Self-Determination and Inclusive Postsecondary Education for Students with Intellectual Disability: A Review of the Literature

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Abstract

Students with intellectual disability should be able to engage in the same robust, authentic college experiences as their peers without disabilities. As opportunities for inclusive postsecondary education (IPSE) for students with intellectual disability have grown, the field has worked to understand the application of evidence-based practices in secondary transition and supports, such as promoting self-determination. The authors conducted a scoping review on self-determination and IPSE, with findings indicating a small but growing body of literature. Much of the literature addresses the topic generally through practice-based descriptions, and the authors provide recommendations for future directions in research and practice.

Keywords: self-determination, inclusive postsecondary education, intellectual disability, literature review

Plain Language Summary

- More students with intellectual disability are going to college. We are learning how to support students with intellectual disability to develop self-determination during college.
- Self-determination is about making things happen in your life based on what you want and need. Self-determination skills are things like

setting goals, making choices, and self-advocacy (saying what you want or need).

- What we did in this study: We completed a literature review. We looked at studies and articles about self-determination and college for students with intellectual disability.
- Findings: We found 31 articles about self-determination and college for students with intellectual disability. Most of the articles explained what self-determination looks like in college for students with intellectual disability.
 - There were two major themes. The first is that selfdetermination is important for students with intellectual disability. The second is that college is a good place to grow and practice self-determination.
- **Conclusion:** We need more research on self-determination and college for students with intellectual disability. People supporting students with intellectual disability in college can use what we know now.
 - Students can take assessments (tests) to understand their self-determination. Students can practice setting goals and working toward them. Peer mentors (other college students) and teachers can provide support.

As the doors to postsecondary education for students with intellectual disability open, so too does scholarly exploration of the postsecondary education learning context for students with intellectual disability. The emergence of inclusive postsecondary education (IPSE) opportunities has its roots in the Higher Education Opportunity Act (HEOA) of 2008, which strengthened educational resources for students with disabilities to attend college alongside their peers. Intellectual disability is defined within the HEOA as significant limitations in intellectual and cognitive functioning and adaptive behavior, with students with intellectual disability being currently or formerly eligible for a free appropriate public education under the Individuals with Disabilities Education Act (2004). Specifically, the HEOA provides access to federal and state funding for students who attend an institution of higher education that qualifies as a comprehensive transition and postsecondary program (CTP) and demonstrate satisfactory progress. Today, there are more than 317 colleges and universities offering IPSE programs with 148 recognized as CTPs (Think College, 2023).

Much of the work exploring inclusive postsecondary education stems from transition planning for students with disabilities, such as the 23 secondary transition predictors for postschool success identified by Mazzotti et al. (2021). In the present review, we focus specifically on IPSE research to date for one such predictor, self-determination. Self- determination is defined in Causal Agency Theory 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). Self-determined people (i.e., causal agents) draw upon their autonomy to choose life goals and take actions towards them, advocate on their behalf, and choose and manage their own supports. The relationship between self-determination and adult success for individuals with disabilities has been explored

extensively. In a large study of 779 students with disabilities exiting high school, Shogren, Wehmeyer, Palmer, Rifenbark, and Little (2015) analyzed the relationship between self-determination status when exiting high school and outcomes one and two years later. Significant positive findings included a relationship between enhanced self-determination and adult outcomes in employment one year after high school and community access one and two years after high school. These findings build on previous research on the relationship between self-determination and adult outcomes (Powers et al., 2012; Wehmeyer & Palmer, 2003; Wehmeyer & Schwartz, 1997). It is important to note that Shogren, Wehmeyer, Palmer, Rifenbark, and Little (2015) found a significant negative interaction between self-determination when exiting high school and financial independence and no significant relationship between self-determination when exiting high school and independent living or life satisfaction. They suggest explanations for the findings and note the need for ongoing research.

Within the context of IPSE, students have opportunities to develop skills and abilities related to self-determination (e.g., decision making, self-advocacy, selfmanagement) that enable them to positively improve their post-school outcomes as they engage in activities and experiences that reflect their interests and values. In college, students can engage in self-directed decision-making about their aspirations and expectations (Rillotta et al., 2020), building a path to the future they desire. The impact of self-determination presents an important opportunity to explore the relationship between self-determination skills and success for all students (Cook et al., 2017). Wehmeyer et al. (2006) underscore the critical importance for students with intellectual disability to gain and practice skills to self-direct their lives as they get older. Schillaci et al. (2021) suggest that "engagement in campus activities may enhance [students'] capacity to make choices about preferred activities (autonomy) and student self-awareness about what they enjoy (self-realization)" (p. 277). Given the connection between self-determination and adult outcomes for transition-age youth with intellectual disability (Powers et al., 2012; Shogren, Wehmeyer, Palmer, Rifenbark, & Little, 2015; Wehmeyer & Palmer, 2003; Wehmeyer & Schwartz, 1997) and IPSE as an increasingly available environment for continued education and growth during this pivotal time, it is important to explore how selfdetermination has been addressed within the context of IPSE to date.

Purpose

As opportunities for IPSE for students with intellectual disability have grown over the last several decades, researchers and practitioners have worked to understand the application of evidence-based practices in secondary transition and supports for students with intellectual disability to have the same robust and authentic college experiences as their peers without disabilities. Given the nascence of the field of IPSE, much remains to be explored. Promoting self-determination, with its established evidence base in secondary transition (Mazzotti et al., 2021), represents one such critical application and area for research. To date, there has not been a review of the literature on selfdetermination in the context of IPSE. Thus, the purpose of this review is to examine the existing literature on self-determination and IPSE for students with intellectual disability and provide recommendations for future research and practice within the field. We used the following research questions to guide this review: **Research Question 1**: What types of articles (descriptive, correlational, experimental/intervention, literature review, and conceptual, policy, or position paper) on self-determination within the context of inclusive postsecondary education for students with intellectual disability have been most common in the literature?

Research Question 2: What themes have emerged across the literature in how self-determination is addressed within the context of inclusive postsecondary education for students with intellectual disability?

Method

A scoping review is a systematic method of mapping areas of relevant literature on a particular topic, regardless of study design, with rigor and transparency (Arksey & O'Malley, 2005). For this review, we followed guidelines from the Preferred Reporting Items for Systematic Reviews and Meta-Analyses Extension for Scoping Reviews (PRISMA-ScR; Tricco et al., 2018).

Inclusion Criteria

This literature review had the following criteria for inclusion: (1) the article was published in English; (2) the article was published in a peer-reviewed journal; and (3) the article addressed the topic of self-determination and higher education for one or more students with intellectual disability. The review included research, practice, and policy literature to cover empirical research, emerging practices (given the nascence of IPSE), and policy related to both IPSE and self-determination. The context of higher education was defined as two- and four-year colleges and universities. We included articles that addressed self-determination as part of preparing for, participating in, or following participation in higher education, although it did not have to be the primary focus of the article. We included articles addressing higher education within the United States and internationally and published as of May 2021. We excluded books, book chapters, book reviews, and unpublished dissertations/theses.

