

**EVALUATION OF OHIO'S CCA FUNDED PROGRAMS**

**FINAL REPORT**

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## TABLE OF CONTENTS

<b>ACKNOWLEDGMENTS .....</b>	<b>II</b>
<b>TABLE OF CONTENTS .....</b>	<b>III</b>
<b>LIST OF TABLES, FIGURES, AND FORMULAS.....</b>	<b>V</b>
<b>SECTION I—INTRODUCTION .....</b>	<b>1</b>
<b>SECTION II—METHODOLOGY .....</b>	<b>3</b>
PARTICIPANTS.....	3
PROGRAMS.....	5
PROCEDURES FOR DATA COLLECTION .....	6
<i>Data Collection on Individuals</i> .....	7
<i>Program Level Data Collection</i> .....	8
INDIVIDUAL LEVEL MEASURES.....	8
PROGRAM LEVEL MEASURES.....	10
DESIGN AND ANALYSES.....	12
<b>SECTION III-RESULTS .....</b>	<b>13</b>
INDIVIDUAL LEVEL RESULTS .....	13
PROGRAM LEVEL TREATMENT EFFECTS .....	21
TREATMENT EFFECTS BY PROGRAM TYPE .....	27
PROGRAM CHARACTERISTICS .....	32
RELATING PROGRAM CHARACTERISTICS SCORES WITH EFFECTIVENESS .....	39
<b>SECTION IV—SUMMARY AND CONCLUSIONS.....</b>	<b>44</b>
LIMITATIONS OF CURRENT RESEARCH.....	46
IMPLICATIONS FOR FUTURE RESEARCH .....	47
IMPLICATIONS FOR POLICY.....	48
<b>REFERENCES.....</b>	<b>51</b>
<b>APPENDIX A—RISK ASSESSMENT FACTORS, WEIGHTS, CUTOFF SCORES, AND RECIDIVISM RATES .....</b>	<b>52</b>
<b>APPENDIX B—CALCULATIONS AND FORMULAS FOR R, Z<sub>R</sub>, AND WEIGHTS .....</b>	<b>54</b>
<b>APPENDIX C—STAFF SURVEY .....</b>	<b>56</b>
<b>APPENDIX D—PROGRAM RESULTS.....</b>	<b>65</b>
<b>APPENDIX E—CROSS-TABULATIONS BETWEEN GROUP MEMBERSHIP AND OUTCOME BY RISK LEVEL.....</b>	<b>67</b>
<b>APPENDIX F—RELATIONSHIP BETWEEN AVERAGE EFFECT SIZE AND SIGNIFICANT PROGRAM FACTORS.....</b>	<b>71</b>

**APPENDIX G—WEIGHTED LEAST SQUARES REGRESSION ANALYSIS..... 73**

## LIST OF TABLES, FIGURES, AND FORMULAS

TABLE 1. DISTRIBUTION OF TOTAL AND MATCHED TREATMENT CASES .....	4
FIGURE 1. ILLUSTRATION OF THE RELATIONSHIP BETWEEN MATCHED PRISON DIVERSION TREATMENT CASES.....	5
TABLE 2. DISTRIBUTION OF OFFENDERS BY PROGRAM TYPE PRISON DIVERSION.....	6
TABLE 3. DISTRIBUTION OF OFFENDERS BY PROGRAM TYPE JAIL DIVERSION .....	6
TABLE 4. DESCRIPTIVE STATISTICS FOR TREATMENT AND PAROLE COMPARISON CASES .....	14
TABLE 5. DESCRIPTIVE STATISTICS FOR TREATMENT AND PROBATION COMPARISON CASES.....	15
TABLE 6. DESCRIPTIVE STATISTICS FOR TREATMENT AND JAIL/PROBATION COMPARISON CASES	17
TABLE 7. DESCRIPTIVE STATISTICS FOR UNMATCHED 408 TREATMENT CASES .....	18
TABLE 8. RECIDIVISM RATES OVERALL AND BY PROGRAM TYPE FOR TREATMENT GROUP ALL CASES .....	19
TABLE 9. LISTING OF EFFECT SIZES, CONFIDENCE INTERVALS, AND WEIGHTS <sup>1</sup> USING PAROLEES AS COMPARISON GROUPS .....	22
TABLE 9 (CONTINUED). LISTING OF EFFECT SIZES, CONFIDENCE INTERVALS, AND WEIGHTS <sup>1</sup> USING PAROLEES AS COMPARISON GROUP .....	23
FIGURE 2. R-VALUES AND CONFIDENCE INTERVALS FOR CCA PROGRAMS USING PAROLEES/JAIL RELEASES AS COMPARISON GROUPS .....	24
TABLE 10. AVERAGE EFFECT SIZE BY DIVERSION GROUP.....	25
TABLE 11. LISTING OF EFFECT SIZES, CONFIDENCE INTERVALS, AND WEIGHTS <sup>1</sup> USING PROBATIONERS AS COMPARISON GROUP .....	26
TABLE 11 (CONTINUED). LISTING OF EFFECT SIZES, CONFIDENCE INTERVALS, AND WEIGHTS <sup>1</sup> USING PROBATIONERS AS COMPARISON GROUP .....	27
TABLE 12. AVERAGE EFFECT SIZE BY DIVERSION GROUP PROBATION .....	27
FIGURE 3. R-VALUES AND CONFIDENCE INTERVALS FOR CCA PROGRAMS USING PROBATIONERS AS COMPARISON GROUPS .....	28
TABLE 13. AVERAGE EFFECT SIZE BY DIVERSION GROUP AND PROGRAM TYPE (PAROLEES) .....	29
FIGURE 4. AVERAGE R-VALUE BY PROGRAM TYPE USING PAROLEES/JAIL RELEASES AS COMPARISON GROUPS. ....	30
FIGURE 5. AVERAGE R-VALUE BY PROGRAM TYPE USING REGULAR PROBATIONERS AS COMPARISON GROUPS. ....	31
TABLE 14. AVERAGE EFFECT SIZE BY DIVERSION GROUP AND PROGRAM TYPE (PROBATIONERS) .....	32
TABLE 15. LISTING AND DEFINITION OF FACTORS IN PROGRAM CHARACTERISTICS SCORE .....	33
TABLE 15 (CONTINUED). LISTING AND DEFINITION OF FACTORS IN PROGRAM CHARACTERISTICS SCORE.....	34
TABLE 16. PROGRAM FACTORS AND CORRELATION WITH EFFECT SIZE .....	35
TABLE 17. PROGRAM FACTORS AND CORRELATION WITH EFFECT SIZE .....	36
TABLE 18. AVERAGE PROGRAM CHARACTERISTICS SCORE BY DIVERSION GROUP.....	38
TABLE 19. AVERAGE PROGRAM CHARACTERISTICS SCORE BY DIVERSION GROUP.....	38
TABLE 20. AVERAGE PROGRAM CHARACTERISTICS SCORE BY DIVERSION GROUP AND PROGRAM TYPE .....	38
FIGURE 6. AVERAGE R-VALUES BY PROGRAM INTEGRITY CATEGORY (3 CATEGORY) .....	40
FIGURE 7. AVERAGE R-VALUES BY PROGRAM INTEGRITY CATEGORY (4 CATEGORY) .....	41
TABLE 21. AVERAGE EFFECT SIZE BY PROGRAM CHARACTERISTICS CATEGORIES .....	39

TABLE 22. AVERAGE EFFECT SIZE BY PROGRAM CHARACTERISTICS CATEGORIES .....	44
FIGURE 8. PERCENTAGE OF PROGRAMS DEMONSTRATING A 5% REDUCTION IN RECIDIVISM BY PROGRAM INTEGRITY SCORE (3 CATEGORY) .....	42
FIGURE 9. PERCENTAGE OF PROGRAMS DEMONSTRATING A 5% REDUCTION IN RECIDIVISM BY PROGRAM INTEGRITY SCORE (4 CATEGORY) .....	43
TABLE A1. RISK FACTORS AND WEIGHTS INCLUDED IN RISK MEASURE .....	53
TABLE A2. CORRELATION BETWEEN RISK MEASURE AND OUTCOME .....	53
TABLE A3. CUTOFF SCORES AND RECIDIVISM RATES .....	53
FORMULA B1. R TO $Z_R$ TRANSFORMATION.....	55
FORMULA B2. $Z_R$ TO R TRANSFORMATION .....	55
FORMULA B3. CALCULATION OF STANDARD ERROR.....	55
FORMULA B4. CALCULATION OF WEIGHT FOR ANALYSES.....	55
FIGURE E-1. CROSS-TABULATIONS BETWEEN RISK –LEVEL, GROUP MEMBERSHIP, AND OUTCOME USING PAROLEES AS COMPARISON GROUP.....	68
FIGURE E-2. CROSS-TABULATIONS BETWEEN RISK –LEVEL, GROUP MEMBERSHIP, AND OUTCOME USING PROBATION AS COMPARISON GROUP.....	69
FIGURE E-3. CROSS-TABULATIONS BETWEEN RISK –LEVEL, GROUP MEMBERSHIP, AND OUTCOME USING JAIL RELEASES AND REGULAR PROBATION AS COMPARISON GROUP.....	70
FIGURE F-1. AVERAGE R-VALUE BY SIGNIFICANT PROGRAM FACTORS .....	72
TABLE E1. WEIGHTED LEAST SQUARES MODEL PREDICTING R-VALUES WITH CAPACITY AND CONTENT PERCENTAGE SCORES .....	74

## **SECTION I—INTRODUCTION**

In 1979, Ohio became the sixth state to pass a community corrections act (Harris, 1996). This act was designed to divert felony offenders from the prison system. The original legislation created Community-Based Correctional Facilities (CBCFs) and prison subsidy programs, and in 1990 the act was amended to allow for jail diversion programs as well. Ohio has commissioned several studies of the Community Corrections Act (CCA) programs beginning in 1989 (Austin), again in 1997 (Latessa, Travis, and Holsinger), and more recently in 2002 (Lowenkamp and Latessa) with a comprehensive study of halfway houses and CBCFs. In early 2002, the Department of Rehabilitation and Corrections (ODRC), at the request of Governor Bob Taft, commissioned a comprehensive study of halfway houses (HWHs) and CBCFs to determine the effectiveness of these state-funded alternatives to prison.

The study resulting from that project represents probably the single largest study done of these types of programs; large amounts of data were collected on almost 14,000 offenders. While the overall results of the study were certainly positive and showed that HWHs and CBCFs are at least as effective as prisons for generally similar offenders, a more in-depth analysis of the data revealed even more useful information regarding the size of the treatment effect in relationship to the risk level of the offender. The research, which Governor Taft's question elicited, clearly had substantial implications for policy decisions and for improvements in the effective use of HWHs and CBCFs as alternatives to prison.

The ODRC is committed to applying the findings from the HWH and CBCF research to sound policy decisions and enhanced operational and program effectiveness. Toward this end, the Department established a Community Corrections Steering Committee to develop a platform

for change by translating the outcomes of the research into practical strategies for CBCF and HWH programs. The success of the HWH and CBCF research, coupled with a collaborative partnership with community-based program stakeholders to develop a blueprint for change, suggested that similar opportunities could be found through a study of Community Corrections Act Programs.

Ohio Community Corrections Act (CCA) jail and prison diversion programs are funded by DRC through the Bureau of Community Sanctions. This program is a partnership between the State of Ohio and the Local Community Corrections Planning Boards. Each CCA program is controlled by its Local Community Corrections Board and is administered by either the county or city officials. These programs allow local courts to sanction certain offenders in the community, saving scarce prison and jail beds for more serious offenders. During Fiscal Year 2002, over 160 CCA subsidy programs in seventy-nine Ohio counties received funding appropriations of \$22,377,966 to divert more than 9,000 offenders from prison and more than 20,000 offenders from local jails.

Given these expenditures and the size of the CCA program, DRC contracted with The University of Cincinnati, Division of Criminal Justice to evaluate these programs. Specifically, the evaluation focused on the following questions:

- Overall, how effective are CCA programs compared with alternative sanctions for similar offenders?
- What characteristics of the CCA programs are associated with higher rates of post-program success?

This report and associated appendices present the results of this evaluation.

## SECTION II—METHODOLOGY

To answer the questions listed above, a quasi-experimental design was used which included post-hoc matching of offenders according to risk level, sex, and county of supervision.<sup>1</sup> To conduct this study, substantial amounts of data were collected through surveys of program staff and reviews of offender files from October 2003 through September 2004. In addition, Community Corrections Information System (CCIS)<sup>2</sup> data were provided electronically to the University of Cincinnati by the ODRC. Once all data were collected, they were analyzed using several different techniques. The methods employed for data collection and analyses as well as the study participants are described in this section.

### Participants

This study included several different groups of offenders. The experimental group included those offenders that were terminated from a CCA funded jail (408) or prison (407) diversion program after being in the program for at least 30 days during FY99. Removing duplicate cases and offenders participating in programs not evaluated in this research left 7,811 prison diversion cases and 3,510 jail diversion cases.

The prison diversion cases were compared to two different groups. First, the prison diversion cases were compared to a matched sample of parolees (N = 5,112). The second

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<sup>1</sup> Comparison cases were also selected based on crime type when the treatment case was under supervision for a sex offense. Similarly, it was also ensured that non-sex offenders were compared to non-sex offenders.

<sup>2</sup> The Community Corrections Information System is a database that tracks the admission and termination of offenders sentenced or referred to CCA programs. The programs themselves enter the data. The database is maintained by the ODRC.

comparison group used in the analyses of prison diversion programs was regular supervision probation cases. These cases were drawn from sampling frames for each site that was able to provide that list. For those unable to provide a sampling frame, cases were systematically selected from files while on site. A total of 2,343 regular probation cases are included in these analyses as a second comparison group. When combining unique treatment cases from those compared to parolees and those compared to regular probation, the total number of treatment cases was 5,781 with 7,455 comparison cases. Table 1 and Figure 1 provide a visual display of the overlap in the treatment cases compared to parolees and probationers.

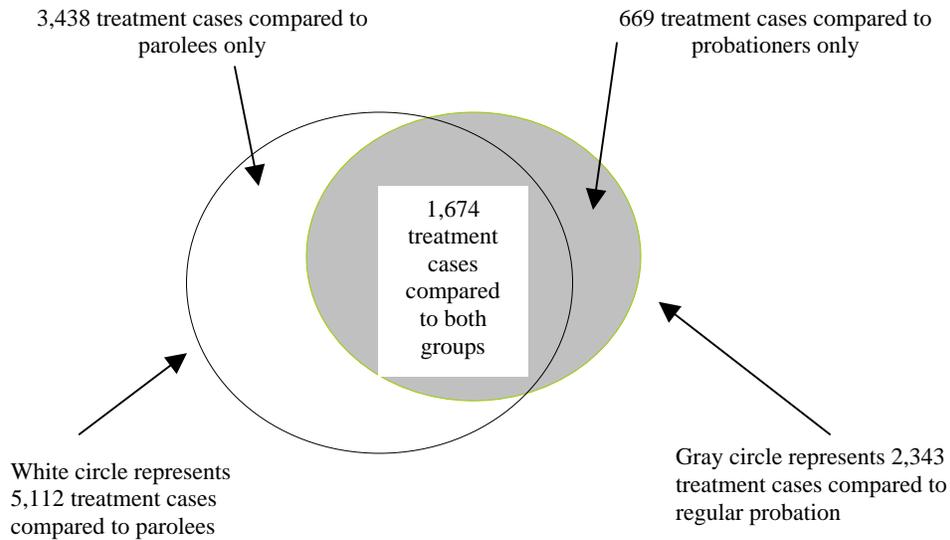
**Table 1. Distribution of Total and Matched Treatment Cases**

Group	Total Cases	Matched
Prison Diversion	7,811	5,781
Jail Diversion	3,510	707

The matched jail diversion cases (n =707) were compared to jail releases or regular municipal probation cases (n = 707). While initial plans included using jail releases as the comparison group for the jail diversion programs, information on jail releases could only be obtained from one county (Summit). These data from Summit County provided enough cases to develop comparison groups for three jail diversion programs. Only eight other sites were able to provide information on regular municipal probation cases to serve as a comparison group for the treatment cases. In order to provide meaningful data to sites where no comparison group was available, we calculated recidivism rates for the treatment cases in all jail diversion sites.

The analyses in this report investigate the recidivism rates for individual programs and the recidivism rates for the CCA program participants overall. The results of the program specific analyses are reported in the Appendix of this report. The aggregate analyses and analyses using program level data are in the body of this report.

