

Promoting and enhancing self-determination to improve the post-school outcomes of people with disabilities

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Abstract. This article re-affirms the call for attention to the development of self-determination skills and opportunities for people with disabilities. Recent data on rates of participation in postsecondary education and employment are reviewed, highlighting the ongoing disparities in post-school outcomes for people with disabilities. Next, research on the relationship between self-determination and post-school outcomes is reviewed as is research on effective strategies to promote self-determination. Implications for the field are highlighted.

Keywords: Self-determination, post-school, transition

1. Introduction

In 1988, the Office of Special Education and Rehabilitative Services (OSERS) began an initiative on self-determination focused on system-wide activities to enable persons with disabilities to have more input in the decisions that affect their lives. In the preliminary stages of the OSERS' initiative, Ward (1988) referred to self-determination as both "the attitudes which lead people to define goals for themselves and the ability to take the initiative to achieve those goals" (p. 2) with the understanding that defining goals was about making choices and having access to multiple options from which to choose. Ward proposed this as a working definition and other definitions were encouraged along with efforts to develop interventions and assessments to promote self-determination. Between 1990 and 1996, OSERS funded more than 26 model demonstration projects on that focused on self-determination theory development, assessment, and intervention (Ward & Kohler, 1996).

Since this time, the field has significantly expanded theoretical frameworks for the development of self-determination and multiple evidence-based practices exist to teach and create opportunities for the development of self-determination in the context of the transition for adulthood for adolescents with disabilities.

The attention directed to self-determination in the early 1990s was part of an effort to improve a range of post-school outcomes and to support youth with disabilities in taking more control over every aspect of their lives (e.g. employment, independent living, community participation). Since the mid-1980s, there have been numerous state-wide and national studies following special education students who completed high school over a period of time (most notably, the National Longitudinal Transition Study 1 & 2). The results of all these studies have indicated that the post-school outcomes of those with disabilities in terms of education, employment, and other aspects of community participation are far bleaker than for the general population. Recurring research has suggested that the outcomes for people with disabilities in all areas have remained stagnant over the past 30 years. The purpose of this article is to first review recent data on rates

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of participation in postsecondary education, employment, SSI, and poverty for people with and without disabilities that suggest the ongoing persistence of this discrepancy and the need for continued attention to the role of self-determination in enhancing post-school outcomes. We will follow this with a review of existing research on the relationship between self-determination and post-outcomes as well as research on effective strategies to promote self-determination, re-affirming the call that originated in the 1990s for attention to the development of self-determination skills and opportunities for people with disabilities.

2. Recent data on post-school outcomes

In this section, we will review data from two recent sources, the CIRP Freshman Survey (Eagan et al., 2017) administered by the Higher Education Research Institute and the Disability Status Report (Erickson, Lee, & von Schrader, 2016) published by Cornell University's Yang-Tan Institute on Employment and Disability. Unfortunately the definition of 'disability' is different in the two data sets and therefore, comparisons cannot be made between them as well as with other common disability counts (e.g. Part B under IDEA). Furthermore, both data sources are based on self-reported disabilities and the accuracy cannot be verified.

The most recent CIRP Freshman Survey data are based upon self-reported responses from 137,456 first-time, full-time students who entered 184 U.S. colleges and universities of in the fall of 2016. Select items related to demographic characteristics and self-determination from the CIRP Freshmen Survey allow for comparisons of the initial college experiences of students with disabilities with those without disabilities. Freshmen participants in the survey were asked to identify as having with any seven disability categories (attention deficit hyperactivity disorder, autism spectrum disorders, chronic illness, learning disability, physical disability, psychological disorder, other disability). Approximately 16.0% of the incoming 2016 class identified as having only one disability with an additional 4.3% selecting two categories and another 1.6% choosing three or more for a total of 21.9% identifying as having at least one disability. The percentages for the total reporting disabilities and for most categories have increased in recent years. For example, 14.6% freshmen reporting one or more disabilities in 2010 compared with 21.9% in 2016,

a 50% increase. This increase was highest for the psychological disorder category. In 2010, a total of 3.6% reported with 2.3% males and 4.7% females reported a psychological disorder while in 2016, a total of 10.7% reported with 6.1% males and 14.5% females. This is over a 300% increase in the total number of freshmen reporting this disability. Perhaps this is encouraging in relation to self-determination as it is possible that students are more comfortable disclosing their disability and are self-advocating for the services and accommodations they need to be successful. However, more research is needed to examine the relationship between disclosure, advocacy and self-determination particularly as survey items do not ask whether students had an IEP/504 Plan in high school or intend to request disability support services from their college.

