



## **WHAT WORKS DURING ECONOMIC RECESSIONS AND RECOVERIES? EVIDENCE FROM THE PATHWAYS CLEARINGHOUSE**

The COVID-19 pandemic changed employment in dramatic ways worldwide and continues to have lasting impacts. In the United States, at the start of the pandemic, the unemployment rate more than tripled, increasing from 3.5 to 14.8 percent over only two months (U.S. Bureau of Labor Statistics 2021a). Although unemployment rates have decreased from those historic highs, as of September 2021, the unemployment rate remained around 4.8 percent. Moreover, in the same month, unemployment was much higher for several groups—for example, 8 percent for Black men and 12 percent for youth. Much research suggests that even short periods of unemployment can have long-term negative effects on a person's earnings and employment (Filomena 2021).

Program administrators and managers are considering ways to adapt their programs to the current economic reality. Evidence on programs that have effectively improved employment and earnings for people with low incomes during past recessions and recoveries can help policymakers and practitioners target their resources as they seek to improve employment in the wake of the pandemic and beyond.

To provide support for this decision making, the Pathways Clearinghouse turned to the research literature. First, we conducted a targeted literature scan for articles that considered why and how interventions might be effective during recessions and recoveries. Next, we used rigorous quantitative methods known as meta-analysis and meta-regression to look across interventions and studies reviewed for the Pathways Clearinghouse systematic review in order to provide new evidence about what works to improve employment outcomes for people with low incomes during recessions and recoveries.

### **What is the Pathways Clearinghouse?**

People who run programs for job seekers with low incomes need evidence on the interventions and strategies that can help their clients succeed in the labor market. Others need this evidence, too—including those making decisions on how to best allocate public resources and those seeking to expand the existing knowledge base.

To provide reliable, accessible information about what works to help job seekers find and keep gainful employment, the Office of Planning, Research & Evaluation at the Administration for Children & Families launched the Pathways Clearinghouse. The Pathways Clearinghouse is built on a foundation of rigor, credibility, and accessibility.

The Pathways Clearinghouse identifies interventions that aim to improve employment outcomes, reduce employment challenges, and support self-sufficiency for people with low incomes. The Pathways Clearinghouse systematically evaluates and summarizes the evidence of their effectiveness.

### **How can decision makers use this synthesis report?**

Results can help stakeholders to plan, fund, and implement programs aiming to improve employment, earnings, and related outcomes for people with low incomes. Results can also help practitioners, policymakers, and researchers more broadly understand patterns in effectiveness across economic conditions.

## Research questions

1. Do interventions designed to improve employment outcomes for people with low incomes show evidence of effectiveness during recessions and recoveries?
2. What specific types of interventions work to improve employment outcomes for people with low incomes during recessions and recoveries? Are specific types of interventions more or less effective during recessions or recoveries?
3. How should providers consider altering operations in response to economic conditions?

## Key Takeaways

- **On average, interventions improve employment outcomes among people with low incomes during recessions and recoveries.**
  - This report considered 30 interventions implemented during recessions. Of these 30 individual interventions, 8 had favorable effects on outcomes including employment, earnings, education and training, and long-term public benefit receipt. When we averaged across all 30, average effects were also favorable.<sup>1</sup>
  - This report considered 95 interventions implemented during recoveries. Twenty-two had favorable effects. When we averaged across all 95, average effects were also favorable.
- **Specific types of interventions were especially effective during recessions and recoveries.**
  - During recessions, interventions that primarily focused on case management or other supports, employment services, and work and work-based learning had evidence of improving outcomes. Interventions focused on case management or other supports and employment services show the largest effects during recessions as compared with other types of interventions implemented during recessions.
  - During recessions, case management interventions tended to have larger effects than during stable economic conditions, and education and training interventions tended to have smaller effects than during stable economic conditions.
  - During recoveries, interventions that primarily focused on education and training, work and work-based learning, employment services, case management or other supports, and incentives and sanctions had evidence of improving outcomes. Interventions focused on education and training and work and work-based learning showed the largest effects during recoveries as compared with other types of interventions implemented during recoveries.
  - During recoveries, case management interventions had larger average effects than case management interventions implemented during stable economic conditions.
- **Providers can consider changing the types of interventions or services they emphasize based on economic conditions.**
  - During recessions, when unemployment is rising, practitioners and policymakers should consider placing more emphasis on case management or other supports, and less emphasis on education and training.
  - During recoveries, when unemployment is falling, practitioners and policymakers should consider targeting resources toward interventions focused on education and training, work and work-based learning, employment services, incentives and sanctions, and case management or other supports.

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<sup>1</sup> The study team combined effect sizes for impacts on earnings, employment, public benefit receipt, and education and training to estimate average effect sizes.

## The Pathways Clearinghouse systematic review

The Pathways Clearinghouse is powered by a systematic review of relevant research. Systematic reviews make it easier to learn from and apply research findings by identifying the most rigorous and relevant evidence and summarizing it in a variety of ways. The goal of a systematic review is to take stock of all existing evidence on a particular question or topic by (1) adopting a transparent, comprehensive search strategy to identify studies and (2) applying predetermined criteria to rate the quality of the evidence presented in each study and to characterize findings in a consistent way. Trained reviewers identify, categorize, and assess studies and summarize their findings in order to convey information concisely to diverse audiences. The Pathways Clearinghouse includes studies that:

1. Quantitatively estimated an intervention's impacts by comparing outcomes observed among a group of individuals who received an offer of intervention services—the intervention group—and a group that did not—the comparison group.
2. Examined the effects of an intervention for people ages 16 and older with low incomes.
3. Estimated the effects of an employment or training intervention, implemented in the United States or Canada, on outcomes related to employment or earnings.
4. Were published or made publicly available in 1990 through 2019 and in English.\*

In the Clearinghouse's first searches for relevant research, which took place in fall 2019 and summer 2020, the review team gathered more than 8,000 manuscripts. Trained staff screened the manuscripts to identify eligible studies. In total, 360 manuscripts contained research eligible for review. Those manuscripts included 315 studies. (Multiple manuscripts might describe results from the same study, such as with an interim and final report on the same evaluation.) Trained reviewers then assessed the studies by using predetermined criteria, with the goal of determining the extent to which findings from the studies could be considered to reliably represent the impact of the intervention.\*\* Of the 315 studies, reviewers assigned 195 a quality rating of high or moderate, meaning that we can be at least somewhat confident in the study findings. The high- and moderate-rated studies represented a total of 147 unique interventions.

\* Although this report summarizes studies available through 2019, the Pathways Clearinghouse continues to review new studies as they become available.

\*\* For more details on the criteria used to assess outcomes, studies, and interventions, see the Pathways Clearinghouse protocol (Rotz et al. 2020). For more details on the outcomes, studies, and interventions catalogued by the Pathways Clearinghouse, see Rotz and Langan (2021).

## Methods to determine what works

We used two approaches to address our research questions.

### Literature scan

First, we conducted a targeted review for past research that provided theoretical or empirical insights into how or why effects of employment and training programs might differ depending on the economic context (recession, recovery, or stable economic conditions). We identified a small literature on this topic, used a short rubric to organize information from each relevant resource, and looked across the rubrics to identify themes. Appendix A gives further details on the methods we used to conduct the literature scan.

## Meta-analysis and meta-regression using the Pathways Clearinghouse systematic review

Next, we used rigorous quantitative methods known as meta-analysis and meta-regression to look across interventions and studies reviewed for the Pathways Clearinghouse systematic review. Meta-analysis is a tool for pulling together findings from multiple analyses to learn more from past studies. It produces average estimates of impacts, with more weight given to more precise estimates. Some studies will overestimate effects, and others will underestimate effects. Averaging findings across studies produces a more reliable estimate of the effect than that of any individual study. Meta-regression is a tool used in meta-analysis to examine how different factors are related to intervention impacts, while accounting for other factors (Borenstein et al. 2009).<sup>2</sup> These techniques enabled us to identify types of interventions with the strongest favorable effects on outcomes during different economic periods. For example, we compared the effects of interventions implemented during recessions and recoveries that provided similar services and served similar populations.

### What are effect sizes, and why do we use them?

Effect sizes make meta-analysis and meta-regression possible. The effect size serves as a standardized unit we can compare to other, similarly standardized units. For example, effect sizes enable us to compare an increase in employment to a decrease in public benefit receipt by putting the measures in comparable terms. For this analysis, the Pathways Clearinghouse used the measure of effect size known as Hedges' *g*, or the standardized mean difference (Hedges and Olkin 1985; see Appendix A for details). The effect size is larger both when an impact is larger and when the outcome examined is spread over a smaller range of values.

