

What do we know about the effectiveness of disability employment interventions?

Compared to individuals without disabilities, individuals with disabilities are more likely to be unemployed, receive lower wages when employed, have lower levels of education and work experience, and require income and other governmental support (Bureau of Labor Statistics, 2022). Interventions designed to improve labor market outcomes for people with disabilities, such as transition programs and support services, provide support and skill-building that impact a number of those outcomes (U.S. Department of Education, 2020).

This synthesis highlights key findings from a Clearinghouse for Labor Evaluation and Research (CLEAR) systematic evidence review¹ that examined the impacts of disability employment interventions on education/training, earnings, employment, public benefits receipt, and health outcomes. CLEAR's literature scan found 58 distinct studies (in 41 publications) published from January 2014 to October 2022.² Of the 58 studies, 40 received a high or moderate causal evidence rating which means that we have a good degree of confidence that the studied interventions caused the measured impacts on outcomes.^{3,4} This synthesis presents a summary of the evidence from the 40 high and moderate-rated studies.^{5,6}

Table 1 illustrates the types of disability employment interventions found in the studies.

Table 1. Types of disability employment interventions examined

Intervention	Description
Benefit offsets	Programs and policies that test alternative Social Security Disability Insurance (SSDI) benefit rules and their impacts on earnings and public benefits receipt. ⁷
Mental and behavioral health supports	Tailored mental health and vocational services including employment supports, medication management, family support, psychoeducation, suicide prevention, tailored skills training, behavioral therapy, and access to additional mental health services.
Supported employment	Intensive services and programs that support individuals with significant impairments with attaining and maintaining competitive employment by providing transitional work experiences in a non-competitive environment, workplace accommodations, self-regulation strategies, and vocational skill development.
Transition programs and support services	Programs and services that prepare and support youth with disabilities (generally ages 16-25) transition to adulthood and obtain gainful employment. Services include case management, financial education, independent living skills, interview and social skills training, resource connection, work-based learning experiences and internships, self-advocacy training, and work incentive benefits counseling.
Vocational rehabilitation (VR)	Standard or enhanced programs ⁸ providing tailored support to individuals with disabilities to obtain gainful employment. Services may include case management, diagnosis and treatment of impairments, job search and job placement assistance, on-the-job supports, financial counseling, and job readiness training.

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¹ For more information on CLEAR, including how CLEAR conducts systematic reviews, visit <https://clear.dol.gov/>.

² Access the CLEAR Disability Employment Review Protocol (<https://clear.dol.gov/reference-documents/disability-employment-policy-protocol>) to learn more about the literature search parameters and the specific criteria used to determine studies eligible for inclusion in the systematic review.

³ One high-rated study did not have unique data and was excluded from the synthesis.

⁴ The CLEAR Causal Evidence Guidelines, Version 2.2 (<https://clear.dol.gov/reference-documents/causal-evidence-guidelines>) provides information on the evidence guidelines used to determine the causal evidence ratings.

⁵ The review also included 17 unique studies that received a low causal evidence rating. It is important to note that a low causal evidence rating does not mean the intervention showed unfavorable or ineffective findings. It also does not mean that the study is not useful. Low rated studies often reflect the most rigorous methods authors could use given the circumstances.

⁶ All results from CLEAR's Disability Employment systematic evidence review can be found on the CLEAR website: <https://clear.dol.gov/topic-area/disability-employment-policy>. Information from the 17 studies that received a low causal evidence rating is included in the supplement to this synthesis.

⁷ For example, the Benefit Offset National Demonstration (BOND) project tested this through reducing benefits by \$1 for each \$2 earned above the determined yearly amount.

⁸ Enhanced services may include expedited engagement and enrollment, and dedicated support staff.

Key takeaways

► **Many disability employment interventions improved participant employment and earnings outcomes but few improved education and training, health, or public benefits receipt outcomes.** Of the 36 studies that examined the impact on employment, 23 studies found that participation in disability employment interventions increased rates of employment. A smaller number of studies (11 out of 34) found higher earnings among program participants. Only 6 studies (out of 12) found an increase in education and training outcomes, while 5 studies (out of 24) found a decrease in the reliance on public benefits.

► **Transition programs and support services interventions improved the widest variety of outcome categories.** The studies found that transition programs and support services had favorable impacts on employment (15 out of 23 studies), earnings (6 out of 21 studies), education and training attainment or completion (6 out of 12 studies), and public benefits receipt (3 out of 19 studies).