The CIRP Freshmen Survey asks many items about freshmen's high school experience as well as activities they intend to pursue in college. Two items that particularly relate to self-determination are whether freshmen expect to communicate regularly with professors and whether they expect to get tutoring help. While approximately 90% of all freshmen, including those with disabilities, indicate there is some chance or a very good chance that they will communicate with their professors, it is concerning that about 11% of freshmen with learning disabilities indicate that there is very little or no chance of such communication. We know that many of these students may need support in accessing course content and must disclose to their professors to get support services and accommodations. Therefore, one would hope that almost 100% of this population would be self-advocating for what they need to succeed in specific courses.

Similarly, about 85% of freshmen with learning disabilities indicate that there is at least some chance of getting tutoring help. This means that the remaining 15% do not plan on requesting tutoring help. Again, we know that many in this population will need additional tutoring help to pass their courses. However, there is evidence that for a variety of reasons, including the belief that the need for special education ends with high school (Lightner, Kipps-Vaughan, Schulte, & Trice, 2012; Marshak, Van Wieren, Ferrell, Swiss, & Dugan, 2010), that most college students do not disclose their learning disabilities, which is the first step in obtaining needed accommodations and support services. The chances of successfully completing college is drastically reduced for those students who do not seek these supports.

Data on employment, participation in the Supplemental Security Income (SSI) Program, and poverty for persons with disabilities was examined using the 2015 Annual Disability Status Report published by Cornell University's Yang-Tan Institute on Employment and Disability. This report, based on the American Community Survey (ACS) administered by U.S. Census Bureau, provides a summary of the most recent demographic and economic statistics on the non-institutionalized population with disabilities. Comparisons can be made to people without disabilities and across disability types. This report indicates that the prevalence of disability among non-institutionalized people of all ages was 12.6% or almost 40 million. Among the six types of disabilities identified in the survey (ambulatory, visual, hearing, self-care, independent living, and cognitive) the highest prevalence rate was for ambulatory disability - 7.0%. The lowest prevalence rate was for visual disability - 2.3%.

The employment rate of working-age people with disabilities in 2015 was 35.2% while the employment rate of people without disabilities was 78.3%. This is a gap of 43.1 percentage points. Among the six types of disabilities, the highest employment rate was for people with a hearing disability - 51.8% - while the lowest employment rate was for those with a self-care disability, 15.8%. As indicated by Fig. 1, trend lines for the recession beginning 2008 through 2015 indicate that at the start of this period, the employment rate for people without disabilities was 79.9% and for people with disabilities, 39.5%. Both of these

rates are relatively high. As the recession deepened and those in the general population became unemployed, people with disabilities lost employment at a comparative rate suggesting that when there are an abundance of jobs and a scarcity of workers, people with disabilities are more likely to be hired. However, when the overall unemployment rate is high, diverse populations, including people with disabilities, experience even higher rates of unemployment. In 2015, the employment participation rate of persons with disabilities was about 35%, the same rate it has been for at least 20 years.

The percentage of working-age people with disabilities who received Supplemental Security Income (SSI) payments in 2015 was 19.3% or about 3,801,100. About one in five adults with disabilities participating in this cash payment program including 29.7% of people with an independent living disability. During the same year, the poverty rate of working-age people with disabilities in the U.S. was 27.0% while the rate of poverty among people without disabilities was 11.6% with a difference of 15.4 percentage points. An estimated 31.8% of people with an independent living disability were living below the poverty line. Using readily available information, the poverty level in 2017 for a 1-person household is \$12,060 while the maximum monthly SSI benefit for an individual is \$735 or an annual income for person on SSI is \$8,820. This suggest that more than one-fourth of people with disabilities live in poverty on an on-going basis. Although many on SSI rely on Medicaid to pay for their healthcare and other necessary

