

Exploring Barriers for Facilitating Work Experience Opportunities for Students with Intellectual Disabilities Enrolled in Postsecondary Education Programs

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Abstract

There are a multitude of benefits associated with employment, which many individuals with intellectual and developmental disabilities (IDDs) are not afforded due to their struggles to find and maintain work. These poor employment outcomes are in part being addressed by the over 240 postsecondary education (PSE) programs for students with IDDs that exist on college and university campuses in the U.S., many of which include work experience as a program component. A sequential mixed methods study, featuring a quantitative survey and qualitative interviews, was conducted to explore barriers faced by PSE program staff when facilitating work experience engagements. Findings include the identification of common barriers to facilitating paid work experience for students in PSE programs as being: (a) *transportation issues*, (b) *employer perceptions of the abilities of people with disabilities*, (c) *inadequate number of staff hours to support students in the workplace*, and (d) *finding time in the students' schedule*. A discussion about these findings, including implications and recommendations for future research, has also been provided.

Keywords: Postsecondary education programs, intellectual disability, employment training

While youth with disabilities are susceptible to a multitude of undesirable post-school outcomes, perhaps the most salient involves employment. Individuals with disabilities can be a valuable asset to the workforce, yet have been consistently underemployed when compared to those without disabilities (Butterworth, Migliore, Sulewski, & Zalewska, 2014; U.S. Department of Labor, 2015). This is especially concerning because work is a basic human right that helps to shape an individual's identity and understanding of self within the broader societal context (Brown & Lent, 2013; Wehman, 2011). Grossi, Gilbride, and Mank (2014) described work as "the cultural rite of passage through which one enters into adulthood" (p. 157). While many take for granted the opportunity to work even the most basic of jobs, people with disabilities often remain overlooked as participants of the labor force.

In order to assist individuals with intellectual or developmental disabilities (IDDs) achieve life goals, which often times includes employment (Kumin &

Schoenbrodt, 2015), postsecondary education (PSE) programs for individuals with disabilities have become increasingly common on institutes of higher education across the U.S. (Weir, Grigal, Hart, & Boyle, 2013). Equipped with the knowledge that paid work experience is an evidence-based predictor of positive employment outcomes for individuals with disabilities (Carter, Austin, & Trainor, 2012; Mazzotti, et al., 2015; Test et al., 2009), many programs include this as a program component (Grigal et al., 2015). However, due to a variety of reasons, it may be challenging for program personnel to provide the opportunities to all students who are interested.

As such, the purpose of this study was to identify and explore barriers faced by PSE program personnel who facilitate paid work experience opportunities for students enrolled in their programs. A survey of PSE program directors was administered in fall 2015 and follow-up interviews were conducted to gain more in-depth understanding of potential barriers.

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PSE Programs and Job Training

PSE programs serving students with IDD on institutes of higher education have existed since the 1970s (Neubert, Grigal, Moon, & Redd, 2001) and have significantly increased in numbers in recent years (Weir et al., 2013). Most of these programs do not grant higher education degrees to program participants, but rather provide individualized special education services to students with disabilities (Grigal, Hart, & Weir, 2012; Papay & Bambara, 2011; Plotner & Marshall, 2014). Expected student outcomes vary between programs and differ from those of the general student population; PSE programs are not designed to serve as an alternative way to gain matriculation for students who do not meet the general admittance requirements for an institute of higher education (Plotner & Marshall, 2014). PSE programs serve students on a community college, college, or university campus, a more age-appropriate learning environment for students of this age (Kleinert, Jones, Sheppard-Jones, Harp, & Harrison, 2012; Uditsky & Hughson 2012; Weir et al., 2013).

