination from the youth program up until January 1, 2005. If the youth appeared in either of these databases after their termination date, the youth was given a value of 1 for this measure. Youth who did not appear in either database were coded as 0. It should be noted that any commitment to DYS, for a new crime or a technical violation was considered as recidivism.

A final measure was developed which captured any contact with the juvenile or adult criminal justice systems. This measure was coded as 1 for youth who appeared in any of the four databases searched, and 0 for youth who did not appear in any of the four databases. Again, note that this measure includes youthful offenders sentenced to DYS on technical violations as well as a new criminal behavior.

Measures – Program Level

Correctional Program Assessment Inventory - (CPAI). The initial version of the CPAI was created in 1994 by Gendreau and Andrews and was comprised of 65 items in six substantive categories. These categories are program implementation, client pre-service assessment, characteristics of the program, characteristics of practices and staff, evaluation, and a final category with a sundry of miscellaneous items. Each category has varying number of questions items, which are scored by whether the item

is present or absent. At the time of the present study, nine of the ten CCFs had been previously evaluated using the CPAI. The mean score of the nine programs was 66.88.

Outcome Effect Size. For each site in this study, a correlation coefficient between group membership (treatment versus comparison) and the outcome measure was calculated. This correlation coefficient, or r , was then used as an indicator of treatment effectiveness for each program. Since the number of offenders by each program differed from site to site, a weight controlling for the sample size was calculated and used in all analyses involving r . The formula for this weight is $N-3$ where N is equal to the number of offenders in the treatment and comparison groups combined.

These r -values are particularly convenient in that they are readily interpretable as the percentage point differences in recidivism rates between the treatment and comparison groups (Rosenthal, 1991). Negative values are associated with programs in which the comparison group outperforms the treatment group. Positive values are associated with programs in which the treatment outperforms the comparison group. For example, an r -value of .10 would indicate that the treatment group had a recidivism rate of 45% while the comparison group had a recidivism rate of 55%. Conversely, an r -value of -.10 would indicate that the treatment group had a recidivism rate of 55% and the comparison group had a recidivism rate of 45%. Effect sizes, which are equal to zero, indicate that there is no difference in recidivism rates between the treatment and comparison groups.

To summarize, a negative treatment effect size indicates programs where the comparison group did better than the treatment group (CCF). A positive treatment effect

size indicates a program which the treatment group (CCF) outperformed the comparison group.

Analysis

First, a series of chi-square tests were conducted to examine differences between the expected and observed recidivism outcomes of the CCF, RECLAIM, and DYS terminations. These chi-square tests were conducted to examine if there were significant differences in recidivism rates between the three types of placements.

Second, to assess the impact of adhering to the risk principle on client recidivism, a series of one-way weighted ANOVA's were conducted. The programs were separated into categories depending on the percentage of low risk clients in the programs. Specifically, the programs were dichotomized into two categories. The categories were those programs where less than 25% of the youth were lower risk and programs where 25% or more of the youth were lower risk.

Third, to assess the impact of program integrity on client recidivism, a series of one-way weighted ANOVA's were conducted. The programs were separated based on their composite CPAI score, unsatisfactory (< 60), satisfactory but needs improvement (60-69), or satisfactory (70+). The scores were analyzed to determine the predictive ability of program integrity (CPAI composite scores) on changes in the effect size of offender recidivism.

SECTION III – RESULTS

The results of the analyses are reported in this section. Results are reported for each outcome (new conviction, incarceration, and either event) for cases matched to

RECLAIM first, and then reports those same outcomes when CCF terminations were matched with DYS releases. Finally, the results of the regression analyses predicting treatment effect sizes using CPAI composite scores are reported.

Demographics

Table 3 presents the demographic data for the matched pairs of the youth by program. For matched pairs with RECLAIM cases, youth were predominately male (97%), and White (87%). For the current offense 10% were violent, 9% were

Table 3. Distribution of matched individuals by comparison with CCF

Variable	CCF with RECLAIM (M)	%	CCF with DYS release (M)	%
Race				
Black	38	13	35	15
White	251	84	193	80
Hispanic	3	1	6	2
Other	6	2	7	2
Sex				
Male	289	97	232	96
Female	9	3	9	4
Offense Type				
Violent	31	10	34	14
Sex offense	26	9	12	5
Other	241	81	195	81
Risk Category				
Low (1)	39	13	*	*
Medium (2)	37	12	38	16
High (3)	174	59	146	61
Very High (4)	48	16	57	24
Population Category				
0-49000	93	31	56	23
50000-99000	81	27	61	25
100000-224000	35	12	31	13
225000-399000	52	17	55	23
	298		241	

Note: Due to the fact that there were no low risk youth in DYS, there was no way to match CCF youth to this category.

sex offenses, and 81% of the offenses were other violations. As illustrated in Table 3, a majority of the matched pairs (58%) were classified as having a high-risk score. Similar to the RECLAIM comparison cases, matched DYS cases were predominately White (80%) and male (97%). For offense type, 14% were violent, 5% were sex offenses, and 81% of the offenses were other violations.