► **VR interventions improved employment and earnings outcomes but the effectiveness differed by disability type and the types of services received.** One study found that individuals with intellectual and developmental disabilities who received VR services had significantly higher rates of competitive employment and higher hourly wages than non-participants (Iwanaga et al., 2021), while another study did not find any VR-related impacts on competitive employment or wages for individuals with non-blind disabilities (Kehn & Honeycutt, 2020). A study investigating the impacts of different VR services for youth with mental health and substance use disorders found that six VR services were significant predictors of gaining competitive employment while three VR services were significant predictors of not gaining competitive employment (Akinola et al., 2021).

Promising interventions to improve employment and earnings outcomes

- Broadened Horizons, Brighter Futures (BHBF)
- Employment Intervention Demonstration Program (EIDP)
- Individual Placement and Support (IPS) Supported Employment
- Post-Secondary Education and Rehabilitation Transition (PERT) Program
- Promoting Readiness of Minors in Supplemental Security Income (PROMISE)
- Substantial Gainful Activity (SGA)
- Work Incentives Benefits Counseling

► **Supported employment interventions improved employment and earnings outcomes but the evidence base is small.** Two high-rated studies found that program participants had better employment and earnings outcomes than non-participants. The first study examined the impact of the Employment Intervention Demonstration Program (EIDP) and found that participants were three times more likely to have competitive employment and significantly higher monthly earnings during follow up (Cook et al., 2016). The second study examined the impact of individual placement and support (IPS)-supported employment, finding that the participants took less time to find a job, had higher rates of “steady employment,”⁹ and had higher earnings from competitive jobs (Davis et al., 2018). Two moderate-rated studies also found higher long-term employment rates among program participants (Schall et al., 2020; Wehman et al., 2020). The studies provide a small body of credible, quality evidence of promising supported employment interventions to improve employment and earnings outcomes.

► **The two high-rated studies on benefits offsets showed no significant impact on earnings outcomes and an unfavorable impact on public benefits receipt outcomes.** The studies examined the impact of new Social Security Disability Insurance (SSDI) work rules designed to increase incentives¹⁰ for SSDI recipients and reduce their reliance on benefits (Geyer et al., 2018). Reduced reliance on SSDI could imply participants are securing employment, increasing their income, and gaining financial independence. Both studies found that the program participants received significantly more SSDI benefits but had no significant differences in wages when compared to non-participants. More evidence is needed to draw stronger conclusions on the effectiveness of benefits offsets in the SSDI program.

► **The only high-rated study of a mental and behavioral health supports intervention showed promise.** The study of an intervention for individuals with a primary disabling diagnosis of schizophrenia or an affective disorder (bipolar disorder or depression) improved short-term (3 month) earnings (Salkever et al., 2014). The intervention components included IPS-supported employment, systematic medication management, and expanded access to other behavioral health or related services.

► **Studies assessing the PROMISE intervention across multiple time points reported changes in outcomes.** When comparing short-term (Mamun et al., 2019) and long-term employment and education outcomes (Patnaik et al., 2022) from six demonstrations of the PROMISE program, program participants in four of the six demonstrations (Arkansas, ASPIRE, CaPromise, and NYS Promise) had higher rates of employment and job-related credential receipt than non-participants at 18 months but there were no significant differences between the groups at five years. Only the WI Promise demonstration maintained its favorable impacts at the five year follow up for employment outcomes. A similar trend was found for earnings outcomes, with four of the six

⁹ Steady employment was defined by Davis et. al as “holding a competitive job for at least 50% of the weeks during the 18-month follow-up (i.e., ≥39 of the 78 weeks)”.

¹⁰ The BOND intervention incentives included reducing benefits by \$1 for each \$2 earned above the determined yearly amount.

demonstrations (Arkansas, CaPromise, MD Promise, and WI Promise) shifting from higher earnings among program participants at 18 months to no significant differences at five years. Two demonstrations (Arkansas Promise and WI Promise) found a decrease in the use of/reliance on public benefits at 18 months and no significant impacts at five years. Conversely, the MD Promise demonstration shifted from a decrease to an increase in the use of/reliance on public benefits.