Search Procedures and Screening

We used a systematic process to search leading educational and social sciences databases [Education Resources Information Center (ERIC), PsycINFO, and Web of Sciences]. Search terms included combinations of (a) self-determination, (b) postsecondary education (e.g., college, university, higher education), and (c) intellectual and developmental disabilities (e.g., intellectual disability, developmental disabilities, mental retardation). Two members of the research team conducted the initial electronic search together, and a third member of the research team independently replicated the process. Both searches in May 2021 produced the same number of results (*n*=891). Next, we completed a hand search of the five journals most common in the search results and three additional journals identified as relevant by the research team: *Education and Training in Autism and Developmental Disabilities, Journal of Inclusive Postsecondary Education, Intellectual and Developmental Disabilities, Journal of Inclusive Postsecondary Education, Exceptional Children and Developmental Disabilities, Journal of Inclusive Postsecondary Education, Intellectual and Developmental Disabilities, Intellectual and Developmental Disabilities, Intellectual and Developmental Disabilities, Intellectual Intellectual Intellectual Intellectual Disabilities, Intellectual Intellectual Intellectual Disabilities, Intellectual Intellectual Intellectual Disabilities, Intellectual Intellectual Intellectual Disabilities, Intellectual Intellectual Intellectual Intellectual Disabilities, Intellectual I*

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Journal of Intellectual Disabilities, Journal of Special Education, and *Journal of Vocational Rehabilitation.* We reviewed the titles of all issues from January 2008 through May 2021. We selected 2008 as the starting year for the hand search because of the significance of the HEOA for increased opportunities for IPSE. The hand search resulted in 10 additional articles. There was a total of 670 articles after the research team removed duplicates.

The first author trained all members of the research team on inclusion criteria, and individuals engaged in coding sets of two randomly selected articles from the search results until the team reached 100% agreement. Two researchers screened the title and abstract of all 670 articles. Inter-rater reliability (IRR) was assessed using percent agreement, or number of agreements divided by number of total agreements and disagreements, and Cohen's kappa (Cohen, 1960). Percent agreement was 94.8%, and Cohen's kappa was .59, indicating moderate agreement among reviewers for titles and abstracts (Landis & Koch, 1977). The team reached consensus on disagreements through discussions. The team identified 51 records for full text review. Next, at least one researcher read each of the 51 full texts to screen for inclusion. A second researcher reviewed 41 of the 51 full texts (80%), with 83.0% agreement at this stage. Cohen's kappa was .66 for full-text screenings, indicating substantial agreement between reviewers (Landis & Koch, 1977). Disagreements were mainly caused by articles that separately mentioned self-determination, higher education, and students with intellectual disability, but without specifically addressing self-determination for students with intellectual disability in the higher education context. The team clarified the inclusion criteria of addressing the three aspects of the topic of focus in conjunction (self-determination, students with intellectual disability, higher education) and reached consensus. We then conducted an ancestral search of the 28 included articles, which produced an additional three articles meeting inclusion criteria. This process resulted in a total of 31 articles. Figure 1 shows the results of the search and screening procedures.

Data Analysis

Authors then conducted a content analysis by extracting data from the 31 included articles. The research team charted key information for each article including the article type, purpose of the paper, primary research questions, research design, number of participants and disability status, a description of the college/university setting for students with intellectual disability, study findings, and content related to self-determination (the definition of self-determination, application, and implications for the field; Arksey & O'Malley, 2005).

Figure 1





The team charted article types as (1) descriptive, (2) correlational, (3) experimental/intervention, (4) literature review, and (5) conceptual, policy, or position paper. We defined descriptive studies/articles as describing a given population or area of interest for informational purposes and non-experimental in nature. Examples include case studies, naturalistic observations, and surveys. We defined correlational studies as using data or models to test relations, but without manipulating variables, for the purpose of looking at relationships through data. We defined experimental or guasi-experimental studies as using a scientific approach to actively manipulate and measure variables of interest. We defined literature reviews as systematic summaries of research on a given topic. Lastly, we defined conceptual, policy, or position papers as providing an overview of the state of practice and/or policy, with and without calls to action to advance the field. When charting the purpose of the paper, the team coded whether self-determination in connection to IPSE was explicitly stated. When describing disability status, we used terminology from the article (i.e., we did not change "intellectual and developmental disabilities" to "intellectual disability"). The team engaged in thematic analysis by using the charted data to search for themes, after which the research team defined, named, and reviewed themes through discussion (Braun & Clarke, 2006). Specifically, we utilized data

on how self-determination within IPSE was examined or described within articles (even when not the publication's focus) as the basis for determining themes.

At least one reviewer charted all articles, and a second reviewer charted 10 of the 31 included articles (32%). IRR for data analysis was 91.2%, which is considered a high level of agreement, with disagreements resolved through discussion to reach consensus (Graham et al., 2012; Hartmann, 1977).

Results

A total of 31 articles met inclusion criteria. The publication year range was from 2005 to 2021. There was an increasing trend in publication dates, with more than half of the 31 articles published in the last five years (n = 19; see Figure 2). The setting in most articles was IPSE in the United States (n = 27), with Taiwan (n = 2), Australia (n = 1), and Mexico (n = 1) as the other locations. Articles were published across 20 unique journals, with five journals with more than one article included in the review: Education and Training in Autism and Developmental Disabilities (n = 5), Journal of Vocational Rehabilitation (n = 4), Journal of Intellectual Disabilities (n = 3), Exceptional Children (n = 2), and Inclusion (n = 2).

Figure 2



Publication Trends

Research Question 1

The most common type of article was descriptive (n = 17), followed by correlational studies (n = 5), experimental/quasi-experimental studies (n = 4), conceptual, policy, or position papers (n = 3), and literature reviews (n = 2). See Table 1 for a list of articles by type and a summary of content related to self-determination within each article.

Descriptive

Among the 31 articles, 17 (55%) were descriptive. Five of these articles had a purpose specific to self-determination. These included students' perceptions of self-determination development and opportunities (Ankeny & Lehmann, 2011), attitudes and experiences of typical college students towards fellow students with intellectual disability, including challenges in promoting self-determination (Izzo & Shuman, 2013), experiences of self-determination in personal, social, and educational contexts in IPSE (Rubio-Jimenez & Kershner, 2021), the importance of self-determination to the success of postsecondary students with disabilities (Thoma & Getzel, 2005), and application of Self-Determination Theory (Ryan & Deci, 2000) to peer mentor models (Fisher et al., 2020).

Correlational

Five studies (16%) utilized a correlational design, and four of these studies had a purpose specific to self-determination. Two of these studies explored self-determination for students participating in postsecondary education (Lee et al., 2021; Shogren et al., 2018). Lee et al. (2021) found students' self-determination significantly increased from the beginning to the end of the academic year in both their first and second years in a two-year IPSE program. The authors found similar changes in students' adaptive skills, with no significant changes in executive functioning or social skills. Shogren et al. (2018) explored the self-determination status of first-year IPSE students and the correlation to personal, secondary school, and postsecondary program factors. Significant findings included differences in self-determination, or its essential characteristics, based on race/ethnicity, gender, participation in regular or alternate state assessment, and participation in college social activities.

Chao et al. (2019) focused specifically on linking self-determination and transition outcomes after high school. The researchers found that youth with intellectual disability, learning disabilities, emotional disturbance, and autism had significantly lower self-determination than peers with other disabilities. They also found that transition outcomes for this population could be predicted by self-determination, with higher self-determination scores corresponding to more positive transition outcomes (i.e., employment, postsecondary education).

Two studies evaluated the impact of postschool outcomes utilizing the National Longitudinal Transition Study-2 (Doren et al., 2012; Shogren et al., 2017). Shogren et al. (2017) found autonomy, psychological empowerment, and self-realization (three of four essential characteristics of self-determination in the functional model of self-determination; Wehmeyer, 2005) mediated the relationship between school-based factors (e.g., access to the general education curriculum and inclusion with peers with and without disabilities, student skills) and postschool outcomes (e.g., employment, social relationships).

Experimental/Quasi-Experimental

Four studies (13%) used experimental or quasi-experimental designs, and all four had a primary purpose focused on self-determination. Two articles measured how

students' self-determination changed in response to IPSE on a college campus (Cook et al., 2017; Schillaci et al., 2021). Schillaci et al. (2021) found statistically significant improvement in self-determination among students with intellectual and developmental disabilities who had attended one year of IPSE compared to those enrolled in a transition program. Two other quasi-experimental studies demonstrated the use of specific practices, such as the *Self-Determination Summary of Performance (SD-SOP), Self-Determination Model of Learning Instruction* (SDLMI), and *Whose Future is it Anyway?*, in building self-determination for students with intellectual and developmental disabilities during person-centered planning, individualized education program (IEP), and transition meetings (Mazzotti et al., 2015; Wehmeyer et al., 2006).