To examine differences between the programs and outcomes (reconviction, re-incarceration, or either event) six chi-squares were conducted. As seen in Table 4 there are only minor differences between the matched pairs. In fact, only one of the six

Table 4. Examination of recidivism differences

	PERCENTAGE RECIDIVATED	
	CCF Compared to RECLAIM (N = 298)	CCF Compared to DYS (N=241)
Any Conviction		
Treatment_a	26.2%	26.1%
Comparison_b	31.9%	29.0%
Any Incarceration		
Treatment_c	41.3%	42.3%
Comparison_d	25.2%	39.8%
Either Event		
Treatment_e	46.6%	48.5%
Comparison_f	43.0%	50.2%

a = $\chi^2 = 2.35$, $p = .13$ b = $\chi^2 = .51$, $p = .48$
c = $\chi^2 = 17.43$, $p = .00$ d = $\chi^2 = .31$, $p = .58$
e = $\chi^2 = .82$, $p = .37$ f = $\chi^2 = .13$, $p = .72$

statistical analyses (incarceration) was significantly differences, $\chi^2(1, 298) = 17.43$, $p < .00$ and this difference favored the comparison group. These analyses indicate that, overall, there are minimal significant differences between the treatment and comparison groups. The next step in the analyses was to determine if effect sizes indicating a treatment effect, were evident based on a programs adherence to the risk principle.

Analyzing the Risk Principle on Recidivism

In the examination of adherence to the risk principle, between CCF and RECLAIM, a series of one-way weighted Analyses of Variance (ANOVA) were conducted. Basically the ANOVA test determines whether the categorization of programs based on adherence to the risk principle leads to a meaningful grouping of programs according to outcome measures. That is, are there statistically significant differences in treatment effects for programs when looking at the programs that adhere to the risk principle versus those programs that do not adhere to the risk principle. Of the three ANOVA's, only two (new conviction and incarceration) were found to have statistically significant differences. Table 5 and Figure 1 display the mean effect size for the CCF's and comparison groups. A comparison of DYS programs, divided by risk principle, can be found in Table 5 and Figure 7.

Focusing on the top half of Table 5, the results for conviction ($r = .14$) indicate that the programs that adhere to the risk principle on average are associated with a 14-percentage point reduction in recidivism when comparing the CCF youth to RECLAIM youth. While not as pronounced, a similar trend is noted in re-incarceration.

The most promising revelation from these analyses is the dramatic difference in new convictions when compared to programs which did not adhere to the risk principle. Programs that did not adhere to the risk principle had an average negative effect ($-.01$) or increase in recidivism rates whereas programs that did adhere to the risk principle had a positive relationship ($.14$) or reduction in recidivism

Table 5. Effect size, confidence intervals from ANOVAs adherence of the risk principle

Outcome Variables	Adherence (N = 6)		Non adherence (N =4)	
	Mean ES	SE	Mean ES	SE
CCF with RECLAIM				
New Conviction ^a	.14*	.09	-.01	.11
Re-Incarceration ^b	-.14	.09	-.21	.11
Either ^c	-.01	.09	-.07	.11
CCF with DYS release				
New Conviction ^d	.07	.11	-.02	.13
Re-Incarceration ^e	-.02	.11	-.04	.13
Either ^f	.04	.11	-.02	.13

^a. $Q_{\text{between}} = 3.37$, $Q_{\text{within}} = 10.87$

^b. $Q_{\text{between}} = .63$, $Q_{\text{within}} = 11.04$

^c. $Q_{\text{between}} = .44$, $Q_{\text{within}} = 17.97$

^d. $Q_{\text{between}} = .92$, $Q_{\text{within}} = 7.60$

^e. $Q_{\text{between}} = .04$, $Q_{\text{within}} = 13.83$

^f. $Q_{\text{between}} = .38$, $Q_{\text{within}} = 9.99$

rates. This provides support for the importance of adhering to the risk principle when referring youth for programming in a CCF.

The overall trend of more positive outcomes for programs that adhere to the risk principle can still be noted when cases were matched with DYS cases. However, as noted in Table 5, the standard error is often larger than the mean effect size and overlap with zero. This suggests that it could be possible for programs with a small negative effect size and a large standard error, if replicated, to change to a positive effect size.

Figure 3 and 4 present the effect size estimates of each CCF using the RECLAIM and DYS comparison groups. Each figure contains a series of bar graphs that represent each of the CCF programs. The bar graph's height, positive or negative,

represents the difference, in raw percentage points, between that program and the comparison group (RECLAIM or DYS). For example, in Figure 3, youth released from Hocking Valley (0.10) had a recidivism rate that was ten percentage points lower than the comparison group for Hocking Valley. This means that youth released from Hocking Valley recidivated at a rate of 45%, where the matched youth from the comparison group (RECLAIM) recidivated at 55%.

Figure 3 compares the effect sizes between CCFs and RECLAIM. It is evident from the figure that a majority of the CCF programs, 7 of 10, did as well or better than RECLAIM programs. In only 3 programs (Perry, Miami Valley, NW Ohio) did the matched youth from RECLAIM programs recidivate at a lower rate than that of the CCF youth.

Figure 4 compares the effect sizes between CCFs and DYS programs. Similar to the last figure, a majority of the CCF programs, 6 of 10, did as well or better than DYS programs. In 4 programs (Miami Valley, NW Ohio, Perry, and North Central) the matched youth from DYS programs recidivated at a lower rate than that of CCF. For example, youth terminated from the Miami Valley CCF had a recidivism rate of 63% while their matched comparison group had a recidivism rate of 37%.

Figure 1. Average CCF effect sizes using RECLAIM as comparison and adherence to the risk principle.