**Figure 1. Illustration of the relationship between matched prison diversion treatment cases**



**Programs**

At the onset of the study, there were 130 CCA-funded programs in operation during FY99. Of those 130, 22 programs were 408-regular probation and were excluded from the sample due to a lack of a suitable comparison group. Of the remaining 108, 17 were excluded due to small numbers of terminations (less than 10) during FY99. These exclusions reduced the total number of programs to 91. These 91 programs represented day reporting, domestic violence, ISP, work release, substance abuse treatment, and residential treatment programs. Tables 2 and 3 list the distribution of offenders terminated from each CCA program during FY99

and the number of programs within each program type. As indicated in Table 2, the predominant prison diversion program type, both in terms of the number of programs in operation and the number of offenders supervised, is ISP.

**Table 2. Distribution of Offenders by Program Type Prison Diversion**

Program Type	Parole Comparison		Probation Comparison	
	Treatment	Comparison	Treatment	Comparison
Day Reporting (6)	153	153	138	138
Electronic Monitoring (2)	33	33	6	6
ISP (42)	4233	4233	1992	1992
Work Release (2)	391	391	114	114
Substance Abuse TX (3)	297	297	143	143

A similar trend is noted in Table 3, which displays the distribution of offenders across the various jail diversion program types. When considering all 91 programs together, 62 programs (71%) are ISP programs. The next most common program type is day reporting with 13 programs (14%).

**Table 3. Distribution of Offenders by Program Type Jail Diversion**

Program Type	Matched		Unmatched	
	Treatment	Comparison	Treatment	Comparison
Day Reporting (7)	274	274	303	----
Domestic Violence (3)	48	48	324	----
ISP (23)	258	258	1477	----
Work Release (2)	92	92	99	----
Residential TX (1)	35	35	----	----

**Procedures for Data Collection**

Two sets of data were collected for this project. The first set pertained to offender characteristics and outcomes. Sources of data on offenders included the CCIS database, the offender files, Bureau of Criminal Investigation and Identification (BCI&I) criminal

investigation reports, and data pulled from the ODRC's database on intakes to prison. The second set of data focused on the programs themselves. The program level data was gathered from aggregate statistics in CCIS, aggregate statistics based on offender data collected by University of Cincinnati staff, and from the surveys completed by program staff.

### *Data Collection on Individuals*

Treatment group data on demographic characteristics, the current offense, county of supervision, needs identified, services delivered, termination type, and employment status at discharge were extracted from the CCIS database maintained by the ODRC. Missing data identified in this database were collected from the offender files located at each program site by research associates from the University of Cincinnati. Program staff was asked to collect the missing data for small sites (defined as fewer than 30 terminations during FY 99). Criminal history data were collected and coded from BCI&I record checks conducted by the ODRC.

Data for the parole comparison group were collected from inmate files, which include pre- or post-sentence investigations, classification instruments, and notes while incarcerated. The data files were collected from the archived records at the Department of Rehabilitation and Correction in Columbus, Ohio. Copies of the records were taken to the University of Cincinnati where data coders coded information from the copied files.<sup>3</sup> As with the experimental group, all criminal history data were compiled from BCI&I record checks conducted by the ODRC.

Data on the probation and jail comparison groups were collected from the files and/or databases of the agencies responsible for the supervision of those offenders. Program staff was

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<sup>3</sup> These data were collected during 2002 as part of the HWH/CBCF project.

asked to complete the data collection forms on the comparison cases for sites with less than 30 cases.

Recidivism data for all groups were gathered and coded from BCI&I record checks conducted by the ODRC. In addition, outcome data for subsequent incarcerations were gathered from data records maintained by the ODRC. This data pertains only to incarcerations in state penal institutions in Ohio.

### *Program Level Data Collection*

Program level data were collected through the use of staff surveys that were administered via e-mail or regular mail.<sup>4</sup> All staff was asked to complete the surveys and return the survey to the University of Cincinnati for data entry. The surveys served as a source of data in the development of program-level measures of program integrity. Program-level data were collected on 79 out of 91 programs. Survey data could not be collected on 12 programs because programs were no longer in operation or staff knowledgeable about program operations during FY99 was unavailable. The survey used for this process is contained in Appendix C.

### *Individual Level Measures*

Individual level measures for both the comparison and experimental groups include race, gender, age, marital status, employment status upon arrest, a history of alcohol use, a history of drug use, and prior criminal history. Measures of prior criminal history include prior number of arrests, prior number of incarcerations, and whether the offender had any prior community control violations.

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<sup>4</sup> For some sites (9 out of 79), the survey was completed via telephone survey with the program director.

Demographic data included age, race, sex, and marital status. Age was recorded as the actual age in years, race was coded as white or non-white, and marital status was coded as married, never married, or divorced/separated/widowed.

Criminal history data were collected on prior arrests and prior incarcerations. Prior arrests and incarcerations were both collected as the actual number of prior arrests or incarcerations. These data, for the purposes of analyses, were collapsed into a truncated measure, with zero representing no arrest or incarceration, a value of 1 representing 1 or 2 prior arrests or incarcerations, and a value of 2 representing 3 or more prior arrests or incarcerations. Finally, a history of felony arrests was also recorded with a 1 representing at least one prior felony arrest and a zero representing the absence of a felony history.

Data pertaining to the needs of the offender and current offense included employment status at arrest, education level completed, history of alcohol abuse, history of drug abuse, a history of or current mental health problems, type of current offense, and felony degree. Employment at arrest was coded as (0) for employed and (1) if unemployed. Education level was coded as the actual grade completed and a second measure captured high school completion (coded 0 for H.S. graduate and 1 if the individual had not completed H.S.). A history of drug use, a history of alcohol abuse, and a history of or current mental health needs were all coded as a (1) if the characteristic was present and a (0) if absent. Finally, offense types and felony degree levels were coded. Offense type was coded as a personal, sex, drug, property, or other type of crime. Felony degree level was coded according to the degree (first degree = 1, second degree = 2, and so on). Misdemeanor offenses were all coded as 6 regardless of degree.

In order to develop meaningful comparison groups, a risk score was developed for all offenders. This score included the following factors: arrest history, felony arrest history,

incarceration history, violent offense history, sex offense history, drug problems, alcohol problems, employment status at arrest, age, marital status, current offense type, current offense level, and history of or current community supervision violations. The scoring of this measure, the cutoff scores for the risk categories, and the recidivism rates for those categories are contained in Appendix A of this report. In summary, however, the risk score was composed of 13 factors with a range of zero to 15 with a mean of 7.4. The correlations between the risk score and any incarceration and any arrest are .35 and .31 respectively.

### **Program Level Measures**

There were two main measures at the program level. The first was a measure of treatment effectiveness, or the difference in the recidivism rates between the treatment and comparison groups. The second measure was a score that captured the characteristics of the program and can be thought of as a measure of program integrity. This measure was based on the Correctional Program Assessment Inventory [CPAI (Gendreau and Andrews, 1994)], but employs some different scoring criteria, some additional factors, and a different method of administration.<sup>5</sup>

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 offender served by each program differed from site to site, a weight

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<sup>5</sup> The CPAI is an instrument that is designed to assess the quality of any correctional program that is designed to change offenders' criminal behavior. The University of Cincinnati, Division of Criminal Justice has administered the CPAI to 27 Day Reporting Programs, 46 Probation Units or Probation Based Programs, and 6 Work Release Programs. These 79 programs scored an average of 52%, which is not significantly different from the scores of 283 other residential and non-residential correctional interventions (Latessa, 2005).

controlling for the sample size was calculated and used in all analyses involve  $r$ . 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 group 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%. (For a more detailed explanation on the binomial effect size display, see Rosenthal, 1991, or Lipsey and Wilson, 2001.) The calculating formula for these  $r$ -values and various other statistics used in the analyses are contained in Appendix B.

Once these values were calculated, the next step was to investigate the correlation between programmatic factors and treatment effect sizes. To accomplish this step, a number of programmatic factors, based on the survey responses, were developed and correlated with various outcome measures (see Appendix C for the survey). The factors that most consistently related to outcome were selected and added into a scale. This measure has two sub-sections: The first measures the content of the program and includes 16 factors while the second sub-section measures the capacity of the program to deliver a sound intervention. The second sub-section has 15 factors for a total of 31 items on the program integrity assessment. Each factor was given

a value of (1) if the factor was determined to be present at the program and (0) if it was not present.

Some programs did not complete the survey or only partially completed the survey.<sup>6</sup> As such, not all programs were scored on 31 factors. To overcome this difference in the completion of the survey items, a percentage score for the content, capacity, and overall measure was calculated for each program. This percentage score was based on the number of items the program received a point for, divided by the total number of items that could be scored for that program.

### **Design and Analyses**

Since the comparison groups were developed by matching offenders based on risk score, county of supervision, and sex (see also footnote 1), the analyses in this study were rather simple and straightforward. As such, the analyses conducted for this research involved calculating descriptive statistics, confidence intervals, bivariate correlations, ANOVAs<sup>7</sup>, and weighted least squares regression models. Aside from calculating the recidivism rates for the treatment and comparison group at each site, analyses focused on determining the impact of programmatic factors on program effectiveness.

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<sup>6</sup> It should also be noted, while most surveys were conducted via mail, some were conducted on-site, and some were conducted through phone interviews.

<sup>7</sup> And the analog to ANOVA specifically developed for meta-analyses (see Lipsey and Wilson, 2001).

## SECTION III-RESULTS

This section presents the results of the study in four subsections. The first subsection reviews the descriptive statistics on the individual offenders. The second section reviews the program level r-values or measures of effectiveness. The third section presents the analyses of program integrity while the fourth section discusses the analyses that investigated the relationship between program integrity and program effectiveness.

### Individual level results

Table 4 provides descriptive statistics for the treatment and parole comparison cases. The demographic characteristics and criminal history characteristics are listed in this table. Where there are significant differences between the treatment and comparison group, variables are indicated with an asterisk. Note that with many of the characteristics where statistically significant differences are indicated the differences are not substantive. For example, the racial composition of the two groups is fairly similar (48% versus 45% white for the treatment and comparison group, respectively). Similar differences, significant but not substantive, are noted for variables such as unemployed at arrest and less than high school degree.

There are, however, some variables where the two groups do differ significantly and substantively. For example, the comparison group was much more likely to have a history of a violent offense or to be currently supervised for a violent offense. The comparison group was also more likely to have a prior or current violation of community supervision, was more likely to have been incarcerated three or more times, was more likely to be under supervision for an offense against a person, and was more likely to have a history of or to be currently supervised for a sex offense. Given the matching procedures, the two groups are identical in

**Table 4. Descriptive Statistics for Treatment and Parole Comparison Cases**

Variable	Treatment		Parole	
	%	N	%	N
White*	48	2454	45	2300
Female	7	358	7	358
Single*	73	3732	65	3323
Unemployed at arrest*	62	3169	65	3323
Less than high school degree*	70	3578	64	3272
Drug history	84	4294	83	4243
Alcohol history	69	3527	70	3578
Current or prior sex offense*	3	153	8	409
Current or prior violent crime*	31	1585	63	3221
Prior or current supervision violation*	33	1687	57	2914
History of felony arrests*	84	4294	75	3834
Prior arrest*				
0	5	272	14	736
1-2	33	1679	24	1241
3+	62	3161	61	3135
Prior incarceration*				
0	63	3219	46	2336
1-2	32	1629	34	1724
3+	5	264	21	1052
Offense type*				
Person	14	730	26	1318
Sex	3	153	3	153
Drug	32	1647	29	1444
Property	36	1847	35	1746
Other	14	735	8	379
Risk category				
Low	5	235	5	235
Low-moderate	23	1192	23	1192
Moderate	62	3147	62	3147
High	11	538	11	538

\* p < .01

terms of the percentage of offenders that fall within each risk category.

Table 5 contains the descriptive statistics for the prison diversion treatment group and probation comparison cases. With few exceptions, these two groups did not differ significantly

on the individual level measures available. The measures where significant differences exist are less than a high school degree, alcohol history, prior or current supervision violation, history felony arrests, prior arrests, prior to course ratios, and offense type. As indicated in Table 5, 55% of the sample is white, 23% is female, and 60% is single. For both groups, about half was

**Table 5. Descriptive Statistics for Treatment and Probation Comparison Cases**

Variable	Treatment		Probation	
	%	N	%	N
White	55	1289	56	1312
Female	23	539	23	539
Single	60	1406	60	1406
Unemployed at arrest	49	1148	46	1078
Less than high school degree*	58	1359	53	1242
Drug history	73	1710	72	1687
Alcohol history*	57	1336	52	1218
Current or prior sex offense	2	47	2	47
Current or prior violent crime	23	539	24	562
Prior or current supervision violation*	24	562	43	1007
History of felony arrests*	73	1710	78	1828
Prior arrest*				
0	11	268	11	254
1-2	45	1059	50	1168
3+	43	1016	39	921
Prior incarceration*				
0	79	1840	84	1978
1-2	20	458	14	316
3+	2	45	2	49
Offense type*				
Person	15	343	13	292
Sex	2	34	2	34
Drug	34	788	35	825
Property	36	848	39	905
Other	14	310	11	264
Risk category				
Low	13	314	13	314
Low-moderate	51	1188	51	1188
Moderate	33	774	33	774
High	3	67	3	67

\* p < .01

unemployed at arrest, and about 55% had less than a high school degree. About 70% of each group had a history of drug problems or indicators of drug problems. Fifty-seven percent of the treatment group had a history of alcohol problems, and 52% of the comparison group had a history of alcohol problems. Two percent of each sample had a current or prior sex offense, while about 23% had a current or prior violent crime offense. Forty-three percent of the probation comparison group had a prior or current supervision violation, while only 24% of the treatment group had a current or past violation of community supervision. About 75% of each group had a history of felony arrests, with 89% of both groups having at least one prior arrest and approximately 80% of each group having no prior incarcerations. While there are subtle differences in the percentages of current offense type between the two groups, the overwhelming majority were currently under supervision for a drug or property offense. Finally, the distribution of offenders in each category of risk shows that 84% of the offenders are low-moderate- and moderate-risk offenders, with only 3% being high-risk.

The descriptive statistics for the jail diversion treatment and comparison cases are listed in Table 6. Approximately 65% of each sample was white, with 19% being female. The two groups significantly different on marital status, employment status at arrest, high school degree, alcohol history, current or prior sex offenses, current or prior violent crimes, current or prior supervision violation, prior arrests, prior incarcerations, and offense type. Sixty-one percent of the treatment group was single with slightly higher percentage of the comparison group being single (70%). Unemployment at arrest was twice as high in the comparison group (70%) as in the treatment group (36%). About 10% more comparison cases had less than high school degree in relation to the treatment cases. An equal percentage of each group had a history of drug problems or indicators of drug problems; however, the comparison group had a higher

**Table 6. Descriptive Statistics for Treatment and Jail/Probation Comparison Cases**

Variable	Treatment		Jail/Probation	
	%	N	%	N
White	62	438	65	460
Female	19	134	19	134
Single*	61	431	70	495
Unemployed at arrest*	36	255	70	495
Less than high school degree*	53	375	62	438
Drug history	65	460	66	467
Alcohol history*	66	467	83	587
Current or prior sex offense*	3	21	0	0
Current or prior violent crime*	22	156	7	49
Prior or current supervision violation*	27	191	19	134
History of felony arrests	43	304	41	290
Prior Arrest*				
0	24	169	37	260
1-2	37	262	30	212
3+	39	276	33	235
Prior incarceration*				
0	83	583	75	534
1-2	14	101	19	134
3+	3	23	6	39
Offense type*				
Person	25	176	22	155
Sex	0	1	0	1
Drug	4	22	8	57
Property	14	70	9	62
Other	62	438	61	432
Risk category				
Low	26	186	26	186
Low-moderate	52	374	52	374
Moderate	20	142	20	142
High	1	5	1	5

\* p &lt; .01

percentage of offenders with a history of alcohol problems. The treatment group had a higher percentage of offenders with a current or prior sex offense, with a current or prior violent offense, and with a current or prior violation of community supervision. In both groups, about 40% of the sample had a history of at least one felony arrest. Approximately 35% of each group

had three or more prior arrests, while roughly 20% of each group had at least one prior incarceration. In terms of risk, approximately 80% of each group is low to low-moderate, with 20% moderate risk.