Conceptual, Policy, and Position Papers

Three studies (10%) in this review were conceptual, policy, or position papers. One had a primary focus on self-determination, specifically advocating for promoting self-determination to enhance outcomes for college graduates with disabilities (Shogren & Ward, 2018).

Literature Reviews

Finally, two of the 31 articles (6%) were literature reviews. Raley et al. (2018) had a purpose specific to self-determination, an examination of curricula to teach skills associated with self-determination. They identified seven articles meeting inclusion criteria, including Wehmeyer et al.'s (2006) evaluation of a model to promote selfdetermination at a community college for students aged 18 to 21.

Research Question 2

While all studies addressed self-determination for students with intellectual disability in higher education in some form, 13 articles included this topic as the main purpose (e.g., self-determination and success in postsecondary education for students with disabilities; Thoma & Getzel, 2005). The remaining 18 articles addressed self-determination in connection with postsecondary education for students with intellectual disability, but it was not the primary focus. For example, Rillotta et al. (2020) completed a qualitative study with students with intellectual disability and peer mentors on their experiences and perceptions and identified self-determination as one of the four major themes of the data. Across the included articles, two primary themes emerged: (1) the criticality of promoting self-determination for students with intellectual disability and (2) inclusive postsecondary education as a valuable context for promoting self-determination for students with intellectual disability.

Theme 1: Critical Importance of Self-Determination for Students with Intellectual

Disability

Across articles, authors used data, case studies, and program descriptions to highlight the significance of self-determination to transition-age students with intellectual

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disability. Using data from a national longitudinal study of education and transition outcomes in Taiwan, Chao et al. (2019) found that youth with intellectual disability, learning disabilities, emotional disturbance, and autism who attended college had higher self-determination scores than their peers with these disabilities who entered the workforce instead or stayed at home, consistent with other research showing selfdetermination as a predictor of transition outcomes. Similarly, Shogren et al. (2017) examined National Longitudinal Transition Study-2 data from the U.S., with results suggesting a large and significant role of three of the four essential characteristics of selfdetermination (i.e., autonomy, psychological empowerment, self-realization) mediating the relationship between school-based factors and postschool outcomes, including postsecondary education. In another study, Shogren et al. (2018) explored secondary school experiences as a predictor of self-determination and IPSE success in students with disabilities, finding that most of the sample included students who participated in general education curriculum for some portion of the school day. Finally, Southward and Kyzar (2017) identified both self-determination and participating in postsecondary education as two of seven transition-related predictors of postsecondary competitive employment for people with intellectual and developmental disabilities.

Theme 2: IPSE as a Valuable Context for Promoting Self-Determination

This review underscored the impact of environments and experiences (i.e., opportunities) on self-determination. Multiple articles highlighted IPSE as a natural setting for fostering students' self-determination (e.g., Ankeny & Lehmann, 2011; Folk et al., 2012; Hart et al., 2010), noting opportunities for freedom, autonomy, and choice in college. Students in IPSE programs have structured choices (e.g., their course of study), but also make many spontaneous choices such as who they spend time with, what they want to eat and when, and what campus activities to participate in (Grigal et al., 2013; Prohn et al., 2019). These independent choices in new contexts can lead to greater self-determination, and college offers a safe space for students to exercise dignity of risk before entering "real life" and the workforce (Grigal et al., 2013).

IPSE provides a rich social context for students with intellectual disability to have more diverse and varied interactions with people outside their family unit–namely faculty, staff, and peers with and without disabilities (Folk et al., 2012; Prohn et al., 2019). Prohn et al. (2019), however, noted that programs can hinder social self-determination by allowing program staff and/or peer supports to overschedule students, leading to "scheduled existences" that prevent students' independent, spontaneous choice-making (p. 118). Other naturally occurring IPSE activities, like advocating for accommodations with faculty and/or university centers for disability services, promote self-determination by supporting students to develop awareness of their strengths and weaknesses (Thoma & Getzel, 2005).

Measurement of Self-Determination in IPSE

Across the studies evaluating change in self-determination in connection to IPSE, researchers used the *Adolescent Self-Determination Assessment - Short Form (Cook et al., 2017), the Self-Determination Inventory - Student Report* (Schillaci et al., 2021), the

Arc's Self-Determination Scale (Lee et al., 2021), and the *Arc's Self-Determination Scale - Postsecondary Version* (Shogren et al., 2018) to measure students' self-determination. While these were the only targeted measures of self-determination, several studies connected the measures used (such as *Social Network Analysis*; Spencer et al., 2021) and targeted outcomes to self-determination.

Two studies found statistically or marginally significant gains in students' selfdetermination after one to two years attending an IPSE program (e.g., one fully inclusive program and one dual enrollment program; Lee et al., 2021; Schillaci et al., 2021). Both Lee et al. (2021) and Schillaci et al. (2021) emphasized college as the primary place where young adults with intellectual disability can grow their self-determination as it is steeped with natural opportunities to use their autonomy and personal decision-making. The authors suggested specific inclusive practices as having had a potential impact on students' self-determination including person-centered planning, supporting students to set and monitor academic and career goals, and providing opportunities for choicemaking. Additional suggested practices included using mentors to support daily living and planning skills, and specific coursework aimed at fostering self-determination; however, these strategies were not directly measured as predictors of participants' improved selfdetermination.

Role of Peer Mentors

Within IPSE, peer mentors often play an important role in supporting students with intellectual disability as they strengthen their abilities associated with self-determination. Peer mentors, referred to by some as natural supports (Kelley & Westling, 2013) or coaches (Giust & Valle-Riestra, 2017; Izzo et al., 2013), are typically other university students who provide guidance to students enrolled in IPSE programs. Fisher et al. (2020) described the development of a peer mentor model grounded in Self-Determination Theory (Ryan & Deci, 2000). This model focuses on promoting participation on campus for students with intellectual disability and fostering positive attitudes about individuals with disabilities for the peer mentors. Ten articles discussed the role of peer mentors in supporting students in IPSE to build their self-determination. A common theme (n = 5)was how peer mentors can promote the self-determination of their mentee by providing support in making decisions (e.g., Cook et al., 2017; Kelley & Westling, 2013; Lee et al., 2021). Students with intellectual disability can determine who their peer mentors are and decide what type of peer mentor support they need to achieve their goals (Rillotta et al., 2020; Schillaci et al., 2021). Mentors can also encourage students to be independent in making decisions about their daily plans and activities, providing individualized support as needed (Cook et al., 2017; Lee et al., 2021). Three articles described peer mentors playing an important role in supporting students with intellectual disability to be selfadvocates (Giust & Valle-Riestra, 2017; Izzo & Shuman, 2013; Kelley & Westling, 2013). Peer mentors can encourage their mentees to talk about their needs, request more independence, and work towards their individual goals. An additional four articles explored how peer mentors support the self-determination of students with intellectual disability within social and leisure settings (Cook et al., 2017; Fisher et al., 2020; Green et al., 2017; Plotner & May, 2019), such as through meeting new friends, exploring and choosing extracurricular activities that align with their interest, and being an active

member of social groups. While not described as peer mentors, facilitators in a postsecondary program in Mexico provided students with guidance in independent living (Rubio-Jimenez & Kershner, 2021). Similarly, direct instruction and engagement in the person-centered planning process were discussed as opportunities for students to increase their self-determination while receiving support from others (Lee et al., 2021; Mazzotti et al., 2015).