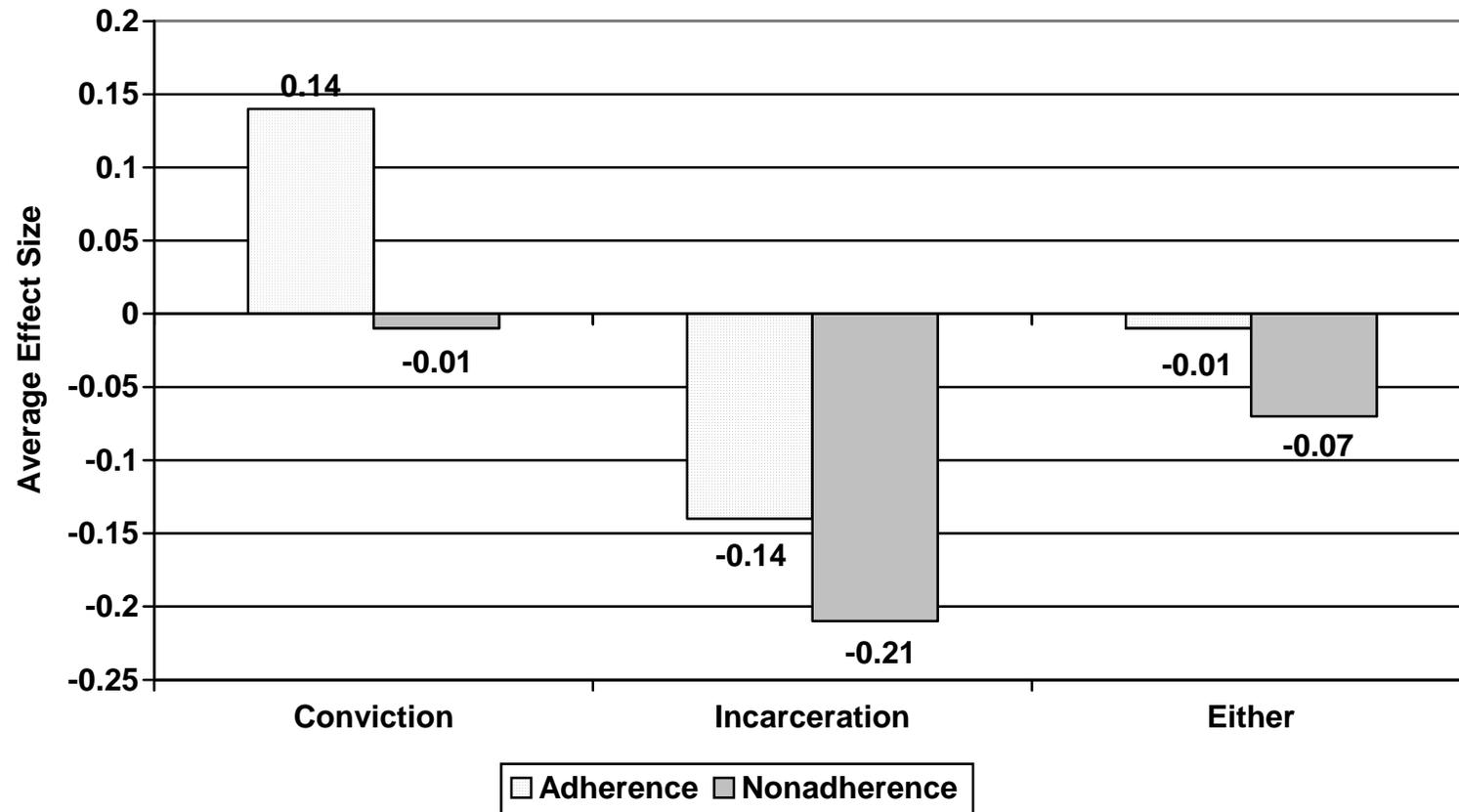


Figure 2. Average CCF effect sizes using DYS Releases as comparison and adherence to the risk principle