### Findings considered

The meta-analyses described in this report draw on 1,438 findings from 188 studies of 141 interventions. We only included findings that Pathways Clearinghouse reviewers determined to be of high or moderate quality (that is, the studies used methods that support the conclusion that the intervention itself—rather than an outside, confounding factor—caused the observed change in outcomes).

The Pathways Clearinghouse considers impacts on the following outcomes: short-term, long-term, and very long-term employment; short-term, long-term, and very long-term earnings; short-term, long-term, and very long-term public benefit receipt; and education and training. For this report, we do not consider short-term public benefit receipt; increased use of public benefits during recessions is expected and often part of program design. We omitted a handful of other observations because they lacked key information needed for the analysis (see Appendix A for details on construction of the analytic sample).

The Pathways Clearinghouse aims to explore interventions that help people become more economically self-sufficient; therefore, it considers decreases in public benefit receipt to be favorable. In contrast, increases in all other outcomes catalogued in the Pathways Clearinghouse are considered favorable. To make the effect sizes comparable, decreases in public benefit receipt are represented as positive effect sizes (and increases as negative effect sizes).

### Approach to identifying recessions, recoveries, and stable economic periods

There are many ways to define recessions, recoveries, or stable periods. Because the focus of this report is on employment and economic security of people with low incomes, we chose a definition based on changes in unemployment rates throughout each year. In addition, although some research considers only two types of economic conditions—recessions and periods that are not recessions—we chose to instead consider three types of economic conditions—recessions, recoveries, and more stable economic periods. We made this choice because the economic recovery from the pandemic is projected to span several years (Congressional Budget Office 2021).

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<sup>2</sup> Further details on the methods used in this report are available in Appendix A.



## Characterizing economic periods during study enrollment

We used seasonally adjusted national unemployment rates published by the U.S. Bureau of Labor Statistics (U.S. Bureau of Labor Statistics 2021b) to classify each year from 1980 to 2020 as a recession, recovery, or stable year (see box). Then, for each finding considered in this analysis, we used information collected by the Pathways Clearinghouse on timing of study enrollment to determine whether the study enrollment period included a recession year, a recovery year, or neither. The first two categories can overlap. That is, for some findings, the study enrollment period included both recession and recovery years. In these cases, we classified the study as having an enrollment period that included a recession year *and* as having an enrollment period that included a recovery year. We only classified findings as reflecting stable economic conditions if the enrollment period included exclusively stable years—that is, did not include a recession or a recovery year.

Our results provide information on how intervention or service effectiveness varies by the economic conditions when people are seeking services. The results also reflect differences in the characteristics of people who seek services across economic conditions. Thus, our findings should support decisions about how to target resources based on current economic conditions, given the most likely changes in service needs.

## Characterizing economic periods during which outcomes were measured

Economic conditions when intervention participants' outcomes are measured could also influence intervention effects. For this reason, we also classify findings by whether the outcome was measured during a recession, recovery, or a stable year. It is not uncommon for economic conditions during study enrollment to differ from economic conditions when outcomes are measured. Meta-regressions enable us to look at differences in effectiveness by economic conditions when participants enrolled—controlling for timing of outcome measurement. Results of meta-analyses do not include these controls. Throughout the paper, we discuss any meaningful differences between results that do and do not use controls.

Results based on the timing of outcome measurement are also valuable as they show how intervention effectiveness varies by the economic conditions when the outcomes are measured. We present these results in Appendix B and highlight any key differences in the report.

## Services considered

The Pathways Clearinghouse breaks down each intervention into its component services, and then assigns each intervention to exactly one primary service based on the primary strategy the intervention used for helping people with low incomes succeed in the labor market and obtain economic self-sufficiency. We further grouped interventions into six types based on their primary service (see box). These six categories reflect common theories of

### Defining economic recession, recovery, and stable years<sup>3</sup>

We classified each year in the following way:

**Recession year.** The national unemployment rate rose by 0.5 percentage points or more during the year. Recession years in this analysis included 1982, 1990, 1991, 2001, 2008, 2009, and 2020.

**Recovery year.** The national unemployment rate fell by 0.5 percentage points or more during the year. Recovery years in this analysis included 1983, 1984, 1987, 1993, 1994, 1997, 2010, 2011, 2013–2015, 2017, and 2019.

**Stable year.** The national unemployment rate was about the same at the beginning and end of the year. Stable years in this analysis included 1985, 1986, 1988, 1989, 1992, 1995, 1996, 1998–2000, 2002–2007, 2012, 2016, and 2018.

<sup>3</sup> The project team developed the 0.5 percentage point cut points based on the distribution of changes in national unemployment rates in the years considered for this study. The literature scan did not uncover alternative approaches to classifying years into economic conditions. Sensitivity checks using alternate cut points to define economic periods are available in Appendix C.

change for employment and training interventions. Creating these six groups enabled us to ensure enough data was available to draw meaningful conclusions about each group. To help understand what types of interventions show evidence of effectiveness in, we look at evidence from interventions using different types of primary services and then compared how these interventions performed across economic periods.

## Findings: Can interventions improve employment outcomes during recessions and recoveries?

We first look at prior research and our meta-analysis of interventions considered by the Pathways Clearinghouse to understand the effectiveness of interventions for improving employment and earnings outcomes of people with low incomes during recessions and recoveries. Findings should help practitioners and policymakers make decisions about how to best improve employment outcomes among people with low incomes during the recession and projected extended recovery from the COVID-19 pandemic (Congressional Budget Office 2021)—and future recessions and recoveries.

### Findings from the literature

Past research in this area has looked at how the effectiveness of interventions varies with changes in economic conditions. Most studies we reviewed found evidence of greater favorable effects of interventions during recessions as compared with other periods. Two meta-analyses of research on interventions to increase employment and earnings implemented in recent decades found that these interventions tended to be more effective during times of high unemployment (Kluve 2010; Card et al. 2018).<sup>4</sup> However, in one of these studies, this finding was not true for interventions focused specifically on younger workers (age 25 or less) (Kluve 2010). One meta-analysis (Card et al. 2018) and two studies of individual interventions implemented in European countries (Lechner and Wunsch 2009; Forslund et al. 2011) also found that interventions were particularly effective when participants enrolled during a recession and completed the program during a recovery or stable economic period.

In general, research in this area tends to focus on interventions implemented around the world and does not focus specifically on interventions that primarily serve people with low incomes. In contrast, one study of three training programs in the United States found more mixed evidence; this study focused on workers who were unemployed and had low incomes. Only one of the three programs examined had evidence of being more effective when participants enrolled during a recession. In addition, this finding was largely explained by the fact that participants who enrolled during a recession were more advantaged on observable characteristics—they were slightly older, more likely to be male, and had higher pre-training earnings—than those who enrolled during stable economic conditions (Heinrich and Mueser 2014).

## The six types of primary services

- **Case management or other supports** interventions focus on assessing clients' needs, linking clients to other available services, and providing other supports to overcome barriers, such as substance abuse counseling or classes to promote financial literacy.
- **Education and training** interventions focus on providing or supporting an individual through education and training programs.
- **Employment retention services** focus on helping employed people maintain their jobs and progress in their careers.
- **Employment services** help people prepare for, find, apply to, and obtain jobs.
- **Incentives and sanctions** interventions focus on providing, or taking away, cash or noncash benefits, such as public assistance benefits or funding for child care.
- **Work and work-based learning** interventions focus on providing clients with work and on-the-job learning opportunities.

<sup>4</sup> Kluve (2010) considered interventions that were active in the period between 1970 and 2004. Card et al. (2018) considered studies published since 1995.

## Why might interventions have different effects in recessions or recoveries?

There are many reasons why economic context might matter for intervention effectiveness. Past research suggests a few possibilities:

- Employers might be more selective during recessions, so programs that increase participants' qualifications might be more valuable to participants at such times, resulting in larger impacts (Card et al. 2018).
- It is common for interventions to lead to a short-term dip in employment relative to a comparison group while participants are busy with the intervention. This short-term dip might be smaller during recessions—when intervention participants might not have been able to work anyway. Thus, overall positive effects could be larger in recessions (Lechner and Wunsch 2009; Forslund et al. 2011; Heinrich and Mueser 2014).
- During recessions, a larger group of workers could be competing for the jobs that program participants typically apply for, making employment less likely than during stable conditions (Card et al. 2018); this dynamic could result in interventions being less effective during recessions than during stable conditions.
- If participants during recessions are different from those in recoveries or stable periods, intervention effects could be different (Heinrich and Mueser 2014; Lechner and Wunsch 2009; Kluve 2010; Card et al. 2018). During recessions, when many are unemployed, participants might be more highly qualified for employment or a better fit for the given intervention. For example, a sectoral training program might have more applicants than normal during a recession and admit only those with the greatest interest or background in the focal sector. Both dynamics could lead to bigger positive impacts during recessions (Lechner and Wunsch 2009; Kluve 2010). On the other hand, people with unstable employment might be the first to lose jobs during a recession. Interventions might then serve people with fewer formal qualifications than those they serve during stable economic conditions—leading to smaller impacts.

