



Results First Mississippi

Issue Brief #1: Opportunities for Improving the Outcomes of Adult Prison-based Intervention Programs

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Compiled by the PEER Committee's Performance Accountability Office

The Pew-MacArthur Results First Initiative

The Pew-MacArthur Results First Initiative, a project of The Pew Charitable Trusts and the John D. and Catherine T. MacArthur Foundation, works with states and localities to develop the tools policymakers need to identify and fund effective intervention programs* that yield return on investment. Using innovative and customizable methods, Results First partners:

- create an inventory of currently funded intervention programs;
- review which programs in the inventory work according to high-quality research;
- conduct benefit-cost analysis to compare effective programs' likely return on investment; and,
- use results of analysis to inform spending and policy decisions.

Taken together, these efforts have helped leaders to direct public resources toward effective, cost-beneficial approaches and away from programs for which there is no high-quality research or that the research shows to be ineffective. Mississippi, a Results First partner state since December 2012, is one of a growing number of states and counties that are customizing the Results First approach to improve the outcomes achieved with public dollars.

*The Results First Initiative defines an intervention program as a set of activities designed to achieve a specific outcome(s), e.g., prevent recidivism, control addictions, by positively affecting the educational, economic, social, behavioral, and/or health status of citizens, and which may be subjected to experimental review for efficacy.

Purpose of Adult Prison-based Intervention Programs

The primary outcome targeted by adult prison-based intervention programs is a reduction in recidivism and its associated costs. For purposes of its adult criminal justice benefit-cost model, Results First defines recidivism as “a conviction for a new crime.” In monetary terms, the benefit of a reduction in recidivism includes the dollar value of:

- incarceration and other criminal justice system costs avoided; and,
- increased public safety through avoided victimizations, including costs to victims related to lost property, injury, or death, and damages due to pain and suffering.

Purpose of Issue Brief

This issue brief seeks to help policymakers to ensure that state dollars expended on Mississippi’s adult prison-based intervention programs are achieving the reductions in recidivism and associated long-term savings reported in the high-quality research literature. In conducting this analysis, legislative staff used the Results First approach to:

- create an inventory, as of November 30, 2016, of prison-based intervention programs offered by each of the state’s twenty-one adult correctional facilities [state-operated, regional (county-operated), and private] housing inmates in state custody;
- identify which of the programs in the inventory are supported by high-quality research documenting their effectiveness in reducing recidivism **if implemented with fidelity to program design;**¹
- rank the programs supported by high-quality research by order of their cost-effectiveness; and,
- identify which programs have no known high-quality research supporting them.

Defining High-Quality Research

High-quality research contains elements necessary to establish causality between the intervention program and its targeted outcome. Legislative staff defines “high-quality research” as any research study meeting either of the following two standards:

- the definition of “evidence-based program” included in MISS. CODE ANN. Section 27-103-159(1)(a) (1972):
“a program or practice that has had multiple site randomized controlled trials across heterogeneous populations demonstrating that the program or practice is effective for the population;” or,
- Level 3, 4, or 5 of the Maryland Scientific Methods Scale (SMS).

Exhibit 1 on page 3 explains the elements of quality research that define both the levels of the Maryland Scientific Methods Scale and “evidence-based program” found in Mississippi law. Appendix A on page 13 explains in more detail the criteria used by legislative staff to define and identify “high-quality” research.

¹ Unless intervention programs shown to be effective through high-quality research are implemented with fidelity to program design, they will not achieve the reductions in recidivism reported in the research. None of the intervention programs identified in this report have been vetted for proper program implementation by an external party.

Exhibit 1: Defining Elements of Research, by Level of Research Quality

Exhibit 1: Defining Elements of Research, by Level of Research Quality						
	Defining Elements Presented in the Research					
Level of Research Quality	Association between Program and Outcome	Pre- and Post-Program Outcome Measurements	Control Group	Efforts to Rule Out Confounding Variables	Random Assignment of Units to Program and Control	Multiple Randomized Controlled Trials across Distinct Populations
Based on MISS. CODE ANN. Section 27-103-159(1)(a) (1972)						
Mississippi Evidence-based Standard	√	√	√	√	√	√
Based on Maryland Scientific Methods Scale						
Level 5	√	√	√	√	√	
Level 4	√	√	√	√		
Level 3	√	√	√			
Level 2	√	√				
Level 1	√					

 Highest Quality	 Second-Highest Quality	 Unacceptable Quality
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Source: Legislative staff analysis based on Maryland Scientific Methods Scale, <http://www.whatworksgrowth.org/public/files/Scoring-Guide.pdf> and MISS. CODE ANN. Section 27-103-159(1)(a) (1972).

To determine which of the programs in Mississippi’s inventory are supported by high-quality research documenting a statistically significant reduction in recidivism, legislative staff examined each of the relevant research citations included in the Results First Clearinghouse Database² and in the Washington State Institute for Public Policy’s³ Benefit-Cost Results for Adult Criminal Justice.

²The Pew-MacArthur Results First Clearinghouse Database includes the following three research clearinghouses that include adult prison-based intervention programs CrimeSolutions.gov; the National Registry of Evidence-based Programs and Practices (NREPP), and What Works in Reentry Clearinghouse (WWR).

³ The Washington State Legislature created the Washington State Institute for Public Policy (WSIPP) in 1983 to carry out “practical, non-partisan research.” Since the 1990s, the Washington State Legislature has directed WSIPP to identify evidence-based policies in order to provide policymakers and budget writers with a list of “well-researched public policies that can, with a high degree of certainty, lead to better statewide outcomes coupled with a more efficient use of taxpayer dollars.”

Inventory of Mississippi's Prison-based Intervention Programs and Identification of those Programs Supported by High-Quality Research

In FY 2016 the state's twenty-one adult correctional facilities housing state inmates reported approximately \$4.2 million in total direct expenditures on prison-based intervention programs in nine broad program areas. As of November 30, 2016, the state's twenty-one adult correctional facilities reported offering prison-based intervention programs in nine broad program areas: correctional education (basic or post-secondary), vocational education, correctional industries, alcohol and drug abuse treatment, cognitive behavioral skills training and therapy, employment and job assistance training, life skills education, religious programs, and multi-purpose programs. It is important to note that the financial and programmatic data collected from Mississippi's adult correctional facilities and presented in this issue brief are self-reported and unaudited.

As shown in Exhibit 2 on page 5, the type and number of programs offered at each facility vary widely. Only two of the nine broad program areas, correctional education (basic) and religious study programs, were offered at all twenty-one facilities at the time of the inventory. Nineteen facilities reported offering alcohol and drug abuse treatment programs (including the Therapeutic Communities for Chemically Dependent Offenders program offered at the Mississippi State Penitentiary) and thirteen of the facilities reported offering vocational education. Appendix B on page 15 lists which correctional facilities offer which type of vocational skill training and the professional certifications that can be earned upon successful program completion. As the appendix shows, the facilities offer vocational education in a combined total of nineteen skill areas.

Although \$4.2 million represents approximately 1.2% of total Mississippi Department of Corrections (MDOC) expenditures for FY 2016, Results First reports a high likelihood that the long-term return on dollars invested in well-run intervention programs that high-quality research shows to be effective in reducing recidivism will exceed costs, in some cases by large amounts. While the vast majority of MDOC financial resources are expended on maintaining the security of the state's prisons and providing for the health and safety of the inmates housed therein, there is an opportunity to improve the outcomes the state is achieving by more strategically investing the limited resources currently expended on adult prison-based intervention programs.