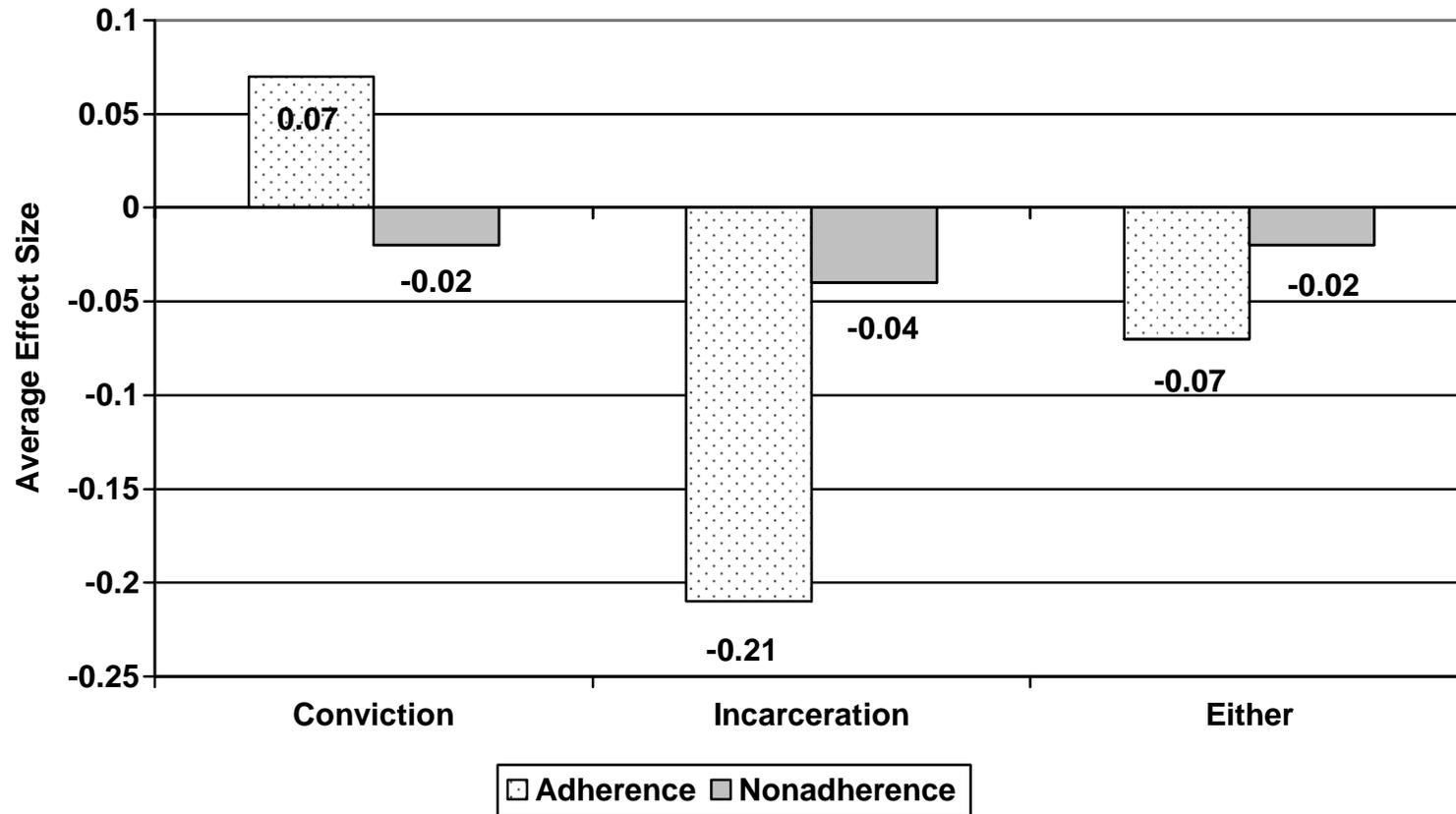


Figure 3. Effect sizes for CCF using RECLAIM comparison group and new conviction as outcome.