## Findings from the Pathways Clearinghouse meta-analysis

### On average, do interventions improve outcomes during recessions and recoveries?

We used meta-analysis to determine if interventions are effective in improving employment outcomes among people with low incomes during recessions and recoveries. To do this, we estimated the average effects of interventions in the Pathways Clearinghouse that enrolled participants during different economic conditions. When estimating average effect sizes, the study team combined effect sizes for impacts on earnings, employment, public benefit receipt, and education and training. Throughout this report, we convert select average effect sizes to equivalent changes in annual earnings in 2018 dollars.

This analysis included 30 interventions that enrolled participants during recessions. Of these 30 interventions, 8 (or 27 percent) had evidence of improving average outcomes, meaning they had average effects that were statistically significantly greater than zero (Figure 1). The analysis also

### What is statistical significance?

Pathways considers statistical significance to be support for the existence of an effect of an intervention. Pathways considers an effect estimate statistically significant if the *p*-value of a two-sided hypothesis test of whether the effect is equal to zero is less than 0.05. A *p*-value is the probability of observing an effect estimate as large or larger than the one observed, if there were no actual effect.

### What is a 95 percent confidence interval?

An effect size represents our best guess as to the impact of an intervention, but the true effect might be somewhat higher or lower. The 95 percent confidence interval shows a range of plausible values. We can say that we are 95 percent confident that a true effect size lies within this range.

considered 95 interventions that enrolled participants with low incomes during recoveries (Figure 1). Twenty-two of these 95 interventions (23 percent) had a statistically significant average effect. Finally, 33 interventions in the analysis enrolled participants during stable economic conditions. In some analyses, we use studies of these interventions as a point of comparison.

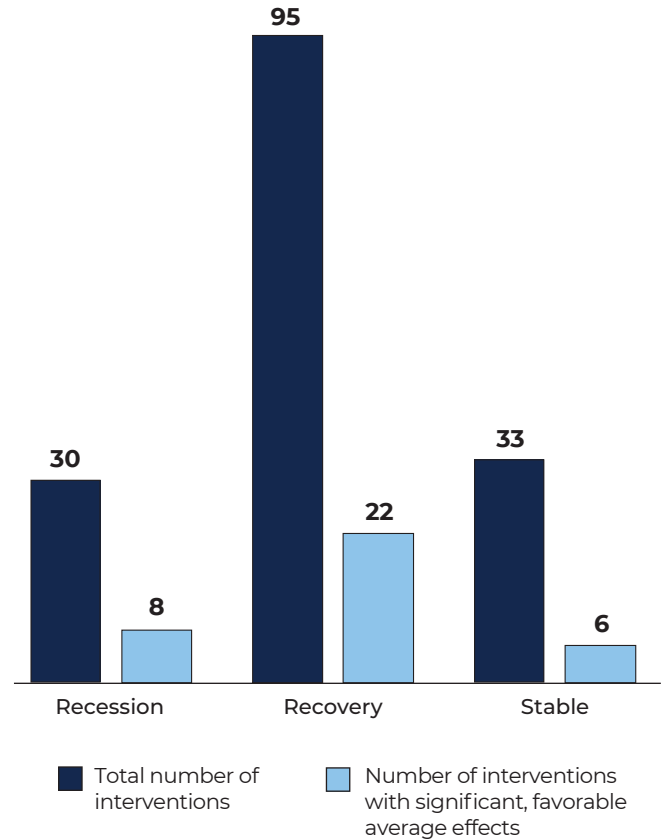
Across all interventions that enrolled participants during recessions, the average effect on employment outcomes was favorable and statistically significant. The average effect size for this group was 0.040, which is equivalent to a \$837 gain in annual earnings (Figure 2, Table B.1). This means that, on average, interventions that enrolled participants during recessions were successful in improving employment outcomes among people with low incomes. Looking across economic periods, average effects were highest for those interventions that enrolled participants during recoveries (Figure 2, Table B.1). The average effect size for interventions that enrolled participants during recoveries was 0.062, which is equivalent to a \$1,297 increase in annual earnings. This pattern of results is similar when we considered economic conditions when outcomes were measured (Table B.1).

We used statistical tests to determine whether the average effects for interventions enrolling participants during recoveries and recessions were statistically significantly different from the overall average effect (to try to ensure that they were caused by actual differences in effectiveness rather than chance). We found that the average effects for interventions enrolling participants during recoveries were significantly larger compared with average effects among interventions enrolling participants in stable periods or recessions (Figure 2).

We used a meta-regression model to do the same test while holding several other characteristics of interventions and studies constant. For example, this model compared average effects across interventions with similar settings and durations, that served similar populations, and that were evaluated using similar outcome measures. We found the same results in the meta-regression model: average effects for interventions enrolling participants during recoveries were statistically significantly larger than interventions enrolling individuals during stable periods or recessions (Table B.3).

Our finding of larger average effects during recoveries differs from the findings of the prior research we reviewed in the literature scan. This prior research generally showed that interventions implemented in periods of high unemployment had larger average effects. Differences in context, types of interventions considered, and measure of economic

**Figure 1.** Total number of interventions and number of interventions with statistically significant, favorable average effects, by economic condition during study enrollment



Note: For 13 interventions, the enrollment period included at least one recession year and at least one recovery year. These 13 interventions are included in the total number of interventions for which enrollment included a recession year (30 interventions) and are also included in the total number of interventions for which enrollment included a recovery year (95 interventions). Of these 13 interventions, 5 had significant, favorable effects. These 5 are included in the number of interventions with significant, favorable average effects for interventions for which enrollment included a recession (8 interventions) and are also included in the same count for interventions for which enrollment included a recovery (22 interventions).

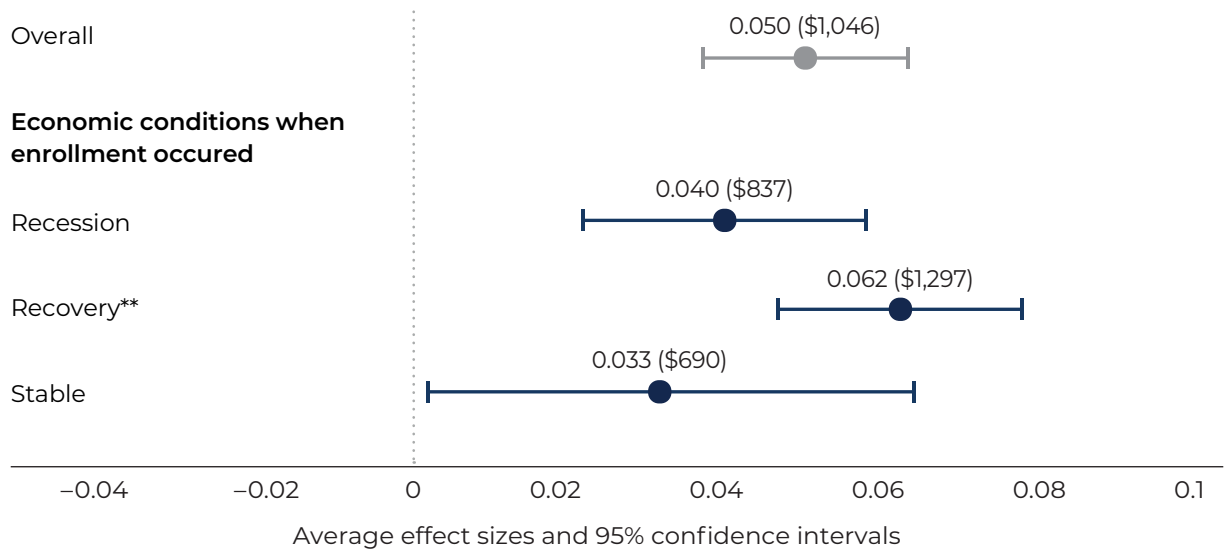


conditions could help explain this disparity. The prior research focused on interventions across many countries, and the Pathways Clearinghouse considers only interventions implemented in the United States and Canada. Also, prior research considered a broader range of interventions. For example, the study by Kluve (2010) considered employer incentive programs and interventions that served people with disabilities who might or might not have low incomes. These interventions would not be included in the Pathways Clearinghouse. Finally, the past research focuses on how intervention effectiveness changes when the unemployment rate is high or low. In contrast, this report examines how effectiveness changes when unemployment is falling or rising. For example, a period of high but declining unemployment would be classified as a recovery in this analysis.