Exhibit 2: Inventory of Mississippi's Adult Prison-based Intervention Programs as of November 30, 2016, Reported by Correctional Facility, Quality of Research Supporting the Program, and Estimated FY 2016 Direct Program Expenditures

Program	Estimated Direct Program Expenditures* (FY 2016)	State			Regional														Private		
		Central Mississippi	Mississippi State Penitentiary	South Mississippi Correctional Institution	Alcorn County	Bolivar County ***	Carroll-Montgomery County	Chickasaw County	George-Greene County	Holmes-Humphreys County	Issaquena County	Jefferson-Franklin County	Kemper-Neshoba County	Leake County	Marion-Walthall County	Stone County	Washington County	Winston-Choctaw County	Yazoo County	East Mississippi	Marshall County
Programs Shown to be Effective in Reducing Recidivism by High-Quality Research**																					
Programs Meeting Definition of "Evidence-based" in MISS. CODE ANN. Section 27-103-159(1)(a) (1972)																					
Therapeutic Communities for Chemically Dependent Offenders (Incarceration-based Practice)	\$558,385.42		◆																		
Programs Meeting Criteria for Levels 3, 4, or 5 on the Maryland Scientific Methods Scale																					
Vocational Education in Prison	\$1,135,541.90	◆	◆	◆	◆	◆		◆	◆				◆	◆	◆					◆	◆
Correctional Education (Basic or Post-Secondary) in Prison	\$1,010,235.21	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Correctional Industries in Prison	\$569,551.73****	◆	◆	◆																	
Employment and Job Assistance Training during Incarceration (Pre-Release)	\$189,258.93		◆																	◆	◆
Thinking for a Change (Cognitive Behavioral Therapy Program for High- and Moderate-Risk Offenders)	\$5,314.50		◆			◆	◆	◆												◆	
Subtotal	\$2,898,735.96																				
Programs Not Known to Be Supported by High-Quality Research Showing Their Effectiveness in Reducing Recidivism																					
Alcohol and Drug Abuse Treatment																					
Various Alcohol and Drug Abuse Treatment	\$812,211.55	◆		◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆			◆	◆
Cognitive Behavioral Skills Training																					
Moral Reconciliation Therapy	\$82,428.20					◆														◆	◆

Pathways to Change	\$79,785.00																			◆		
Anger Management	\$30,764.30				◆	◆		◆					◆			◆			◆	◆	◆	◆
Challenge	\$18,973.20							◆					◆									◆
Cognitive Skills Training	\$2,184.50				◆			◆														
Character Development	\$2,064.04							◆														◆
Thinking for Good	\$1,787.62																			◆		◆
Stress Management	\$980.00							◆													◆	
Life Skills																						
Basic Computer	\$55,300.08							◆	◆		◆	◆	◆	◆		◆		◆	◆	◆	◆	◆
Employment Skills	\$82,493.88				◆	◆		◆		◆	◆	◆	◆	◆		◆		◆	◆	◆	◆	◆
Music/Art	\$40,519.00				◆								◆							◆	◆	
Inside Out Dad	\$9,526.50				◆			◆												◆	◆	◆
Workforce Readiness	\$7,670.00							◆					◆							◆		
Financial Peace University	\$7,119.00																				◆	
Mississippi Prison Writes	\$0.00		◆																			
Multi-Purpose Programs																						
Managing Co-Occurring Disorders	\$1,839.00																			◆		
Recidivism Reduction Program	\$0.00			◆																		
Religious Programs																						
Religious Study Programs	\$76,480.00	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆	◆
Faith-Based Initiative	\$35,535.86		◆		◆			◆												◆		
Subtotal	\$1,347,661.73																					
Grand Total	\$4,246,397.69																					

* Direct program expenditures include dollars spent on individuals directly responsible for providing the program to inmates and on materials used to teach or implement the program. These expenditures were self-reported by the facilities and have not been audited for accuracy by legislative staff.

** For a definition of “high-quality research,” see discussion beginning on page 2 of this issue brief.

*** Bolivar County reported a combined expenditure total for three of its programs (Alcohol and Drug Abuse Treatment, Anger Management, and Employment Skills Training) provided contractually by a single provider who did not provide the correctional facility with a programmatic cost breakout. Legislative staff allocated the reported total expenditures to each of the three programs based on the average reported duration of each program.

**** In Mississippi, correctional industries in prison is provided by Mississippi Prison Industries Corporation (MPIC), a nonprofit, self-funded corporation established by the Mississippi Legislature in 1990. MPIC receives no funding from the state. The MPIC expenditures reported in this exhibit are for FY 2015.

Source: Legislative staff analysis, based on data and information provided by Mississippi’s adult correctional facilities and the Mississippi Prison Industries Corporation. To determine the quality of the research supporting the programs in Mississippi’s inventory, legislative staff reviewed relevant research contained in the Pew-MacArthur Results First Clearinghouse Database and cited in the Washington State Institute for Public Policy’s Benefit-Cost Results for Adult Criminal Justice

Six of the programs in Mississippi’s inventory, accounting for approximately 68% of total estimated direct expenditures, are shown to be effective in reducing recidivism by high-quality research. As Exhibit 2 shows, based on the published research reviewed by legislative staff, only one program, Therapeutic Communities for Chemically Dependent Offenders (Incarceration-based Practice), qualifies as high-quality research by meeting the high standard of “evidence-based” set forth in MISS. CODE ANN. Section 27-103-159(1)(a) (1972). The following five prison-based programs or program categories met the standard for high-quality research based on Levels 3, 4, and 5 of the Maryland Scientific Methods Scale: vocational education, correctional (basic or post-secondary) education, correctional industries, employment and job assistance training (pre-release), and Thinking for a Change (cognitive behavioral therapy program). In FY 2016 the state’s adult correctional facilities reported estimated direct expenditures of approximately \$2.9 million in state funds on these programs. This total excludes direct expenditures on Correctional Industries in Prison because that program is totally self-supporting and receives no state funds. Appendix C on page 21 contains a brief description of each program in Mississippi’s inventory, categorized by the quality of research supporting the program.

In FY 2016, approximately \$1.3 million was expended on programs for which there is no known high-quality research showing their effectiveness in reducing recidivism. As shown in Exhibit 2, the state’s adult correctional facilities estimated having expended approximately \$1.3 million in FY 2016 on prison-based intervention programs with no known high-quality research supporting their effectiveness in reducing recidivism. Over half of these expenditures (approximately 60%) were on various alcohol and drug abuse treatment programs (refer to Appendix D on page 26 for a list of these programs, by facility). Appendix F on page 28 describes fourteen programs supported by high-quality research showing their effectiveness in reducing recidivism that could be implemented in place of the programs unsupported by known high-quality research in Mississippi’s inventory.