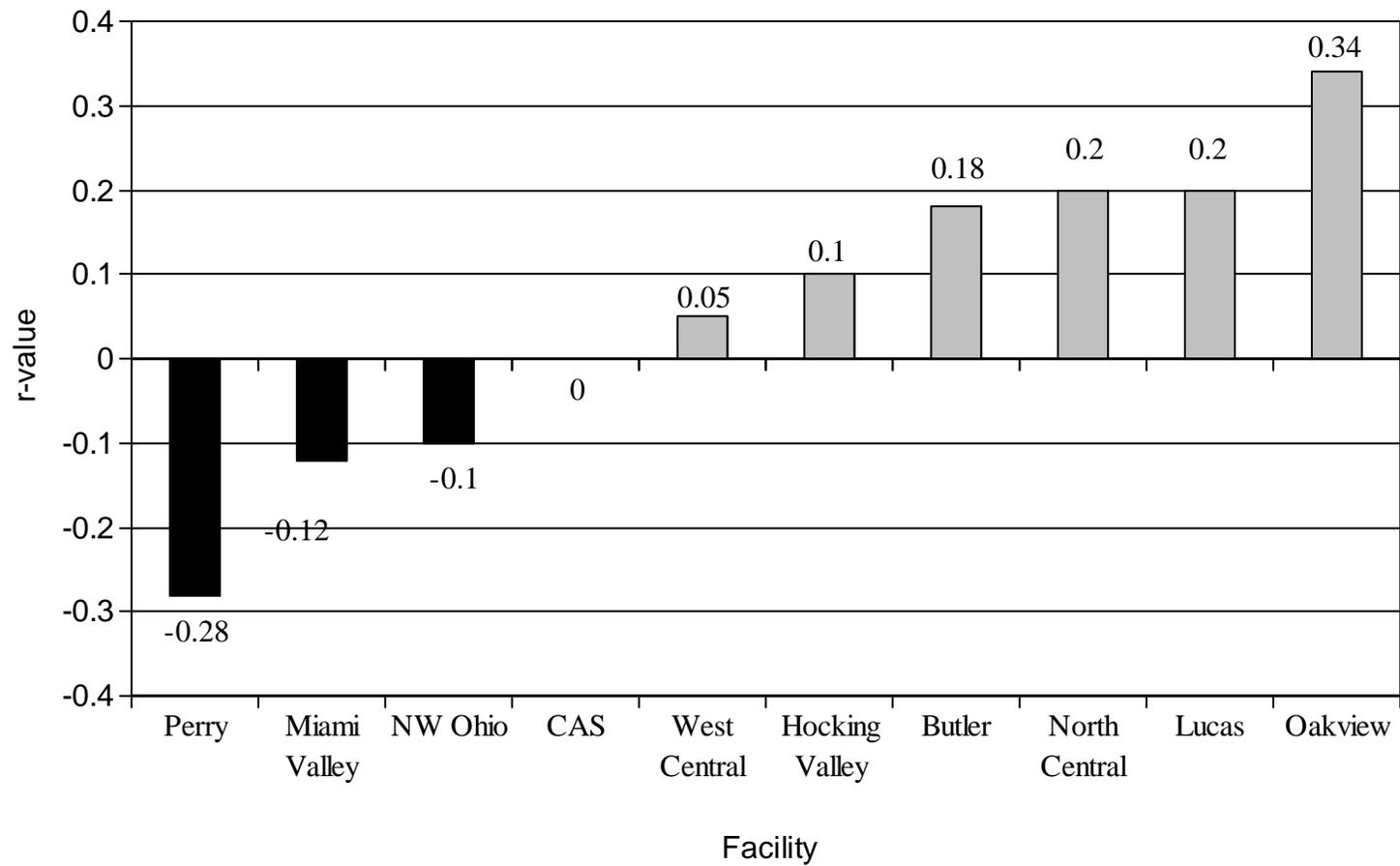
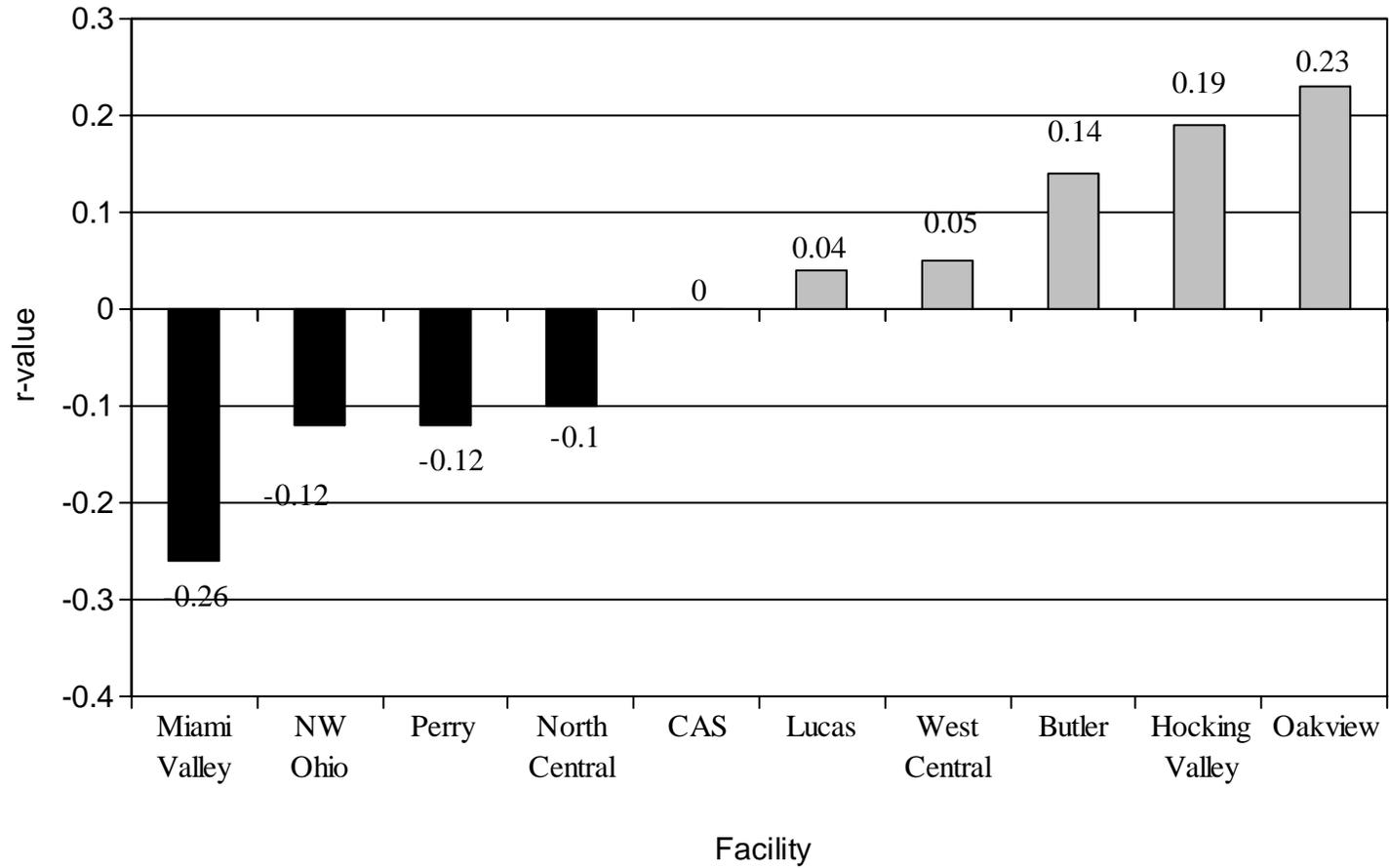


Figure 4. Effect sizes for CCF using DYS comparison group and new conviction as outcome.



Analyzing The Impact of Program Integrity on Recidivism (CCF and RECLAIM)

The next analyses focus on whether recidivism outcomes differ based program integrity. As seen in Table 6 a consistent trend of higher scores on the CPAI resulted in a reduced likelihood of getting processed through the criminal justice system or incarcerated. For example, the treatment effect using new convictions as the outcome progressed from -.11 (increase in recidivism rates) for the programs assessed as unsatisfactory, to .01 for the satisfactory but needs improvement programs, to .14 (reduction in recidivism) for the satisfactory programs.² As indicated by both Table 6 and Figure 5, programs with lower scores on the CPAI did significantly worse (had lower r values) than programs with higher scores.