Discussion

As more students with intellectual disability access higher education, selfdetermination represents a critical area for study, and the findings of the present review indicate a small but growing body of research on self-determination and IPSE for students with intellectual disability. The results suggest that researchers have mostly addressed self-determination broadly as highly relevant to IPSE for students with intellectual disability, but there has been limited evaluation or comprehensive description of practices on how to promote self-determination within IPSE despite the uptick in peer-reviewed literature addressing IPSE and self-determination in the last five years. The majority of articles (17 of 31) focused on describing IPSE broadly, with self-determination often identified as pivotal for students and as highly relevant to the context. Research to extend understandings of how to address self-determination in IPSE is paramount, and recommendations for future directions in research and practice are provided below.

Limitations

Several limitations should be considered when interpreting the results of this review. First, this scoping review included a broad search of peer-reviewed literature on research, practice, and policy to map the current state of the literature on selfdetermination and IPSE. Findings suggest the need for a future systematic review exclusively examining empirical research on self-determination in IPSE to provide a clearer understanding of how self-determination is fostered among college students with intellectual disability- specifically, the participants, settings, self-determination interventions used, and strength and rigor of intervention outcomes (i.e., independent and dependent variables). Second, this review did not include an evaluation of the inclusivity of programs described within the literature. In future evaluations of self-determination within IPSE, researchers should consider inclusive program design as a factor, such as whether students participate in segregated classes or live in separate settings. Researchers have made linkages between self-determination and the level of inclusion with peers with and without disabilities (Kurth et al., 2019), and such work should continue in the context of IPSE.

Third, self-determination is a complex construct and has been misunderstood and misinterpreted across research and practice, particularly with regard to people with more significant support needs (Wehmeyer, 2005). The present findings should be interpreted with the consideration that this review did not include an exploration of differences in theory undergirding the included research, practice, and policy papers on the topic of self-determination within IPSE. Lastly, interrater reliability (IRR) at or above 90% is desirable when identifying articles for inclusion and coding within a literature review. IRR ranged

from 83.0 to 94.8% across stages, with the lower IRR of 83.0% occurring during the fulltext review stage used to determine inclusion of articles. While the team reached consensus for all disagreements, an IRR of less than 90% suggests a need to operationalize inclusion criteria more specifically (e.g., the definition of self-determination) when conducting a review across diverse types of literature (i.e., research, practice, and policy).

Implications for Research

As IPSE opportunities grow with the backing of legislation such as the Higher Education Opportunity Act of 2008, it is promising that, so too, has the literature base on self-determination in this context. Self-determination is identified as a predictor of positive postschool outcomes for students with disabilities (Shogren, Wehmeyer, Palmer, Rifenbark, & Little, 2015; Wehmeyer, 2020), and promoting self-determination is an evidence-based practice in secondary transition (National Technical Assistance Center on Transition, 2019). Thus, the increasing literature addressing self-determination in IPSE suggests that researchers and practitioners are applying what we know from secondary settings to the new world of postsecondary education for students with intellectual disability. Such work, however, is not seamless. Curricula such as the Self-Directed Summary of Performance (SD-SOP) and Whose Future is it Anyway? have been used to promote self-determination for college students with intellectual disability (most often those dually enrolled in secondary and postsecondary programs) during person-centered planning, IEP, and transition meetings (Mazzotti et al., 2015; Wehmeyer et al., 2006). Previously, such curricula have been implemented most often within the structure of K-12 learning environments, but college represents a significantly different setting. Students are supported by a larger number of faculty and staff, who change from semester to semester, as well as outside providers of adult services such as supports coordinators and employment specialists. Crucial questions for researchers to explore thus include when, where, and how self-determination can be promoted intentionally within higher education, and efforts to directly measure and track self-determination among students enrolled in IPSE programs should be employed. Such work can build upon broader research on benefits and barriers of IPSE (Lee & Taylor, 2022) to a more focused examination of benefits and barriers of promoting self-determination within IPSE.

A core tenet of the IPSE movement is authentic inclusion, but research has established significant variation in the inclusivity of higher education programming for students with intellectual disability (Papay et al., 2018). Papay et al. describe educational inclusion as both the physical setting for instruction and the curriculum in which students participate. Within higher education, inclusive practices can be further operationalized as the opportunity to take courses for credit, access to regular advising, receipt of an official transcript, support from university disability resource services, and access to campus housing. While development of quality indicators and benchmarks for IPSE programming is underway (Grigal, Hart, & Weir, 2011), research connecting the quality of IPSE programming (with inclusion as a key factor) and the effect on opportunities for students to enhance their self-determination is needed. To date, much of the literature addresses the topic in general or limited terms despite the increasing number of students in IPSE and the empirical evidence for the significance of self-determination in the lives of people

with intellectual disability. For instance, Kelley and Westling (2013) make the connection between natural supports and the development of self-determination, but this description was not part of an empirical evaluation and did not outline specific practices by natural supports to foster self-determination. Such work will be paramount as the IPSE continues to grow. The development of self-determination occurs with opportunities to practice skills and abilities associated with self-determined action, like choice making, problem solving, self-advocacy, and self-management (Shogren, Wehmeyer, Palmer, Forber-Pratt, et al., 2015). While an examination of the literature on each of these skills and abilities in the college setting was beyond the scope of this review, such work can further operationalize best practices in IPSE.

Implications for Practice

Direct implications of the findings from this scoping review for developing and enhancing IPSE programs are found in the categories of assessment, goal setting and attainment, environment, and peer supports. Detailed within this section, we outline how higher education practitioners can utilize specific practices in these categories to promote self-determination while capitalizing on the many benefits of a college environment and the natural supports available.

Assessment

Data-driven instruction, services, and supports in education begin with assessment, and thus it is a critical starting point and ongoing component for promoting selfdetermination in the context of inclusive postsecondary education. Valid and reliable assessments to measure self-determination for students with intellectual disability in higher education include the Self-Determination Inventory: Adult Report (SDI:AR; Shogren et al., 2021) and the Arc's Self-Determination Scale (SDS; Wehmeyer & Kelchner, 1995), most recently adapted in a Postsecondary Education Version (SDS-PV; Wehmeyer et al., 2014). Importantly, the SDI-AR has been validated for use with adults ages 18 and above with and without disabilities, allowing for the evaluation of selfdetermination and related growth across the full college population. Program faculty and staff can support students to complete the SDI-AR in a short amount of time (10 to 15 minutes) and repeat this evaluation each semester. Educators can also support students to evaluate their progress with goal setting and attainment (Shogren, Wehmeyer, Palmer, Forber-Pratt, et al., 2015). Researchers have explored *Goal Attainment Scaling* (Kiresuk et al. 1994) as an outcome measure at the individual or aggregate level with individuals with intellectual and developmental disabilities (Shogren, Dean, et al., 2021). With this tool, a student can create a five-point rating scale that corresponds to their specific goal, with support from mentors or program faculty and staff. In sum, assessment, which can take a variety of forms, represents a critical component in efforts to promote selfdetermination in inclusive postsecondary education, and should be integrated throughout a student's experience.

Goal-Setting and Attainment

The causal agency essential to self-determination necessitates the student taking the driver's seat for their postsecondary education journey (Shogren, Wehmeyer, Palmer, Forber-Pratt, et al., 2015). The pivotal team of supporters for each student in IPSE can elevate the student to being the "driver" of their own experience through goal setting, person-centered planning, and individualized learning. The Self-Determined Learning Model of Instruction is an instructional framework in which students engage in an iterative problem-solving process to set and work toward goals (Shogren et al., 2019). The model allows for individual, small group, and whole group implementation by a trained facilitator, and thus can be implemented within IPSE in a range of formats. Finn et al. (2008) implemented an adapted version of the SDLMI with college students with disabilities in the categories of orthopedic impairment, other health impairment, deafness, specific learning disability, and emotional disturbance. The format and structure included eight 90minute sessions over two semesters, and students expressed positive outcomes in the areas of self-advocacy, understanding their disabilities, self-confidence, and goal setting. An emerging and related resource, the College and Career Learning Model, offers an individualized goal-setting process focused on the development of college and career skills through experiences and with supports (Burke & Becht, 2022).