A primary goal of many PSE programs involves career development and increasing positive employment outcomes for students (Grigal et al., 2012; Papay & Bambara, 2011). The 2013-2014 annual report detailing Transition Postsecondary Education Program for Students with Intellectual Disability (TPSID) programs provides encouraging data to suggest a measurable positive impact as a result of students with disabilities participating in PSE programs (Grigal et al., 2015). First, this report indicates that nearly 40% of individuals enrolled in TPSID programs were involved in a paid work experience. Especially encouraging is that 48% of these students never previously had a paid job experience, which shows the value of the programs because this type of engagement is widely-regarded as a predictor of post-school success for individuals with disabilities (Mazzotti et al., 2015; Test et al., 2009). However, perhaps the most notable employment statistic from the report is that 41% of students had a paying job upon exit from the program. These results are similar to those presented by Moore and Schelling (2015) who found that individuals completed a PSE program for students with IDD were more likely to find employment and earn higher wages than those who did not.

In order to support career development and positive employment outcomes among program participants, the development of employment skills for students with IDD is a primary focus and key component of many PSE programs. The importance of including employment training as part of a PSE program for individuals with IDD is highlighted

by results from a national survey that indicate 70% of families of students with IDD and 81% of professionals who work with youth with IDD describe positive post-school employment outcomes as *very important* (Benito, 2012). Furthermore, in their survey of parents of youth with disabilities, Martinez, Conroy, and Cerreto (2012) found that approximately half of respondents noted a preference for PSE programs that have a primary focus of positive employment-related outcomes for students. This value of employment training as a critical feature of PSE programs is further emphasized by the inclusion of *career development* as the second Think College PSE Program Standard (Grigal, et al., 2011).

Furthermore, Griffin, McMillian, and Hodapp (2010) explored parent attitudes regarding PSE program structure and came to the conclusion that “PSE programs should prioritize preparation for employment as the primary outcome for their students” (p. 345). Papay and Bambara (2011) surveyed PSE program coordinators to identify the primary purpose for students attending school on a college campus. They found that nearly all program coordinators (90%) identified the development of employment or vocational skills as a reason for students to be on campus, leading them to consider the notion that “we could perhaps refer more accurately to programs based on college campuses as employment programs based in age-appropriate settings rather than as postsecondary education programs” (p. 90).

Barriers to Paid Work Experiences in PSE Programs

While engagement in paid work experience is a predictor of positive post-school outcomes for individuals with intellectual and developmental disabilities (Carter et al., 2012; Mazzotti et al., 2015; Test et al., 2009), employment specialists may struggle to find opportunities for their students. Factors relating to the PSE program structures, inter-agency collaboration, the students themselves, and employers may contribute to the problem.

Barriers related to PSE program structure. There are several programmatic barriers that make it challenging for PSE programs to facilitate paid work experience, perhaps most notably the lack of training and knowledge in employment supports of PSE staff. The 2013-2014 TPSID report (Grigal et al., 2015) describes many PSE staff as having limited knowledge about best practices involving customized and integrated employment. Additionally, PSE program staff have described limited financial resources as another significant barrier to providing the framework necessary to support the facilitation paid work experience for students (Petcu, Chezan, & Van Horn, 2015).

Grigal and Dwyre (2010) also identified barriers involving time as a resource; some PSE programs have difficulty managing time for work experience due to the academic expectations for students.

Barriers related to inter-agency collaboration.

Another barrier to facilitating paid employment for students in PSE programs involves inter-agency collaboration, mostly notably with Vocational Rehabilitation (VR). While partnerships between PSE programs and VR can be fruitful and provide additional opportunities for students (Sheppard-Jones, Reilly, & Jones, 2013), there can be challenges with the relationship. PSE program coordinators surveyed by Petcu et al. (2015) identified barriers such as: (a) a large investment of time to develop relationships with VR personnel, (b) lack of clarity and guidance regarding state VR regulations for students who are enrolled in a PSE program, (c) an inefficient system for VR referrals, (d) lack of interest from VR personnel to collaborate with PSE staff, and (e) issues involving the VR payment system.

Barriers related to student factors. In addition to barriers to work experience involving PSE program staff, challenges have been identified relating to the students themselves. For example, Lysaght, Ouellette-Kuntz, and Lin (2012) explained that individuals with IDD may face workplace challenges, including “slower than average learning of new tasks, impaired memory, slow and sometimes impaired motor performance, and reluctance to change roles and routines” (p. 412). Petcu et al. (2015) identified additional barriers that directly involve the student as being related to “skill level, motivation, responsibility and accountability, difficulty in identifying realistic employment goals, problem behavior, and attendance to work” (p. 20). Although it is perhaps not a barrier directly related to the student, issues involving transportation to and from the job site have been identified as a challenge when facilitating work experiences for students enrolled in PSE programs (Grigal & Dwyre, 2010; Petcu et al., 2015).