Analyzing Program Integrity on Recidivism (CCF and DYS)

The next analyses focus on whether recidivism outcomes differ on another aspect of the principles of effective intervention, program integrity. As seen in Table 6 a consistent trend of higher scores on the CPAI resulted in a reduced likelihood of getting processed through the criminal justice system or incarcerated. For example, new convictions progressed from -.17 (unsatisfactory) to .05 (satisfactory but needs improvement) to .10 (satisfactory). While these changes were not statistically significant Table 6 indicates that significant differences were found for both re-incarceration and either event, with the $Q_{\text{between}}, p < .05$.

These statistics suggest, similar to RECLAIM programs, that while there were no significant variations within the categories of program implementation, there were

² Table 6 indicates that the Q_{between} is statistically significant, $P < .05$ but the Q_{within} was not significant. These statistics suggest that while there was no significant variation within the categories of program implementation, there were significant variation between programs with differing levels of implementation.

significant variations between programs with differing levels of program integrity. As indicated by both Table 6 and Figure 6, programs with lower scores on the CPAI did significantly worse (had lower r values) than programs with higher scores.

It is evident from Figures 5 and 6 that treatment effects increase to favor public safety as the quality of the program increases. Conversely, programs with CPAI scores less than 60 have large negative effects indicating an increase in recidivism rates relative to the comparison group. For the satisfactory but needs improvement group, the bar chart suggests an overall improvement from the unsatisfactory group, but the standard error of this group is sufficiently larger. This indicates that this group hovers near and around 0, with minimal negative or positive influence.

Interestingly, the statistical differences disappear when cases were matched with DYS cases, with the notable exception of the substantive negative effects in conviction (-.17), re-incarceration (-.32), or either event (-.25) for programs that scored unsatisfactory on the CPAI.³

CPAI as Predictor for Effect Size

The next step used regressions to analyze the relationship between program score on the CPAI and recidivism outcomes. A regression analysis is a statistical analysis concerned with predicting some variables by knowing the values of others. The dependent variable was the overall recidivism rate, or average effect size, of the program. The resulting models are contained in table 7. The results suggest that program integrity was a significant predictor of a program's recidivism rate, regardless of how the outcome was measured.

³ Examination of Table 6 shows that while the positive trend towards better programs still exists for DYS, this effect is subsumed under the large standard error.

Table 6. Effect size, confidence intervals from ANOVA's differing by CPAI scores

Outcome Variables	Unsatisfactory (Less than 60)		Satisfactory but needs improvement (60-69)		Satisfactory (70+)	
	Mean ES	SE	Mean ES	SE	Mean ES	SE
CCF with RECLAIM						
New Conviction ^a	-.11	.09	.01	.11	.14	.05
Re-Incarceration ^b	-.31	.09	-.12	.11	-.13	.05
Either ^c	-.25	.09	-.002	.11	.02	.05
CCF with DYS release						
New Conviction ^d	-.17	.11	.05	.13	.10	.06
Re-Incarceration ^e	-.32	.11	-.06	.13	.06	.06
Either ^f	-.25	.11	-.03	.13	.09	.06

^a. $Q_{\text{between}} = 5.98$, $Q_{\text{Within}} = 8.20$

^b. $Q_{\text{between}} = 3.17$, $Q_{\text{Within}} = 8.08$

^c. $Q_{\text{between}} = 6.80$, $Q_{\text{Within}} = 11.58$

^d. $Q_{\text{between}} = 4.77$, $Q_{\text{Within}} = 3.73$

^e. $Q_{\text{between}} = 9.23$, $Q_{\text{Within}} = 4.30$

^f. $Q_{\text{between}} = 7.65$, $Q_{\text{Within}} = 1.74$

Figure 5. Average Effect Sizes for CCFs (RECLAIM Comparison) by CPAI Score.