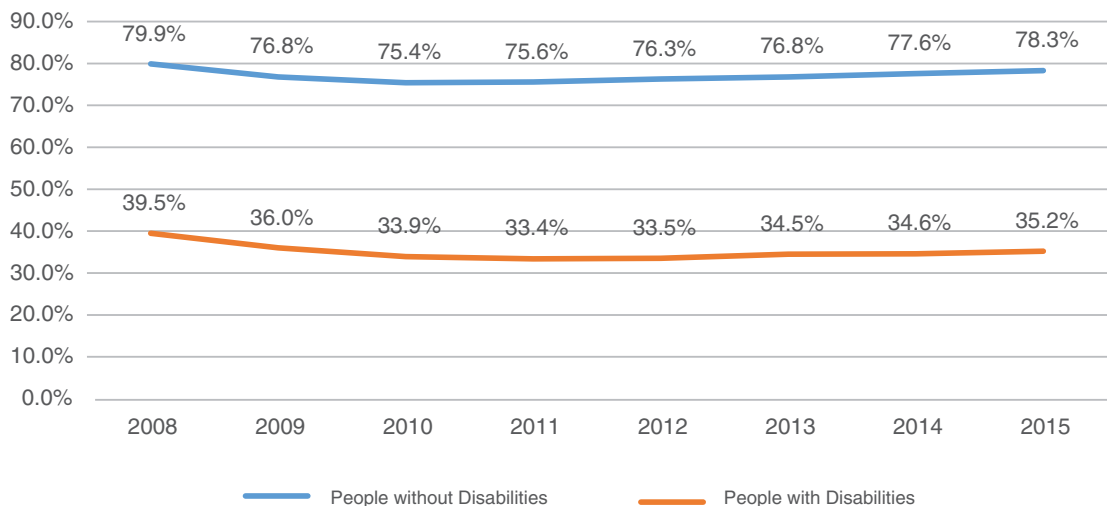


Fig. 1. Employment rate of people with and without disabilities (ages 21-64) 2008-2015. Based on the 2015 American Community Survey (ACS) data (Erickson, Lee, & von Schrader, 2016).

long-term support, less than 1% of those who enroll in this program ever become financially self-sufficient enough to end their dependence on these benefits (Ticket to Work and Work Incentives Improvement Act of 1999). This is unfortunate because an annual income of less than \$9,000 creates significant barriers to an independent, self-determined life-style.

3. Relationship between self-determination and post-school outcomes

Beginning in the late 1990s, driven in large part by the OSERS initiatives, researchers began to explore the connection between the self-determination of young people with disabilities and post-school outcomes. This research has consistently suggested that – after controlling for other factors – enhanced self-determination leads to more positive post-school outcomes. This research suggests that promoting self-determination is a critical factor to consider along with other systemic changes in the design and delivery of supports and services to enhance post-school outcomes. For example, Wehmeyer and Schwartz (1997) measured the self-determination status of 80 students with intellectual or learning disabilities in their final year of high school and then one year after high school. Students with higher self-determination scores when they left high school were more likely to have expressed a preference to live outside the family home, have a savings or checking account, and be employed for pay one year after school. Among school-leavers who were employed, youth in the high self-determination group earned significantly more per hour than their peers in the low self-determination group. Wehmeyer and Palmer (2003) conducted a second follow-up study, examining the adult status of 94 young people with intellectual or learning disabilities one and three years after graduation. These data replicated Wehmeyer and Schwartz' (1997) earlier study and also found employed young adults scoring higher in self-determination made statistically significant advances in obtaining job benefits, including vacation and sick leave and health insurance, an outcome not shared by their peers in the low self-determination group.

Building on this early research suggesting a correlational link between self-determination and outcomes, researchers have explored the impact of actively teaching and creating opportunities for self-determination in adolescents and young adults with

disabilities on in-school and post-school outcomes. For example, research has found that teaching self-determination skills can lead to increased academic performance (Konrad, Fowler, Walker, Test, & Wood, 2007; Raley, Shogren, & McDonald, 2017), attainment of academic goals (Agran, Blanchard, Hughes, & Wehmeyer, 2002; Shogren, Palmer, Wehmeyer, Williams-Diehm, & Little, 2012; Wehmeyer, Palmer, Agran, Mithaug, & Martin, 2000) and transition goals (Devlin, 2011; McGlashing-Johnson, Agran, Sitlington, Cavin, & Wehmeyer, 2003; Shogren et al., 2012; Wehmeyer et al., 2000; Woods & Martin, 2004), as well as greater access to the general education curriculum (Agran, Wehmeyer, Cavin, & Palmer, 2008; Lee, Wehmeyer, Palmer, Soukup, & Little, 2008) for adolescents with disabilities in secondary school. It is hypothesized that these positive in-school outcomes will lead to more positive post-school outcomes. In addition to findings with adolescents, researchers have found that increased self-determination in adults is linked to enhanced recreation and leisure participation (Dattilo & Rusch, 2012), to increased choice opportunities (Neely-Barnes, Marcenko, & Weber, 2008), and to enhanced quality of life (Lachapelle et al., 2005; Wehmeyer & Schalock, 2001) in adults with disabilities.