Person-centered planning can be described as the collaborative process of an individual with a disability engaging with a team and sharing their short- and long-term life goals and the associated services, supports, and experiences to enable them to achieve those goals (Claes et al., 2010; Taylor & Taylor, 2013). Researchers have begun to explore how person-centered planning is best implemented in IPSE, pulling from both research in secondary transition and adult services. For instance, Mazzotti et al. (2015) described the *Self-Directed Summary of Performance* as a tool for supporting students to participate meaningfully in their person-centered planning, such as *Charting the LifeCourse* (Gotto et al., 2019) and MAPS and PATH (O'Brien & Pearpoint, 2007), are available, although practitioners must consider factors such as evidence of their effectiveness, material cost, and associated training.

Environment and Supports

Higher education professionals have begun to dedicate significant attention to the impact of instructional and environmental factors on students' experiences and outcomes. As a result, efforts to promote self-determination and inclusion for all students have emerged as an imperative in higher education, aided by an increasing focus on evidence-based indicators, including self-determination, that point to better post-school results (Mazzotti et al., 2021). Typically, first-year students access support in semester planning and completion requirements, peer and faculty instructional support, and finding academic and social communities. While the literature documents the barriers faced by students with intellectual disability in accessing these supports and related efforts to increase engagement, much less focus is given to universal designs and approaches that could benefit the self-determination of all students (Wehmeyer & Abery, 2013).

Recognizing engagement as a key indicator of self-determination, Getzel (2014) cites university models that include mentorship through faculty and peers, clarity around the accommodation process, coaching, and cross-campus collaboration as evidencebased approaches. The positive impact of social engagement on students' selfdetermination implores higher education professionals to curate and foster campus programs and activities that integrate the needs of students with and without intellectual disability (Shogren et al., 2018). Experiences that foster on-campus engagement through sports and recreational events, residence life, natural supports, and cross-campus communication through technology are emphasized in "The Think College Standards, Quality Indicators, and Benchmarks for Inclusive Higher Education" (Grigal, Hart, & Weir, 2011), currently being expanded and piloted as "Model Accreditation Standards for Higher Education Programs for Students with Disability" (Think College, 2021).

In addition to natural supports and contexts on campus, peer mentorship can provide another pathway to promote self-determination with students with intellectual disability. As discussed by Fisher et al. (2020), a peer mentor model of support based on Self-Determination Theory (Ryan & Deci, 2000) positions mentors to build a relationship with their mentees within the valued social context of the college community. Peer mentors are often able to promote and support mentees in decision-making, selfadvocating, and exercising self-determination in the social and leisure settings of a college experience. Peer mentors can support their mentee in making decisions about their social and leisure life by expanding their awareness of the options they have on campus, helping them utilize university social resources, and encouraging them to participate in activities and organizations that involve their interests. Additionally, peer mentors can support their mentee in self-advocating for and making decisions related to their academic accommodations and can assist their mentee in initiating conversations with professors or parents to advocate for their needs within the classroom or on campus (Giust & Valle-Riestra, 2017; Izzo & Shuman, 2013). IPSE staff can provide structured training to peer mentors to increase their confidence in supporting self-determination for students with intellectual disability. With training in self-determination, peer mentors can learn to identify opportunities for their mentee to practice decision-making, problemsolving, and goal-setting. By recognizing these opportunities within the natural context of college, a peer mentor can encourage their mentee to take on situations which require self-advocacy.

Conclusion

It is evident that the college context represents a critical learning environment for students with and without disabilities to develop self-determination. As more students with intellectual disability enroll in inclusive postsecondary education, it is critical that researchers continue to empirically explore how to foster the development of selfdetermination most effectively and that practitioners translate this knowledge into action in higher education. The findings of this review suggest a clear path forward to utilize the natural opportunities for students to exercise and enhance their self-determination in the college setting. Practitioners can conduct targeted assessment and support to yield significant and meaningful outcomes for students with intellectual disability.

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References

- Ankeny, E. M., & Lehmann, J. P. (2011). Journey toward self-determination: Voices of students with disabilities who participated in a secondary transition program on a community college campus. *Remedial and Special Education*, 32(4), 279-289. <u>https://doi.org/dvf38v</u>
- Arksey, H., & O'Malley, L. (2005). Scoping studies: Towards a methodological framework. *International Journal of Social Research Methodology, 8*(1), 19-32. <u>https://doi.org/bqnqnb</u>
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77-101. <u>https://doi.org/fswdcx</u>
- Burke, K. M., & Becht, K. (2022). A model for intentional college and career learning inside and outside the classroom. Think College Insight Brief, Issue No. 55. University of Massachusetts Boston, Institute for Community Inclusion. <u>https://thinkcollege.net/resource/campus-life/a-model-for-intentional-college-and-career-learning-inside-and-outside-the</u>
- Chao, P. C., Chou, Y. C., & Cheng, S. F. (2019). Self-determination and transition outcomes of youth with disabilities: Findings from the special needs education longitudinal study. *Advances in Neurodevelopmental Disorders, 3*, 129-137. https://doi.org/jdc8
- Claes, C., Van Hove, G., Vandevelde, S., van Loon, J., & Schalock, R. L. (2010). Person-centered planning: Analysis of research and effectiveness. *Intellectual and Developmental Disabilities, 48*(6), 432-453. <u>https://doi.org/10.1352/1934-9556-48.6.432</u>
- Cohen, J. (1960). A coefficient of agreement for nominal scales. *Educational and Psychological Measurement, 20*(1), 37-46. <u>https://doi.org/10.1177/001316446002000104</u>
- Cook, A. L., Wilczenski, F. L., & Vanderberg, L. (2017). Inclusive concurrent enrollment: A promising postsecondary transition practice for building self-determination among students with intellectual disability. *Journal of the American Academy of Special Education Professionals*, 25-44. https://files.eric.ed.gov/fulltext/EJ1129638.pdf
- Doren, B., Gau, J. M., & Lindstrom, L. E. (2012). The relationship between parent expectations and postschool outcomes of adolescents with disabilities. *Exceptional Children, 79*(1), 7-23. <u>https://doi.org/10.1177/001440291207900101</u>
- Finn, D., Getzel, E. E., & McManus, S. (2008). Adapting the Self-Determined Learning Model of Instruction for college students with disabilities. *Career Development for Exceptional Individuals*, 31, 85-93. <u>https://doi.org/10.1177/0885728808318327</u>
- Fisher, M. H., Athamanah, L. S., Sung, C., & Josol, C. K. (2020). Applying the Self-Determination Theory to develop a school-to-work peer mentoring programme to promote social inclusion. *Journal of Applied Research in Intellectual Disabilities,* 33(2), 296–309. <u>https://doi.org/10.1111/jar.12673</u>
- Folk, E. D. R., Yamamoto, K. K., & Stodden, R. A. (2012). Implementing inclusion and collaborative teaming in a model program of postsecondary education for young adults with intellectual disabilities. *Journal of Policy and Practice in Intellectual Disabilities*, 9(4), 257-269. <u>https://doi.org/10.1111/jppi.12007</u>