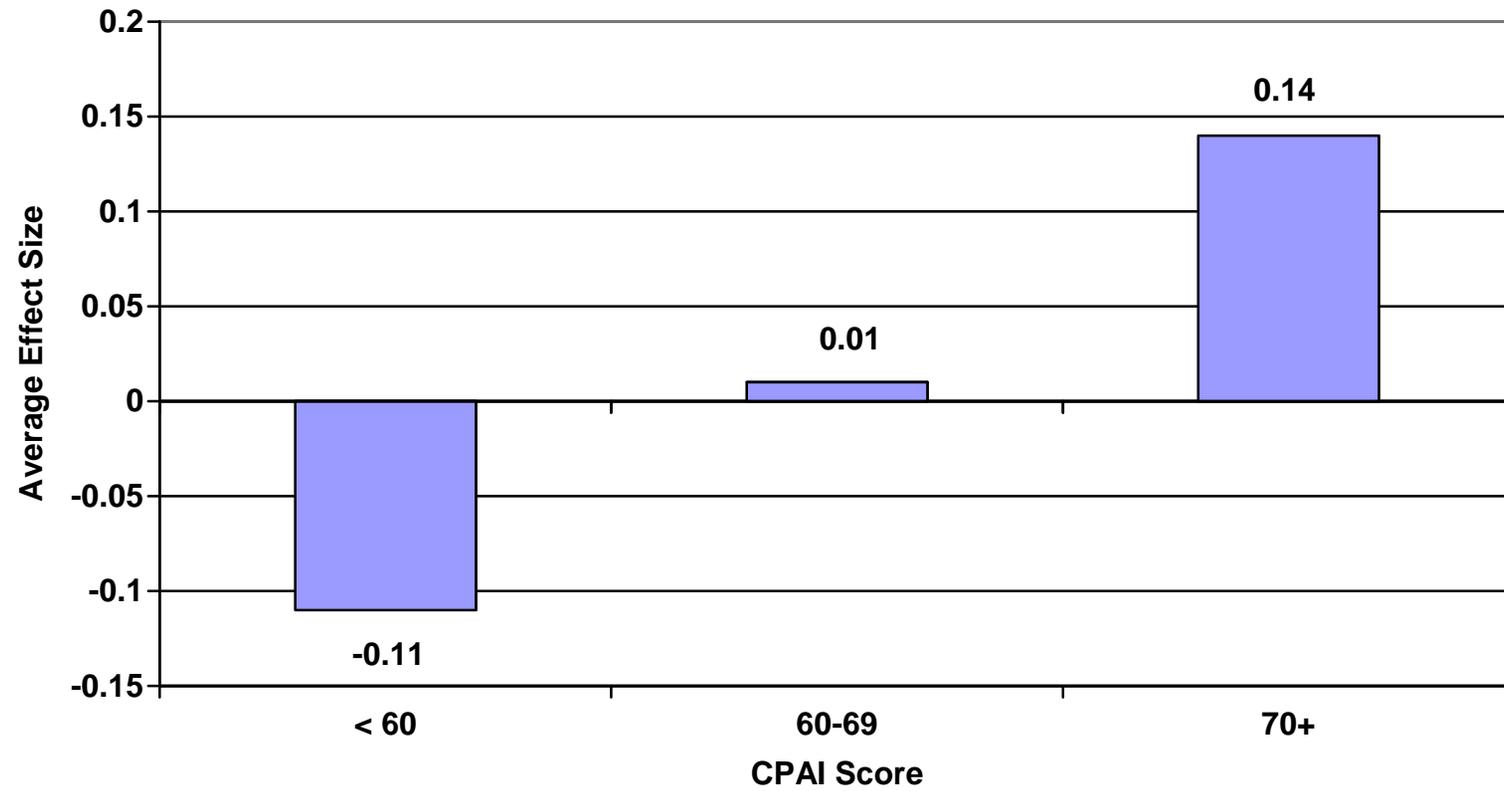
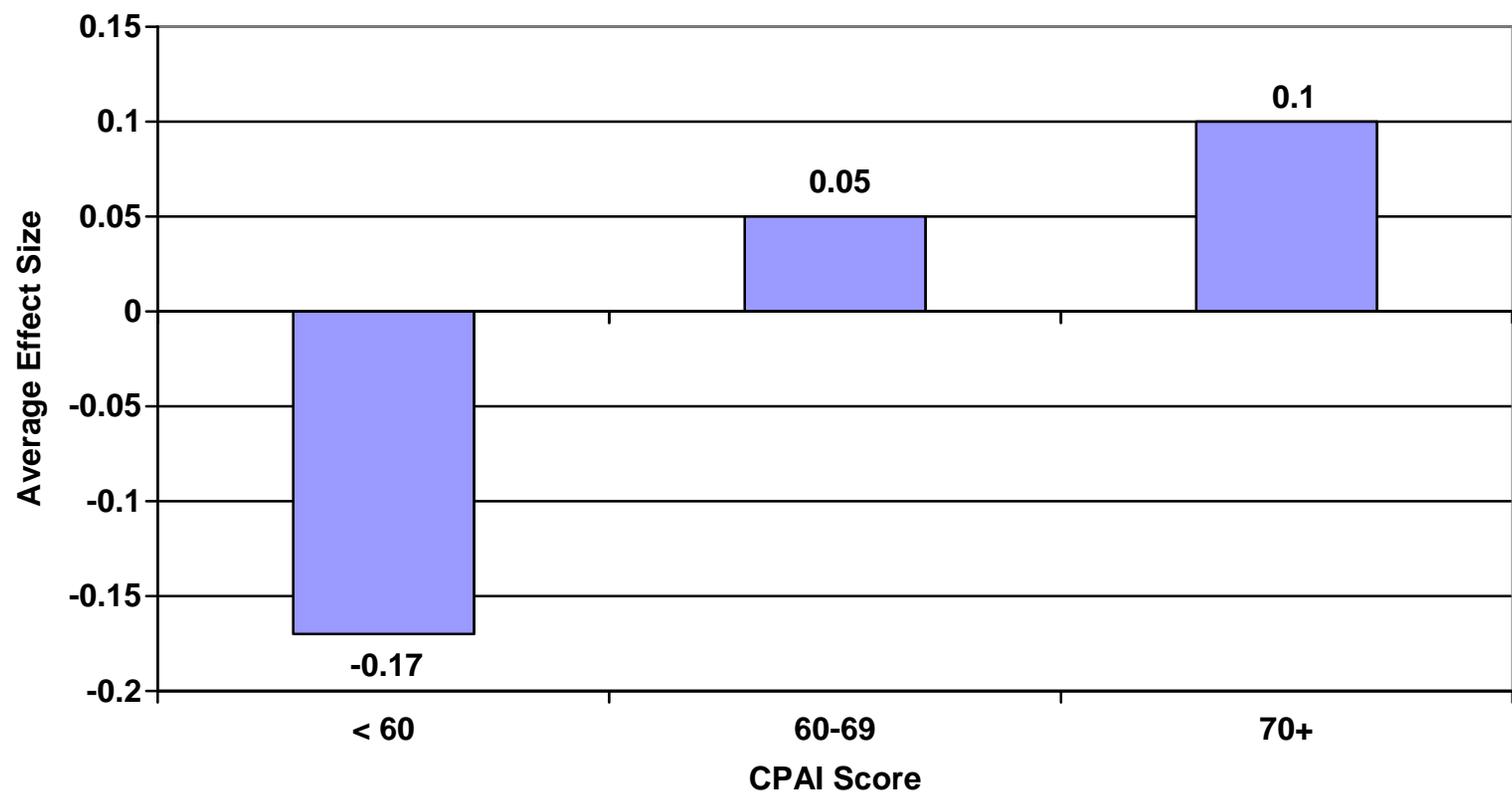