In one of the few longitudinal studies examining the relationship of promoting self-determination in adolescents and longer-term early adulthood outcomes, Shogren, Wehmeyer, Palmer, Rifenshark, and Little (2015) followed students who had participated in a randomized control trial on the efficacy of self-determination interventions (compared to a business as usual control group; Wehmeyer, Palmer, Shogren, Williams-Diehm, & Soukup, 2013) for two years post school. To measure adult outcomes, Shogren and colleagues used the Outcome Survey, a survey adapted from Wehmeyer and Schwartz (1997) and Wehmeyer and Palmer (2003), the National Consumer Survey (Jaskulski, Metzler, & Zierman, 1990), and the National Longitudinal Survey (Wagner, D'Amico, Marder, Newman, & Blackorby, 1992). The measure includes questions related to employment, community access, financial independence, independent living, and life satisfaction. Results indicated that self-determination status at the end of high school, which was impacted by exposure to self-determination interventions in secondary school, predicted significantly more positive employment outcomes, including increased wages, benefits, and opportunities for career development. The young adults also showed increased community

integration outcomes, including access to social networks and supports, transportation, and other critical factors to successful employment and community participation. In essence, this study provided evidence that promoting self-determination while youth are in secondary school results in enhanced self-determination in early adulthood, and that enhanced self-determination in early adulthood results in more positive adult outcomes, including employment and community participation.

Overall, the research suggests the importance of taking a lifespan approach to promoting self-determination, which can be a critical element of promoting positive outcomes, particularly in the context of – as noted in the original OSERS' funding-initiatives – system-wide activities to support persons with disabilities have more input in the decisions that affect their lives, including decisions about integrated employment and community engagement school and post-school.

4. Interventions to promote self-determination and post-school outcomes

Beginning with the OSERS' initiatives in the early 1990s, and bolstered by the ongoing data suggesting continued poor post-school outcomes as well as the increasing data suggesting the role of promoting self-determination in addressing poor outcomes, researchers have directed significant attention to the development, evaluation, and implementation of self-determination strategies. Much of this work has focused on adolescents with disabilities in the context of secondary transition services (Test et al., 2009) as required under the Individuals with Disabilities Act, although other research groups have begun to focus on promoting self-determination in the context of the design and delivery of adult services and supports (Heller et al., 2011). Researchers have found that multi-component interventions (i.e., those that target multiple self-determination skills – goal-setting, problem solving, decision making, choice making, self-advocacy simultaneously) tend to be the most effective (Cobb, Lehmann, Newman-Gonchar, & Alwell, 2009), perhaps because of the focus on multiple skills and their application across environments.

Central to implementing interventions to support self-determination is a theoretical framework to guide intervention implementation and evaluation. On the-

ory, developed by Shogren, Wehmeyer, Palmer, Forber-Pratt, et al. (2015) is Causal Agency Theory. Causal Agency Theory is an empirically-validated model that provides a theoretical framework for developing and enhancing supports to enable people with disabilities to develop greater self-determination by engaging in agentic action to set and go after goals. It builds on the functional model of self-determination (Wehmeyer, 1992, 1998, 2003) and defines self-determination as a “dispositional characteristic manifested as acting as the causal agent in one's life” (Shogren, Wehmeyer, Palmer, Forber-Pratt, et al., 2015, p. 258). A dispositional characteristic is an enduring tendency that develops over time, with appropriate supports and opportunities. The importance of contextual factors is a central element of Causal Agency Theory. Contextual factors (e.g., personal, family and community, and systems and policy factors) shape opportunities for the development and expression of self-determination, necessitating consideration of the implementation of interventions to teach skills associated with self-determination, such as self-advocacy, goal-setting, problem-solving and decision-making skills, across supportive systems.