In addition to barriers that involve the students directly, many students arrive to PSE programs unprepared to maintain a paid employment position (Dwyre & Deschamps, 2013; Grigal et al., 2015). This unpreparedness is perhaps due to a lack of training and awareness of employment-related best practices at the high school level (Dwyre & Deschamps, 2013; Grigal & Hart, 2010). As such, some students enter PSE programs with insufficient work skills and arrive with limited information regarding interests and ability. The 2013-2014 TPSID report (Grigal et al., 2015) noted that poor student preparation and assessment of skills were challenges reported by program coordina-

tors facilitating work experience in these programs.

Barriers related to employers. Finally, other barriers to facilitating work experiences for students with IDD may involve challenges associated with the partner businesses. The lack of employer knowledge and perceptions regarding the abilities of individuals with disabilities may be one of the more significant employment-related barriers (Domzal, Houtenville, & Sharma, 2008; Kaye, Jans, & Jones, 2011; Lindsay, Robinson, McDougall, Sanford, & Adams, 2012). Grigal and Dwyre (2010) found that the ability to connect students with paid work experience can be impacted by changes in management within a business. Additionally, the authors explained that some work opportunities may be impacted by seasonal lay-offs, which impact the extent to which students receive consistency in their work. Petcu et al. (2015) described a paucity of paid work experience availability as well as a limited number of hours for many students in PSE programs who do find positions.

The general purpose of this study was to explore barriers faced by PSE program personnel when facilitating paid work experiences for students. A survey of PSE program directors was administered in fall 2015 and follow-up interviews were conducted to gain more in-depth understanding of the phenomenon.

Methods

In order to explore the research questions, a sequential mixed methods (MM) research design was used (Teddlie & Tashakkori, 2009). A questionnaire was administered to PSE program directors, followed by interviews containing questions designed to further explore the findings identified using the survey instrument. Meta-inferences were made in order to provide a more robust and in-depth explanation of the phenomenon.

Participants

This research explored the perspectives of personnel who work for a PSE program for students with IDD in the U.S. Email addresses were collected from the Think College (n.d.) database of existing PSE programs in September 2015, which included 243 programs. An email was sent to program directors, requesting that someone knowledgeable about the program’s career development offerings complete the hyperlinked electronic survey. While this may have been the directors themselves, some PSE programs employ staff who specifically manage career development activities for students in the program. Updated email addresses were sought for survey so-

licitations that were returned due to an invalid email address. The survey was open for four total weeks, with a reminder email sent after the first two weeks. As an incentive, survey respondents were offered a code to receive a free Redbox movie rental.

Survey participants were asked to indicate if they would be willing to participate in a follow up interview. Ten participants were selected using a purposeful sampling technique that ensured interview participants represented a diversity of program characteristics (e.g., size, location, involvement with VR).

Instruments and Procedures

Survey. This research is based on a sub-section of a larger survey to better understand how paid work experiences are facilitated in PSE programs. This component, focused specifically on items related directly to work experiences for program participants, asked program to identify: (a) the extent to which specific sources provide employment support or services to program participants, (b) the setting and conditions in which students receive work experience, and (c) the level to which specific items are barriers to finding paid work experience for students. These survey elements were designed by the researchers and reflect findings presented by: Carter et al. (2009); Grigal et al. (2015); Grigal and Dwyre (2010); Grigal and Hart (2010); Hughson, Moodie, and Uditsky (2006); Luecking (2010); and Petcu et al. (2015). The survey included closed ended questions relating to the aforementioned research, as well as open ended questions that allowed participants to elaborate on their responses.

This particular study is based on the survey items relating to barriers to facilitating paid work experience. The survey instrument contained 28 items in this section. Participants were asked to identify the extent to which each items is a barrier by selecting one of the following responses: *Not a Barrier*, *Small Barrier*, *Large Barrier*, or *Critical Barrier*.