**Table 7. Descriptive Statistics for Unmatched 408 Treatment Cases**

Variable	Treatment	
	%	N
White	70	1962
Female	14	392
Single	53	1486
Unemployed at arrest	49	1373
Less than high school degree	56	1570
Drug history	61	1710
Alcohol history	65	1822
Current or prior sex offense	1	28
Current or prior violent crime	23	645
Prior/current supervision violation	16	448
With history of felony arrests	40	1121
Prior arrest		
0	23	656
1-2	41	1159
3+	35	988
Prior incarceration		
0	84	2354
1-2	14	390
3+	2	59
Offense type		
Person	51	1011
Sex	1	22
Drug	12	240
Property	12	240
Other	30	587
Risk category		
Low	33	911
Low-moderate	45	1254
Moderate	21	594
High	2	44

Finally, Table 7 presents the descriptive statistics for the unmatched jail diversion treatment cases. Note that a higher percentage (70%) is white compared to the matched jail diversion cases, and a slightly smaller percentage is female and single. A slightly higher percentage (49%) was unemployed at arrest, while similar percentages had less than a high school degree, a drug problem, or an alcohol problem. Similar percentages were also noted for prior arrests, prior incarcerations, and other measures of criminal history. Also similar is the fact that almost 80% of the unmatched jail diversion treatment cases are low- to low-moderate-risk, while only 21% was moderate-risk, and 3% high-risk.

**Table 8. Recidivism Rates Overall and By Program Type for Treatment Group All Cases**

Program Type	Programs	Offenders	Risk Distribution			Recidivism Rate		
			% HR	% MR	%LR	Overall	HR	LR
Prison Diversion <sup>1,a</sup>	55	7,811	7	46	47	32	41	21
Day Reporting	6	226	4	36	60	25	37	16
Electronic Monitoring	2	84	2	41	57	20	31	13
ISP	42	6,385	7	46	48	33	43	21
Work Release	2	604	9	47	44	29	35	20
Substance Abuse TX	3	512	9	59	32	28	31	19
Jail Diversion <sup>2,b</sup>	36	3,510	1	21	78	30	42	27
Day Reporting	7	577	1	24	75	33	43	30
Domestic Violence	3	972	2	27	71	33	43	28
ISP	23	1,735	1	17	82	27	41	23
Work Release	2	191	1	14	86	42	41	43
Residential TX	1	35	0	31	69	37	46	33

1 = Recidivism rate calculated using sent to prison for any reason based on ODRC database.

2 = Recidivism rate calculated using any new arrest from BCI&I criminal background data.

a = Higher Risk  $X^2(4, N = 4150) = 23.995, p < .05$ ; Lower Risk  $X^2(4, N = 3661) = 4.471, p > .05$

b = Higher Risk  $X^2(4, N = 2725) = 0.316, p > .05$ ; Lower Risk  $X^2(4, N = 2725) = 33.159, p < .05$

HR = High-risk, MR = Moderate-risk, LR=Lower-risk which includes low and low-moderate

Table 8 lists the recidivism rates for each program by diversion type and program type (third panel of Table 8) and also lists the percentage of offenders that fall into the high, moderate, and lower (combination of low and low-moderate) risk categories (second panel of Table 8). The recidivism rates have also been calculated by risk level of the offenders: higher

risk, which includes moderate- and high-risk offenders, and lower risk, which includes low- and low-moderate-risk offenders. This table displays all the data on all the offenders that were terminated from the programs and were initially included in this study (i.e., before matching). The total number of offenders included in this table is listed in the first pane of Table 8 along with the number of programs that fell into each program type. As is indicated in the notes for Table 8, the measure of recidivism for the jail diversion cases is any arrest while the measure of recidivism for the prison diversion cases is any subsequent incarceration in an Ohio prison. Overall, the prison diversion cases had a recidivism rate of 32% while the jail diversion cases had a 30% recidivism rate.

Note in Table 8 that for the lower-risk prison diversion cases there is not a statistically significant difference in the recidivism rates across the different programs. However, there is a statistically significant difference in the recidivism rates of the programs for higher risk offenders. The opposite trend is true for jail diversion cases, where the recidivism rates for higher-risk offenders do not differ, but the recidivism rates for lower-risk offenders do differ significantly. This table should serve as a guide for programs to compare their individual results to statewide results.

The next step in the analyses was to calculate treatment effects, which represent the difference in recidivism rates between the treatment and comparison groups. The results of these analyses are presented in the next section. However, before leaving the issue of effects by risk-level, analyses were conducted that investigated the effects of programming across levels of risk using the different comparison groups. Those analyses, cross-tabulations between risk-level, group membership, and outcome, were calculated for matched cases and are contained in Appendix E.

Figure E-1, which displays the effects of the prison diversion programs by risk using parolees as the comparison group, indicates that there is very little variation in the effects of the programs by risk. In addition, the effects of the program appear to be stronger for the lower risk cases. That is, lower risk cases respond better when kept in the community as opposed to being placed in prison.

Figure E-2 displays the results of the analyses using probationers as the comparison group. This figure indicates that the highest risk cases are the only group of offenders to respond positively to programming. This is extremely important. As Table 5 indicates, only 3% of the offenders in the probation matched analyses are high-risk. Reviewing these data it becomes apparent that the CCA programs are not receiving high-risk offenders who are the most likely to respond to programming.

### **Program Level Treatment Effects**

Table 9 and Figure 2 present the treatment effects for 55 prison diversion programs and three jail diversion programs. The comparison groups used for the calculation of treatment effects in this table and figure are parolees (prison diversion) and jail releases (jail diversion). Aside from the actual r-value, the table and figure provide information about the confidence intervals for each effect size. In addition, Table 9 presents information about the weights used for each effect size in the program level analyses.

In Figure 2, an error bar chart is presented. This error bar chart represents the r-values for each program and the confidence intervals around each r-value. It is easiest to conceptualize the confidence intervals, in Table 9, and their respective error bands, in Figure 2, as the range within which we would expect, with some certainty, the true value of r to lie. Some information

**Table 9. Listing of Effect Sizes, Confidence Intervals, and Weights<sup>1</sup> Using Parolees as Comparison Groups**

Site	r	-95%CI	+95%CI	Weight
Miami County PISP	-0.30	-0.55	-0.06	63
Marion County PISP	-0.30	-0.53	-0.07	71
Montgomery County PISP	-0.28	-0.42	-0.13	175
Hamilton County PISP	-0.21	-0.27	-0.15	1175
Fayette County PISP	-0.20	-0.68	0.27	17
Muskingum County PISP	-0.17	-0.36	0.02	107
Greene County PISP	-0.15	-0.38	0.09	69
Clermont County PISP	-0.13	-0.31	0.05	119
Sandusky County PISP	-0.10	-0.32	0.12	77
Belmont County PISP	-0.08	-0.35	0.19	53
Columbiana County PISP	-0.07	-0.33	0.18	59
Wayne County PISP	-0.07	-0.22	0.08	165
Lake County PISP	-0.07	-0.32	0.18	61
Auglaize County PDR	-0.06	-0.41	0.29	31
Hancock County PISP	-0.05	-0.35	0.25	43
Richland County PISP	-0.04	-0.34	0.25	43
Scioto County PISP	-0.04	-0.23	0.16	101
Lucas County PISP	-0.02	-0.10	0.06	625
Clark County PISP	-0.02	-0.20	0.16	117
Licking County PISP	0.00	-0.48	0.48	17
Mercer County PISP	0.00	-0.17	0.17	141
Pickaway County PDR	0.00	-0.15	0.15	181
Summit County JWR <sup>2</sup>	0.00	-0.39	0.39	25
Portage County PISP	0.02	-0.11	0.14	253
Cuyahoga County PISP	0.02	-0.03	0.06	2031
Montgomery County PSUB	0.02	-0.16	0.20	117
Allen County PISP	0.04	-0.15	0.22	111
Summit County PISP	0.05	-0.06	0.15	337
Stark County PISP	0.06	-0.08	0.19	209
Cuyahoga County PSUB	0.06	-0.05	0.17	307

<sup>1</sup>= Effect sizes reported are r-values which can be interpreted as the actual difference in recidivism rates between the treatment and comparison groups (see Rosenthal, 1991). Negative values of r favor the comparison group while positive values of r favor the treatment group. Unless otherwise noted, the value of r was calculated using parolees as the comparison group and any new incarceration as the measure of recidivism.

<sup>2</sup> = Value of r calculated using jail releases as the comparison group and any new arrest as the measure of recidivism.

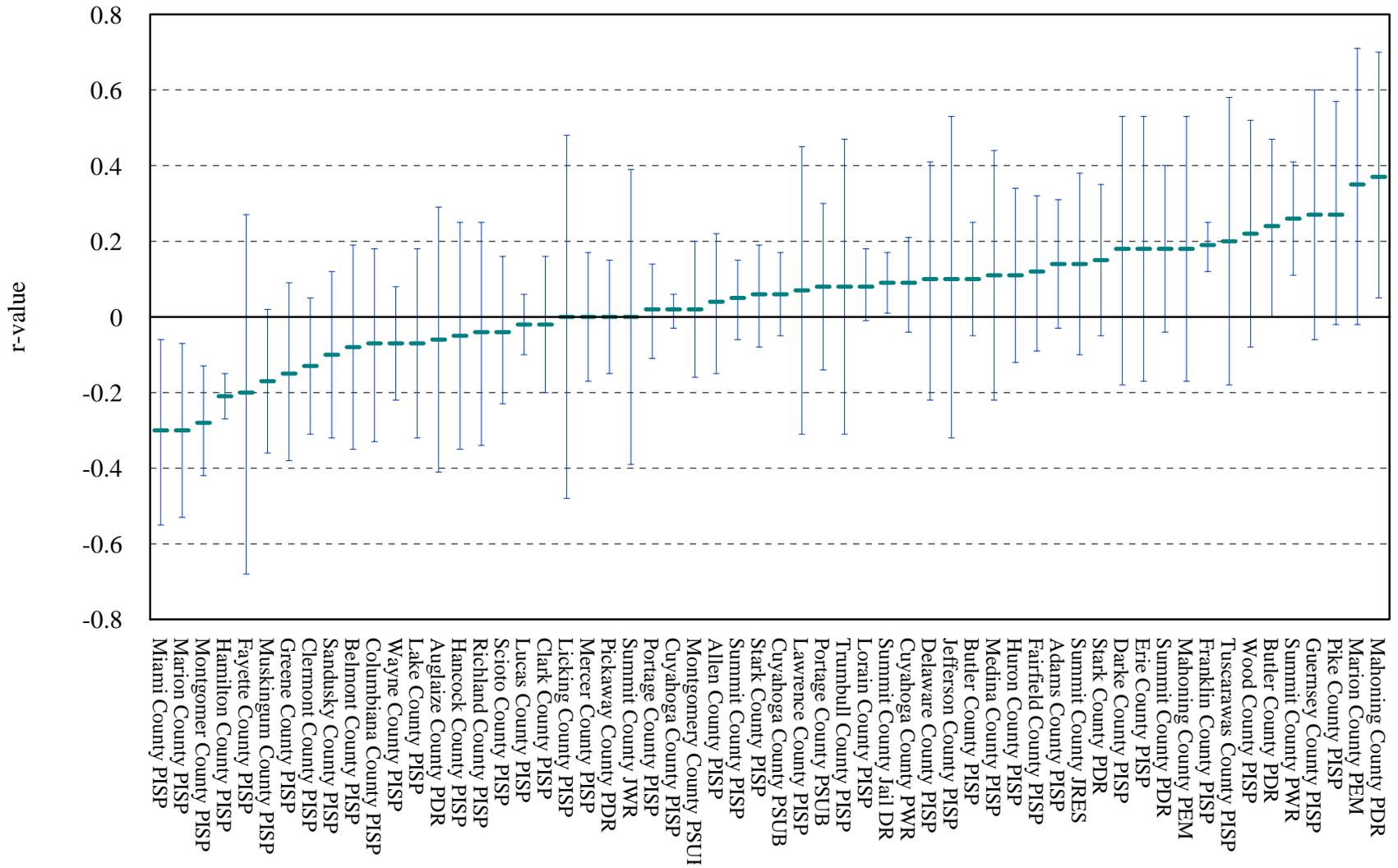
**Table 9 (continued). Listing of Effect Sizes, Confidence Intervals, and Weights<sup>1</sup> Using Parolees as Comparison Group**

Site	r	-95%CI	+95%CI	Weight
Lawrence County PISP	0.07	-0.31	0.45	27
Portage County PSUB	0.08	-0.14	0.30	77
Trumbull County PISP	0.08	-0.31	0.47	25
Lorain County PISP	0.08	-0.01	0.18	401
Summit County JDR <sup>2</sup>	0.09	0.01	0.17	613
Cuyahoga County PWR	0.09	-0.04	0.21	251
Delaware County PISP	0.10	-0.22	0.41	39
Jefferson County PISP	0.10	-0.32	0.53	21
Butler County PISP	0.10	-0.05	0.25	175
Medina County PISP	0.11	-0.22	0.44	35
Huron County PISP	0.11	-0.12	0.34	73
Fairfield County PISP	0.12	-0.09	0.32	91
Adams County PISP	0.14	-0.03	0.31	131
Summit County JRES <sup>2</sup>	0.14	-0.10	0.38	67
Stark County PDR	0.15	-0.05	0.35	93
Darke County PISP	0.18	-0.18	0.53	31
Erie County PISP	0.18	-0.17	0.53	31
Summit County PDR	0.18	-0.04	0.40	79
Mahoning County PEM	0.18	-0.17	0.53	31
Franklin County PISP	0.19	0.12	0.25	879
Tuscarawas County PISP	0.20	-0.18	0.58	27
Wood County PISP	0.22	-0.08	0.52	43
Butler County PDR	0.24	0.00	0.47	71
Summit County PWR	0.26	0.11	0.41	173
Guernsey County PISP	0.27	-0.06	0.60	35
Pike County PISP	0.27	-0.02	0.57	43
Marion County PEM	0.35	-0.02	0.71	29
Mahoning County PDR	0.37	0.05	0.70	37
Mean	0.02	-0.00	0.04	----

<sup>1</sup>= Effect sizes reported are r-values which can be interpreted as the actual difference in recidivism rates between the treatment and comparison groups (see Rosenthal, 1991). Negative values of r favor the comparison group while positive values of r favor the treatment group. Unless otherwise noted, the value of r was calculated using parolees as the comparison group and any new incarceration as the measure of recidivism.

<sup>2</sup> = Value of r calculated using jail releases as the comparison group and any new arrest as the measure of recidivism.

**Figure 2. R-values and confidence intervals for CCA programs using parolees/jail releases as comparison groups**



can be gleaned from the error bars in Figure 2. First, the size of the error bar for a particular site is linked to the sample used for that site: The larger the error bar and confidence interval, the smaller the sample size. Second, if the error bar crosses zero (which most do), the effect size calculated does not differ significantly from zero.

More important, are the r-values, which are also presented in Table 9 and Figure 2. Overall these programs generated an average r- value of .02 (95% CI from -.02 to .06). The jail diversion programs on average generated an r-value of .06 (N = 3) while the prison diversion programs generated an r-value of .01 (N = 55). This information indicates overall that the CCA-funded programs, as a group, are not especially effective in reducing recidivism when compared to parolees or jail releases (see Table 10). While the jail diversion programs appear to be a bit more effective than the prison diversion, there are only three jail diversion programs, and they are all from one site. Second, is the fact that the confidence intervals for the mean r-values for the jail and prison diversion programs completely overlap, indicating that the two values do not differ from one another, nor do they differ significantly from zero.

**Table 10. Average Effect Size by Diversion Group**

Group	R	-95%CI	+95%CI	N
Jail	.06	-.02	.15	3
Prison	.01	-.01	.03	55

A similar set of tables and figure was developed for the prison and jail diversion programs using regular supervision probation as a comparison group. Figure 3 and Table 11 indicate that there are very few programs that have positive r-values when regular probationers are used as the comparison group. In addition, the positive effects are not as large. On

**Table 11. Listing of Effect Sizes, Confidence Intervals, and Weights<sup>1</sup> Using Probationers as Comparison Group**

Site ID	r	-95%CI	+95%CI	Weight
Miami County PISP	-.49	-.80	-.17	39
Darke County PISP	-.34	-.67	-.01	35
Wayne County PISP	-.27	-.46	-.08	109
Hamilton County PISP	-.27	-.33	-.20	997
Erie County PISP	-.26	-.52	-.01	59
Tuscarawas County PISP	-.26	-.52	-.01	59
Butler County PISP	-.26	-.42	-.10	149
Montgomery County PISP	-.25	-.41	-.10	161
Lake County PISP	-.25	-.41	-.09	155
Scioto County PISP	-.24	-.51	.02	55
Clermont County PISP	-.23	-.43	-.04	101
Summit County PWR	-.23	-.38	-.08	169
Fayette County PISP	-.22	-.65	.20	21
Pickaway County PDR	-.20	-.55	.15	31
Lucas County PISP	-.18	-.29	-.07	295
Greene County PISP	-.17	-.45	.11	49
Medina County JISP <sup>2</sup>	-.17	-.50	.17	7
Summit County PDR	-.15	-.51	.20	31
Butler County PDR	-.15	-.35	.05	95
Miami County JDR <sup>2</sup>	-.15	-.50	.19	52
Fairfield County PISP	-.14	-.34	.06	97
Delaware County PISP	-.13	-.55	.30	21
Summit County PISP	-.10	-.32	.11	83
Lawrence County PISP	-.10	-.38	.17	51
Hamilton County JDR <sup>2</sup>	-.09	-.27	.10	25
Stark County PISP	-.07	-.26	.11	109
Franklin County PISP	-.06	-.17	.05	323
Licking County PISP	-.04	-.28	.20	67
Montgomery County PSUB	-.04	-.19	.11	177
Sandusky County JISP <sup>2</sup>	-.04	-.29	.21	20
Stark County PDR	-.02	-.21	.17	107
Franklin County JISP <sup>2</sup>	-.02	-.23	.19	311
Hamilton County JDV <sup>2</sup>	-.02	-.32	.27	45
Medina County PISP	.00	-.28	.28	49

1= Effect sizes reported are r-values, which can be interpreted as the actual difference in recidivism rates between the treatment and comparison groups (see Rosenthal, 1991). Negative values of r favor the comparison group while positive values of r favor the treatment group. Unless otherwise noted, the value of r was calculated using felony probationers as the comparison group and any new incarceration as the measure of recidivism.