Causal Agency Theory provides a framework to assess, develop, implement, and evaluate interventions to promote self-determination. For example, researchers have developed curricula to teach and create opportunities for students with disabilities to take leadership roles in the transition planning process, engaging adolescents in the goal setting process and with advocating for their future. Martin et al. (2006) conducted a randomized control trial (RCT) study of a student involvement curriculum, called the Self-Directed IEP, and found that students with disabilities who received instruction using the SDIEP increased their participation in IEP meetings, engaged in more leadership activities during the meeting, and were better prepared to express their interests, strengths, and support needs. Wehmeyer, Palmer, Lee, Williams-Diehm, and Shogren (2011) conducted an RCT study of the impact of another student involvement curriculum, *Whose Future is it Anyway?*, on self-determination and transition knowledge and skills, finding that instruction using the WFA resulted in significant, positive differences in self-determination when compared with a placebo-control group, and that students who received instruction gained transition knowledge and skills.

Promoting self-determination, however, can and should occur across contexts (e.g., home, school,

and the community) as well as within contexts (e.g., transition planning, employment experiences, core content instruction at school) across the lifespan. Two related interventions, the Self-Determined Learning Model of Instruction and the Self-Determined Career Development Model have been extensively researched with adolescents and adults with disabilities as a means of promoting self-determination and goal-directed action. The SDLMI and SDCDM are models of instruction used by a facilitator (e.g., educator, direct support professional, family member) to design instruction and supports that enable people with disabilities to self-direct goal-setting to enhance self-determination. In implementing the model, people with disabilities are supported to set a goal, develop an action plan, and evaluate their progress. The SDLMI and SDCDM create opportunities for people with disabilities to focus on choice-making, problem solving, decision making, and self-advocacy, with support from a trained facilitator. The differences between the SDLMI and the SDCDM emerge in the focus of the goal and the support provided. The SDLMI can be used generally with any learning goal (e.g., academic, social, behavioral, recreational), including learning goals in the school context and the SDCDM is specific to career development related goals and the supports needed to self-direct career exploration and development activities.

A growing body of research has suggested the impact of the SDLMI and SDCDM on self-determination other school and post-school outcomes. Wehmeyer et al. (2012) reported the results of a group RCT study of the efficacy of SDLMI with over 300 students with intellectual and learning disability. Adolescents in the treatment group reported significantly greater increases in self-determination, with the greatest growth in the second year of instruction suggesting the importance of ongoing exposure to self-determination skill instruction. Shogren et al. (2012) conducted a group RCT of the impact of the SDLMI on access to the general education curriculum and goal attainment, finding that students in the SDLMI group (vs. the control group) made significantly more progress on goals and had significantly greater increases in their access to the general education curriculum than students assigned to the control group, further teachers reported significant changes in their perceptions of student's capacity for self-determination (Shogren, Plotner, Palmer, Wehmeyer, & Paek, 2014). As mentioned previously, Shogren, Wehmeyer, Palmer, Rifenbark,

et al. (2015) followed youth with disabilities, for two years after high school who were exposed to multicomponent self-determination interventions including the SDLMI, finding increased employment and community participation outcomes post-school. Powers et al. (2012) had similar results in school and post-school using an intervention to promote self-determination called My Life for youth in foster care and special education. Shogren, Burke, et al. (2017) reported the results of a state-wide implementation of the SDLMI with transition-age youth planning for the movement from school to integrated employment, and found that one year of implementation of the SDLMI teacher's perceptions of adolescent self-determination and transition-related goal attainment.

With regard to the SDCDM, Wehmeyer et al. (2003) worked with vocational rehabilitation counselors to implement the SDCDM, and found that adults with disabilities who were supported to use the model made progress on self-selected employment goals, and felt that they had gained important skills. Wehmeyer et al. (2009) also used the SDCDM as part of a larger intervention package with young women with developmental disabilities, suggesting that they found the model useful and effective in setting and pursuing career development goals. Shogren et al. (2016) examined implementation of the SDCDM with direct support providers as facilitators, examining the impacts on self-determination of adults with intellectual and developmental disabilities served by support provider organizations in the community, finding that the SDCDM influenced self-determination outcomes. However, differences in how the provider organizations supported the SDCDM significantly influenced outcomes, suggesting the importance of the environment and training and supports provided for implementation. Shogren, Dean, et al. (2017) combined the SDCDM with the Discovery process and found impacts on self-determination when implemented with adults with intellectual and developmental disabilities receiving supports for employment from community service provider organizations.