### Which interventions improve outcomes during recessions and recoveries?

Thirty-one interventions considered in this analysis had evidence of improving outcomes (Figure 3). This count includes 8 interventions that enrolled participants during recessions, 22 that enrolled participants during recoveries (5 of which also enrolled participants during recessions), and 6 that enrolled participants during stable economic conditions. The 31 interventions with evidence of improving average outcomes represented a range of interventions. Those with the largest average effect sizes were implemented during recoveries and stable economic periods. The text box spotlights interventions with the largest favorable effects that were implemented during recent recessions and recoveries; the full list of interventions is available in Appendix B.

**Figure 2.** Average effects overall and by economic conditions during enrollment

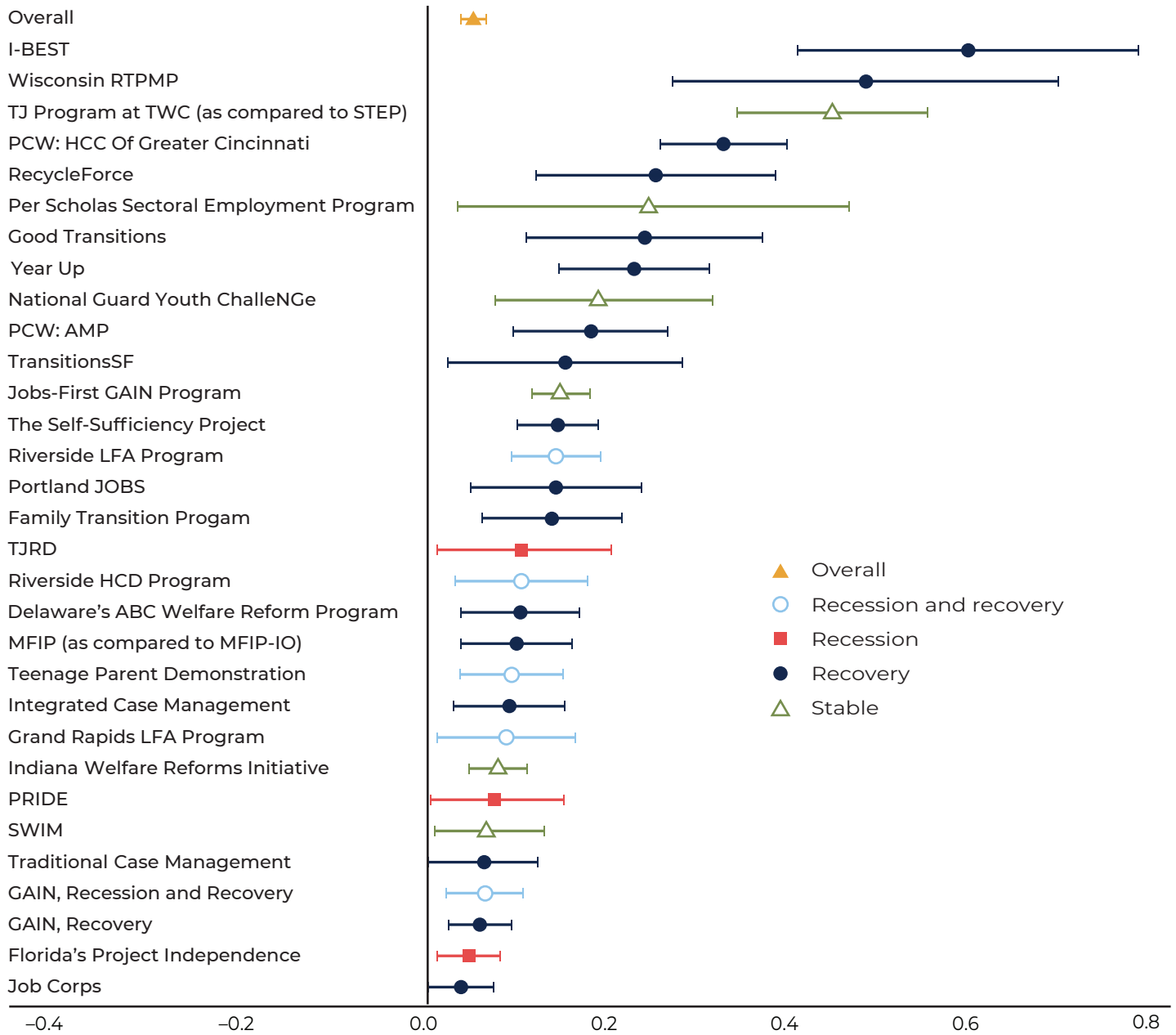


Source: Pathways Clearinghouse database.

Notes: The study team combined effect sizes for impacts on earnings, employment, public benefit receipt, and education and training to estimate average effect sizes. In this figure, the gray marker and line at the top of the figure indicate the average effect across all interventions. The dark blue markers and lines indicate average effects by the economic conditions (recession, recovery, or stable) when enrollment occurred. The marker on each line represents the average effect size, and the line is its 95 percent confidence interval. When this line does not cross the vertical dashed line (which is the case for all lines in this figure), this means the average effect size is statistically significant at the 0.05 level. If the gray or blue line is completely to the right of the vertical dashed line, the evidence suggests that the given group of interventions has favorable effects, on average (which is the case for all lines in this figure). For some studies, the enrollment period included both recession and recovery years. In these cases, we include the given study in analyses focused on studies for which enrollment included a recession year and in analyses focused on studies for which enrollment included a recovery year. Analyses focused on studies for which enrollment occurred during a stable economic period only include studies where all years in the enrollment period were classified as stable.

\*/\*\*/\*\* Average effect size is statistically significantly different from the overall mean at the 0.1/0.05/0.01 level.

**Figure 3.** Interventions with statistically significant, favorable average effect sizes, by economic condition during study enrollment



Source: Pathways Clearinghouse database.

Notes: In this figure, the orange line at the top indicates the average effect across all interventions. All other lines represent an intervention. Different colored lines correspond to economic conditions when enrollment occurred (recession, recovery, recession and recovery, or stable). The marker on the line represents the average effect size, and the line is its 95 percent confidence interval. When this line does not include the vertical dashed line, the average effect size is statistically significant at the 0.05 level. If the colored line is completely to the right of the dashed line, the evidence suggests that an intervention has favorable average effects.

Delaware's ABC Welfare Reform Program = Delaware's A Better Chance Welfare Reform Program; GAIN, Recovery = Greater Avenues for Independence, enrollment included recovery; GAIN, Recession and recovery = Greater Avenues for Independence, enrollment included a recession and recovery; Grand Rapids LFA Program = Grand Rapids Labor Force Attachment Program; I-BEST = Integrated Basic Education and Skills Training; Jobs-First GAIN Program = Jobs-First Greater Avenues for Independence Program; MFIP = Minnesota Family Investment Program (MFIP) (as compared with MFIP Incentives Only); PCW: AMP = Partners for a Competitive Workforce: Advanced Manufacturing Partnership; PCW: HCC of Greater Cincinnati = Partners for a Competitive Workforce: Health Careers Collaborative of Greater Cincinnati; Portland JOBS = Portland Job Opportunities and Basic Skills Training Program; Riverside HCD Program = Riverside Human Capital Development Program; Riverside LFA = Riverside Labor Force Attachment Program; PRIDE = Personal Roads to Individual Development and Employment (PRIDE); TJRP = Transitional Jobs Reentry Demonstration; TJ Program at TWC (as compared to STEP) = Transitional Jobs Program at the Transitional Work Corporation (as compared to Success Through Employment Preparation); SWIM = The San Diego Saturation Work Initiative Model (SWIM); Wisconsin RTPMP = Wisconsin Regional Training Partnership Manufacturing Pathway.

## Spotlight on effective interventions in recent recessions and recoveries

The following interventions were implemented during recent recessions or recoveries and had the largest statistically significant, favorable average effects.