Figure 6. Average Effect Sizes for CCFs (DYS Release Comparison) by CPAI Score.



There were two exceptions, re-incarceration for RECLAIM, and new conviction for DYS.⁴

As noted in Table 7, for matched cases with RECLAIM, the CPAI composite score explains 22% (re-incarceration) to 30% (conviction) of the outcomes variation. There is a slight difference in the CPAI's explanatory power when cases were matched with DYS cases, ranging from 34% (conviction) to 69% (either event). It is important to note that CPAI scores continued to be a significant and important predictor after individual differences of the cases were controlled by matching.

Table 7. Weighted least squares model predicting recidivism outcomes by CPAI

	<i>B</i>	<i>SE</i>	<i>p</i>	<i>Beta</i>	<i>R</i> ²
CCF with RECLAIM					
New Conviction	.01	.005	.04 *	.55	.30
Re-Incarceration	.01	.005	.11	.47	.22
Either	.01	.005	.04 *	.49	.24
CCF with DYS release					
New Conviction	.01	.006	.09	.58	.34
Re-Incarceration	.01	.006	.00 *	.78	.60
Either	.02	.006	.01 *	.83	.69

One advantage of using regression analyses is that the reported beta-weights of the models are substantively interpretable as the bivariate correlation between the CPAI composite score and the outcome measure. As evident in Table 7, for RECLAIM, the CPAI scores were correlated with the outcome from 0.47 to 0.55, while for DYS the range was 0.58 to 0.83. These results are similar to the findings of the previous research on the relationship between the CPAI and program effectiveness.⁵

⁴ However note the small sample size and also that the parameter estimates approach reasonable p-values.

⁵ Previously, Lowenkamp (2004) found correlation ranging from .23 to .63 with CPAI total scores and with modified survey format. Nesovic (2003) found similar correlations, .51 when sex (male) was controlled for, and .52 when age (youth) was controlled.

SECTION IV – SUMMARY AND CONCLUSIONS

This research sought to answer two main research questions about CCF youth. Research questions examined program effectiveness by adherence to the risk level and then by program integrity or quality.

Data analysis of recidivism rates indicated that that programs which adhered to the risk principle (defined as those programs where less than 25% of cases served were categorized as lower risk) had overall better program outcomes, regardless of how recidivism was operationalized. With some outcomes measures, youth terminated from programs that did not adhere to the risk principle were more likely to fail than programs that did adhere to the risk principle.

In addition to these findings, it is important to note that different levels of program integrity have differing impact on recidivism rates. This trend persisted even after controlling for some of the individual differences that might have contributed to recidivism. Based on the analyses contained in this report, programs that scored under 60% on the CPAI were associated with an increase in recidivism whereas those that scored over 70% were associated with substantive reductions in recidivism.

It is vital that counties and the state review program implementation, regularly evaluate programs to maintain high levels of care, and ensure that they are using the most effective programs based on risk level. The regression model found that a program's implementation, as measured by a higher composite CPAI score, accounted for an impressive amount of variation in offender recidivism (20% - 30% for RECLAIM, 34% - 69% for DYS). This model suggests that substantial reductions might be made in recidivism if counties ensure the programs they operate or fund adhere to some basic

principles of effective correctional interventions. The strength of this relationship has critical implications for the development of programs throughout the State of Ohio.

Limitations of the Current Research

Several limitations of the research must be considered when reviewing the results and findings of this study and applying them into practice. First, the measure of risk was limited to static factors. While it proved to be a robust predictor of recidivism, a more complex and comprehensive operationalization including dynamic measures might provide additional information on the relationship.

Another limitation is the relative size of the sample. Smaller samples make it harder to generalize to other programs. However, in the present study, the results are consistent in both direction and size with previous research (Lowenkamp 2004, Nesovic 2003). In effect, this report, when taken into consideration the other studies, lends greater credence to the principles of effective intervention, specifically program integrity.

Recommendations

Even given the limitations of the current research several recommendations can be gathered from the analyses. First, the DYS should continue to assess all treatment-based programs with the CPAI—2000. Second, the DYS should provide assistance to the programs to increase the integrity of programs throughout the state. Third, the DYS, in concert with the counties and service providers, should develop program standards that can be used to evaluate the implementation and content of programs. Fourth, the DYS should begin using the developed standards and the CPAI as partial criteria in making program-funding decisions as the current research has demonstrated that

programs that fail to adhere to the principles of effective interventions might actually increase the recidivism rates of the youth served.

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