- Francis, G. L., & Chiu, C. Y. (2020). The way to ultimate wisdom: An exploratory qualitative study on Taiwanese students with disabilities attending college. *International Journal of Developmental Disabilities, 66*(4), 270-281. <u>https://doi.org/ghfb65</u>
- Getzel, E. E. (2014). Fostering self-determination in higher education: Identifying evidence-based practices. *Journal of Postsecondary Education and Disability*, *27*(4), 381-386. <u>https://files.eric.ed.gov/fulltext/EJ1060006.pdf</u>
- Giust, A. M., & Valle-Riestra, D. M. (2017). Supporting mentors working with students with intellectual disabilities in higher education. *Journal of Intellectual Disabilities, 21*(2), 144-157. <u>https://doi.org/10.1177/1744629516651019</u>
- Gotto, G. S., Reynolds, M. C., Palmer, S. B., & Chiang, D. F. (2019). Supporting families through the Charting the Lifecourse framework. *Intellectual and Developmental Disabilities*, *57*(1), 56-65. <u>https://doi.org/10.1352/1934-9556-57.1.56</u>
- Graham, M., Milanowski, A., & Miller, J. (2012). *Measuring and promoting inter-rater agreement of teacher and principal performance ratings*. Center for Education Compensation Reform. <u>https://files.eric.ed.gov/fulltext/ED532068.pdf</u>
- Green, J. C., Cleary, D. S., & Cannella-Malone, H. I. (2017). A model for enhancing employment outcomes through postsecondary education. *Journal of Vocational Rehabilitation, 46*(3), 287-291. <u>https://doi.org/10.3233/jvr-170863</u>
- Grigal, M., Dwyre, A., Emmett, J., & Emmett, R. (2012). A program evaluation tool for dual enrollment transition programs. *Teaching Exceptional Children, 44*(5), 36-45. <u>https://doi.org/10.1177/004005991204400504</u>
- Grigal, M., Hart, D., & Weir, C. (2011). *Think College standards quality indicators, and benchmarks for inclusive higher education.* Institute for Community Inclusion. https://www.mass.edu/strategic/maicei/documents/think-college-standards.pdf
- Grigal, M., Hart, D., & Weir, C. (2013). Postsecondary education for people with intellectual disability: Current issues and critical challenges. *Inclusion, 1*(1), 50-63. <u>https://doi.org/jfx4</u>
- Hart, D., Grigal, M., & Weir, C. (2010). Expanding the paradigm: Postsecondary education options for individuals with autism spectrum disorder and intellectual disabilities. *Focus on Autism and Other Developmental Disabilities*, 25(3), 134-150. <u>https://doi.org/bwdggk</u>
- Hartmann, D. P. (1977). Considerations in the choice of interobserver reliability estimates. *Journal of Applied Behavior Analysis, 10*(1), 103-116. <u>https://doi.org/fjpjms</u>
- Izzo, M. V., & Shuman, A. (2013). Impact of inclusive college programs serving students with intellectual disabilities on disability studies interns and typically enrolled students. *Journal of Postsecondary Education and Disability, 26*(4), 321-335. <u>https://files.eric.ed.gov/fulltext/EJ1026886.pdf</u>
- Kelley, K. R., & Westling, D. L. (2013). A focus on natural supports in postsecondary education for students with intellectual disabilities at Western Carolina University. *Journal of Vocational Rehabilitation, 38*(1), 67-76. <u>https://doi.org/10.3233/jvr-120621</u>
- Kiresuk, T. J., Smith, A., & Cardillo, J. (1994). *Goal attainment scaling: Applications, theory, and measurement*. Lawrence Erlbaum.
- Kurth, J. A., Ruppar, L. A., Toews, S. G., McCabe, K. M., McQueston, J. A., & Johnston, R. (2019). Considerations in placement decisions for students with extensive

support needs: An analysis of LRE statements. *Research and Practice for Persons with Severe Disabilities, 44*(1), 3-19. https://doi.org/10.1177/1540796918825479

- Landis, J. R., & Koch, G. G. (1977). A one-way components of variance model for categorical data. *Biometrics*, *33*(4), 671-679. <u>https://doi.org/10.2307/2529465</u>
- Lee, C. E., Day, T. L., Carter, E. W., & Taylor, J. L. (2021). Examining growth among college students with intellectual and developmental disability: A longitudinal study. *Behavioral Modification*, 45(2), 324-348. <u>https://doi.org/10.1177/0145445520982968</u>
- Lee, C. E., & Taylor, J. L. (2022). A review of the benefits and barriers to postsecondary education for students with intellectual and developmental disabilities. *Journal of Special Education*, *55*(4), 234-245. <u>https://doi.org/10.1177/00224669211013354</u>
- Mazzotti, V. L., Kelley, K. R., & Coco, C. M. (2015). Effects of Self-Directed Summary of Performance on postsecondary education students' participation in personcentered planning meetings. *Journal of Special Education, 48*, 243-255. <u>https://doi.org/f6tbt7</u>
- Mazzotti, V. L., Rowe, D. A., Kwiatek, S., Voggt, A., Chang, W., Fowler, C. H., Poppen, M., Sinclair, J., & Test, D. W. (2021). Secondary transition predictors of postschool success: An update to the research base. *Career Development and Transition for Exceptional Individuals, 44*(1), 47-64. <u>https://doi.org/f2xx</u>
- National Technical Assistance Center on Transition. (2019). *Effective practices and predictors matrix*. <u>https://transitionta.org/</u>
- O'Brien, J., & Pearpoint, J. (2007). *Person-centered planning with MAPS and PATH: A workbook for facilitators* (5th ed.). Inclusion Press.
- Papay, C., Grigal, M., Hart, D., Kwan, N., & Smith, F. A. (2018). Predictors of inclusive course enrollments in higher education by students with intellectual and developmental disabilities. *Intellectual and Developmental Disabilities*, *56*(6), 458-470. <u>https://doi.org/f827</u>
- Plotner, A., & May, C. (2019). A comparison of the college experience for students with and without disabilities. *Journal of Intellectual Disabilities, 23*(1), 55-77. <u>https://doi.org/j43r</u>
- Powers, L. E., Geenen, S., Powers, J., Pommier-Satya, S., Turner, A., Dalton, L. D., Drummond, D., & Swank, P. (2012). My life: Effects of a longitudinal, randomized study of self-determination enhancement on the transition outcomes of youth in foster care and special education. *Children and Youth Services Review, 34*(11), 2179-2187. <u>https://doi.org/f4cdr2</u>
- Prohn, S. M., Kelley, K. R., & Westling, D. L. (2019). Supports' perspectives on the social experiences of college students with intellectual disability. *Inclusion*, 7(2), 111-124. <u>https://doi.org/10.1352/2326-6988-7.2.111</u>
- Raley, S. K., Mumbardó-Adam, C., Shogren, K. A., Simó-Pinatella, D., & Giné, C. (2018). Curricula to teach skills associated with self-determination: A review of existing research. *Education and Training in Autism and Developmental Disabilities, 53*(4), 353-362. <u>https://www.jstor.org/stable/26563478</u>
- Rillotta, F., Arthur, J., Hutchinson, C., & Raghavendra, P. (2020). Inclusive university experience in Australia: Perspectives of students with intellectual disability and their mentors. *Journal of Intellectual Disabilities, 24*(1), 102-117. https://doi.org/gpbs8m