### Recession

- **Transitional Jobs Reentry Demonstration (TJRD).** The TJRD program provided people who were formerly incarcerated with 30 to 40 hours of temporary paid employment, job search assistance, and other supports, including job coaching and classes to prepare for employment. Participants in later cohorts in some sites also received bonuses (up to \$1,500) for obtaining and retaining unsubsidized employment. The study of TJRD enrolled participants during the Great Recession (enrollment occurred from early 2007 to September 2008) and found statistically significant favorable effects on short-term earnings and short- and long-term employment.
- **Personal Roads to Individual Development and Employment (PRIDE).** The PRIDE program served people who received cash assistance and had physical or mental health conditions that limited their ability to work. PRIDE participants were required to participate in work placements designed to accommodate their health conditions. Those who did not participate could face a reduction in their benefits. Some also had to attend a highly structured program that incorporated unpaid work experience and educational activities. All PRIDE participants received job search and placement assistance as well as employment retention services. The study of PRIDE enrolled participants during the 2001 recession (enrollment occurred from December 2001 to December 2002). Among single parents, the study found statistically significant favorable impacts on short-term earnings, employment, and benefit receipt as well as favorable long-term effects on employment and benefit receipt.

### Recovery

- **Integrated Basic Education and Skills Training (I-BEST).** I-BEST served people with fewer formal qualifications as compared with other job seekers. The intervention offered occupational training courses in a variety of areas, including allied health, welding, and clerical fields. I-BEST integrated basic skills and occupational training through a team-teaching model whereby a basic skills and occupational instructor co-led (for at least 50 percent of class time) an occupational training course. Participants could access financial supports for tuition and supportive services, as well as a dedicated advisor who provided academic supports and career planning. The study of I-BEST considered in this report enrolled participants during the recovery from the Great Recession (enrollment occurred from November 2011 to September 2014) and found statistically significant favorable effects on education and training.
- **Wisconsin Regional Training Partnership Manufacturing Pathway (RTPMP).** Wisconsin RTPMP provided services and training to people who were unemployed and who wanted to prepare for a career in the manufacturing sector. Training included job-readiness training to improve personal and professional skills, occupational training that provided certificates in specific trades, and apprenticeships. Services included tutoring, job search assistance, and job referrals to partner employers in the manufacturing industry. The study of Wisconsin RTPMP enrolled participants during the recovery from the Great Recession (enrollment occurred from January 2010 to February 2012) and found statistically significant favorable effects on short-term earnings and employment.

## Findings: What types of interventions work during recessions and recoveries?

The findings in this report show that, on average, interventions have favorable effects during recessions and recoveries and spotlight interventions that have been successful in recent recessions and recoveries. In this section, we classify interventions by their main strategy for helping people with low incomes succeed in the labor market and achieve economic self-sufficiency. Specifically, we classify interventions as focused on one of the following six types of primary services: (1) case management or other supports, (2) education and training, (3) employment retention services, (4) employment services, (5) incentives and sanctions, and (6) work and work-based learning. Then, we ask whether specific types of interventions are more effective overall, regardless of conditions, and during economic recessions and recoveries.

### Findings from the literature

We found just two prior studies that looked at whether specific types of interventions tend to produce more favorable effects during recessions or recoveries. One, which considered interventions implemented in many countries, found that interventions focused on education and training and work and work-based learning tended to be more effective during recessions than those that focused on quickly connecting participants to work through employment services or incentives and sanctions (Card et al. 2018). Another looked at interventions implemented in Sweden and found that those that offered on-the-job learning opportunities were more effective during recessions than those that offered education and training in a classroom setting (Forslund et al. 2011).

### Why might different types of interventions have different effects in recessions or recoveries?

There are many reasons why some types of interventions might be more effective in some economic conditions. Past research suggests a few possibilities:

- Services that aim to get people into jobs quickly—such as those that help people prepare for, apply to, or obtain jobs—might be most effective during recoveries or stable periods. In these periods, finding a job quickly can be easier, and rapid placement services might match participants to better-fitting, higher-paying jobs (Forslund et al. 2011; Francis 2013).
- More time-intensive services, such as education and training, might be more effective when people participate during recessions (Card et al. 2018; Forslund et al. 2011; Francis 2013)—perhaps because these services take participants out of the labor market when it would have been hard to find a good job anyway, while increasing participants' marketability to employers once economic conditions improve.



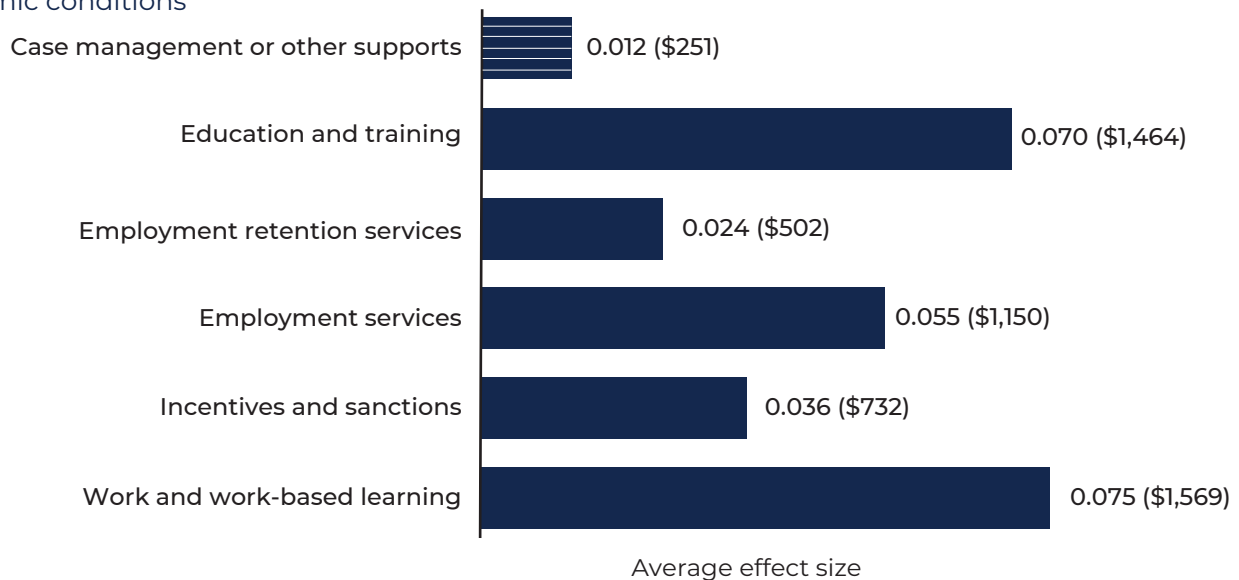
## Findings from the Pathways Clearinghouse meta-analysis

### When we do not look separately by economic conditions: What types of interventions improve employment outcomes for people with low incomes?

Five of the six types of interventions significantly improved employment outcomes, on average, when we do not look separately by economic conditions: work and work-based learning, employment services, incentives and sanctions, employment retention services, and education and training. Average effects were highest for interventions focused on work and work-based learning (Figure 4, Table B.4). These types of programs had an average effect size of 0.075, which is equivalent to a \$1,569 increase in average annual earnings. Effect sizes for the types of interventions focused on employment services and education and training also exceeded \$1,000 (in terms of increases in average annual earnings). Average effects for interventions focused on employment retention and incentives and sanctions were somewhat smaller, at 0.024 (corresponding to a \$502 increase in average annual earnings) and 0.036 (\$732 increase in average annual earnings), respectively.

Looking across intervention types, we found that education and training interventions had significantly higher average effects, whereas case management or other supports interventions and employment retention interventions had significantly lower effects as compared with other types of interventions.