This web-based survey instrument was designed based on the Tailored Design Method (Dillman, Smyth, & Christian, 2014). It was created using Qualtrics software and was reviewed and revised based on the three-stage strategy described by Campanelli (2008) to increase content validity. Five external reviewers with expertise in special education and survey design were involved with this process.

Interviews. In order to provide structure and flexibility, the interviewer engaged in one-on-one semi-structured interviews, utilizing a protocol that is designed to be flexible and not followed precisely (Kvale & Brinkmann, 2009). Following the sequential mixed methods guidelines (i.e., quantitative find-

ings in the first strand inform qualitative findings in the second strand), the final interview protocol was revised after a preliminary analysis of the survey results and included questions that aid in exploring other noteworthy findings identified in the survey results. Interviews were conducted on the telephone and audio recordings of the interviews were transcribed verbatim and used for analysis.

Data Analysis

Quantitative analyses. Descriptive statistics were used to explore program characteristics and responses regarding barriers to finding paid work experiences for students in PSE programs. The survey item designed to measure the extent to which something is a barrier to facilitating paid work experience opportunities asked participants to respond using the following scale: *Not a Barrier*, *Small Barrier*, *Large Barrier*, or *Critical Barrier*. Percentages of participants responding positively to each of the scale items for each potential variable were calculated and used to identify which items are viewed as the most significant barriers. Respondents were given an opportunity to include any other barriers that were not presented on the list. These items were collectively reviewed to identify any additional barriers.

Qualitative analysis. For the second phase of this sequential mixed methods study, an interview protocol was developed based on the findings from the quantitative survey. Transcribed interviews were imported into the qualitative analysis software program Atlas.Ti and analyzed using thematic analysis (Braun & Clarke, 2006). In order to increase credibility of the results, a second coder reviewed and coded the data. Having an additional perspective during analysis meets the credibility measure of investigator triangulation (Brantlinger, Jimenez, Klingner, Pugach, & Richardson, 2005).

Meta-Inference. The study included a phase to develop inferences based on the information revealed by the quantitative and qualitative phases of the study (Teddlie & Tashakkori, 2009). During analysis of the data, the research questions and purpose of the study were prominent in the mind of the coders. Notes and summaries of data were re-examined and discussed. This process allowed the researchers to establish tentative interpretations, which were then re-evaluated for meaning and relation to other preliminary findings.

Results

Participants

Survey respondents. While the Think College database included contact information for 245 PSE programs, only 220 of the email solicitations were delivered. Two rounds of email invitations resulted in 75 survey responses, a response rate of 34%. However, a preliminary analysis eliminated 10 responses from data analysis. When asked about their role in the PSE program, four respondents selected: "None of my job responsibilities involve designing and/or facilitating career development opportunities (including work experience) for students in the program." As the survey was designed for those who facilitate work experiences, the instrument was programmed to end if this option was selected. Six respondents provided demographic and program characteristics, but did not complete the sections focused on barriers and strategies. As these components are essential for data analysis, these six responses were eliminated from all of the analysis. Considering both of these factors, analysis of data included information from 65 participants, meaning 29.5% of the total survey solicitations resulted in usable data.

Interviewees. Individuals who completed the survey were asked to identify if they would be available to engage in a follow-up interview. Forty-eight respondents identified themselves as being willing to be interviewed to further explore the results of the survey. Ten interviewees were purposefully selected in order to provide a diverse sample, with particular attention paid to representing the varied regions of the United States as well as different types of institutions of higher education (e.g., college, university, community college, vocational school). In addition, the responses of potential interviewees were reviewed to ensure that there was within sample variance (i.e. the respondent did not provide the same answer for a large number of survey items) and the individual had responded to each item of the survey. Table 1 contains information about the interview participants.