Overall, there is a wide and growing body of research that clearly establishes that people with disabilities can learn the skills associated with self-determination when provided with individualized supports, instruction, and opportunities. While researchers have established that promoting the development of self-determination influences outcomes across the lifespan, including integrated

employment outcomes, there is also a compelling body of evidence that schools and adult support provider organizations too often do not implement evidence-based practices to promote self-determination to improve integrated employment outcomes (Winsor & Butterworth, 2008; Winsor, Butterworth, & Boone, 2011). People with disabilities remain restricted in their opportunities to learn and use skills leading to enhanced self-determination necessitating ongoing targeted and directed attention to embedding opportunities and supports for self-determination across all contexts within which people with disabilities live, learn, work and play (Shogren et al., 2014; Shogren & Shaw, 2017).

5. Future directions to promote integrated employment outcomes

The ongoing disparities in post-school employment and community participation outcomes are well-established and illuminate the ongoing need for the development of interventions and supports that address these outcomes. Given the established relationship between self-determination, employment, and community integration outcomes (Shogren & Shaw, 2016; Shogren, Wehmeyer, Palmer, Rifenburg, et al., 2015; Wehmeyer & Palmer, 2003; Wehmeyer & Schwartz, 1997), we would argue that self-determination should be at the center of efforts to promote change. Enabling people with disabilities to self-direct their own lives and careers should be a goal of disability supports and services across the lifespan both because of the inherent right all people to be self-determining as well as the clear and compelling evidence that promoting self-determination makes a difference in outcomes. Obviously, systemic changes are needed both to create opportunities for self-determination as well as to address the other factors that restrict opportunities for adults with disabilities to be engaged members of their community and the workforce. Promoting self-determination should be an explicit aspect of all supports and services and all system reforms initiatives. As such, changes are needed in the structure of the systems that organize supports (Shogren, Abery, et al., 2015). Current opportunities, such as those introduced by the U.S. Department of Justice's enforcement of Title II of the Americans with Disabilities Act as interpreted by the U.S. Supreme Court in *Olmstead vs. L.C* in the context of employment supports (United States

District Court District of Rhode Island, 2014) as well as the provisions related to transition in the Workforce Innovation and Opportunities Act create opportunities that must be leveraged for systemic changes.

At the individual level to promote integrated employment outcomes, enabling people with disabilities to make choices as well as set and work toward goals will enable supports and services to be matched to wishes, interests, and capabilities, and, in doing so, will promote greater engagement and motivation (Mithaug, 2005; Shogren, Dean et al., 2017). Making choices and setting goals requires that individuals are exposed to a pool of potentially rich choice options and opportunities that enable the ongoing development of self-determination. If these options are sufficiently rich, the person's goals and choices will become more and more self-determining. This also promotes systems change by shifting the focus from what is available to what is aligned with the person's interests, preferences and needs. During the employment goal setting process, job seekers should participate actively in all job search activities - from determining their interests and career goals to starting a new job (Brugnaro & Timmons, 2007). Self-determined job seekers choose the resources to achieve those goals, are the decision-makers, and are actively involved in all stages of the employment process. They act as the primary source of information, decide the direction of the job search, choose the people to participate, and control the planning that leads to a job. They know, and fully understand, what choices are available. To be self-determining is to be fully engaged in the job selection process as well as the selection of community-based resources and supports which creates feelings of empowerment and motivation.

At the system level, school based transition and employment supports and services need to be coordinated and funded in ways that promote self-determination and provide individualized supports based on identified support needs with the goal of enhanced self-determination and employment and community integration outcomes. To enable self-determined job seekers to create their own personal career goals and to take responsibility for participating actively in determining how these goals will be achieved, supports must be aligned with these goals and training for staff and decision-makers must focus on self-determination across all levels to foster self-determined individuals and valued outcomes.

6. Conclusion

Through persistence and innovation, the field has developed many strategies that enable long-term career and community engagement outcomes of people with disabilities. However, the utilization and the full integration of these strategies into systems of supports remains low. Strategies such as supported employment and entrepreneurship, and their value in finding jobs one person at a time cannot be denied. Further, researchers have shown that efforts to promote self-determination can be fully integrated into these strategies (Shogren, Dean, et al., 2017). Yet with the employment rate of people with disabilities stagnating at about 35%, further systemic change is needed that incorporates best practices in employment, community integration, and promoting self-determination. New and ongoing innovation in federal policy and initiatives, building on the original OSERS' initiatives, is needed across systems. Further, ongoing work is needed to support evidence-based practice at the level of individual, community, and state level supports and services. Exploring ways to innovate, plan with the end in mind, and effectively use evidence-based practice are critically important to break down the stagnation in outcomes and promote real, meaningful, self-determined lives in the community that are driven by the interests, preferences, and values of people with disabilities.

Conflict of interest

None to report.

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