**Figure 4.** Average intervention effects by type of primary service, when we do not look separately by economic conditions



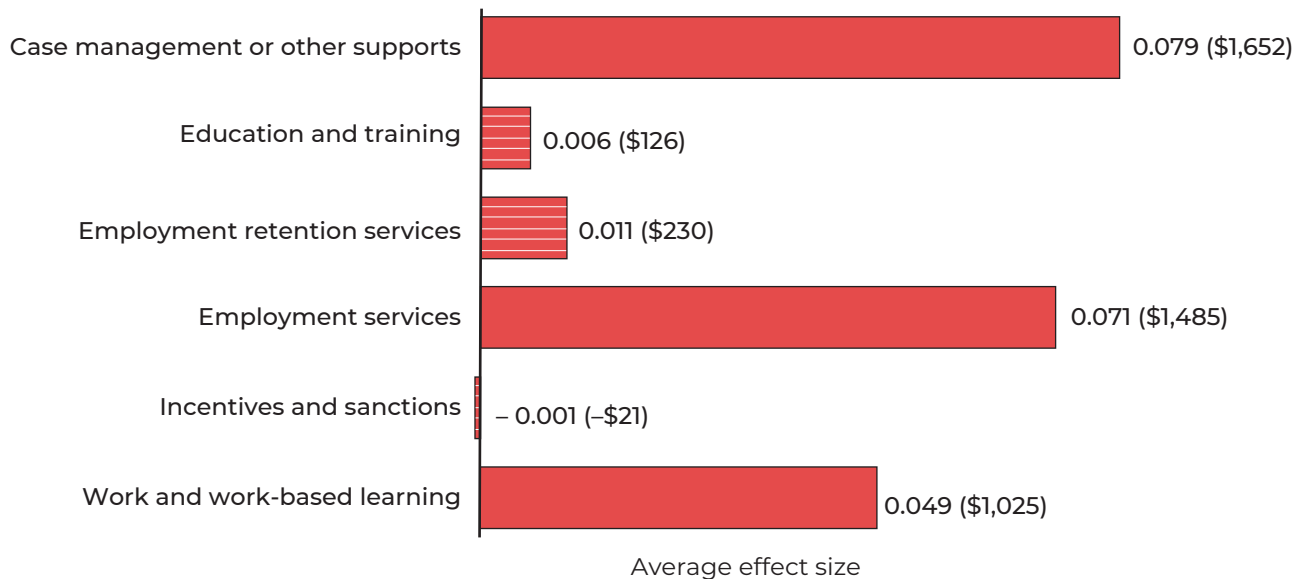
Source: Pathways Clearinghouse database.

Notes: In this figure, each bar represents the average effect size across all interventions with the given type of primary service. If the bar is greater than zero, the evidence suggests interventions have favorable effects, on average. If the bar is less than zero, the evidence suggests interventions have unfavorable effects, on average. Solid bars represent average effect sizes that are statistically significantly different from zero, at the 5 percent level. Striped bars indicate average effect sizes that are not statistically significantly different from zero, at the 5 percent level.

**During recessions: What types of interventions improve employment outcomes for people with low incomes?**

On average, interventions that focused on providing case management or other supports, employment services, and work and work-based learning improved outcomes when implemented during recessions (Figure 5, Table B.4). The effects of case management interventions were particularly large as compared with other types of interventions implemented during recessions. During recessions, these interventions had an average effect size of 0.079, which is equivalent to a \$1,652 increase in average annual earnings. Employment services interventions improved outcomes during recessions by 0.071 (corresponding to an \$1,485 increase in average annual earnings), and work and work-based learning interventions improved outcomes during recessions by 0.049 (corresponding to an \$1,025 increase in average annual earnings). Other types of interventions, including education and training programs, incentives and sanctions, and employment retention services did not have statistically significant average effects when implemented during a recession. This means that there is not enough evidence to conclude that the typical interventions focused on these services improved people’s outcomes during recessions. This pattern of results looked very similar when we classified interventions according to the economic conditions when the outcomes were measured as opposed to when study enrollment occurred (see results by economic conditions when outcomes were measured in Table B.5).

**Figure 5.** Average intervention effects by type of primary service, interventions enrolling participants during recessions



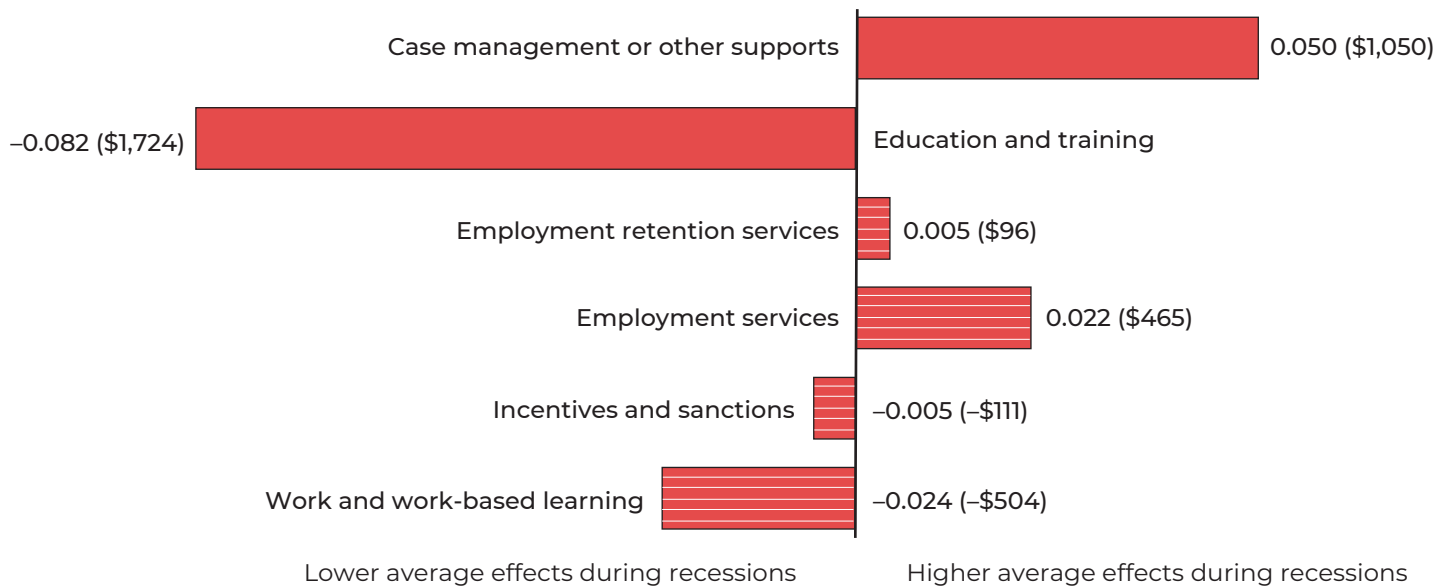
Source: Pathways Clearinghouse database.

Notes: In this figure, each bar represents the average effect size across all interventions with the given type of primary service for which enrollment included a recession. If the bar is greater than zero, the evidence suggests interventions have favorable effects, on average. If the bar is less than zero, the evidence suggests interventions have unfavorable effects, on average. Solid bars represent average effect sizes that are statistically significantly different from zero, at the 5 percent level. Striped bars indicate average effect sizes that are not statistically significantly different from zero, at the 5 percent level.

Comparing average intervention effects across recessions and stable periods suggests that some types of interventions might be more or less effective during recessions. Figure 6 makes these comparisons. Each bar represents the difference in average effects for interventions using the given type of primary service implemented during recessions, compared with those using the same type of primary service implemented during stable economic conditions. If the bar is greater than zero, the evidence suggests interventions were more effective during recessions, compared with stable periods, on average. If the bar is less than zero, the evidence suggests interventions were less effective when implemented during recessions than during stable periods, on average. If the bar is solid, the difference in intervention effectiveness between recessions and stable periods is statistically significant.

Results in Figure 6 show that interventions focused on case management or other supports had significantly larger effects during recessions as compared with case management interventions implemented during stable economic conditions. Interventions focused on education and training had significantly smaller effects. That is, case management interventions were more successful and education and training interventions were less successful in recessions, that is periods of increasing unemployment, than they were during times when the unemployment rate was stable. These findings generally hold when we test differences using meta-regression models to control for intervention and study characteristics (Table B.6).<sup>5</sup>

**Figure 6.** Differences in average effects between interventions implemented during recessions versus stable economic conditions, by type of primary service



Source: Pathways Clearinghouse database.

Notes: In this figure, each bar represents the difference in average effect size across all interventions with the given type of primary service for which enrollment included a recession, compared with all interventions with the given type of primary service that enrolled participants during stable economic conditions. If the bar is greater than zero, the evidence suggests interventions were more effective during recoveries, compared with stable periods, on average. If the bar is less than zero, the evidence suggests interventions were less effective when implemented during recoveries as compared with stable periods, on average. Solid bars represent differences that are statistically significant, at the 5 percent level. Striped bars indicate average effect sizes that are not statistically significantly different from zero, at the 5 percent level.