► **Studies assessing the same intervention across multiple sites reported differing results.** In addition to studies of the PROMISE intervention previously described, studies of the Youth Transition Demonstration (YTD) and Substantial Gainful Activity found different results across study sites. Hemmeter (2014) examined the impacts of the YTD across six sites and found that outcomes varied across locations. For example, employment outcomes improved at the Colorado, New York City, and West Virginia sites, whereas there were no significant impacts on employment at the Erie County (NY), Miami-Dade (FL), and Montgomery County (MD) sites. Another intervention, Substantial Gainful Activity, was implemented in Kentucky and Minnesota with individuals with non-blind disabilities. The Kentucky demonstration (Martin & Sevak, 2020) found favorable impacts on employment and earnings while the Minnesota demonstration (Kehn & Honeycutt, 2020) found no significant impacts.

Summary of the evidence base by intervention

What we know from existing research, as summarized in Table 2, includes:

- The most frequently evaluated disability employment interventions were transition programs and support services (24 of 40 studies) and vocational rehabilitation programs (8 of 40 studies).
- All but four studies included in the synthesis investigated the effect of disability employment interventions on employment outcomes (36 studies, see column 2).
- Only the studies looking at transition programs and support services (24 of 40) investigated the effect of disability employment interventions on education and training outcomes. Of those, six studies found improvements (green boxes labeled with “a” in column 4).
- The two benefit offset studies demonstrated no significant impacts for earnings (column 3, row 4) and unfavorable impacts on public benefit receipt outcomes (column 5, row 4).
- Only one study investigated mental and behavioral health supports. The study found a favorable impact on earnings.
- Only one study investigated the effect of a supported employment intervention on health outcomes for individuals with autism spectrum disorder. The study reported no significant impacts on health outcomes; we excluded health outcomes from Table 2.

Table 2. Summary of the evidence base by intervention

Intervention Category	1		2			3			4		5		
	Number of studies	Employment		Earnings			Education and training		Public benefits receipt				
Transition programs and support services	24	15 ^a	8 ^b		6 ^a	14 ^b	1 ^d	6 ^a	6 ^b		3 ^a	10 ^b	6 ^d
Vocational rehabilitation (VR)	8	4 ^a	2 ^b	2 ^c	2 ^a	2 ^b	2 ^c				1 ^a		
Supported employment	5	4 ^a	1 ^b		2 ^a	2 ^b					1 ^a	1 ^b	
Benefit offsets	2					2 ^b							2 ^d
Mental and behavioral health supports	1				1 ^a								

- Key:**
- ^a **Favorable impact:** Indicates the number of studies that found at least one statistically significant favorable impact in the outcome domain and no statistically significant unfavorable impacts.
 - ^b **Null:** Indicates the number of studies that found no statistically significant impacts in the outcome domain.
 - ^c **Mixed impact:** Indicates the number of studies that had both statistically significant favorable and unfavorable impacts in the outcome domain.
 - ^d **Unfavorable impact:** Indicates the number of studies that found at least one statistically significant unfavorable impact in the outcome domain and no statistically significant favorable impacts.

Summary of the evidence base by disability type

The studies reviewed in this synthesis cover a broad range of disabilities, including cognitive, physical, and behavioral and mental health. To increase the usability of this information for individuals looking to leverage these findings to inform their work in the disability space, we also present the findings categorized by disability type.

What we know about disability employment interventions by disability type, as summarized in Table 3, includes:

- There were favorable impacts on employment across all disability types.
- The majority of studies assessed disability employment interventions for multiple or varied disabilities (26 of 40), rather than focusing on a singular primary disability. Studies assessing the effect of interventions for varied disabilities were the only ones that reported any impacts on education and training (column 4, row 1) and any unfavorable impacts overall (columns 3 and 5, row 1).
- Almost all (6 of 7) studies that focused on interventions for mental health diagnoses evaluated impacts on employment. Half of the reported employment impacts were favorable (column 2, row 2). Three of the studies on interventions for individuals with mental health disabilities reported favorable impacts on earnings (column 3, row 2) and no outcomes related to education and training or health. Two of the seven studies reported impacts on public benefits receipt, with one of those impacts being favorable (column 5, row 2).
- Three studies examined disability employment interventions for individuals with autism spectrum disorder (ASD) and primarily found improvements in employment outcomes (column 2, row 3). These studies did not evaluate any impacts on education and training completion or attainment or on public benefits receipt (columns 4 and 5, row 3).
- One study assessing the impact of disability employment interventions for individuals with non-blind disabilities found VR had favorable impacts on both employment and earnings (columns 3 and 4, row 4).
- One study examined interventions for individuals with intellectual and developmental disabilities (IDD) and found improved employment and earnings outcomes (columns 2 and 3, row 5).
- Another study looked at interventions for individuals with visual impairments and found that transition programs and supports improved employment outcomes (column 2, row 6).