Relative Cost-Effectiveness of High-Quality Programs in Mississippi’s Inventory

Among the programs in Mississippi’s inventory supported by high-quality research, Thinking for a Change (a cognitive behavioral therapy program for high- and moderate-risk offenders) ranks highest in cost-effectiveness. The Results First benefit-cost model is based on a technique originally developed by the Washington State Institute for Public Policy (WSIPP)⁴ and continues to be refined in partnership with that body. At the time of publication of this issue brief, legislative staff is unable to run the Results First benefit-cost model on Mississippi’s adult prison-based intervention programs until questions concerning the reliability of the data required by the model can be resolved. In the interim, legislative staff has improvised an alternative method for ranking the six prison-based interventions in Mississippi’s program inventory supported

⁴ For additional information on WSIPP and its benefit-cost results by policy area see www.wsipp.wa.gov/BenefitCost.

by high-quality research. This alternative method uses the effect size⁵ reported by the Washington State Institute for Public Policy (WSIPP)⁶ for each high-quality research program in Mississippi's inventory in combination with that program's Mississippi cost data. Appendix E on page 27 presents a technical discussion of this method for ranking intervention programs supported by high-quality research.

As shown in Exhibit 3 on page 9, while Employment and Job Training Assistance during Incarceration (pre-release) has the largest reported effect size on reducing recidivism, followed by Vocational Education and Correctional Education, the most cost-effective of the programs in Mississippi's inventory is Thinking for a Change (a Cognitive Behavioral Therapy program for High- and Moderate-Risk Offenders) because it has significantly lower reported direct costs per participant than the other adult prison-based intervention programs. Because the cost effectiveness scores calculated for each program have ratio properties, Thinking for a Change (cost effectiveness score of 702) is approximately thirty times more cost-effective than the next most cost-effective program in Mississippi's inventory, Correctional Education (cost effectiveness score of 23). It is important to note that the reported costs for any program that is not being implemented with fidelity to the research-based program design could be artificially low (or high), thereby resulting in a misleading cost-effectiveness score and associated ranking.

⁵ Effect size is a quantitative measure of the difference between two groups. Effect sizes are calculated based on the standardized mean difference between two groups in a trial. Because the rate of recidivism is the outcome of interest in comparing the effectiveness of adult prison-based intervention programs, the effect size reports the magnitude of the increased reduction in recidivism attributable to the intervention program (in comparison to the recidivism rate among similar offenders that did not participate in the intervention program).

⁶ It is important to note that some effect sizes reported by WSIPP may be imprecise, as they result from WSIPP grouping together a large number of broadly similar programs that might productively be examined on an individual basis; for instance, Moral Reconciliation Therapy and Thinking for a Change are both treated as generic examples of cognitive behavioral therapy for purposes of WSIPP's effect size calculations, despite the fact that the two involve different theoretical and methodological practices and achieve different reductions in recidivism under some specifiable circumstances.

Exhibit 3: High-Quality Adult Prison-based Intervention Programs Ranked by Their Cost Effectiveness Score

Program	Estimated Direct Cost per Participant*	Program Effect Size**	Cost Effectiveness Score***
Thinking for a Change (Cognitive Behavioral Therapy Program for High- and Moderate-Risk Offenders)	\$21.52	0.151	702
Correctional Education (Basic or Post-Secondary) in Prison	\$1,061.73	0.242	23
Employment and Job Assistance Training During Incarceration (Pre-Release)	\$2,510.76	0.380	15
Vocational Education in Prison	\$1,785.52	0.256	14
Therapeutic Communities for Chemically Dependent Offenders (Incarceration-based Practice)	\$1,334.89	0.119	9
Correctional Industries in Prison	\$1,855.22	0.082	4

Notes:

* Calculated by legislative staff using self-reported, unaudited estimated direct cost and participant data collected from the correctional facilities offering the intervention program.

** As reported by the Washington State Institute for Public Policy (WSIPP) on January 25, 2017, in its benefit-cost results for adult criminal justice prison-based intervention programs.

*** The program effect size divided by the estimated direct cost per participant and multiplied by 100,000 in order to convert a very small fraction into a number that is easier to comprehend for purposes of ranking programs.

Source: Legislative staff calculations using self-reported estimated direct cost-per-participant data provided by the state's twenty-one adult correctional facilities and program effect sizes reported by the Washington State Institute for Public Policy in its Benefit-Cost Analyses of Adult Criminal Justice programs.

Opportunities for Improving the Impact of the State's Limited Adult Prison-based Intervention Program Dollars

There are several steps that the state's adult correctional facilities can take to maximize the impact of their limited adult prison-based intervention program dollars:

1. **Move financial resources out of programs with no known high-quality research of their effectiveness into programs that high-quality research shows to be effective in reducing recidivism.** MDOC's Director of Treatment and Programs is encouraging the state's adult correctional facilities to redirect the dollars being spent on programs with no known high-quality research of their effectiveness to programs shown to be effective in reducing recidivism by high-quality research. Appendix F on page 28 provides a list of alternative programs supported by high-quality research, organized by broad program purpose. For example, the appendix lists five alcohol and drug abuse treatment programs meeting the standard for high-quality research, any of which would be a less risky investment of public dollars than the dollars currently being expended on programs with no evidence supporting their effectiveness. Similarly, the state funds expended on cognitive behavioral skills training programs with no known high-quality research showing their effectiveness in reducing recidivism would be better spent on the previously identified highly cost-effective cognitive behavioral therapy program, Thinking for a Change (refer to discussions of this program on pages 8 and 29).
2. **Conduct high-quality research of the effectiveness of MDOC pilot programs.** Because MDOC developed its Recidivism Reduction Program (RRP) as a pilot program to replace a program shown to be ineffective in reducing recidivism (see discussion on page 25 of Appendix C), it is critical that MDOC establish a rigorous research method for assessing the effectiveness of its Recidivism Reduction Program (i.e., create a body of high-quality research on the program) for several reasons. The Recidivism Reduction Program is not a single operationally distinct intervention program; rather, it is closer to a plan of action regarding several interventions. As described, the program requires an initial assessment of each participant's rehabilitation needs and a matching of those needs to only those interventions deemed helpful from among a menu of possible interventions. This program structure presents several challenges. First, the needs assessment tool must be evaluated and determined to be valid for its purpose. Second, the evidence basis of the component interventions must be evaluated. Third, the cumulative effect of several individual interventions must be established. And, fourth, the typical effect given the population should be measured if the Recidivism Reduction Program is to be compared to individual interventions. In light of this complexity, MDOC should seek external evaluation expertise (e.g., from one of the state's research universities) to establish a high-quality research design for assessing the effectiveness of its Recidivism Reduction Program. This level of rigor is not only necessary to make an informed decision as to whether to continue and expand MDOC's Recidivism Reduction Program, but also to make a contribution to the research literature on prison-based adult criminal justice programs.