- Rubio-Jimenez, A. L., & Kershner, R. (2021). Transition to independent living: Signs of self-determination in the discussions of Mexican students with intellectual disability. *British Journal of Learning Disabilities, 49*(3), 352-364. <u>https://doi.org/10.1111/bld.12398</u>
- Ryan, R. M., & Deci, E. L. (2000). Self-Determination Theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, *55*(1), 68-78. <u>https://doi.org/10.1037/0003-066X.55.1.68</u>
- Schillaci, R. S., Parker, C. E., Grigal, M., & Paiewonsky, M. (2021). College-based transition services' impact on self-determination for youth with intellectual and developmental disabilities. *Intellectual and Developmental Disabilities*, 59(4), 269-282. <u>https://doi.org/k3pk</u>
- Shogren, K. A., Dean, E. E., Burke, K. M., Raley, S. K., & Taylor, J. L. (2021). Goal Attainment Scaling: A framework for research and practice in the intellectual and developmental disabilities field. *Intellectual and Developmental Disabilities*, 59(1), 7-21. <u>https://doi.org/k3pm</u>
- Shogren, K. A., Garnier Villarreal, M., Lang, K., & Seo, H. (2017). Mediating role of selfdetermination constructs in explaining the relationship between school factors and postschool outcomes. *Exceptional Children, 83*(2), 165-180. https://doi.org/gf86nr
- Shogren, K. A., Raley, S. K., Burke, K. M., & Wehmeyer, M. L. (2019). *The Self-Determined Learning Model of Instruction: Teacher's guide*. Kansas University Center on Developmental Disabilities. <u>https://selfdetermination.ku.edu/wp-content/uploads/2019/05/Teachers-Guide-2019-Updated-Logos.pdf</u>
- Shogren, K. A., Rifenbark, G. G., & Hagiwara, M. (2021). Self-determination assessment in adults with and without intellectual disability. *Intellectual and Developmental Disabilities*, 59(1), 55-69. <u>https://doi.org/10.1352/1934-9556-59.1.55</u>
- Shogren, K. A., & Ward, M. J. (2018). Promoting and enhancing self-determination to improve the post-school outcomes of people with disabilities. *Journal of Vocational Rehabilitation, 48*(2), 187-196. <u>https://doi.org/10.3233/jvr-180935</u>
- Shogren, K. A., Wehmeyer, M. L., Palmer, S. B., Forber-Pratt, A. J., Little, T. J., & Lopez, S. (2015). Causal Agency Theory: Reconceptualizing a functional model of self-determination. *Education and Training in Autism and Developmental Disabilities, 50*, 251-263. <u>https://www.jstor.org/stable/24827508</u>
- Shogren, K. A., Wehmeyer, M. L., Palmer, S. B., Rifenbark, G. G., & Little, T. D. (2015). Relationships between self-determination and postschool outcomes for youth with disabilities. *Journal of Special Education, 48*, 256-267. <u>https://doi.org/ghd48q</u>
- Shogren, K. A., Wehmeyer, M. L., Shaw, L. A., Grigal, M., Hart, D., Smith, F. A., & Khamsi, S. (2018). Predictors of self-determination in postsecondary education for students with intellectual and developmental disabilities. *Education and Training in Autism and Developmental Disabilities*, *53*(2), 146-159. <u>https://www.jstor.org/stable/26495266</u>
- Southward, J. D., & Kyzar, K. (2017). Predictors of competitive employment for students with intellectual and/or developmental disabilities. *Education and Training in Autism and Developmental Disabilities, 52*(1), 26-37. https://www.jstor.org/stable/26420373

- Spencer, P., Van Haneghan, J. P., Baxter, A., Chanto-Wetter, A., & Meyer, L. (2021). Tracking network growth of students with intellectual disabilities (ID) and understanding the challenges, expectations, and realizations of families in a postsecondary program. *Journal of Inclusive Postsecondary Education, 3*(1). <u>https://doi.org/j43s</u>
- Taylor, J. E., & Taylor, J. A. (2013). Person-centered planning: Evidence-based practice, challenges, and potential for the 21st century. *Journal of Social Work in Disability & Rehabilitation*, *12*(3), 213-235. https://doi.org/10.1080/1536710X.2013.810102
- Think College. (2023). *College search*. Retrieved January 31 from https://thinkcollege.net/college-search
- Think College National Coordinating Center Accreditation Workgroup. (2021). *Model* accreditation standards for higher education programs for students with intellectual disability. University of Massachusetts Boston, Institute for Community Inclusion.

https://thinkcollege.net/sites/default/files/files/TCreport_Accreditationfull_2021.pdf

- Thoma, C., Austin, K., Achola, E., Batalo, C., Carlson, D., Boyd, K., Bozeman, L., & Wolfe, D. (2012). The state of postsecondary education for persons with intellectual disabilities: What are the perceptions of key stakeholders? *Creative Education, 3*(6), 1122-1129. <u>https://doi.org/10.4236/ce.2012.326168</u>
- Thoma, C. A., & Getzel, E. E. (2005). "Self-determination is what it's all about": What post-secondary students with disabilities tell us are important considerations for success. *Education and Training in Developmental Disabilities, 40*(3), 234-242. <u>https://www.jstor.org/stable/23879718</u>
- Tricco, A. C., Lillie, E., Zarin, W., O'Brien, K. K., Colquhoun, H., Levac, D., Moher, D., & Straus, S. E. (2018). PRISMA extension for scoping reviews (PRISMA-ScR): Checklist and explanation. *Annals of Internal Medicine*, *169*, 467-473. <u>https://doi.org/gfd8vk</u>
- Wehmeyer, M. L. (2005). Self-determination and individuals with severe disabilities: Reexamining meanings and misinterpretations. *Research and Practice for Persons with Severe Disabilities*, 30(3), 113-120. <u>https://doi.org/10.2511/rpsd.30.3.113</u>
- Wehmeyer, M. L. (2020). The importance of self-determination to the quality of life of people with intellectual disability: A perspective. *International Journal of Environmental Research and Public Health*, 17(19), 7121. <u>https://doi.org/10.3390/ijerph17197121</u>
- Wehmeyer, M. L., & Abery, B. H. (2013). Self-determination and choice. *Intellectual and Developmental Disabilities, 51*(5), 399-411. <u>https://doi.org/10.1352/1934-9556-51.5.399</u>
- Wehmeyer, M. L., Garner, N., Yeager, D., & Lawrence, M. (2006). Infusing selfdetermination into 18-21 services for students with intellectual or developmental disabilities: A multi-stage, multiple component model. *Education and Training in Autism and Developmental Disabilities, 41*, 3-13. https://www.jstor.org/stable/23879862

- Wehmeyer, M. L., & Kelchner, K. (1995). *The Arc's Self-Determination Scale*. The Arc National Headquarters. <u>https://thearc.org/wp-content/uploads/forchapters/The%20Arc%27s%20Self-Determination%20Scale%20-%20Adolescent%20version%20REV2013.pdf</u>
- Wehmeyer, M. L., Little, T. D., Lopez, S. J., & Shogren, K. A. (2014). *The Arc's Self-Determination Scale Postsecondary Version*. Kansas University Center on Developmental Disabilities.
- Wehmeyer, M. L., & Palmer, S. B. (2003). Adult outcomes for students with cognitive disabilities three years after high school: The impact of self-determination. *Education and Training in Developmental Disabilities, 38*, 131-144. <u>https://www.jstor.org/stable/23879591</u>
- Wehmeyer, M. L., & Schwartz, M. (1997). Self-determination and positive adult outcomes: A follow-up study of youth with mental retardation or learning disabilities. *Exceptional Children*, 63(2), 245-255. <u>https://doi.org/km24</u>
- Wilson, P. G., Killam, S. G., Stazio, L. C., Ellis, R. B., Kiernan, N. M., & Ukachu, A. N. (2017). Post-secondary apprenticeships for youth: Creating opportunities for high demand employment. *Journal of Vocational Rehabilitation, 46*(3), 305-312. <u>https://doi.org/k3pn</u>

Table 1

Included Articles by Type

Author(s)/Year	Journal	Publication Title	Article Type	Self-Determination Content Summary
Thoma & Getzel (2005)	<i>Education and Training in Developmental Disabilities</i>	"Self-determination is what it's all about": What post-secondary students with disabilities tell us are important considerations for success	Descriptive	Importance of self- determination to the success of post- secondary students with disabilities
Wehmeyer et al. (2006)	<i>Education and Training in Developmental Disabilities</i>	Infusing self- determination into 18- 21 services for students with intellectual or developmental disabilities: A multi- stage, multiple component model	Experimental/Quasi- Experimental	Students engaged in the multi-stage, multiple component model to promote self- determination achieved educationally relevant goals and reported enhanced autonomy
Hart et al. (2010)	Focus on Autism and Other Developmental Disabilities	Expanding the paradigm: Postsecondary education options for individuals with autism spectrum disorder and intellectual disabilities	Conceptual, Policy, or Position Paper	Benefits of IPSE, including increased self- determination
Ankeny & Lehmann (2011)	Remedial and Special Education	Journey toward self- determination: Voices of students with	Descriptive	Students' perceptions of self-determination