2 = Value of r calculated using misdemeanor probationers as the comparison group and any new arrest as the measure of recidivism.

**Table 11 (continued). Listing of Effect Sizes, Confidence Intervals, and Weights<sup>1</sup> Using Probationers as Comparison Group**

Site ID	r	-95%CI	+95%CI	Weight
Miami County JISP <sup>2</sup>	.00	-.43	.43	38
Clermont County JISP <sup>2</sup>	.00	-.32	.32	69
Cuyahoga County PISP	.03	-.05	.11	653
Cuyahoga County PWR	.15	-.12	.42	53
Lorain County PISP	.23	.07	.39	143
Mean	-.14	-.17	-.11	0

1= Effect sizes reported are r-values, which can be interpreted as the actual difference in recidivism rates between the treatment and comparison groups (see Rosenthal, 1991). Negative values of r favor the comparison group while positive values of r favor the treatment group. Unless otherwise noted, the value of r was calculated using probationers as the comparison group and any new incarceration as the measure of recidivism.

2 = Value of r calculated using misdemeanor probationers as the comparison group and any new arrest as the measure of recidivism.

average, the CCA programs produced an r-value of -.14 when compared to regular probation cases. Again Table 12 indicates that, while the jail diversion programs appeared to perform a little better based on the average value of r, there were only 8 programs in the jail diversion group, and the confidence intervals for the two average values of r overlap with one another.

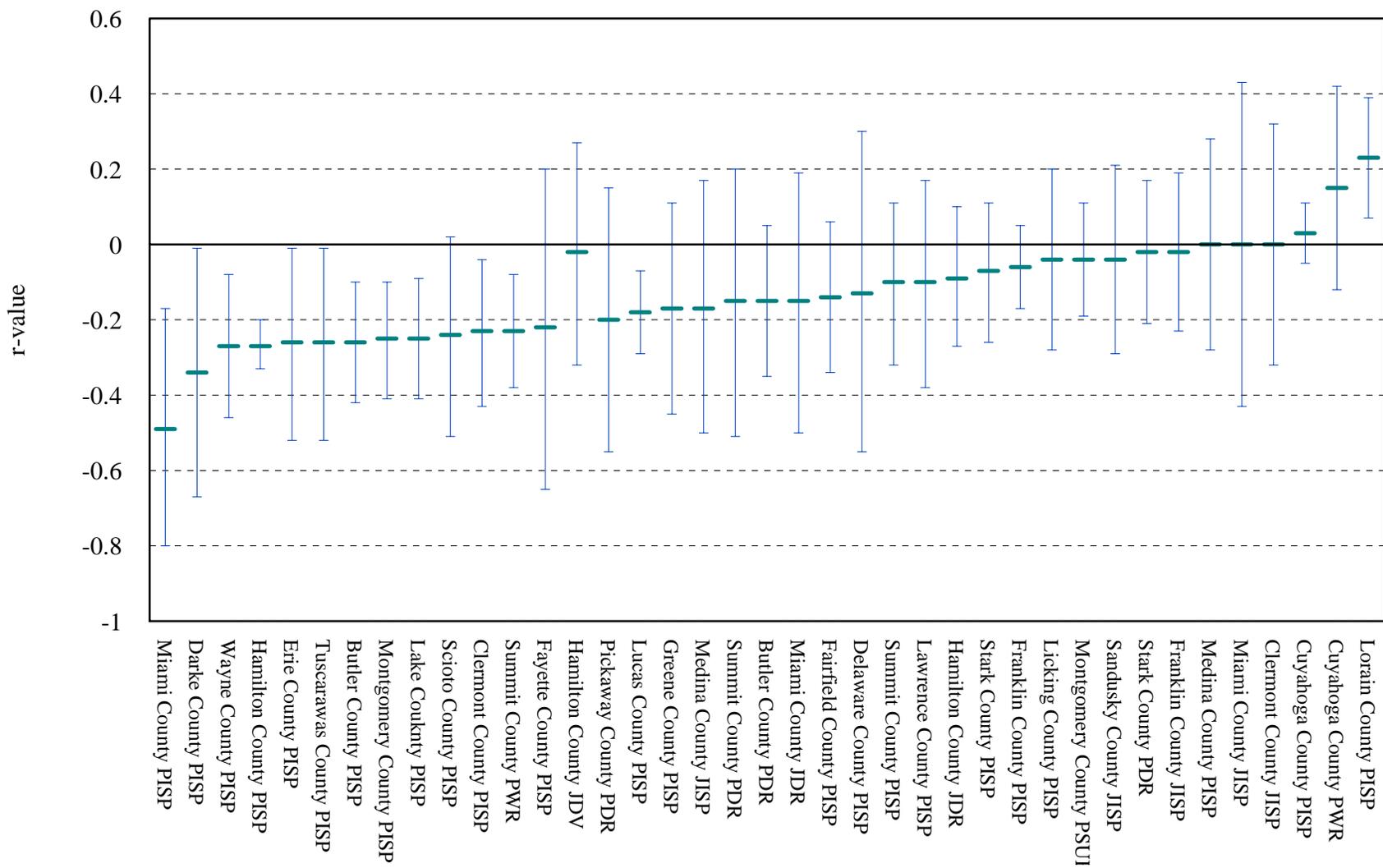
**Table 12. Average Effect Size by Diversion Group Probation**

Group	R	-95%CI	+95%CI	N
Jail	-.06	-.15	.03	8
Prison	-.14	-.17	-.11	33

**Treatment Effects by Program Type**

The next analyses were conducted to determine if the differing types of CCA programs produced different effects on recidivism. To do this, ANOVA models were constructed and run for the CCA program treatment effects using program type as the independent variable. Basically the ANOVA test determines whether the categorization of programs based on program type leads to groups that are similar in terms of the dependent variable (r-values). Table 13 and Figure 4 display the results based on the r-values calculated using parolees/jail releases as the

**Figure 3. R-values and confidence intervals for CCA programs using probationers as comparison groups**



comparison groups. Table 14 and Figure 5 display the results based on r-values calculated using regular supervision probationers as the comparison groups.

Table 13 indicates that the  $Q_{\text{between}}$  value is not statistically significant while the  $Q_{\text{within}}$  value is statistically significant. This information indicates that, while there is significant variation in the values of r within the program types (i.e., some ISP programs that perform well and some that perform poorly), there are no significant differences between the program types.

**Table 13. Average Effect Size by Diversion Group and Program Type (Parolees)**

Group	R	-95%CI	+95%CI	N
Prison Day Reporting*	.17	.06	.28	6
Prison Elec Monitoring	.26	.01	.51	2
Prison ISP	-.01	-.03	.02	42
Prison Work Release*	.12	.05	.19	2
Prison Substance Abuse	.04	-.04	.12	3
Jail Day Reporting	.09	-.04	.21	1
Jail Work Release	.00	-.15	.15	1
Jail Residential Treatment	.14	-.10	.38	1

\* =  $p < .05$

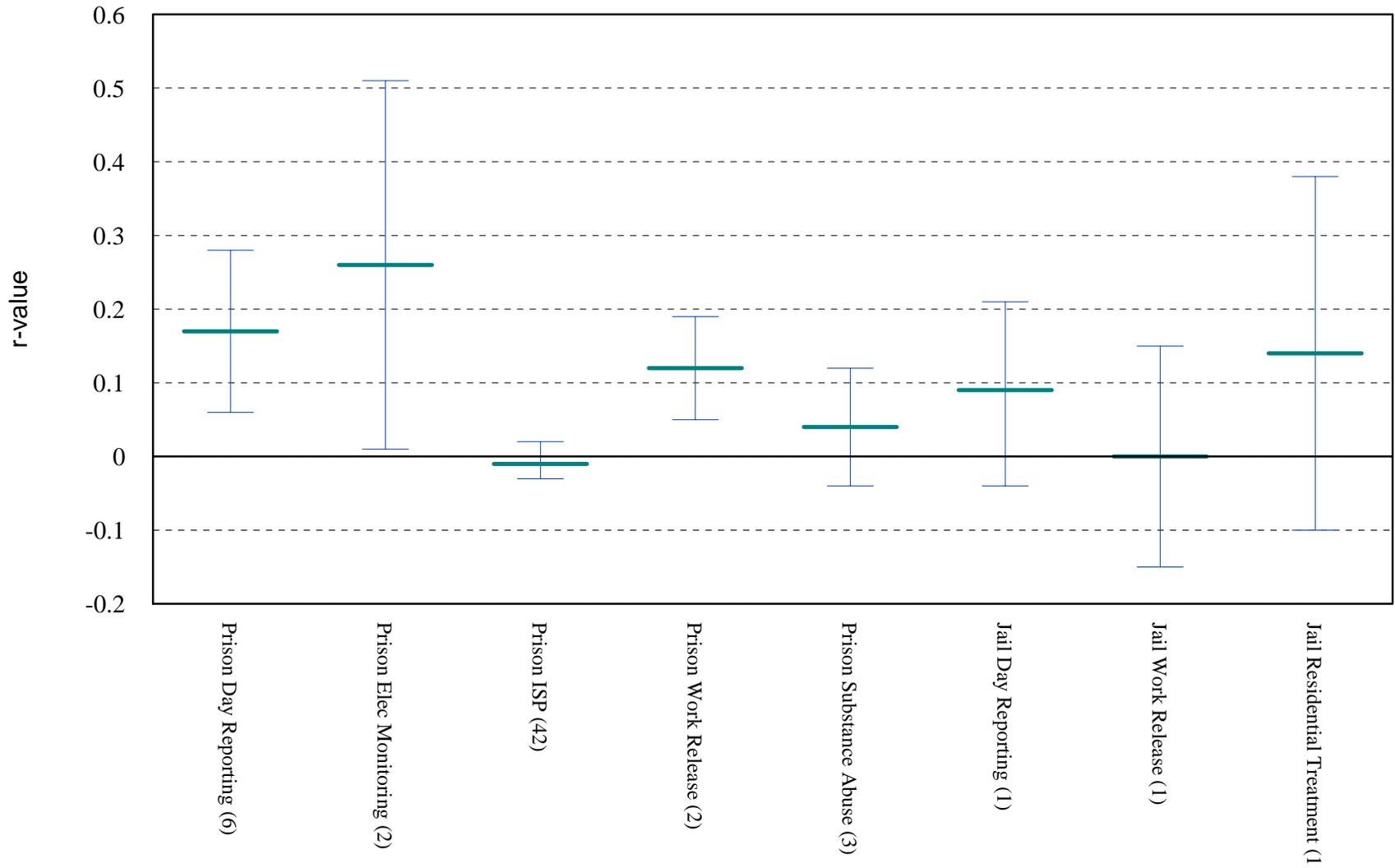
$Q_{\text{between}} = 13.29$ ,  $p > .05$

$Q_{\text{within}} = 81.27$ ;  $p < .05$

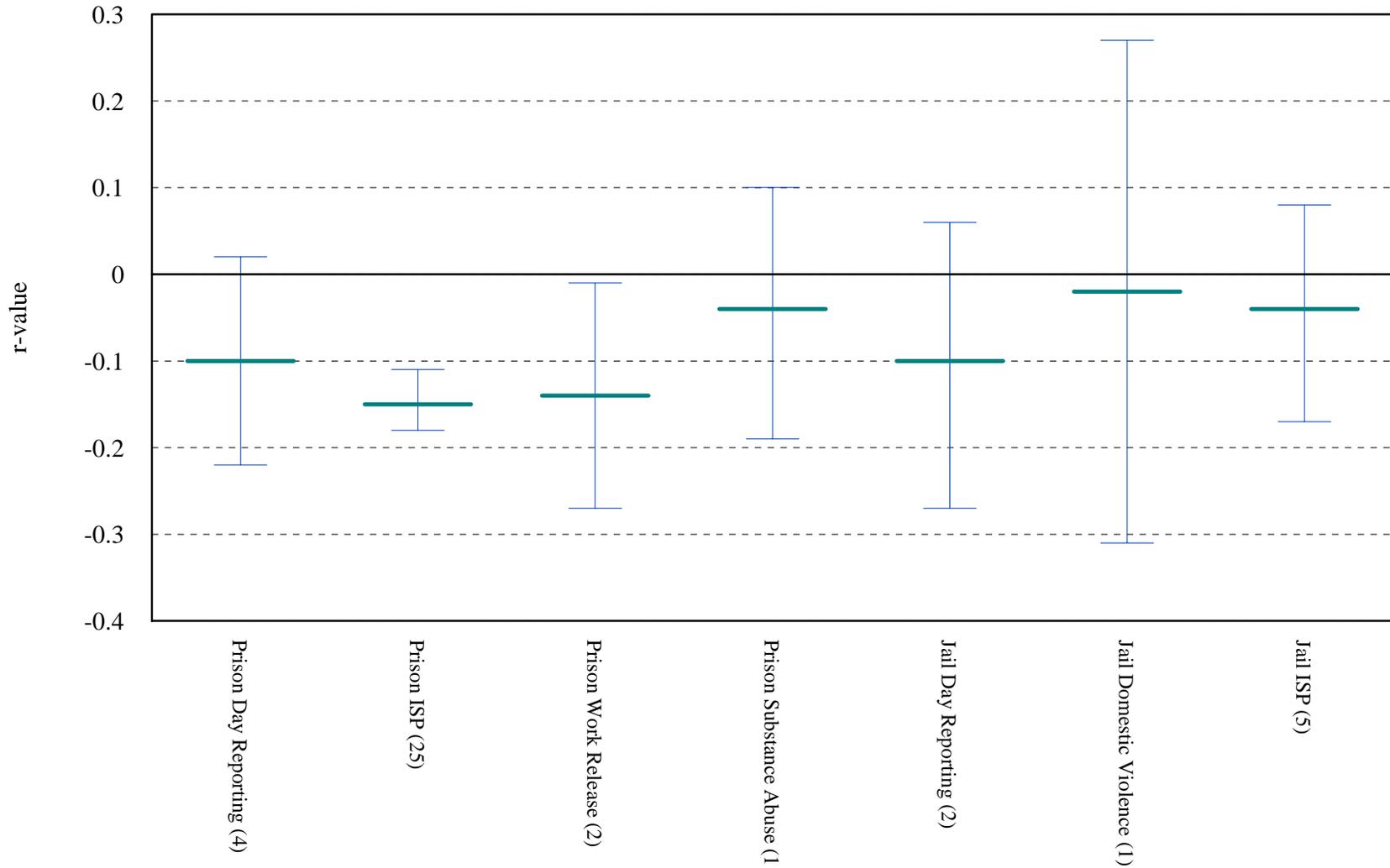
This result represents the exact opposite of a useful categorization; however, it is expected given the fact that programs of the same type may operate very differently. For example, it might be the case that an ISP program operates more like a day-reporting program than a typical ISP. Therefore, categorization of the programs based simply on program type is not necessarily too meaningful. Figure 4, which indicates that while some types of program might appear to be more successful based on their average r-values, the confidence intervals for all the programs overlap with one another to some degree.