3. **Ensure fidelity of high-quality program implementation.** To achieve the effect sizes reported in this issue brief for each intervention program supported by high-quality research, the state's correctional facilities must deliver these programs with fidelity to the critical elements of program design. In order to achieve the monetized benefits that will accrue to the state and society from a reduction in recidivism, it is more effective to faithfully execute a few high-quality programs than to execute many high-quality programs poorly. The following suggested actions relate to ensuring fidelity of program implementation.
- a. Create a fidelity audit plan for each high-quality intervention program delivered to inmates and assess annually each program's compliance with the critical elements of successful implementation. The components of a program critical to achieving the effect sizes reported in the research must be identified and replicated. These components include, but are not limited to, program content, program intensity and duration, program provider qualifications, and target population.
 - b. Monitor intervention program performance on an ongoing basis to ensure that reductions in recidivism reported in the research literature are being achieved. It is important to monitor intervention program outcomes to make sure that they are in line with the results being reported in the research literature. Significant variance could indicate a problem with fidelity of program implementation. It is also important to monitor program unit costs to ensure that the programs are being delivered as efficiently as possible and in line with unit costs reported in the research literature.
 - c. Minimize the movement of inmates in and out of programs prior to completion. The full benefits of most programs are only realized if the inmate enrolled in a program follows it through to completion. While unavoidable under certain circumstances, it is both inefficient and potentially ineffective to move inmates in and out of programs prior to completion.
 - d. Match intervention programs to inmate rehabilitation needs. Every prison-based intervention program supported by high-quality research has a specific target population for whom the intervention was designed to work. The program effect sizes documented in the research are only applicable to the program's targeted population. While MDOC is reportedly in the process of identifying and implementing a valid offender risk/needs assessment tool that will be administered to all offenders as part of the intake process, in the absence of such a system, it is not clear that resources are being expended on those inmates best suited for the interventions being offered.
 - e. Match areas of vocational skill training to employment opportunities. MDOC should work with the Mississippi Department of Employment Security to ensure that there are a sufficient number of available jobs in Mississippi or neighboring states to justify the number of inmates being trained in each area of vocational skill certification offered.
 - f. Time the delivery of intervention programs to inmates to maximize their potential to reduce recidivism. The timing of an inmate's participation in an intervention program can be an important component of fidelity to research design and as such can significantly affect the program's effectiveness in

reducing recidivism. The best example of this would be a reentry program that is provided shortly prior to the inmate's release rather than at the beginning of a long sentence.

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Appendix A: Defining “High-Quality” Research for Purposes of Informing Public Sector Intervention Program Investment Decisions

The Need to Define High-Quality Research

To be worthy of public sector investment, an intervention program should be supported by research of sufficient quality to demonstrate with some degree of certainty that the program causes a desired outcome. Research meeting this standard is considered to be “high-quality” research. The definition of “evidence-based program” set forth in MISS. CODE ANN. Section 27-103-159(1)(a) (1972)⁷ is the gold standard for high-quality research in that its requirements for multiple site randomized controlled trials across heterogeneous populations provides the highest degree of certainty that the demonstrated positive effects of a program tested in this manner are caused by the program and not by extraneous variables.

Because the number of intervention programs meeting Mississippi’s “evidence-based” standard is limited, it is useful to also identify intervention programs falling short of this standard but supported by research demonstrating sufficient causal inference to justify consideration for public investment. Toward this end, legislative staff identified the Maryland Scientific Methods (MSM) scale as specified by Farrington et al.,⁸ as a useful tool in further defining high-quality research. The MSM scale classifies research according to a five-level ordinal scale, according to which 1 is least rigorous and 5 the most. On this scale, levels 1 and 2 are not considered to support inferences about program effectiveness and do not therefore qualify as “high-quality research.” Because levels 3 through 5 support such inferences with increasing certainty by ruling out certain threats to them, they do qualify as “high-quality research.” Mississippi’s legally defined standard for an evidence-based program is even stronger than MSM level 5, and correspondingly supports inferences about program effectiveness with greater certainty. A brief discussion of each level of the MSM scale follows.

MSM Levels Falling below the Threshold of High-Quality Research

MSM level 1 involves simple descriptive association between an intervention and an outcome—for instance, a correlation between individuals with exposure to a drug and improved health outcomes. This sort of design fails to establish that the drug caused the improved health outcome, by failing to rule out many threats to causal inference, such as

⁷ MISS. CODE ANN. Section 27-103-159(1)(a) (1972) defines an evidence-based program as “a program or practice that has had multiple site randomized controlled trials across heterogeneous populations demonstrating that the program or practice is effective for the population.”

⁸ Farrington, David P., Denise C. Gottfredson, Lawrence W. Sherman, and Brandon C. Welsh. 2002. “The Maryland Scientific Methods Scale,” pp. 13–21 in *Evidence-Based Crime Prevention*, Lawrence W. Sherman, David P. Farrington, Brandon C. Welsh, and Doris L. MacKenzie (eds.). New York, NY: Routledge.

the possibility that the improved health outcome might be due to factors other than drug; e.g., socioeconomic status, exercise.

MSM level 2 adds a dimension of time to the above observed association, examining individual outcomes both before and after the exposure. For instance, at this level one might test individuals for health outcomes before and after exposure to a drug. This design at least has the potential to rule out reverse causation – e.g., that improved health outcomes caused drug exposure rather than vice versa. This might happen because people who take care of their health are more prone to take a variety of medication. A level 2 design still fails to eliminate so many threats to inference (i.e., that a variable other than the drug caused the positive results) as to be effectively uninterpretable.

MSM Levels Qualifying as High-Quality Research

MSM level 3 adds a comparison to a control group to the level 2 standard. In this sort of design, some individuals would be given a drug and tested for outcomes both before and after administration; other individuals, thought to be comparable, would be tested but not given the drug. This design eliminates threats to inference springing from common trends—perhaps the health outcome of interest naturally improves over time—but does not rule out inferential threats due to nonequivalence of the experimental and control groups on relevant characteristics.

MSM level 4 adds an attempt to ensure the equivalence of the experimental and control groups. At this level, the attempt is often by statistical methods. For instance, if one believes that age is relevant to the health outcome of interest, the groups can be mathematically adjusted to factor out the effects of age from the effects of the drug. If done well, designs at this level can rule out threats to inference springing from group nonequivalence—but it is impossible to know *a priori* that all such threats have been handled.

MSM level 5 attempts to ensure equivalence of the experimental and control groups by true random assignment of individuals to experimental or control conditions. Properly doing so removes all threats to inferential validity springing from group nonequivalence—though there are still some challenges to appropriate implementation and analysis that can be at least partially dealt with through the stronger Mississippi standard for evidence-based programs.

Appendix B: Type of Vocational Skill Training Offered, by Mississippi Adult Correctional Facility, and Description of Each Training Program, including Available Professional Certifications available at Some Facilities* upon Successful Course Completion

Vocational Skill Training Program	State Prisons			Regional Facilities														Private Prisons				
	Central MS Correctional Facility	MS State Penitentiary	South MS Correctional Institution	Alcorn County	Bolivar County	Carroll-Montgomery County	Chickasaw County	George-Greene County	Holmes-Humphreys County	Issaquena	Jefferson-Franklin County	Kemper-Neshoba County	Leake County	Marion-Walthall County	Stone County	Washington County	Winston-Choctaw County	Yazoo County	East Mississippi	Marshall County	Wilkinson County	
Auto/Automotive Body Repair		◆																				
Auto/Automotive Mechanic/Tech		◆	◆																			
Diesel Equipment Repair and Services		◆																				
Small Gas Engine Repair		◆				◆																
Electronic Communication Production		◆																				
Basic Electrical/Plumbing			◆											◆								
Plumbing and Pipefitting			◆												◆							
Heating, Ventilation, Air Conditioning and Refrigeration		◆						◆						◆								
Building Trades						◆		◆							◆							
Carpentry		◆			◆								◆									
Upholstery	◆																					
Welding		◆	◆						◆													
Barbering																					◆	
Cosmetology	◆																					
Culinary Arts		◆												◆							◆	
Facility Care Class																				◆		
Family and Consumer Science	◆																					
Business Technology	◆												◆									
Horticulture		◆		◆																		

*Mississippi's Adult Correctional Facilities are in the process of making professional certifications available for most of their vocational education programs; however, at the time of this report, these certifications were not available for every program at all facilities.