Table 3. Summary of the evidence base by disability type

Disability Type	1 Number of studies	2 Employment			3 Earnings			4 Education and training		5 Public benefits receipt		
Varied disabilities ¹	26	14 ^a	8 ^b	1 ^c	6 ^a	16 ^b	1 ^d	6 ^a	6 ^b	4 ^a	10 ^b	8 ^d
Mental health	7	3 ^a	2 ^b	1 ^c	3 ^a	2 ^b	2 ^c			1 ^a	1 ^b	
Autism spectrum disorder (ASD)	3	3 ^a				1 ^b						
Non-blind disabilities	2	1 ^a	1 ^b		1 ^a	1 ^b						
Intellectual and developmental disabilities (IDD)	1	1 ^a			1 ^a							
Visual impairment	1	1 ^a										

- Key:**
- ^a **Favorable impact:** Indicates the number of studies that found at least one statistically significant favorable impact in the outcome domain and no statistically significant unfavorable impacts.
 - ^b **Null:** Indicates the number of studies that found no statistically significant impacts in the outcome domain.
 - ^c **Mixed impact:** Indicates the number of studies that had both statistically significant favorable and unfavorable impacts in the outcome domain.
 - ^d **Unfavorable impact:** Indicates the number of studies that found at least one statistically significant unfavorable impact in the outcome domain and no statistically significant favorable impacts.

Notes:

¹Studies did not specify a disability type and included multiple disabilities.

Where are the gaps in the research on disability employment interventions?

- **More high-quality research is required to determine what combination of services or intervention components leads to improved education, earnings, and employment outcomes.** Of the 58 studies included in this evidence review, many (40 studies) received a high or moderate causal evidence rating; however, all but one of the intervention types (benefit offsets) provided a combination of service components, making it unclear which specific services lead to improved outcomes. Mental and behavioral health supports, supported employment, transition programs and support services, and VR interventions all included multiple service components. It is unclear based on the existing research if the combination of these services contributes to their impacts or if one of the many services offered is the most impactful.

- **More high-quality research is required to determine the impacts of disability employment interventions on earnings.** While some of the disability employment interventions reported improved earnings outcomes, the majority of studies that evaluated earnings outcomes reported no significant impacts (20 of 34). More research is needed to fully understand the potential impacts of disability employment interventions on earnings-related outcomes.
- **Exploring the differences in outcomes across disability diagnoses would illuminate the importance of implementation and context when evaluating the effectiveness of interventions.** The majority of interventions (26 of 40) served a variety of disability types, but the research studies included combined findings only. Further exploration by primary disability type would provide more insights into the interventions that are most impactful for specific disabilities. This level of analysis would allow for more informed disability employment policy decisions (Abulaghaib et al., 2019).
- **Clear definitions of disabilities are required to effectively compare interventions.** For the 26 studies assessing a variety of disabilities, the way the disabilities were defined or categorized differed across studies. For example, some studies used broad categories like “nervous system and other sensory disorders” or “non-blind disabilities”¹¹ while others listed specific disabilities, such as speech, hearing, or visual impairments. Studies also differed on when to combine disabilities under one umbrella category. For example, some studies combined intellectual and developmental disabilities while others reported developmental disabilities and intellectual disabilities separately. Including clear definitions of the disabilities being evaluated allows consumers of research to better understand how an intervention may impact a specific population.
- **More longitudinal research is required to determine the effect of disability employment interventions on labor market outcomes.** The majority of the studies focused on labor market outcomes (40 of 58), notably employment and earnings, and 26 studies focused on impacts at 24 months or less post-intervention. Five studies looked at outcomes at 36 months post-intervention, and nine studies looked at time periods from 5 years to 13 years post-intervention. As previously mentioned, the studies following the sample for longer periods found different impacts of the intervention over time. Examining outcomes over time allows for an investigation of the long-term impacts of the interventions.
- **More rigorous research is needed to assess the effectiveness of mental health interventions.** The majority of studies that focused on mental health interventions as part of this systematic evidence review showed potentially promising effects on employment, education and training, and health outcomes, but received low causal evidence ratings (2 of 3). Only one study received a high causal evidence rating. Thus, there is a need to expand rigorous research to understand the impacts of mental health interventions on outcomes.

¹¹ Note: according to study authors non-blind disabilities were defined as any disability besides blindness. Disabilities categorized as “non-blind” were not limited to visual impairments. Visual impairments refer to significant non-blind vision-loss.

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