A similar trend is noted in Table 14 and Figure 5. Table 14 indicates that the average r-value for each of the program types is negative. Further, the confidence intervals of the differing

**Figure 4. Average r-value by program type using parolees/jail releases as comparison groups.**



**Figure 5. Average r-value by program type using regular probationers as comparison groups.**



program types overlap substantially. This fact can also easily be seen in Figure 5. Similar to the results for the treatment effects using parolees/jail releases, the  $Q_{\text{between}}$  value is not statistically significant while the  $Q_{\text{within}}$  value is statistically significant (see Table 14 for values). This again indicates that it is difficult to classify meaningfully the CCA programs as effective versus ineffective by simply using the program type. These findings are not surprising and were expected given the research conducted using halfway houses and CBCF programs, which indicated that the two groups of programs were heterogeneous in terms of their effectiveness (Lowenkamp and Latessa, 2002 and Lowenkamp, 2004). Given this confirmation, we next developed a score for each program that captured program integrity. We believe this measure to be of much greater importance in explaining program effectiveness compared to the relative importance of diversion type or program type.

**Table 14. Average Effect Size by Diversion Group and Program Type (Probationers)**

Group	R	-95%CI	+95%CI	N
Prison Day Reporting	-.10	-.22	.02	4
Prison ISP	-.15	-.18	-.11	25
Prison Work Release	-.14	-.27	-.01	2
Prison Substance Abuse	-.04	-.19	.10	1
Jail Day Reporting	-.10	-.27	.06	2
Jail Domestic Violence	-.02	-.31	.27	1
Jail ISP	-.04	-.17	.08	5

\* =  $p < .05$

$Q_{\text{between}} = 8.05$ ;  $p > .05$

$Q_{\text{within}} = 90.25$ ;  $p < .05$

### **Program Characteristics**

We used the results of the staff surveys to develop scores that measured the program integrity of the CCA programs. The surveys were used to score program factors that conceptually relate to two aspects of a program: capacity and content. Capacity items relate to the program's ability or capacity to deliver a sound intervention, and the content items relate

**Table 15. Listing and Definition of Factors in Program Characteristics Score**

Factor	Subscale	How Defined
Director has caseload	Capacity	66% of supervisors/directors carries a caseload or runs a group
Director experience	Capacity	66% of supervisors/directors with 2+ years experience in a treatment program
Staff values or skill	Capacity	On average, at least one skill or relevant value looked for when hiring
Staff input	Capacity	On average, staff rated ability to provide input into program as a 3+ out of 4
In-house training	Capacity	20 or more hours in-house training each year
Staff experience	Capacity	66% or more of staff have at least 2 years experience in a treatment program
Staff meetings	Capacity	66% of staff reported staff meetings being held at least bi-monthly
Caseload size	Capacity	Caseloads less than 40. Calculated by dividing capacity by total staff
Budget	Capacity	25% or more of budget spent on training or offender materials
Community support	Capacity	No detrimental changes reported by staff
Funding	Capacity	No detrimental changes reported by staff
Pre/post test offenders	Capacity	66% of staff stated pre/post testing was used
Outcome evaluation	Capacity	66% of staff stated an outcome evaluation was conducted
Process evaluation	Capacity	66% of staff stated a process evaluation was conducted
Quality assurance activities	Capacity	Staff reported, on average, the use of 4 or more listed QA activities
Exclusionary criteria	Content	On average, staff reported the existence of 2 or more criteria
Exclusions followed	Content	On average staff rated adherence to exclusionary criteria as a 3+ out of 4
Number of groups available	Content	At least 5 of the listed groups were available
Treatment model	Content	66% of staff stated model was cognitive or cognitive-behavioral
Separate groups by risk	Content	66% of staff reported offenders were assigned to groups based on risk level
Hours of treatment per week	Content	Average of 20 or more hours in treatment each week
Length of program	Content	Staff on average reported range of program lasted 3 to 9 months

1 = factor calculated using aggregated CCIS data and/or data collected during site visits.

**Table 15 (continued). Listing and Definition of Factors in Program Characteristics Score**

Factor	Subscale	How Defined
Offender input	Content	66% of staff stated offenders had a formal means of providing program input
Manual	Content	66% of staff stated that there was a treatment manual to guide activities
Manual followed	Content	On average, staff rated adherence to manual as a 3+ out of 4
Quality of aftercare	Content	On average, staff rated the quality of aftercare as a 3+ out of 4
Risk principle supervision <sup>1</sup>	Content	On average, higher-risk offenders were in program for longer than lower-risk offenders
Risk principle treatment <sup>1</sup>	Content	On average, higher-risk offenders received 0.5+ more referrals than lower-risk offenders
Success rate <sup>1</sup>	Content	Successful termination rate 65-85%
Higher risk sample <sup>1</sup>	Content	75% or more of the sample was higher-risk (moderate and high)
Treatment Referrals <sup>1</sup>	Content	At least 75% of the referrals were treatment-oriented

<sup>1</sup> = factor calculated using aggregated CCIS data and/or data collected during site visits.

to the substance of the program provided within the context of the principles of effective interventions. Fifteen factors in the Capacity area were scored using survey responses, and 11 factors in the Content area were scored using survey responses. In addition to these 11 survey-based factors in the Content section, five additional factors relating to content were developed from aggregated CCIS data and aggregated data collected during the data collection phase of this project. The factors and how they were measured are defined in Table 15.

Table 16 lists the program capacity factors, the percentage of programs receiving a point for that factor, the number of programs that could be scored on that particular item, and the correlation between that item and treatment effects. The treatment effects used in these correlations were based on a parolee/jail release comparison group if such a measure was available. If an r-value based on parolees or jail releases was not available due to the lack of a comparison group, the treatment effect was based on regular probationers, which occurred for jail diversion programs only (N = 8). A program factor/measure was selected for inclusion in the

scale if it was positively correlated with the r-values. This led to the inclusion of 15 factors. Each significant factor is marked with an asterisk. Given the small number of programs, a fairly large correlation must be observed before statistical significance is obtained. Given this fact, we included factors that were not significantly related to the measure of effectiveness but had been implicated as important to program success in prior research.

**Table 16. Program Factors and Correlation with Effect Size**

Factor Program Capacity	% Receiving Point	Total N	Correlation
Director has caseload	35	57	.07
Director experience*	49	43	.45
Staff values or skills*	33	58	.24
Staff input	35	58	.10
In-house training*	43	58	.47
Staff experience	61	58	.12
Staff meetings*	24	58	.47
Caseload size*	50	54	.22
Budget	32	44	.21
Community support	69	58	.06
Funding	62	58	.07
Pre/post test offenders	3	58	.01
Outcome evaluation*	35	58	.33
Process evaluation	67	58	.04
Quality assurance activities	28	58	.11
Average Capacity Score (Percentage)*	39	58	.57

\*  $p < .10$

About one-third of the programs had supervisors/directors that carried a caseload or ran groups, considered relevant values or skills when hiring staff, allowed staff to have input into the program, spent 25% or more of their budget on training and/or materials for offenders, had an outcome evaluation conducted on their program, and engaged in four or more quality assurance activities. Sixty to seventy percent of the programs were scored as having stable community support, stable funding, staff with two years treatment experience, and a process evaluation. Approximately half the programs were assessed as having a director that had two or more years

treatment experience, caseloads of 40 or less offenders, and in-house training. Finally, a small percentage of the programs received a point for having bimonthly staff meetings (24%) and using pre/post testing (3%). The average score for this section, based on 58 sites, is a 39%. The score in this section correlates with the treatment effect size at .57.

Table 17 lists the program factors for the content section, the percentage of programs receiving a point for each factor, the total number of programs that could be ranked on the factor,

**Table 17. Program Factors and Correlation with Effect Size**

Factor Program Content	% Receiving Point	Total N	Correlation
Exclusionary criteria	26	58	.12
Exclusions followed	31	58	.08
Number of groups available*	24	58	.23
Treatment model	33	58	.17
Separate groups by risk	9	58	.18
Hours of treatment per week	38	58	.06
Length of program*	36	58	.41
Offender input	24	58	.17
Manual	30	58	.11
Manual followed	21	58	.11
Quality of aftercare	31	58	.16
Risk principle supervision	29	66	.15
Risk principle treatment	24	55	.13
Success rate*	23	66	.33
Higher risk sample*	23	66	.28
Treatment referrals*	33	48	.49
Average Content Score (Percentage) *	27	66	.59

\*  $p < .10$

and the factors correlation with the measure of program effectiveness. Quickly noticeable is the fact that the percentage of programs that received points on each of the factors in the Content section is much lower than the percentage of programs that received points in the Capacity section. No single factor is scored more frequently than 38% of the time (hours of treatment per week). Four factors pertaining to the risk principle all indicate that no more than 29% of the programs met the criteria for these items (separate groups by risk, 9%; longer program length for

higher risk, 29%; more services for higher risk, 24%; and 75% of the sample higher risk, 23%). About one-third of the programs were rated as using a cognitive behavioral or cognitive model, following exclusionary criteria, having an adequate program length, having a treatment manual, having acceptable quality aftercare, and making three treatment referrals for every one non-treatment-related referral. Roughly one-fifth of the programs were scored as having exclusionary criteria, having treatment groups available in the community, allowing for offender input, following the treatment manual reasonably well, and having a reasonable successful termination rate. The overall average in the Content section is 27%. The overall score for this section correlates with outcome at .59. For a visual display of the differences in program effectiveness based on the significant factors listed in Tables 16 and 17, see figure F-1 in Appendix F. This figure lists the average r-values based on adherence to 13 of the factors listed in Tables 16 and 17.

When adding the Content and Capacity scores together, a total score is produced with average of 32%, a standard deviation of 15, and a range from 0 to 67%. This total score correlates with the treatment effect measures developed using parolees/jail releases at .66. When using the treatment effect sizes developed with regular probationers, the correlation between the total score and the r-values is .34.

Tables 18, 19, and 20 present the average program characteristics scores by diversion type, program type, and then by program type and diversion type. Table 18 indicates that the two groupings of programs based on diversion type (jail  $\bar{X} = 33$ ,  $SD = 14.38$  versus prison  $\bar{X} = 32$ ,  $SD = 13.80$ ) did not lead to a significant difference in program characteristics score  $t(64) = .200$ ,  $p = .838$ . Nor were significant differences,  $F(6, 59) = 1.581$ ,  $p > .05$ , noted when

**Table 18. Average Program Characteristics Score by Diversion Group**

Group	Average Score	N
Jail	33	11
Prison	32	55

the average program characteristics scores by program type were calculated (see Table 19). An analysis of the scores by program and diversion type reveals significant differences,  $F(9, 56) = 2.132, p < .05$  (see Table 20). Post hoc analyses indicate that the prison day reporting significantly differs from the prison ISP programs, but no other significant differences were noted.

**Table 19. Average Program Characteristics Score by Diversion Group**

Group	Average Score	N
Day Reporting	37	9
Domestic Violence	48	1
Electronic Monitoring	56	2
ISP	29	47
Work Release	38	3
Substance Abuse Treatment	36	3
Residential Treatment	39	1

$F(6, 59) = 1.581, p > .05$

**Table 20. Average Program Characteristics Score by Diversion Group and Program Type**

Group	Average Score	N
Prison Day Reporting	45	6
Prison Electronic Monitoring	56	2
Prison ISP	29	42
Prison Work Release	36	2
Prison Substance Abuse	36	3
Jail Day Reporting	20	3
Jail Domestic Violence	48	1
Jail ISP	35	5
Jail Work Release	41	1
Jail Residential Treatment	39	1

$F(9, 56) = 2.132, p < .05$ .

### Relating Program Characteristics Scores with Effectiveness

The final step in the analyses was to investigate the relationship between the scores based on the measures of program integrity and program effectiveness in reducing recidivism. First, categories were developed based on the program characteristics scores. The first categorization developed led to three groupings of programs: those that scored 0-19 % of the points, 20-39% of the points, and those programs that scored over 40% of the points. The creation of groups of programs in this manner led to an inclusion of nine programs in the first category, 37 in the second, and 20 in the third. The average r-values for each category were -.15, .02, and .12 (see Figure 6). These differences from one another are significant as indicated by the  $Q_{\text{between}}$  value in Table 21. Also important is the discovery that the  $Q_{\text{within}}$  value reported in Table 21 is not significant, which indicates that the groupings of programs based on the program integrity measure are homogenous in terms of r-values.

**Table 21. Average Effect Size by Program Characteristics Categories**

Percentage of Points Scored	Mean r	-95%CI	+95%CI	N
0-19%	-.15*	-.19	-.10	9
20-39%	.02	-.00	.04	37
40+%	.12*	.08	.16	20