Source: Data provided by Mississippi's twenty-one adult correctional facilities

Auto/Automotive Body Repair

Auto/Automotive Body Repair prepares inmates for an entry-level position in the collision repair and refinishing trade. Upon completion of the program, inmates will be prepared for such beginning positions as body, frame, and refinish technicians. Instruction includes all phases necessary to teach collision repair, including glass replacement, welding, replacement of hardware and trim items, and cosmetic and structural repairs.

Professional Certification(s) Available at Some Facilities:

Automotive Technicians and Service Professionals (ASE) Certification

Auto/Automotive Mechanic/Tech

Auto Mechanics utilizes the Research Curriculum Unit (RCU) for Workforce Development developed by Mississippi State University. Students who successfully complete this program will be prepared to engage in the servicing and maintenance of all types of automobiles. Instruction includes training in safety, the use and care of tools, the diagnosis of malfunctions and repair of steering and suspension systems, the diagnosis and repair of malfunctions of electrical systems, and the diagnosis of the engine's performance. Instruction is given in the adjustment and repair of individual components and systems, such as radiators, transmissions, etc.

Professional Certification(s) Available at Some Facilities:

Automotive Technicians and Service Professionals (ASE) Certification

Diesel Equipment Repair and Services

Diesel Equipment Technology instructs inmates in competencies required to maintain and repair a variety of industrial diesel equipment, including agricultural tractors, commercial trucks, and construction equipment. The program includes instruction in inspection, repair, and maintenance of engines, power trains, hydraulic systems, and other components.

Professional Certification(s) Available at Some Facilities:

Automotive Technicians and Service Professionals (ASE) Certification

Small Gas Engine Repair

The Small Gas Engine Repair Program provides inmates with entry-level skills needed in the small engine and equipment repair industry. Instruction and training is provided in the areas of engine repair, diagnostic skills, cutting systems, chassis repair, electrical systems, and shop management skills.

Professional Certification(s) Available at Some Facilities:

Equipment and Engine Training Council (EETC) Engine Technician Certification

Electronic Communication Production

The Electronic Communication Production Program teaches inmates how to become a competent electronic technician. After completing the class inmates should be able to support electrical engineers and other engineer professionals in the design, development, and testing of electrical circuits, devices, and systems.

Professional Certification(s) Available at Some Facilities:

International Society of Certified Electronics Technician — Basic Electronics Technician Certification

Basic Electrical/Plumbing

The Electrical class provides classroom and shop experience that focus on the layout, assembly, installation, testing and maintenance of electrical systems. Instruction is provided on reading and interpreting electrical codes and industrial wiring. As a result of specialized classroom instruction and hands-on laboratory training, the inmate will be able to demonstrate the fundamentals of electricity, and accurately read residential and industrial blueprints. Inmates will also be able to wire and troubleshoot these systems.

Professional Certification(s) Available at Some Facilities:

National Center for Construction Education and Research (NCCER) Core Curriculum

National Center for Construction Education and Research (NCCER) Electrical I

National Center for Construction Education and Research (NCCER) Electrical II

Plumbing and Pipefitting

Through specialized classroom instruction and shop experiences, the Plumbing and Pipefitting Program teaches inmate the layout, assembly, installation, alteration, and repair of piping systems. Instruction includes all of the related fixtures and fittings in these structures. Inmates learn how to use and care for tools and equipment utilized in pipe cutting, bending, threading, welding, soldering, and brazing.

Professional Certification(s) Available at Some Facilities:

National Center for Construction Education and Research (NCCER) Core Curriculum

National Center for Construction Education and Research (NCCER)
Plumbing/Pipefitting I

National Center for Construction Education and Research (NCCER)
Plumbing/Pipefitting II

Heating, Ventilation, Air Conditioning, and Refrigeration

Heating, Ventilation, Air Conditioning, and Refrigeration prepares individuals to work in engineering departments or private firms installing, maintaining, and operating small or medium-size air conditioning, heating, and refrigeration systems.

Professional Certification(s) Available at Some Facilities:

National Center for Construction Education and Research (NCCER) Core Curriculum

National Center for Construction Education and Research (NCCER) HVAC I

National Center for Construction Education and Research (NCCER) HVAC II

National Center for Construction Education and Research (NCCER) HVAC III

North Carolina Board of Refrigeration Environmental Protection Agency (EPA) Certification

Building Trades

The Building Trades Program introduces inmates to all major aspects of construction site safety and teaches inmates how to use power tools, hand tools, scaffolds, and ladders. The program also teaches inmates personal protection against hazardous waste, mold, and lead, and how to identify unsafe working conditions.

Professional Certification(s) Available at Some Facilities:

None

Carpentry

Carpentry prepares inmates for entry-level work in residential carpentry trade. The program offers learning experiences in blueprint reading, estimating, building, installing, and repairing instructional units.

Professional Certification(s) Available at Some Facilities:

National Center for Construction Education and Research (NCCER) Core Curriculum

National Center for Construction Education and Research (NCCER) Carpentry I

National Center for Construction Education and Research (NCCER) Carpentry II

Upholstery

The Upholstery Program includes repairing and covering furniture, automobile seats, and boat seats in order to prepare inmates for work in sewing factories, furniture manufacturing plants, upholstery shops, or for beginning an independent entrepreneurial business of their own.

Professional Certification(s) Available at Some Facilities:

Career Readiness Certification, CRC

Welding

The Welding Program provides hands-on training that teaches the principles of arc and oxyacetylene welding, flame cutting, and brazing with emphasis on mastering basic welding techniques.

Professional Certification(s) Available at Some Facilities:

National Center for Construction Education and Research (NCCER) Core Curriculum

National Center for Construction Education and Research (NCCER) Welding I

National Center for Construction Education and Research (NCCER) Welding II

Barbering

The Barbering Program includes instruction on the latest trends in men's hairdressing and how these trends can be adapted to suit different hair textures and customers. The class includes an introduction of professional salon tools and their uses, hair analysis and consultation with clients, a variety of clipper techniques, and blending of the hair. Inmates practice on live models throughout the course.

Professional Certification(s) Available at Some Facilities:

State of Mississippi Barbering Board Certification

Cosmetology

The Cosmetology Program teaches the chemical makeup of products used and the effect they can have on hair. In the program, inmates learn how to style hair, create nail art, apply makeup, and effectively give cosmetology advice to their clients.

Professional Certification(s) Available at Some Facilities:

State of Mississippi Cosmetology Board Certification

Culinary Arts

The Culinary Arts Program provides inmates with the basic food preparation and sanitation skills necessary to be employed in the food service industry. Some facilities offer a ServSafe Management Certificate to inmates interested in culinary arts. ServSafe is designed to certify students in safe handling and preparation of food in a managerial position.

Professional Certification(s) Available at Some Facilities:

ServSafe

Facility Care Class

The Facility Care Class Program teaches inmates janitorial skills, such as waxing floors, stripping floors, painting, and creating signs.

Professional Certification(s) Available at Some Facilities:

None

Family and Consumer Science

The Family and Consumer Science Program is similar to a home economics class. Curriculum components include, but are not limited to, cooking, sewing, value clarification, parenting skills, communicable disease awareness, nutrition, money management, and other general household duties.