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		disabilities who participated in a secondary transition program on a community college campus		development and opportunities in IPSE
Doren et al. (2012)	Exceptional Children	The relationship between parent expectations and autonomy, and how autonomy influenced postschool outcomes for adolescents with disabilities	Correlational	Parent expectations were a predictor of autonomy and autonomy was a predictor of postschool outcomes (specifically, postsecondary education and employment)
Folk et al. (2012)	<i>Journal of Policy and Practice in Intellectual Disabilities</i>	Implementing inclusion and collaborative teaming in a model program of postsecondary education for young adults with intellectual disabilities	Descriptive	Description of an IPSE program model, including its value as a path to self- determination
Grigal et al. (2012)	Teaching Exceptional Children	A program evaluation tool for dual enrollment transition programs	Descriptive	A model for IPSE program evaluation, including self- determination as one of the evaluation components
Thoma et al. (2012)	Creative Education	The state of postsecondary education for persons with intellectual disabilities: What are	Descriptive	Highlighted the development of self- determination within higher education from the perspectives of experts

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Grigal et al. (2013)	Inclusion	the perceptions of key stakeholders? Postsecondary education for people with intellectual disability: Current issues and critical challenges	Conceptual, Policy, or Position Paper	Current legislative and policy issues for college students with intellectual disability, with value of IPSE context for development of self- determination highlighted
Izzo & Shuman (2013)	<i>Journal of Postsecondary Education and Disability</i>	Impact of inclusive college programs serving students with intellectual disabilities on disability studies interns and typically enrolled students	Descriptive	Attitudes and experiences of typical college students towards fellow students with intellectual disability, including challenges in promoting self- determination
Kelley & Westling (2013)	<i>Journal of Vocational Rehabilitation</i>	A focus on natural supports in postsecondary education for students with intellectual disabilities at Western Carolina University	Descriptive	Role of peer mentors, including fostering the development of self- determination for students in IPSE
Mazzotti et al. (2015)	Journal of Special Education	Effects of self- directed summary of performance on postsecondary education students' participation in person-centered planning meetings	Experimental/Quasi- Experimental	Increased participation in person-centered planning for students using the <i>Self-Directed Summary of</i> <i>Performance</i> (SD-SOP), with generalization to employment settings
Cook et al. (2017)	Journal of the American Academy of	Inclusive concurrent enrollment: A	Descriptive	How students' self- determination changed in

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	Special Education Professionals	promising postsecondary transition practice for building self- determination among students with intellectual disability		response to IPSE on a college campus
Giust & Valle- Riestra (2017)	<i>Journal of Intellectual Disabilities</i>	Supporting mentors working with students with intellectual disabilities in higher education	Descriptive	Analysis of skills and activities mentors use with students in IPSE and areas for support and training, including self- determination
Green et al. (2017)	<i>Journal of Vocational Rehabilitation</i>	A model for enhancing employment outcomes through postsecondary education	Descriptive	Program description, including self- determination as one of four transition areas
Shogren et al. (2017)	Exceptional Children	Mediating role of self- determination constructs in explaining the relationship between school factors and postschool outcomes	Correlational	Autonomy, psychological empowerment, and self- realization mediated the relationship between school-based factors and postschool outcomes
Southward & Kyzar (2017)	Education and Training in Autism and Developmental Disabilities	Predictors of competitive employment for students with intellectual and/or developmental disabilities	Literature Review	Transition-related factors that lead to postsecondary competitive employment for individuals with intellectual and developmental disabilities, including self-

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				determination and postsecondary education	
Wilson et al. (2017)	<i>Journal of Vocational Rehabilitation</i>	Post-secondary apprenticeships for youth: Creating opportunities for high demand employment	Descriptive	Post-secondary program description, including self-determination training	
Raley et al. (2018)	Education and Training in Autism and Developmental Disabilities	Curricula to teach skills associated with self-determination: A review of existing research	Literature Review	Examination of curricula to teach skills associated with self-determination, including model to promote self- determination at a community college for students aged 18 to 21	
Shogren & Ward (2018)	<i>Journal of Vocational Rehabilitation</i>	Promoting and enhancing self- determination to improve the post- school outcomes of people with disabilities	Conceptual, Policy, or Position Paper	Advocating for promoting self-determination to enhance outcomes for college graduates with disabilities	
Shogren et al. (2018)	Education and Training in Autism and Developmental Disabilities	Predictors of self- determination in postsecondary education for students with intellectual and developmental disabilities	Correlational	Differences in self- determination or its essential characteristics based on race/ethnicity, participation in regular or alternate state assessment, gender, and participation in college social activities	
Chao et al. (2019)	Advances in Neurodevelopmental Disorders	Self-determination and transition outcomes of youth	Correlational	Youth with intellectual disability, learning disabilities, emotional	

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		with disabilities: Findings from the special needs education longitudinal study		disturbance, and autism had significantly lower self-determination than peers with other disabilities, and transition outcomes for this population can be predicted by self- determination, with higher self-determination scores corresponding to more positive transition outcomes
Plotner & May (2019)	<i>Journal of Intellectual Disabilities</i>	A comparison of the college experience for students with and without disabilities	Descriptive	Comparison of the social experiences of college students with and without disabilities, including an emphasis on self- determination in IPSE programs
Prohn et al. (2019)	Inclusion	Supports' perspectives on the social experiences of college students with intellectual disability	Descriptive	Social life of students with intellectual disability, including limitations to opportunities to develop and exercise self- determination
Fisher et al. (2020)	<i>Journal of Applied Research in Intellectual Disabilities</i>	Applying the self- determination theory to develop a school- to-work peer mentoring programme to promote social inclusion	Descriptive	Application of Self- Determination Theory to peer mentor models

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Francis & Chiu (2020)	International Journal of Developmental Disabilities	The way to ultimate wisdom: An exploratory qualitative study on Taiwanese students with disabilities attending college	Descriptive	Perspectives of stakeholders on IPSE, including the need to support students to enhance their self- determination in preparation for success in higher education	
Rillotta et al. (2020)	<i>Journal of Intellectual Disabilities</i>	Inclusive university experience in Australia: Perspectives of students with intellectual disability and their mentors	Descriptive	Students' experiences in IPSE from the perspective of students and peer mentors, including development of self-determination	
Lee et al. (2021)	Behavioral Modification	Examining growth among college students with intellectual and developmental disability: A longitudinal study	Correlational	Students' self- determination significantly increased from the beginning to the end of the academic year in both their first and second years in a two- year IPSE program	
Rubio-Jimenez & Kershner (2021)	British Journal of Learning Disabilities	Transition to independent living: Signs of self- determination in the discussions of Mexican students with intellectual disability	Descriptive	Experiences of students' self-determination in personal, social, and educational contexts in IPSE	
Schillaci et al. (2021)	Intellectual and Developmental Disabilities	College-based transitions services' impact on self-	Experimental/Quasi- Experimental	Significant improvement in self-determination among students with	

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		determination for youth with intellectual and developmental disabilities		intellectual and developmental disabilities who had attended one year of IPSE compared to those enrolled in a transition program
Spencer et al. (2021)	<i>Journal of Inclusive Postsecondary Education</i>	Tracking network growth of students with intellectual disabilities (ID) and understanding the challenges, expectations, and realizations of families in a postsecondary program	Descriptive	Social networks of students with intellectual disability, including development of self- determination through peer mentor and other relationships

Note. Articles are sorted in chronological order.