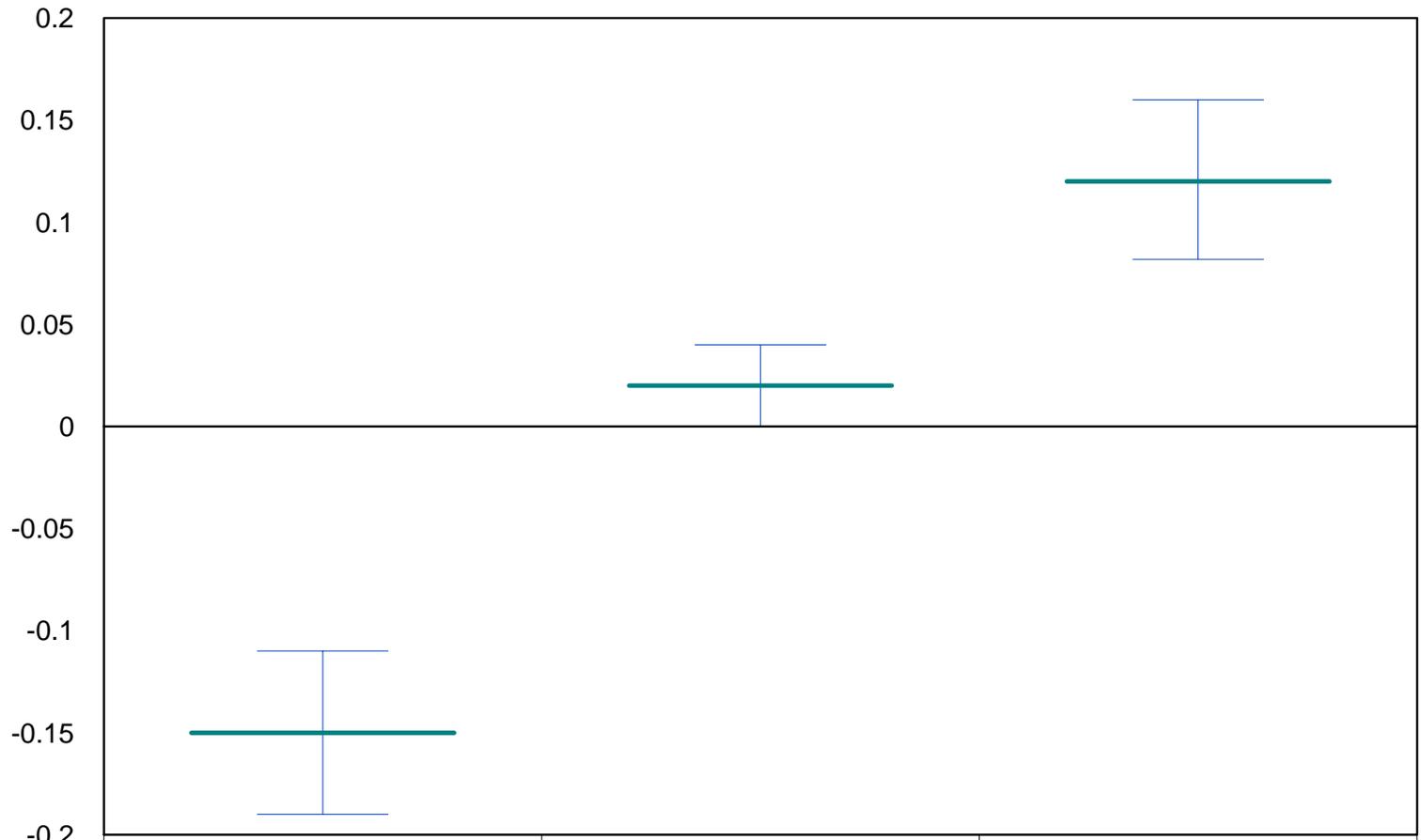
\* =  $p < .05$

$Q_{\text{between}} = 39.79, p < .05$

$Q_{\text{within}} = 51.69; p > .05$

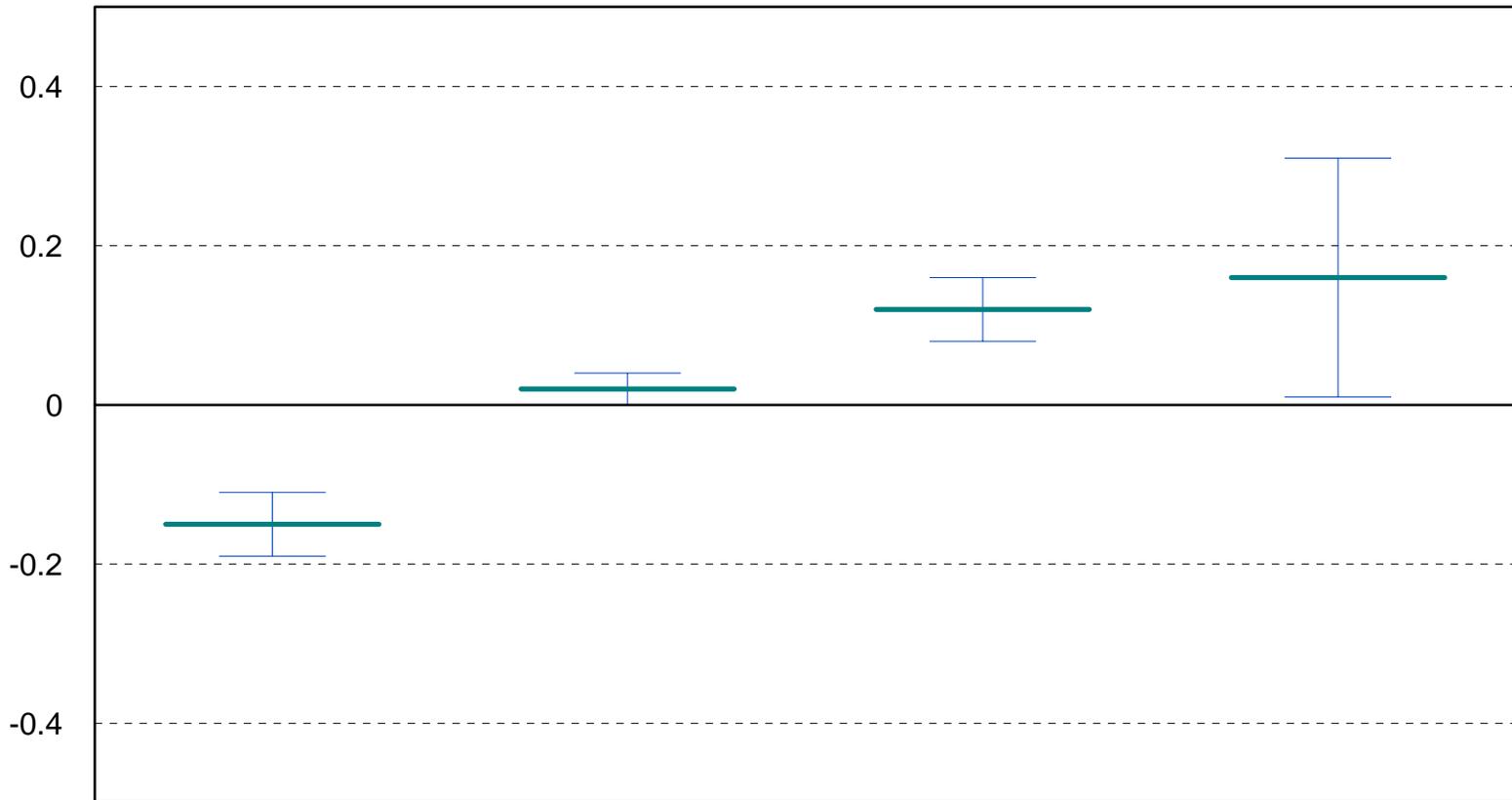
We next wanted to determine if the programs that scored the highest could be placed in a fourth category with meaningful results. Rather than using a third category that included all programs with a score of 40% and above, the third category was capped at 59%. A fourth category included all programs that score 60% and above. This led to the same number of programs in the first and second categories; however, the third category of programs (ranging in score from 40% to 59%) had 17 programs, and the fourth category had three programs. The

**Figure 6. Average r-values by program integrity category (3 category)**



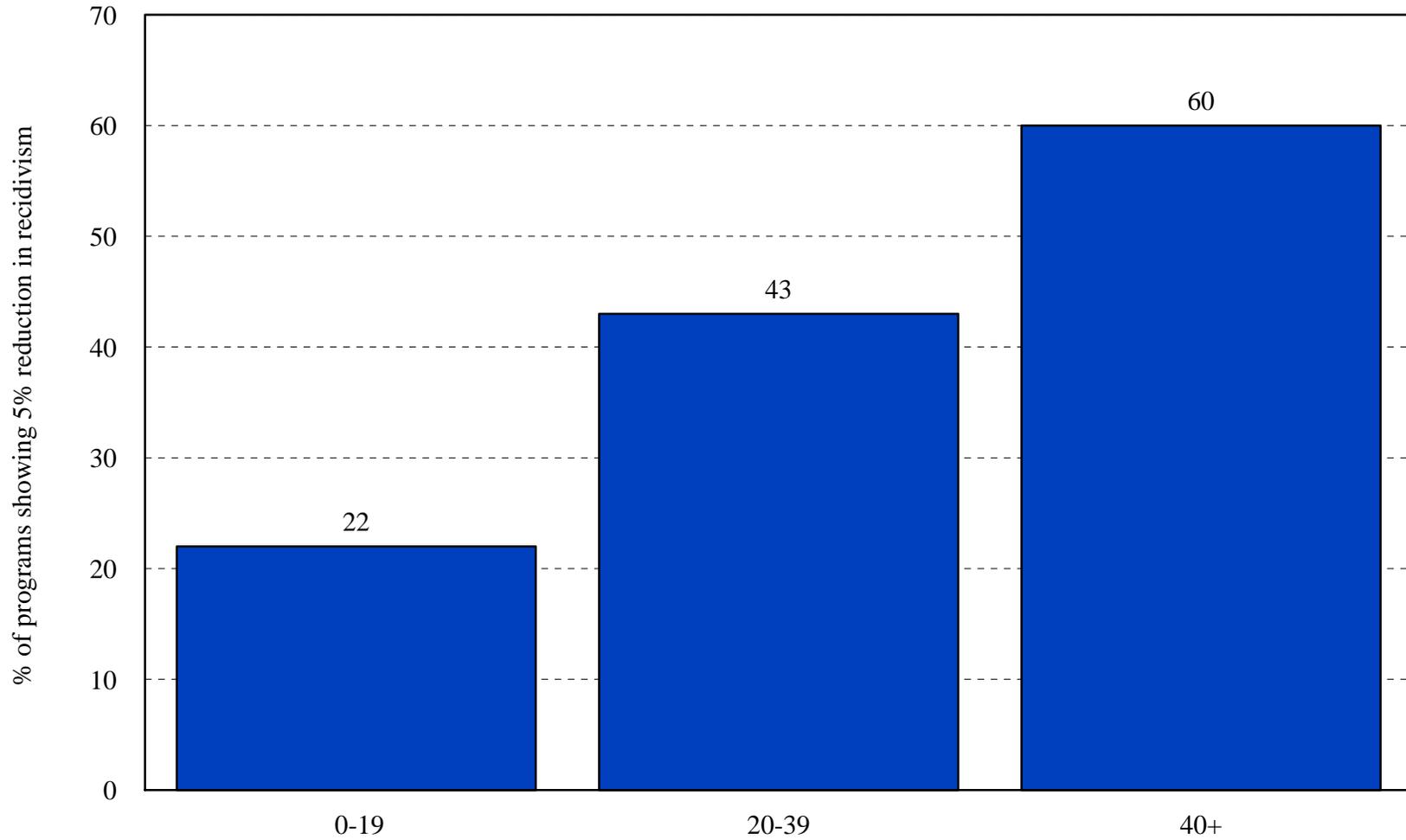
	0-19 (9)	20-39 (37)	40+ (20)
Upper 95%CI	-0.11	0.04	0.16
Lower 95%CI	-0.19	0	0.0818
Mean r	-0.15	0.02	0.12

**Figure 7. Average r-values by program integrity category (4 category)**

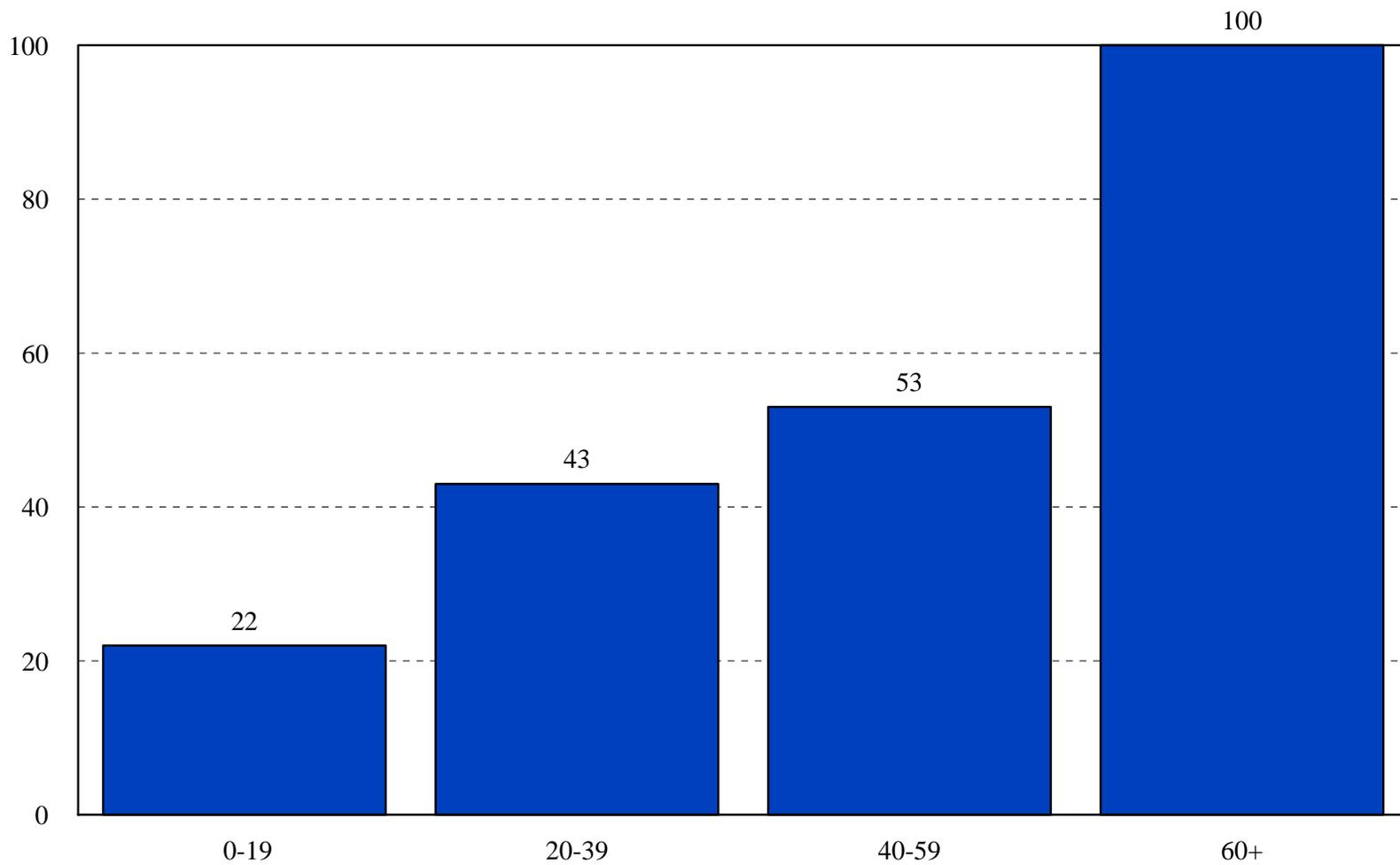


	0-19 (9)	20-39 (37)	40-59 (17)	60+ (3)
Upper 95%CI	-0.11	0.04	0.16	0.31
Lower 95% CI	-0.19	0	0.08	0.01
Mean r	<b>-0.15</b>	<b>0.02</b>	<b>0.12</b>	<b>0.16</b>

**Figure 8. Percentage of programs demonstrating a 5% reduction in recidivism by program integrity score (3 category)**



**Figure 9. Percentage of programs demonstrating a 5% reduction in recidivism by program integrity score (4 category)**



**Table 22. Average Effect Size by Program Characteristics Categories**

Percentage of Points Scored	Mean r	-95%CI	+95%CI	N
0-19%	-.15*	-.19	-.10	9
20-39%	.02	-.00	.04	37
40-59%	.12*	.08	.16	17
60+%	.16*	.01	.31	3

\* =  $p < .05$

$Q_{\text{between}} = 39.92, p < .05$

$Q_{\text{within}} = 51.56; p > .05$

average r-values for these categories are -.15, .02, .12, and .16 respectively (see Figure 7). Again the  $Q_{\text{between}}$  is significant while the  $Q_{\text{within}}$  value is not significant (see Table 22).

Our final analyses involved calculating the percentage of programs within each category that had an r-value of .05 or above. This value may seem arbitrary; however, in practical terms, it makes sense to consider 5 percentage point reductions in recidivism meaningful. Further, researchers in Washington have found that similar types of programs as the ones evaluated in this study provide tax-payer benefits when they lead to reductions in recidivism of 5 to 10% (Aos, Phipps, Barnoski, and Lieb, 2001). Both Figures 8 and 9 demonstrate that the percentage of programs that have an r-value of .05 or greater increases (the chi-square values for both categorizations approach but do not attain statistical significance) as we move across the categories of programs.

#### **SECTION IV—SUMMARY AND CONCLUSIONS**

This research investigates the effectiveness of CCA-funded programs on recidivism rates. A quasi-experimental design was used with post-hoc matching on risk level, sex, and county of supervision. Prison diversion cases were compared to parolees and regular supervision probation cases when that data was available. A total of 5,781 CCA prison diversion cases were included

in these analyses. Jail diversion cases (N = 707) were compared to jail releases (three sites) or municipal regular supervision probation (eight sites).

The results of these analyses indicate that overall the prison diversion programs, when compared to parolees, had a negligible impact on recidivism rates (mean r-value .01). And while the jail diversion programs had a slightly higher average r-value when compared to jail releases (mean r-value of .06), it was not significant at any conventional probability level.

The results using regular probation supervision cases as the comparison groups revealed a very different trend. The prison diversion programs had a mean r-value of -.14 (which was statistically significant) when compared to similar regular supervision probation cases. Jail diversion programs had a mean r-value of -.06 (not statistically significant).

An analysis of r-values by diversion type and program type revealed no differences in the effectiveness of these programs. Similarly, there was negligible substantive difference in the program integrity scores based on the diversion type and program type distinctions. Analyses of the effectiveness of the programs (as measured using the r-values) in relation to the program integrity scores developed in this research revealed a strong and consistent relationship. These findings were conceptually similar to those revealed in the CBCF/HWH study (Lowenkamp and Latessa, 2002 and Lowenkamp, 2004) and with the general body of literature on effective interventions, which indicated that programs that adhere to the principles of effective interventions can lead to substantial decreases in recidivism (Andrews et al., 1990; Gendreau, 1996; Gendreau, French, and Taylor, 2002).

Analyses of r-values by program integrity indicated that the best programs were associated with somewhere between a 12% and 16% reduction in recidivism while the lowest scoring programs were associated with a 15% increase in recidivism. Results of a weighted least

squares regression model (see Appendix E) indicated that both the content and capacity of the program are significantly and substantively related to program effectiveness. Of equal importance is the fact that the content of the program appears to be somewhat more important to program effectiveness. This finding deserves special attention given the fact that the programs typically scored lower in this area than in the capacity area. This WLS model also indicated that these two measures are capable of explaining approximately 45% of the variation in program effectiveness as measured by the r-values. Finally, using the WLS model for predictive purposes, a program that scores a 60% in both the content and capacity areas would be associated with a predicted r-value of .24, or a 24% reduction in recidivism. If a program scores a 70% in both areas, the r-value climbs to over .30. Conversely, if a program were to score in the 10% range on both areas (content and capacity), the associated r-value is -.12 or a 12% increase in recidivism rates.

### **Limitations of current research**

Several limitations to this research must be considered when interpreting the results. First, the samples used in this research were not randomly assigned to the different conditions. While attempts were carefully made to match offenders based on relevant factors, randomized studies typically generate smaller effect sizes than non-randomized studies. Second, this research is limited to adult offenders. Third, comparison groups including regular supervision probationers could not be developed for all sites reducing the number of sites included in those analyses to 30. Fourth, program integrity was measured using a staff survey, which might not be the most accurate reflection of program practices. Fifth, while this is the second study of its kind to use retrospective assessments of program integrity, more faith would be placed in research using a prospective design where assessments are completed contemporaneously and offenders

followed prospectively.<sup>8</sup> Finally, the results are limited to two outcome measures—any arrest for the jail diversion cases and any subsequent incarceration for the prison diversion cases. Perhaps the use of different outcome measures would yield differing results. While the use of different outcome measures would not be expected to lead to drastic differences based on previous research (Lowenkamp and Latessa, 2005), this is an empirical question.