Professional Certification(s) Available at Some Facilities:

Career Readiness Certification, CRC

ServSafe

Business Technology

The Business Technology Program is designed to help inmates develop a mastery of computer application skills, through classroom instruction and hands-on training, which can be quickly converted to entry-level jobs in the information-processing field.

Professional Certification(s) Available at Some Facilities:

Microsoft Office Certifications

Horticulture

Horticulture introduces inmates to the principles and practices in the development, productions, and use of fruit, vegetables, greenhouse, turf, nursery, floral, and landscape. The program includes the following elements: the classification structure, growth and development, and environmental influences on horticulture plants; horticulture technology; and introduction to the horticulture industries.

Professional Certification(s) Available at Some Facilities:

Career Readiness Certification, CRC

Appendix C: Description of Prison-based Intervention Programs Offered by One or More of Mississippi's Adult Correctional Facilities as of November 30, 2016, Categorized by Quality of the Research Supporting the Program

Programs Supported by High-Quality Research

(Note: None of these programs have been audited by an external party to ensure that they are being implemented in accordance with the program design specified in the research.)

Programs Meeting Definition of "Evidence-based" in MISS. CODE ANN. Section 27-103-159

Therapeutic Communities for Chemically Dependent Offenders (Incarceration-based Practice)

Therapeutic Communities is a separate unit within the Mississippi State Penitentiary that is dedicated to long-term, full-time alcohol and drug abuse treatment therapy for offenders with a history of abuse and/or addiction to alcohol and other drugs. The programs offered in Therapeutic Community are based on the philosophy that addiction is a multifaceted disease that results in severe family, vocational, social, legal, and spiritual dysfunction, and that has hindered the addicted person's ability to function responsibly in society. Offenders are provided twenty hours per week of educational instruction from materials obtained from an evidence-based curriculum in a classroom setting. A twelve-week Basic Alcohol and Drug Education program is also offered to eligible offenders housed in high-risk, lockdown, and protective custody units.

Programs Meeting Criteria for Levels 3, 4, or 5 of the Maryland Scientific Methods Scale

Vocational Education in Prison

Prison-based Vocational Education programs teach inmate a specific trade, occupation, or vocation; e.g., auto repair, building maintenance, welding. The primary goal of vocational education is to help inmates develop marketable job skills that can help them to gain employment upon release into the community. For a list of all vocational education programs offered by Mississippi's adult correctional facilities, see Appendix B on page 15.

Correctional Education in Prison

Basic Education is an academic instructional program for those adult inmates with a grade level of 0 to 12.9. After pretesting, students enter the program at the level prescribed by test results. The goal is for inmates to advance academically through each level [Literacy, Adult Basic Education (ABE), and General Education

Development (GED)] and obtain a general equivalency diploma upon completion of all levels of the program.

Post-Secondary Education is offered to inmates at the Mississippi State Penitentiary and Central Mississippi Correctional Facility through the Mississippi Humanities Council's Prison-to-College Pipeline program. The program is a college-level course of studies for inmates who hold high school diplomas or GEDs. Inmates who participate in the program have the opportunity to earn college credit.

Correctional Industries in Prison (MPIC)

Mississippi Prison Industries Corporation (MPIC) is a nonprofit, self-funded corporation established by the Mississippi Legislature. It provides inmates with opportunities to obtain skills and work experiences in the following areas to support economic self-sufficiency upon release: printing, textiles, bedding, metal fabrication, wood working, office furniture, cement products, signage, embroidery, parks and recreational products, security products, and service work for the private sector.

Employment and Job Assistance Training during Incarceration (Pre-Release)

The primary purpose of MDOC's Pre-Release Program is to prepare inmate for a successful reentry into society upon their release from prison. The program's services and activities are designed to focus on improving the inmate's employability, social, and human relations skills in order to facilitate a successful reintegration from the state's tax roll to an employer's payroll. It is a transition program that covers job readiness, community resources, and life management skills. The program provides job assistance services to the inmates via counseling, job referrals, job development, job interviews, and follow-up.

Thinking for a Change (Cognitive Behavioral Therapy)

Thinking for a Change is a cognitive-behavioral based program that focuses on changing the criminogenic thinking of inmates. The program includes cognitive restructuring, social skills development, and the development of problem-solving skills. The class addresses specific thoughts, attitudes, and beliefs typically held by inmates who have antisocial behaviors.

Programs Not Known to be Supported by High-Quality Research

Alcohol and Drug Abuse Treatment

Various Alcohol and Drug Abuse Treatment Programs

Alcohol and drug abuse treatment programs in Mississippi's adult correctional facilities use workbook-driven, teacher-guided substance abuse education curriculums. The goal of these programs is to ensure that inmates reenter society understanding the dangers of substance abuse and the implications of their actions. Appendix D on page 26 lists the alcohol and drug abuse treatment programs not supported by high-quality research offered, by facility.

Cognitive Behavioral Skills Training

Moral Reconciliation Therapy

Moral Reconciliation Therapy is a systematic, step-by-step program that meets weekly. Inmates progress through the steps based on completion of tasks, assignments, and testimonies. The program is designed to address criminogenic factors and reeducate inmates socially, morally, and behaviorally to instill goals and values. Moral reconciliation therapy challenges faulty thought processes that could lead participants to future criminal involvement.

Pathways to Change

The Pathways to Change Program engages inmates in cognitive skills training that teaches them how to restructure their behavior. The goal of the program is to change an inmate's way of thinking and to apply that change to the inmate's actions.

Anger Management

The Anger Management Program helps inmates recognize their feelings of anger, learn the causes of the anger, and how to deal with it in a responsible way.

Challenge

The Challenge Program addresses and improves poor communication skills, errors in thinking, poor problem-solving, limited reasoning abilities, tendencies to act on impulse/poor self-control, inability to manage emotions, and lack of awareness regarding how one's behavior affects the family, community, and society. The program focuses on assisting high-risk inmates in living a life free of criminal activity, violence, and drug use and emphasizes the importance of building a healthy support system.

Cognitive Skills Training

Cognitive Skills Training uses a combination of approaches to increase inmates' awareness of themselves and others by integrating cognitive restructuring, social skills, and problem-solving. Inmates are taught an introspective process for examining their ways of thinking and their feelings, beliefs, and attitudes. Social skills training is provided as an alternative to antisocial behaviors. Skills learned throughout the program are used to develop problem-solving abilities necessary to deal with daily life.

Character Development

The Character Development Program fosters the growth of core values that nurture ethical, social-emotional, life skills, and academic development in prison and communities. The goal is to prepare inmates for reentry into the community.

Thinking for Good

Thinking for Good is a cognitive behavioral program that confronts the inmate's thinking patterns, irrational beliefs, and inappropriate behavior. The program specifically focuses on the inmate's thoughts and behavior as well as typical criminal thinking such as the perception that everyone lies, cheats, and steals. The course

targets resistant inmate populations in groups. The program prepares the most resistant inmates for treatment. Typically, an inmate would participate in this program before participating in a more long-term program, such as Moral Reconciliation Therapy.

Stress Management

The Stress Management Program helps inmates develop healthy thinking patterns and learn to better themselves. The goal is to help them conquer negative thoughts, improve self-esteem, and accept themselves.

Life Skills

Basic Computer

The Basic Computer Program is designed to provide inmates with basic skills on the use and function of computers. The goal is to assist inmates with gaining employable and marketable skills to enhance their abilities of being job ready when they reenter the community.