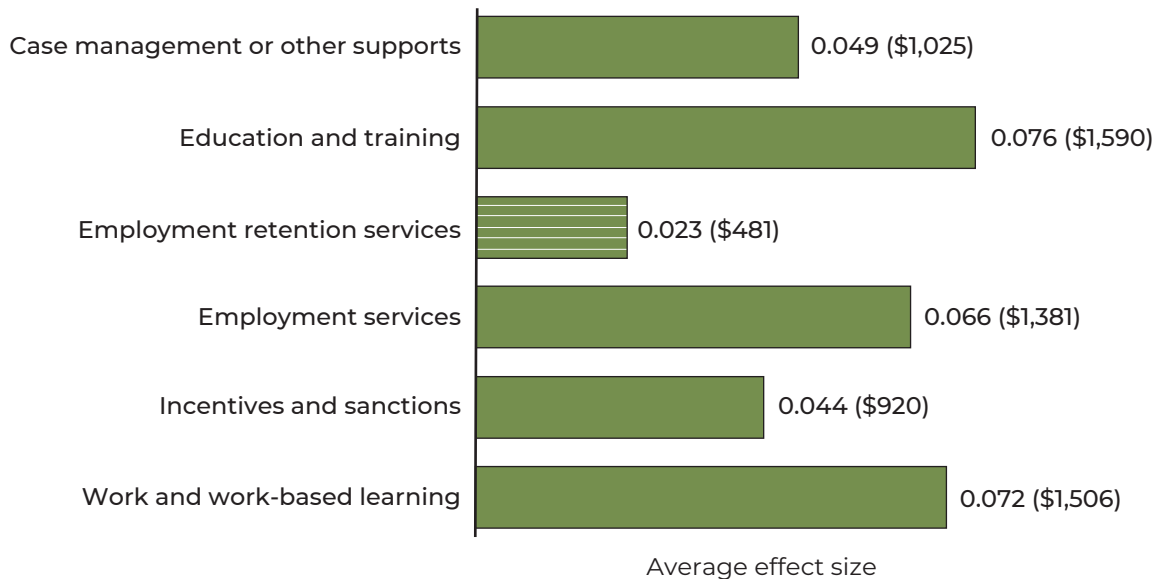
<sup>5</sup> In the meta-regression models, the difference in average effects for case management interventions implemented during recessions as compared with during stable periods becomes statistically insignificant at conventional levels ( $p = 0.104$ ). However, the coefficient remains similarly sized, and the  $p$ -value is still quite low, suggesting the difference is meaningful but not significant at conventional levels because of the relatively small sample size and number of controls in the meta-regression.

**During recoveries: What types of interventions improve employment outcomes for people with low incomes?**

Five of the six types of interventions improved outcomes during recoveries (Figure 7, Table B.4). In particular, interventions focused on education and training, work and work-based learning, and employment services had statistically significant average effects of 0.076, 0.072, and 0.066—which are equivalent to average increases in annual earnings of \$1,590, \$1,506, and \$1,381, respectively. Interventions that focused on incentives and sanctions or case management or other supports also significantly improved outcomes during recoveries (Figure 7, Table B.4). This pattern of results looked very similar when we classified interventions according to the economic conditions when outcomes were measured as opposed to when study enrollment occurred (see results by economic conditions when outcomes were measured in Table B.5).

The average effects of interventions were generally similar during recoveries and stable periods, with one exception. Interventions focused on case management or other supports had significantly larger effects during recoveries than during stable economic conditions (Figure 8). That is, case management interventions were considerably more successful during periods of declining unemployment, as compared with periods of stable unemployment. We found the same result when we tested differences using meta-regression to control for intervention and study characteristics (Table B.6). These finding—together with the result presented above, that case management interventions also had significantly larger effects during recessions as compared to stable economic periods—suggests that this type of intervention may be less effective during stable economic conditions. It may be that that interventions that primarily focus on case management give job seekers a particular leg up when unemployment is falling (during recoveries) or rising (during recessions).

**Figure 7.** Average intervention effects by type of primary service, interventions enrolling participants during recoveries



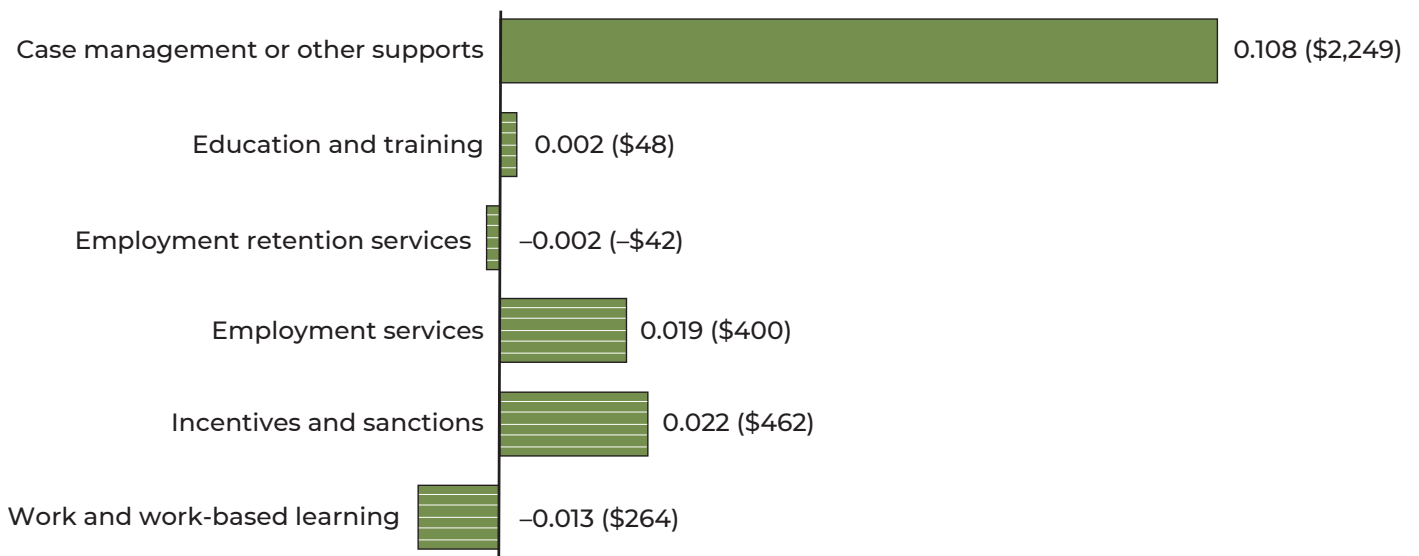
Source: Pathways Clearinghouse database.

Notes: In this figure, each bar represents the average effect size across all interventions with the given type of primary service for which enrollment included a recovery. If the bar is greater than zero, the evidence suggests interventions have favorable effects, on average. If the bar is less than zero, the evidence suggests interventions have unfavorable effects, on average. Solid bars represent average effect sizes that are statistically significantly different from zero, at the 5 percent level. Striped bars indicate average effect sizes that are not statistically significantly different from zero, at the 5 percent level.



The findings described here are generally similar to findings from the limited prior research in this area. For example, past research has also pointed to work-based and on-the-job learning opportunities as effective during poor economic conditions (Card et al. 2018; Forslund et al. 2011). However, the types of interventions and the contrasts we considered are somewhat different from what past research has examined, so it is difficult to make direct comparisons. In particular, no other research has considered how the effectiveness of interventions focusing on case management varies across economic conditions—and we found that interventions with this focus tend to be more effective during recessions and recoveries than during stable economic conditions. In addition, as we noted previously, unlike the interventions included in the Pathways Clearinghouse, prior research considered interventions implemented in countries other than the United States and those that served people who might or might not have low incomes.

**Figure 8.** Differences in average effects between interventions implemented during recoveries versus stable economic conditions, by type of primary service



Source: Pathways Clearinghouse database.

Notes: In this figure, each bar represents the difference in average effect size across all interventions with the given type of primary service for which enrollment included a recovery, compared with all interventions that enrolled participants during stable economic conditions. If the bar is greater than zero, the evidence suggests interventions were more effective during recoveries, compared with stable periods, on average. If the bar is less than zero, the evidence suggests interventions were less effective when implemented during recoveries as compared with stable periods, on average. Solid bars represent differences that are statistically significant, at the 5 percent level. Striped bars indicate average effect sizes that are not statistically significantly different from zero, at the 5 percent level.

## Cautions for interpreting findings

When interpreting findings, consider four key limitations of this analysis:

**There are challenges measuring recessions and recoveries.** There is no, one objective way to measure recessions or recoveries. In this analysis, we chose to classify years as recession, recovery, or stable economic years based on changes in unemployment rates over the year. In Appendix C, we show that the results of this analysis do look somewhat—but not very—different when we chose different ways to measure recessions and recoveries. Alternate constructions we tested included using different cutoffs in yearly unemployment changes and using a definition of recessions and recoveries that focuses not just on changes in unemployment rates but also on economic indicators such as gross domestic product, wholesale-retail sales, and industrial production.