### **Implications for future research**

First, and perhaps most intriguing, is the notion of conducting this study prospectively. This strategy will allow for a better and more accurate assessment of program integrity, more complete data collection on offenders, and the collection of a more complete set of outcome measures. Second, efforts should be made to conduct random assignment of offenders in some sites. The results of such studies would carry substantial weight in making more definitive conclusions about CCA programs and in changing correctional practice in general. Third, more detailed data on program characteristics should be collected. For instance, data on officer characteristics, officer attitudes and values, the number of office and collateral contacts during supervision, drug testing results, referral completion status, and offender adjustment to supervision would all make for more complete and informative analyses. Finally, this study should be replicated in other jurisdictions and with other populations of offenders. Only after several such studies are conducted can definitive conclusions about non-residential correctional

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<sup>8</sup> The data used to develop the measures of program factors were gathered from surveys completed by staff at the programs. Staff was asked to complete the surveys, to the best of their ability, based on operations in 1999. While there is concern about the reliability of such a process given the number of years that have lapsed between 1999 and the survey date, this process has been used before (Lowenkamp and Latessa, 2002) and was found to be correlated with independent CPAI assessments conducted prior to 1999 (Lowenkamp, 2004). Nonetheless, this limitation of the current investigation should be noted and considered when reviewing results.

programs can be made. While this study is a strong start, more research needs to be done in this area.

### **Implications for policy**

This research has provided considerable information useful for policy and practice. First, this research, coupled with the research on the HWH/CBCF study, provides strong support for the larger body of literature on effective interventions. This is important as that body of literature provides considerable information that should guide the development of CCA-funded programs. However, that body of literature is not as specific as is this research in terms of focus. Much of the research published to date considers correctional treatment programs. When considering the specific information provided in this report, some strong recommendations can be made for policy and procedure changes:

- The CCA programs should focus on higher-risk cases. This conclusion comes from the analyses that indicated programs were more effective when 75% or more of the sample was higher-risk.
- The CCA programs should be used for true prison and jail diversions. While a marginal treatment effect was observed when CCA cases were compared to parolees/jail releases, iatrogenic effects were noted when compared with offenders that were similar in risk but supervised under regular probation supervision. To ensure that proper offenders are targeted for inclusion into these programs, the State may need to develop guidelines based on the sentencing practices of each jurisdiction. These guidelines should also take into account the risk level of the offender. Net widening, while not directly assessed for in this study, is a potential outcome when failing to target the appropriate offenders for referral to CCA (or any) programming.<sup>9</sup>

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<sup>9</sup> Alternate analyses of the entire sample of parolees/PRC cases released in FY99 (6,781) and all prison diversions terminated during FY99 (7,811) indicated that the two groups were not equivalent on crime type, felony degree, or risk level. Parole/PRC cases were more likely to be violent or sex offenders (chi-square = 598.830, df = 5, p < .000), more likely to be under supervision for a more serious offense according to felony degree (chi-square = 1706.303, df = 4, p < .000), and were higher risk (t = -62.773, df = 13087.37, p < .000). The difference in average risk scores (2.5) indicates that the typical CCA participant was on the border between a low moderate and moderate case (mean of 7.5) and the typical parole/PRC case was on the border between moderate and high risk (10.1).

- The State should facilitate and support the development of sound correctional interventions through funding policies, training, and other activities. Perhaps the ODRC can provide workshops that assist agencies in shifting from existing practices and policies to new policies and procedures based on this research.
- The programs should ensure that more services are being provided to the higher-risk cases and that the higher-risk cases stay in the program for a longer period of time.
- The programs and the State should work to develop programs that are three to nine months long with exceptions for sex offenders. In this research, programs that fall outside this range were found to be ineffective.
- The programs should develop standardized completion criteria to determine when an offender successfully completes the program. Such a process will likely lead to successful termination rates, which were associated with the more effective programs.
- If a program provides groups or refers offenders out for services, offenders should be separated by risk-level. Although many correctional programs do not adhere to this policy, this measure is recognized as having a strong impact on program effectiveness.
- Local CCABs should ensure that the program directors have the appropriate qualifications.
- Program directors should make efforts to hire staff based on their values and skills and should ensure that they have practical and meaningful experience and meaningful training opportunities.
- A quality assurance program for the programs and external service-providers to whom offenders can be referred should be in place.
- The programs should adopt a sound treatment model. At the very least, this model should shape staff's understanding of behavior and behavioral change.
- Finally, the State should audit how closely the programs meet the criteria of effectiveness and provide feedback and direction for program change.

This research has demonstrated that CCA programs have the ability to impact the recidivism rates significantly of offenders under community supervision especially when compared to offenders of similar risk levels that have been sentenced to prison. However, to

realize this impact, the programs must adhere to specific principles and engage in certain practices. Therefore, the authors of this report recommend that the ODRC develop policy and procedure to guide the placement of offenders into the CCA programs. This policy should focus on the identification of true jail/prison diversions and higher-risk offenders. The authors also suggest that the ODRC develop a protocol for the assessment of the CCA programs for adherence to the policies and procedures recommended in this research.

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**APPENDIX A—RISK ASSESSMENT FACTORS, WEIGHTS, CUTOFF SCORES, AND  
RECIDIVISM RATES**

**Table A1. Risk Factors and weights included in risk measure**

Factor	Weight
Marital status (single)	1
Less than high school degree	1
Unemployed at arrest	1
Drug problems	1
Alcohol problems	1
Age (34 and under)	1
History of sex offense	1
History of violent offense	1
History of felony arrests	1
Prior or current community supervision violations	1
Fifth degree felony offense	1
Prior arrests	
0	0
1 to 2	1
3+	2
Prior incarcerations	
0	0
1 to 2	1
3+	2

**Table A2. Correlation between risk measure and outcome**

Outcome Measure	Correlation
Any incarceration (17,502)	.32*
Any arrest (17, 209)	.31*

\* =  $p < .05$

**Table A3. Cutoff scores and recidivism rates**

Risk Level	Any Arrest <sup>a</sup>	Any Incarceration <sup>b</sup>
Low (0-4)	15%	7%
Low-Moderate (5-7)	30%	22%
Moderate (8-10)	48%	38%
High (11-15)	65%	53%

a = Chi-square (3) = 1420.16;  $p < .05$

b = Chi-square (3) = 1485.33;  $p < .05$

**APPENDIX B—CALCULATIONS AND FORMULAS FOR R, Z<sub>r</sub>, AND WEIGHTS**

The r-values reported in this research are correlation coefficients calculated for each program and represent the correlation between group membership and the outcome measure (any arrest for jail diversion and any incarceration for prison diversion). The r-values were transformed to Fisher's  $Z_r$  for all calculations (ANOVA, descriptive statistics, and WLS) and then transformed back to standard correlational form. The following formulas were used for these transformations and the calculation of standard errors and weights. For a more complete discussion see Rosenthal, 1991 and Lipsey and Wilson, 2001.

**Formula B1. r to  $Z_r$  transformation**

$$Z_r = .5 \ln \left[ \frac{1+r}{1-r} \right]$$

Where r = the correlation coefficient and ln equals the natural logarithm (*e*)

**Formula B2.  $Z_r$  to r transformation**

$$r = \frac{e^{2Z_r} - 1}{e^{2Z_r} + 1}$$

Where  $Z_r$  = the Fisher transformed value of r and e = approximately 2.718.

**Formula B3. Calculation of standard error**

$$se = \sqrt{\frac{1}{n-3}}$$

Where n equals the number of cases in the treatment and comparison groups combined

**Formula B4. Calculation of weight for analyses**

$$w = \frac{1}{se^2} = n - 3$$

Where n equals the number of cases in the treatment and comparison groups combined

**APPENDIX C—STAFF SURVEY**

**Instructions:** This survey is to be completed by the program staff.

There are no right or wrong answers. The best answers are those which are most descriptive of the program. Accurate answers will give us the best information to understand the impacts of program characteristics on effectiveness.

Please focus your responses on the program as it existed in FISCAL YEAR 1999. Also, focus your responses solely on the characteristics of your program, as opposed to including information on referral programs you use. If your CCA program is regular probation or intensive probation, "program" refers to the supervision and other services provided by probation staff.

No individual responses will be reproduced in any reports, presentations or publications.

Thank you for taking the time to complete this survey.

County: \_\_\_\_\_

Program: \_\_\_\_\_

Address: \_\_\_\_\_

Years program has been in operation: \_\_\_\_\_

Years you have worked at the program: \_\_\_\_\_

**Type of Community Corrections Act program:**

- \_\_\_\_\_ 1. Day reporting
- \_\_\_\_\_ 2. Regular probation
- \_\_\_\_\_ 3. ISP
- \_\_\_\_\_ 4. Work release
- \_\_\_\_\_ 5. Substance abuse treatment
- \_\_\_\_\_ 6. Domestic violence program
- \_\_\_\_\_ 7. Residential treatment
- \_\_\_\_\_ 8. Jail management
- \_\_\_\_\_ 9. Mental health treatment
- \_\_\_\_\_ 10. Offender treatment diversion
- \_\_\_\_\_ 11. Other, please specify \_\_\_\_\_

**Type of clients served** (check all that apply):

- \_\_\_\_\_ 1. Jail diversion
- \_\_\_\_\_ 2. Prison diversion
- \_\_\_\_\_ 3. Both prison and jail diversion

**Number of cases/residents/participants in FY99:**

- \_\_\_\_\_ 1. Total number
- \_\_\_\_\_ 2. Number of males
- \_\_\_\_\_ 3. Number of females

**Capacity number of residents/participants** (i.e., number of treatment slots or beds):

- \_\_\_\_\_ 1. Total number
- \_\_\_\_\_ 2. Number of males
- \_\_\_\_\_ 3. Number of females

Please summarize the major changes in the program SINCE FISCAL YEAR 1999: (continue your response on the back of this page if necessary): \_\_\_\_\_

Mark the offender characteristics that were (1) assessed at program intake and (2) those re-assessed upon discharge. Fill in the assessment instrument used to assess the characteristic.

<u>Intake</u>	<u>Re-assess</u>	<u>Characteristic</u>	<u>What instrument did you use?</u>
_____	_____	1. Criminal history	_____
_____	_____	2. Substance use/abuse	_____
_____	_____	3. Family/marital dynamics	_____
_____	_____	4. Education	_____
_____	_____	5. Employment	_____
_____	_____	6. Finances	_____
_____	_____	7. Accommodations	_____
_____	_____	8. Companions/peers	_____
_____	_____	9. Leisure/recreation activities	_____
_____	_____	10. Temperament	_____
_____	_____	11. Attitudes about crime	_____
_____	_____	12. Problem solving skills	_____
_____	_____	13. Mental health	_____
_____	_____	14. Intelligence	_____
_____	_____	15. Personality	_____
_____	_____	16. Learning disabilities	_____
_____	_____	17. Reading ability	_____
_____	_____	18. Anxiety	_____
_____	_____	19. Abuse, physical	_____
_____	_____	20. Abuse, sexual	_____
_____	_____	21. Motivation	_____
_____	_____	22. Transportation availability	_____
_____	_____	23. Need for child care	_____
_____	_____	24. Other, specify _____	_____

**Were high-risk and low-risk offenders assigned to separate groups?**

- \_\_\_\_\_ 1. Yes
- \_\_\_\_\_ 2. No
- \_\_\_\_\_ 3. We did not have program groups

**Were male and female offenders assigned to separate groups?**

- \_\_\_\_\_ 1. Yes
- \_\_\_\_\_ 2. No
- \_\_\_\_\_ 3. Only one sex was served at the program or we did not have program groups

**Were offenders ever in groups with non-offenders?**

- \_\_\_\_\_ 1. Yes
- \_\_\_\_\_ 2. No
- \_\_\_\_\_ 3. We did not have program groups

**What exclusionary criteria were used for the program?**

- \_\_\_\_\_ 1. Sex Offender
- \_\_\_\_\_ 2. Fire setting
- \_\_\_\_\_ 3. Mental illness
- \_\_\_\_\_ 4. Current substance use/abuse
- \_\_\_\_\_ 5. History of substance use/abuse
- \_\_\_\_\_ 6. History of violence
- \_\_\_\_\_ 7. Mental retardation
- \_\_\_\_\_ 8. Motivation
- \_\_\_\_\_ 9. Other, please specify \_\_\_\_\_





How many hours per week were participants engaged in treatment activities, including school and work ? \_\_\_\_\_(hours per week)

What was the average length of stay in the program (excluding aftercare)? \_\_\_\_\_(months)

If located in a prison or jail, were participants separated from the rest of the prison population?

- \_\_\_\_\_ 1. Yes
- \_\_\_\_\_ 2. No
- \_\_\_\_\_ 3. Not located in a prison or jail

Did offenders have a mechanism whereby they provided input into the structure of the program?

- \_\_\_\_\_ 1. Yes, example \_\_\_\_\_
- \_\_\_\_\_ 2. No

Were incentives and rewards used to encourage program participation and or skill acquisition?

- \_\_\_\_\_ 1. Yes
- \_\_\_\_\_ 2. No

If the program used incentives and rewards, please list them.

- \_\_\_\_\_ 1. \_\_\_\_\_
- \_\_\_\_\_ 2. \_\_\_\_\_
- \_\_\_\_\_ 3. \_\_\_\_\_
- \_\_\_\_\_ 4. \_\_\_\_\_
- \_\_\_\_\_ 5. \_\_\_\_\_
- \_\_\_\_\_ 6. \_\_\_\_\_
- \_\_\_\_\_ 7. \_\_\_\_\_
- \_\_\_\_\_ 8. Did not use incentives and rewards

Were punishers/consequences/sanctions used to extinguish undesirable behaviors?

- \_\_\_\_\_ 1. Yes
- \_\_\_\_\_ 2. No

If the program used punishers/consequences/sanctions, please list them.

- \_\_\_\_\_ 1. \_\_\_\_\_
- \_\_\_\_\_ 2. \_\_\_\_\_
- \_\_\_\_\_ 3. \_\_\_\_\_
- \_\_\_\_\_ 4. \_\_\_\_\_
- \_\_\_\_\_ 5. \_\_\_\_\_
- \_\_\_\_\_ 6. \_\_\_\_\_
- \_\_\_\_\_ 7. \_\_\_\_\_
- \_\_\_\_\_ 8. Did not use punishers/consequences/sanctions

Indicate the ratio of punishers to rewards used. That is, for every reward given, how many punishers were given on average? \_\_\_\_\_ punishers to \_\_\_\_\_ rewards

Did the program director/supervisor run any treatment groups or have a case load?

- \_\_\_\_\_ 1. Yes
- \_\_\_\_\_ 2. No

Did the program have a manual/curriculum that details the schedule and methods of treatment?

- \_\_\_\_\_ 1. Yes, name of curriculum(s) \_\_\_\_\_
- \_\_\_\_\_ 2. No

How well was the manual/curriculum followed by treatment providers?