Employment Skills

The Employment Skills Program prepares inmates for the real world by teaching them how to prepare résumés, register to vote, fill out job applications, and apply for employment upon release.

Music/Art

The music appreciation component of this program was developed to give inmates the chance to develop both their musical knowledge and skills. The program consists of weekly music theory lessons and hands-on experience playing the guitar, bass, and piano. The arts and crafts component of the program was developed to give inmates a positive outlet for artistic creativity in a cooperative learning environment.

Inside Out Dad

Inside Out Dad was developed to help incarcerated fathers become better dads while on the inside and help inmates who will be released continue to grow as dads once they are on the outside. The goal of the program is to prepare inmates to be productive fathers upon release.

Workforce Readiness

The Workforce Readiness Program prepares inmates for entering the workforce upon release from custody.

Financial Peace University

The Financial Peace University is a financial literacy class that covers such topics as saving and investing, credit and debt, insurance, financial responsibility, and money management.

Mississippi Prison Writes

The Mississippi Prison Writes Program is an introductory course in writing poetry, fiction, and creative nonfiction. The goal of the program is to improve language and writing skills of inmates enrolled in the program.

Multi-Purpose Programs

Managing Co-Occurring Disorders

The Managing Co-Occurring Disorders Program offers classes that focus on life skills, substance use disorders, and personal values. The Life Skills component of the program is an eight to twelve-week class that discusses a variety of topics pertaining to relationship building, physical health, emotional health, and identifying interests and activities. The Substance Use Disorders class is an eight to twelve-week class that discusses substance abuse and mental health. The class explains the effects of substance and alcohol abuse on one's health, school, finances, job, family, and future. The program also offers an eight to twelve-week class that focuses on personal beliefs that people have and how values are reflected in their daily choices. Honesty, acceptance, caring, and accountability are highlighted.

Recidivism Reduction Program

On July 1, 2016, MDOC began offering a new Recidivism Reduction Program at South Mississippi Correctional Institution. MDOC created this program in response to a mandate in H.B. 906 (2015 Regular Session) to eliminate, by January 1, 2017, the Department's Regimented Inmate Discipline (RID) program, a type of "boot camp" program found by high-quality research to be ineffective in reducing recidivism. H.B. 906 also amended MISS. CODE ANN. Section 99-15-26 (1972) to allow MDOC to replace its RID program with "an effective evidence-based program or a properly controlled pilot study designed to contribute to the evidence-based research literature on programs targeted at reducing recidivism." The drafting and passage of H.B. 906 and subsequent creation of the Recidivism Reduction Program was the direct result of previous Results First inventory work at the Mississippi Department of Corrections that revealed the ineffectiveness of prison-based boot camp programs, such as the RID program.

MDOC's Recidivism Reduction Program includes the following five components designed to rehabilitate the inmate: academic education, vocational education, cognitive behavioral therapy (mental and social), alcohol and drug abuse treatment, and pre-employment training. Each component is implemented in 90-minute blocks daily. The duration of the Recidivism Reduction Program is approximately six months.

Religious Programs

Religious Study

Religious study includes Bible study, discipleship, and worship services for inmates. The goal of the Religious Study Program is to encourage inmates to become more disciplined in their daily lives by gaining knowledge of the scripture.

Faith-based Initiative

The Faith-based Initiative Program provides inmates the opportunity to earn an associate's or bachelor's degree in Christian Ministry.

Appendix D: Prison-based Alcohol and Drug Abuse Treatment Programs with No Known High-Quality Research Showing Their Effectiveness in Reducing Recidivism, by Mississippi Adult Correctional Facility

Prison-Based Alcohol and Drug Abuse Treatment Programs	State Prisons			Regional Facilities														Private Prisons			
	Central MS Correctional Facility	MS State Penitentiary	South MS Correctional Institution	Alcorn County	Bolivar County	Carroll-Montgomery County	Chickasaw County	George-Greene County	Holmes-Humphreys County	Issaquena County	Jefferson-Franklin County	Kemper-Neshoba County	Leake County	Marion-Walthall County	Stone County	Washington County	Winston-Choctaw County	Yazoo County	East Mississippi	Marshall County	Wilkinson County
Living in Balance and a New Direction	◆		◆																		
Unknown Program Name				◆				◆	◆							◆					◆
The Matrix Model					◆																
12-Step Program					◆					◆											
Celebrate Recovery						◆											◆				
Substance Abuse and Detox							◆														
Addictions Counseling							◆														
12-Steps for Overcoming Chemical Dependency											◆										
Conquering Chemical Dependency											◆				◆						
Christians Against Substance Abuse												◆									
First Steps to a Christ Centered 12-Step Process														◆							
Residential Drug Abuse Program																		◆	◆		
Choice and Change																		◆			
Nonresidential Drug Abuse Program																			◆		

Source: Data provided by Mississippi's twenty-one adult correctional facilities

Appendix E: Technical Discussion of the Method Used to Calculate the Program Effect Size Used to Rank the Cost-Effectiveness of Intervention Programs Shown to Be Effective in the Results First Clearinghouse Database

This appendix discusses the method used by legislative staff to calculate the program effect sizes reported in Exhibit 3 on page 9 of this report.

Calculation of Program Effect Size

For this analysis, a program's cost-effectiveness score is defined as its effect size divided by the direct cost of a program participant. Because this calculation yields a very small decimal value, e.g., ".0000xx," legislative staff multiplied scores by 100,000 to make their relative size easier to comprehend. The purpose of calculating a cost-effectiveness score is to rank programs. The higher a program's cost-effectiveness score, the greater a reduction in recidivism the program is expected to produce per dollar spent on it. Assuming the accuracy of the unit cost and effect size components, this score has ratio properties; that is, a program with a cost-effectiveness score of 24 achieves four times the reduction in recidivism per dollar spent as a program with a cost-effectiveness score of 6. While the effect sizes used to create the rankings were derived from published research reviewed by the Washington State Institute for Public Policy (WSIPP) and vetted for methodological rigor, any inaccuracies in the self-reported cost per participant data could affect the rankings produced by this method.

The program effect size column of Exhibit 3 contains Cohen's *d* for each program; i.e. the difference in mean recidivism rates for inmates in the program, as compared to control group inmates, divided by the pooled standard deviation for both groups. In this context, an effect size of 0.2 is conventionally considered "small," one of 0.5 is considered "medium," and one of 0.8 is considered "large." As discussed on page 8, legislative staff derived effect sizes from the meta-analyses for adult criminal justice intervention programs presented by WSIPP. In the context of this analysis, the effect sizes are, strictly speaking, all negative, as they represent reductions in recidivism; however, for purposes of this table, all effect sizes have been treated as positive, so that larger numbers indicate better results.

Test of Rank Order Validity

Legislative staff tested the validity of its ranking method by comparing its ranking results to the ranking results reported by WSIPP. On the sample of WSIPP data regarding adult prison-based intervention programs, the cost-effectiveness score calculated using the method presented in this report has a Kendall's tau of 0.88 with benefit-cost ratio as calculated by the Results First benefit-cost model. The two evaluative methods have a Spearman's rank-order correlation of 0.97. Both Kendall's tau and Spearman's rank-order correlation are measures of similarity of ranking methods; each has a maximum value of 1.0. In other words, the cost-effectiveness score calculated by the model used in this report delivers extraordinarily similar results to the Results First benefit-cost model in terms of ranking by benefit-cost ratio, with many fewer data points and no strictly statistical uncertainty. The Cost-Effectiveness Score reported in Exhibit 3 makes no assumptions not present in the Results First benefit-cost model—the data necessary to calculate it are a proper subset of the data necessary to run the model—and thus it is less ambitious, but more reliable, than the other method. Given that the data on recidivism rates necessary to run the Results First benefit-cost model were not available for the period of this report, the Cost-Effectiveness Score was deemed an informative substitute ranking method given the available information.