**This report presents differences, not impacts.** This analysis includes only findings that the Pathways Clearinghouse has assessed and determined to have high or moderate quality. This means that we can be at least somewhat confident that the effects included in this analysis represent the causal effects of the interventions examined, rather than some other factor. However, this does not mean that the differences in the effects are caused by differences in the interventions examined. For example, we can be confident that education and training interventions implemented during recoveries improved outcomes by an average of 0.076 standard deviations and that interventions focused on case management or other supports implemented during recoveries improved outcomes by an average of 0.049 standard deviations. But we cannot conclude that during a recovery, choosing to focus an intervention on education and training, rather than case management or other supports, increases an intervention’s effect by 0.027 standard deviations ( $0.076 - 0.049 = 0.027$ ). Other differences between the interventions, such as the populations served or implementers, could lead to differences in average effect sizes.

**This report considers just a select group of outcomes.** The analysis was limited to the outcomes and intervention characteristics catalogued by the Pathways Clearinghouse. All included outcomes measure employment, earnings, long and very-long term public benefit receipt, or education and training. However, other outcomes, such as those related to health or well-being, are also important. In addition, the Pathways Clearinghouse recorded information on only a subset of outcomes within these groups. For example, it did not record information on every possible measure of employment reported (see Rotz et al. 2020 for details).

**The findings in this report could be affected by publication bias.** The tendency of study authors to report and publish favorable findings more often than other findings could lead to overly optimistic results. This phenomenon is known as publication bias. To address this concern, the Pathways Clearinghouse and this report include findings from published and unpublished reports (Pigott and Polanin 2020). However, if the least favorable findings are not available in published or unpublished research (termed the “file drawer” problem, see Dalton et al. 2012), this type of bias could still affect the meta-analysis.

## How should providers consider altering operations in response to economic conditions?

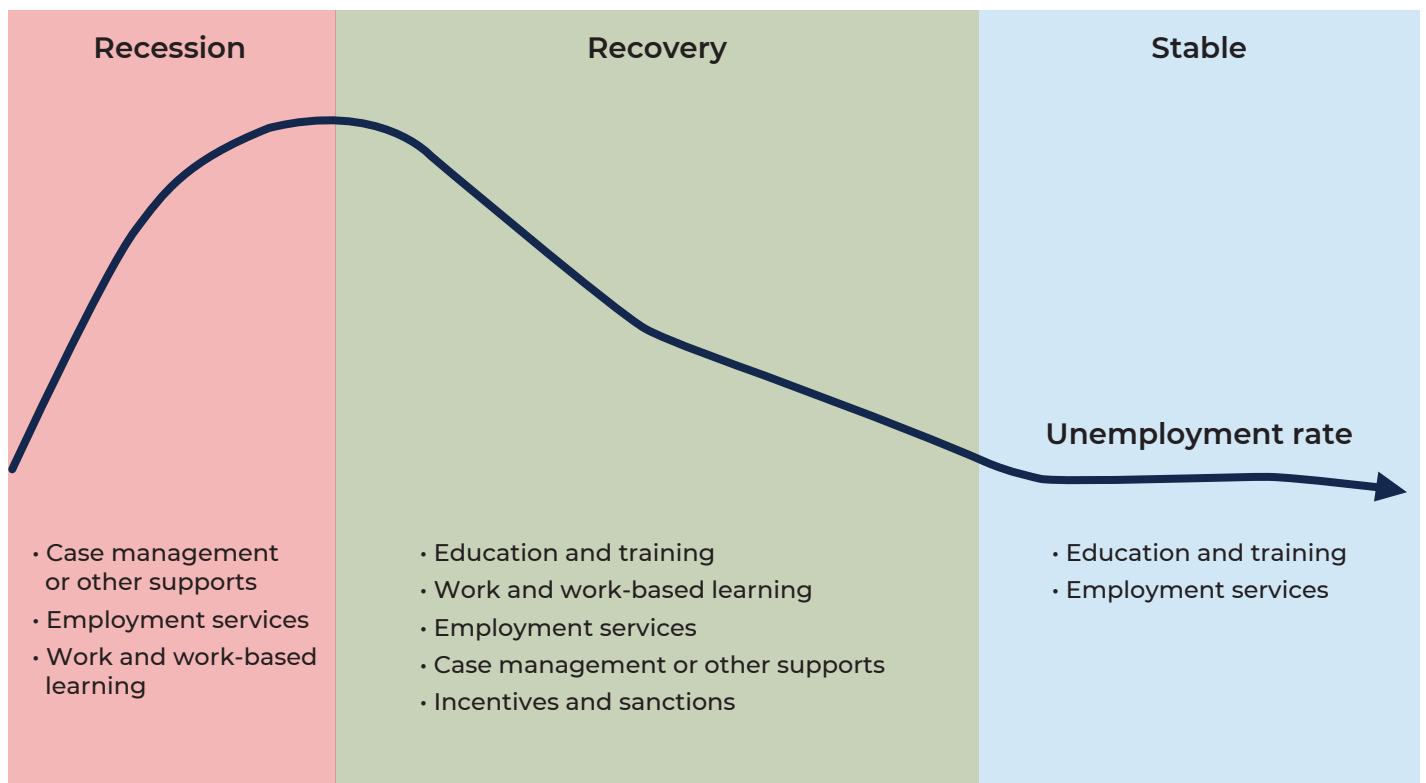
This meta-analysis reveals that there is important variability in the types of interventions that work during different economic conditions. Some types of interventions appear to improve outcomes across economic conditions, whereas other types appear successful only under certain conditions. Nevertheless, interventions supporting employment and economic self-sufficiency for people with low incomes have been successful in a variety of economic conditions. Figure 9 lists the intervention types with evidence of improving outcomes by economic condition; those with the biggest effects are listed first.

These findings indicate that decision makers should consider economic conditions when planning *types* of interventions to emphasize. In particular, during recessions, that is when unemployment is increasing, practitioners and policymakers should consider placing more emphasis on case management or other supports, and less emphasis on education and training. When the unemployment rate is falling during a recovery, practitioners and policymakers should consider targeting resources toward interventions other than those focused on employment retention services.

As the economy enters a period of recovery from the COVID-19-induced recession, decision makers can use these findings to target resources. However, it is important to keep in mind that although the differences in effects during recessions and recoveries could be caused by actual differences in effectiveness during recessions and recoveries, these differences might also be driven by differences in the types of individuals who enroll in programs or nuances of the programs provided. That is, we do not (and cannot) compare the same interventions delivered to the same types of people during different economic conditions. Moreover, economic conditions in the economy as a whole might differ from the conditions faced by a specific group of clients or in a specific area. People who support or run programs should therefore consider these overall findings and the characteristics of their clients and specific economic context when selecting a program.

Even with these limitations in mind, this report shows evidence that interventions can improve employment outcomes among people with low incomes—even during recession and recoveries or when economic conditions are uncertain. It provides lessons from past recessions and recoveries that can help decision makers think about what types of interventions might best match economic conditions facing the people they serve.

**Figure 9.** Types of interventions with evidence of improving outcomes among workers with low incomes



Source: Pathways Clearinghouse database.

Note: The types of interventions with the biggest effects within recessions, recoveries, and stable economic periods are listed first in each column. The trend in the unemployment rate is a stylized representation of economic conditions from 2007 to 2019.

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## Goals of the Pathways Clearinghouse

The Pathways Clearinghouse systematically evaluates and summarizes the evidence on the effectiveness of interventions that aim to improve employment outcomes, reduce employment challenges, and support self-sufficiency for populations with low incomes. It has several goals:

- Conduct a transparent, comprehensive search to identify studies of employment and training interventions designed to improve employment, increase earnings, support self-sufficiency, or advance education and training for populations who are low income.
- Rate the quality of those studies to assess the strength of the evidence they provide on the different interventions.
- Determine the evidence of effectiveness for those interventions.
- Share the results, as well as other Clearinghouse products, on a user-friendly website to help state and local TANF administrators, policymakers, researchers and the general public make sense of the results and better understand how this evidence might apply to questions and contexts that matter to them.
- Synthesize the overall state of evidence in the field by creating and disseminating a variety of reports, briefs, and other products.

For more information, see <https://pathwaystowork.acf.hhs.gov>.

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