- |                     |                            |   |   |                            |
|---------------------|----------------------------|---|---|----------------------------|
| 0                   | 1                          | 2 | 3 | 4                          |
| There was no manual | Followed very sporadically |   |   | Followed very consistently |





**Rate the extent of changes to the *program* that occurred in the two years prior to 1999 that jeopardized the smooth functioning of the program?**

0	1	2	3	4
No such changes	One change			Many changes

**Rate the extent of *changes* in the area of program *funding* that occurred in the two years prior to 1999 that jeopardized the smooth functioning of the program?**

0	1	2	3	4
No such changes	One change			Many changes

**Rate the extent of changes in *community support* that occurred in the two years prior to 1999 that jeopardized the smooth functioning of the program?**

0	1	2	3	4
No such changes	One change			Many changes

**Rate how supportive the community at large was of your program?**

1	2	3	4	5
Very unsupportive				Very supportive

**Rate how supportive the criminal justice community was of your program?**

1	2	3	4	5
Very unsupportive				Very supportive

**How cost effective was the program?**

1	2	3	4	5
Not cost effective at all				Very cost effective

**How adequate was the funding of the program to sustain its operation?**

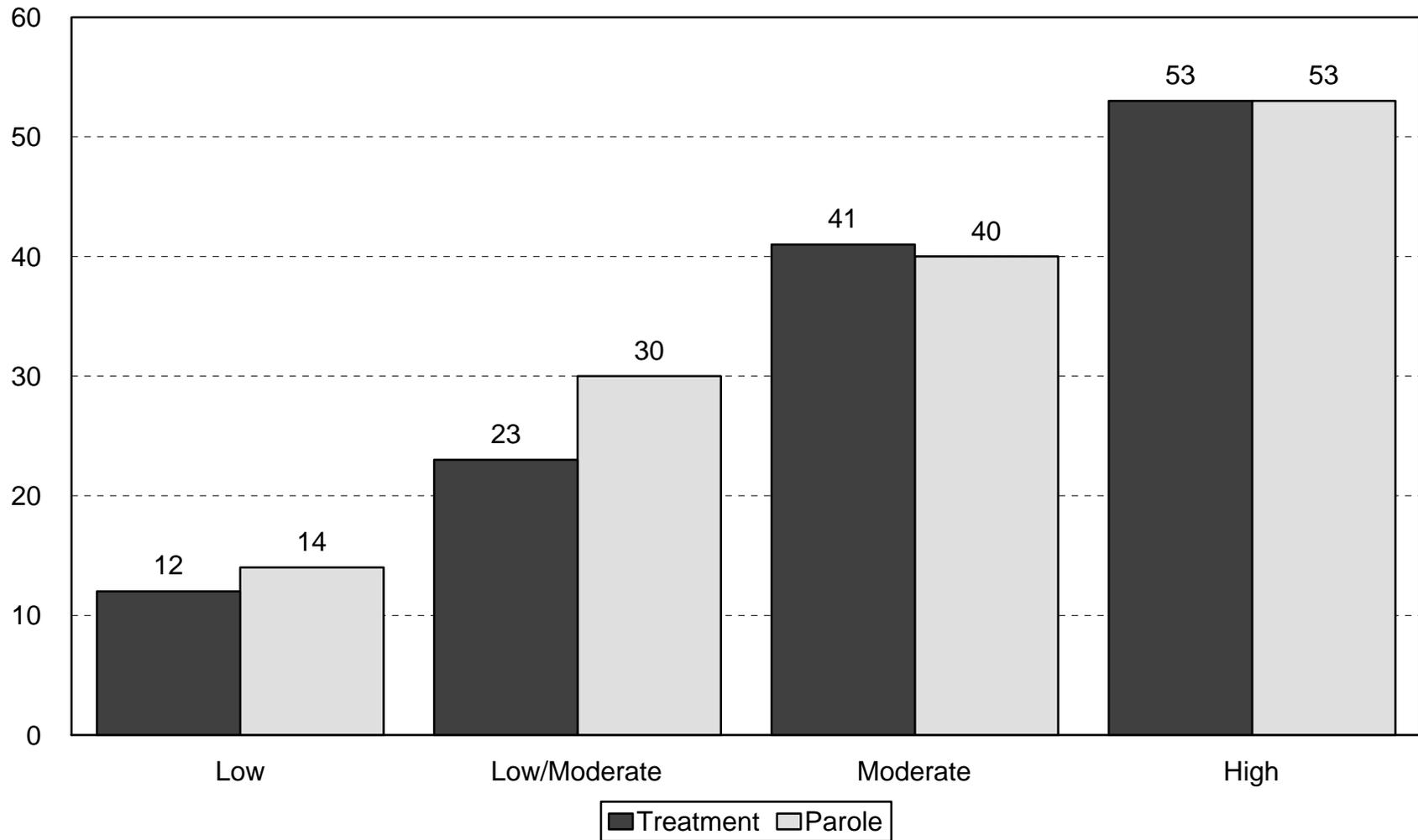
1	2	3	4	5
Very inadequate				Very adequate

## **APPENDIX D—PROGRAM RESULTS**



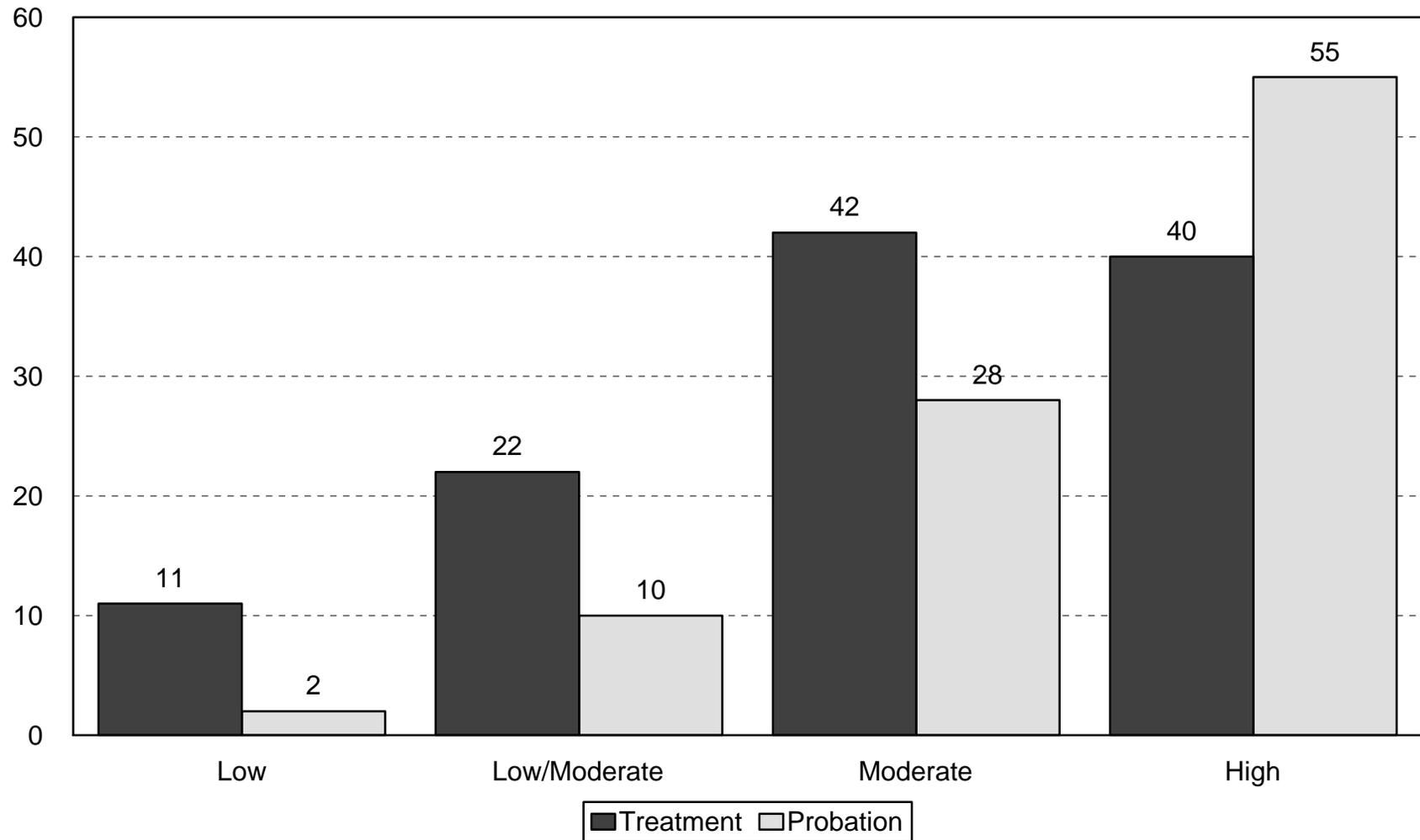
**APPENDIX E—CROSS-TABULATIONS BETWEEN GROUP MEMBERSHIP AND  
OUTCOME BY RISK LEVEL**

**Figure E-1. Cross-tabulations between risk –level, group membership, and outcome using Parolees as comparison group.**



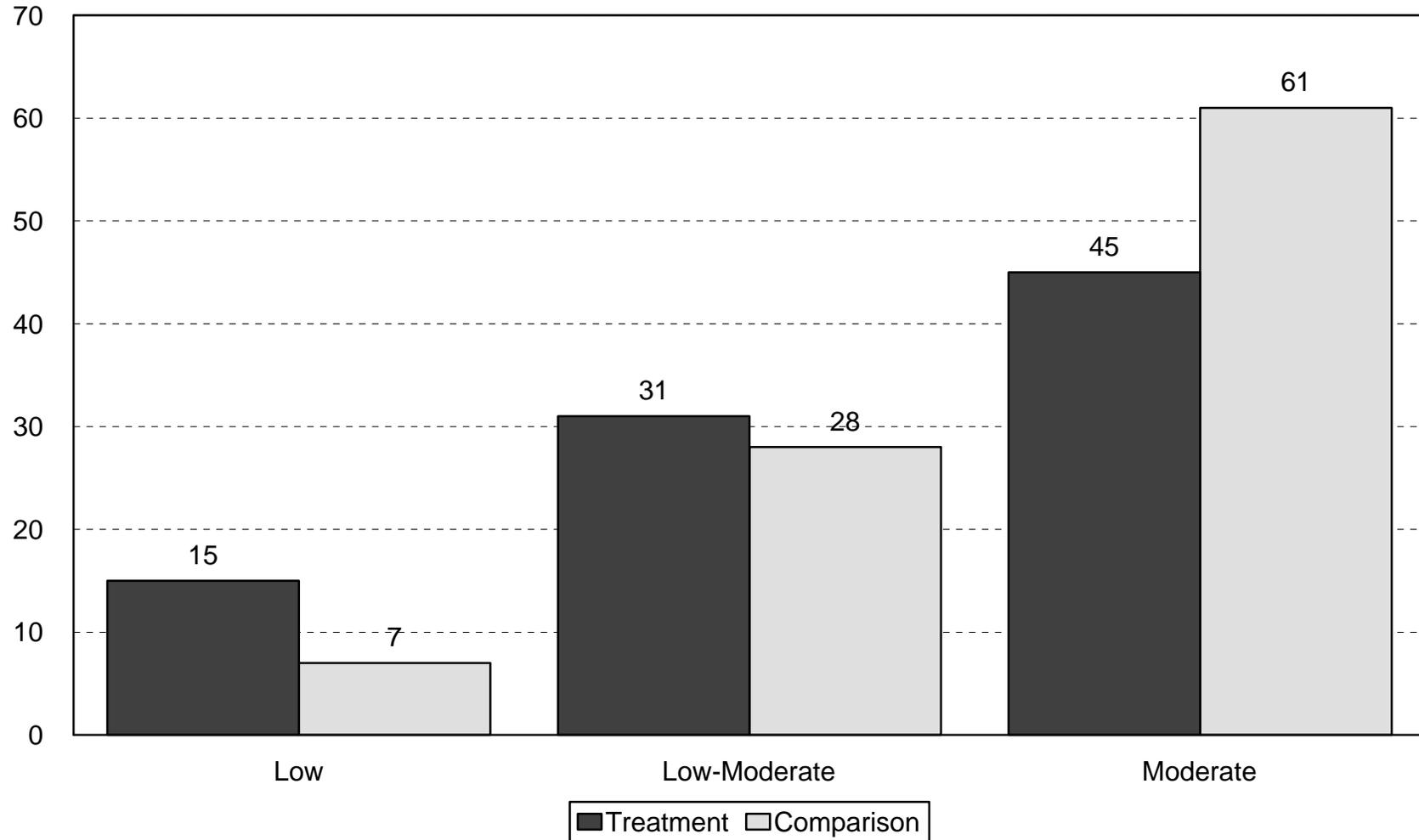
470 Low risk cases; Chi-square (1) = .471; p > .05  
 2384 Low-moderate risk cases; Chi-square (1) = 16.346; p < .05  
 6294 Moderate risk cases; Chi-square (1) = .381; p > .05  
 1076 High risk cases; Chi-square (1) = .015; p > .05

**Figure E-2. Cross-tabulations between risk –level, group membership, and outcome using Probation as comparison group.**



628 Low risk cases; Chi-square (1) = 19.930;  $p < .05$   
 2376 Low-moderate risk cases; Chi-square (1) = 69.508;  $p < .05$   
 1548 Moderate risk cases; Chi-square (1) = 33.589;  $p < .05$   
 134 High risk cases; Chi-square (1) = 2.991;  $p > .05$

**Figure E-3. Cross-tabulations between risk –level, group membership, and outcome using jail releases and regular probation as comparison group.**



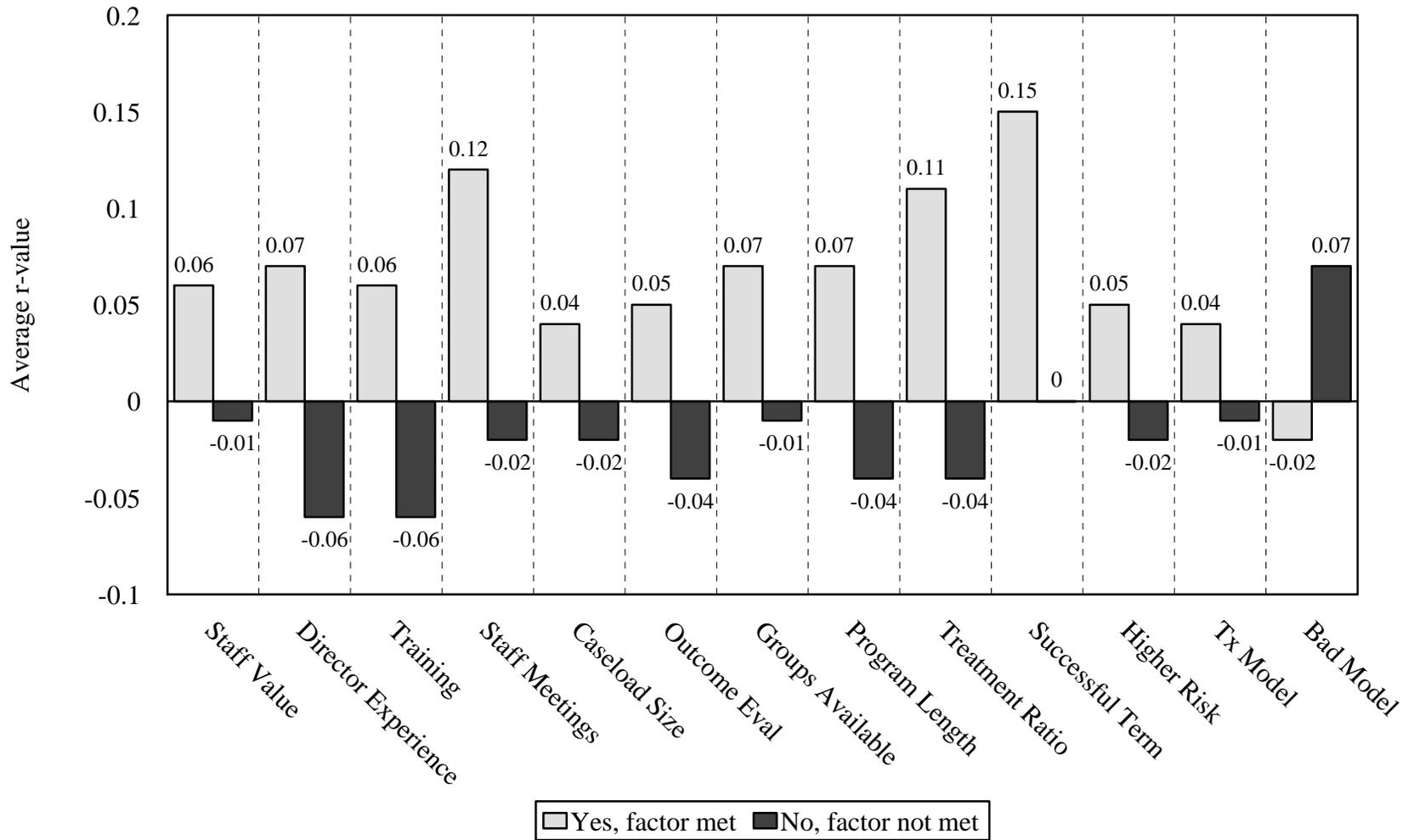
372 Low risk cases; Chi-square (1) = 6.168;  $p < .05$

748 Low-moderate risk cases; Chi-square (1) = 1.262;  $p > .05$

294 Moderate risk cases; Chi-square (1) = 8.127;  $p < .05$

**APPENDIX F—RELATIONSHIP BETWEEN AVERAGE EFFECT SIZE AND  
SIGNIFICANT PROGRAM FACTORS**

**Figure F-1. Average r-value by Significant Program Factors**



All differences listed, except those observed based on the Tx Model factor, are significant at  $p < .05$ .

## **APPENDIX G—WEIGHTED LEAST SQUARES REGRESSION ANALYSIS**

**Table E1. Weighted Least Squares Model Predicting r-values with Capacity and Content Percentage Scores**

Variable	Parameter Estimate	<i>B</i>	P
Constant	-.1929		.0000
Capacity Score	.3000	.3510	.0039
Content	.4198	.4340	.0004

$R^2 = 0.46$

Model Q (2) = 41.72;  $p < .05$

Residual Q (55) = 48.21;  $p > .05$

Total Q (57) = 89.94;  $p < .05$