Appendix F: High-Quality Research-based Programs that Could Replace Mississippi’s Prison-based Adult Correctional Intervention Programs without Known High-Quality Research

Alcohol and Drug Abuse Treatment Programs

Amity In-Prison Therapeutic Community

The Amity In-Prison Therapeutic Community (TC), is a nine to twelve-month program, which provides intensive treatment to male inmates with substance abuse problems. The program also offers community-based aftercare services.

<https://whatworks.csgjusticecenter.org/program/amity-in-prison-therapeutic-community>

<https://www.crimesolutions.gov/ProgramDetails.aspx?ID=54>

Integrity Prison Therapeutic Community (TC) Program

The Integrity Prison Program incorporates two gender-responsive curricula, Helping Women Recover and Beyond Trauma, into its treatment approach. Both curricula incorporate cognitive-behavioral methods, as well as experiential therapies, such as art therapy. The program provides participants with approximately six months of in-prison treatment. Voluntary aftercare is available to graduates of the program, providing up to six months of additional treatment—either residential or outpatient—in the community.

<https://whatworks.csgjusticecenter.org/program/integrity-prison-therapeutic-community-tc-program>

KEY/Crest Substance Abuse Programs (DE)

KEY/Crest is a corrections and community-based multistage substance abuse treatment program for drug-involved offenders. Each stage in the continuum corresponds to the offender’s changing correctional status: incarceration, work release, and parole or community supervision.

<https://www.crimesolutions.gov/ProgramDetails.aspx?ID=55>

Offender Substance Abuse Pre-Release Program (OSAPP)

The Offender Substance Abuse Pre-Release Program is an in-prison program designed for those with moderate to severe substance abuse problems.

<https://whatworks.csgjusticecenter.org/program/offender-substance-abuse-pre-release-program-osapp>

Substance Abuse Treatment Tier Programs (Connecticut)	
	The Substance Abuse Treatment Tier Programs consist of four tiers, or levels, of treatment: Tier One involves one week of drug and alcohol education; Tier Two consists of thirty outpatient group sessions spread over ten weeks; Tier Three is a day treatment program offering four sessions per week for four months; and Tier Four, which is based on a therapeutic community model, consists of six months of full-time, daily treatment in a separate housing unit.
	https://whatworks.csgjusticecenter.org/program/connecticut-department-of-correction-substance-abuse-treatment-tier-programs
Cognitive Behavioral Treatment/Therapy Programs	
Thinking for a Change	
	Thinking for a Change is an integrated cognitive-behavioral change program that focuses on changing the criminogenic thinking of offenders. The program includes cognitive restructuring, social skills development, and the development of problem-solving skills. The class addresses specific thoughts, attitudes, and beliefs typically held by offenders who have antisocial behaviors.
	https://www.crimesolutions.gov/ProgramDetails.aspx?ID=242
EQUIP Program (Psycho-Educational Component)	
	The EQUIP Program is a multicomponent cognitive-behavioral program. According to the research, the program only reduces recidivism for female offenders.
	https://whatworks.csgjusticecenter.org/program/psycho-educational-component-of-equip-program
Enhanced Thinking Skills	
	Enhanced Thinking Skills is a cognitive behavioral program. Each course consists of twenty two-hour sessions held over the course of four to six weeks. The program targets participants based on several suitability criteria, including their risk assessment (participants should be medium-high risk or higher), their needs assessment, and other factors that may reflect their responsiveness to and readiness for treatment, including intellectual ability, mental and physical health, and motivation to change their behavior.
	https://whatworks.csgjusticecenter.org/program/enhanced-thinking-skills
Employment and Job Training Assistance Programs	
EMPLOY (MN)	
	EMPLOY helps inmates, secure, and retain employment after their release from prison. Participation in the program is voluntary; in order to be eligible, participants must be within the last five years of their sentence and have at least six months of experience in the state's prison industry program.
	https://whatworks.csgjusticecenter.org/program/employ-minnesota

Project Rio	
	Project Rio is a voluntary reentry program that was implemented to reduce recidivism and enhance the employment prospects of formerly incarcerated persons as they reintegrate into their communities. To improve post-release employment outcomes, clients receive program services in two stages: while incarcerated in a correctional facility and in the community after release. Within the correctional facility, counselors help program participants to obtain the documents often necessary to gain employment (e.g., Social Security cards, birth certificates), as well as to develop a post-release “Employability Developmental Plan.” After clients are released, staff provide a number of employment services, including job search preparation, job search assistance, and referrals to community services (e.g., welfare services, stipends for local transportation).
	https://whatworks.csgjusticecenter.org/program/project-rio
Life Skills Programs	
Creating Lasting Family Connections Fatherhood Program: Family Reintegration	
	The Creating Lasting Family Connections Fatherhood Program: Family Reintegration (CLFCFP) is designed for fathers, men who are mentors, and men who are planning to be fathers. The program was developed to help individuals who are experiencing or are at risk for family dissonance resulting from the individual’s physical and/or emotional separation.
	http://legacy.nreppadmin.net/ViewIntervention.aspx?id=324
Lifestyle Change Programs	
	The Lifestyle Change Program consists of three phases: a ten-week psychoeducational class called Lifestyle Issues (Phase I); a series of three classes, referred to as Advanced Groups, twenty weeks each (Phase II); and a relapse prevention group that meets for forty weeks (Phase III). In all phases, classes are taught by a single psychologist, and sessions lasting one to two hours are held once per week in groups of twelve to twenty-four inmates. Lectures, discussions, and videos are used to deliver the material. The only requirement for participation is an interest in the program.
	https://whatworks.csgjusticecenter.org/program/lifestyle-change-program

Multi-Purpose Programs

Mental Health Services Continuum Program

The Mental Health Services Continuum Program (MHSCP) consists of multiple components designed to increase continuity of mental health care during reentry into the community from prison. MHSCP consists of two main elements: the Transitional Case Management Program, in which social workers conduct face-to-face assessments of eligible inmates' mental health needs within ninety days of release on parole, and post-release attendance at the Parole Outpatient Clinic, open to all parolees with a mental health diagnosis, but to which MHSCP participants are specifically referred through the pre-release mental health needs assessment.

<https://whatworks.csgjusticecenter.org/program/mental-health-services-continuum-program>

Personal Reflections

Personal Reflections is a modified therapeutic community (TC) for those offenders with mental illness and substance abuse disorders that is based on a cognitive-behavioral curriculum. Those residing in the TC usually participate in formal program activities five days a week for four to five hours each day; the remainder of their time is spent working in the prison. The length of the program is approximately twelve months, although this can vary by individual.

<https://whatworks.csgjusticecenter.org/program/personal-reflections>

Source: Legislative staff analysis of information presented in the Results First Clearinghouse and the Washington State Institute for Public Policy's Benefit-Cost Results.

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