Survey

An online survey was administered to personnel who work with PSE programs that serve students with IDD to identify potential barriers when facilitating work experience opportunities for students. The survey focused on employment services, with an emphasis on barriers to facilitating student work experience and strategies utilized to overcome potential obstacles. A Chronbach's alpha was conducted after data from the survey was collected. The

results showed a .87 alpha which indicates to be in good range of internal consistency (Litwin, 1995); therefore, one can imply that the survey could be further used in reliable manner.

Barriers to work experience. Respondents were given a list of 28 potential barriers they may face when facilitating work experiences for students enrolled in their PSE program and asked to identify the extent to which each was a barrier. A complete listing of responses for each of the 28 barriers can be found in Table 2.

In order to identify items that are *commonly identified* as barriers, the three items that respondents most often selected as being a Critical Barrier were identified. The inclusion of three items was selected because these represent 10% of all of the barriers. These three items that were most often identified as a *Critical Barrier* included: *Transportation issues* (26.2%), *Employer perceptions of the abilities of people with disabilities* (21.5%), and *Inadequate number of staff hours to support students in the workplace* (18.5%). In order to consider other items which may be significant barriers, the response categories of *Large Barrier* and *Critical Barrier* were combined. Forty-five percent or more of respondents identified concerns related to these three individual items. This cut off percentage was selected both because it presented itself as a natural cutoff point (the next closest item was over 10% point lower) and again includes three items, or 10% of the total barriers. This confirmed two of the already identified items, including *Transportation issues* (52.4%) and *Employer perceptions of the abilities of people with disabilities* (46.1%). In addition, combining these response categories added *Finding time in the students' schedule* (46.1%) to the frequently identified barriers.

In order to identify items not included on the list, respondents were provided with an opportunity to include any additional barriers they face when facilitating work experience opportunities for students enrolled in their affiliated PSE program. Of the 65 respondents, 11 included written comments to describe additional barriers. The most prominent theme from the comments involved student and family concerns over a loss of government benefits due to earned wages, which was identified by three respondents. One person explained, "The biggest barrier to long term employment is the difficulty in managing SSI when students earn an income. Some parents are worried that student SSI checks are affected by income." Another parent-related comment described low-expectations regarding employment by the family as well as over-assistance leading to a lack of student independent living skills. Other comments related

to barriers described: difficulty finding partner employers, high costs of individualizing services, lack of services post-program, student lack of ambition, and perceptions by employers that college internships must be unpaid.

Interviews

Interviewees were presented (aurally and visually) with frequently identified barriers to paid work experiences, as identified by the survey. The barriers include: *transportation issues*, *employer perceptions of the abilities of people with disabilities*, *finding time in the students' schedule*, and *inadequate number of staff hours to support students in the workplace*. Several related questions were asked to further explore these particular barriers and the extent to which they present a challenge in the participant's program.

Nine of the ten interviewees expressed general agreement with the aforementioned barriers. Responses representative of the group included: "Those are all true for us as well," "No, none of it surprises me at all," and "We've encountered all of them. We just try to knock them down as much as we can." Responses regarding specific themes are described below.

Transportation issues. Responses describing transportation issues were mixed. One participant shared an anecdote describing the struggles of transportation-related issues for PSE programs. The interviewee described a student who was interested in working in the health care field. "He had a job ready for him, the employer was ready to hire him, but we just could not find a way to get him to work. So, by the time that was figured out, the job was gone."

Transportation barriers may be more of an issue for programs in more rural settings. Three interviewees specifically noted that this may be the case. One interviewee said, "Once you get outside [the city], our state is a pretty expansive rural area, and transportation is an issue." Other interviewees provided a variety of responses explaining why transportation-related issues were not a barrier for their specific program.

Recognizing that getting students to and from a work site can be challenging, one interviewee who works in an urban environment described making efforts to find work experience placements within walking distance from the campus. Two participants explained that they were able to manage this barrier by utilizing public transportation. Three interviewees described transportation as being provided by partner sources, such as developmental disability support organizations, state-sponsored supports, and the local school district. However, one interviewee explained that some of these sources may not provide reliable

transportation. This frustration was described as such: "You have to be [at work] at a certain time and when you are at the whim and fancy of a transit service or Medicaid provider, they don't often see the urgency of getting you where you need to be or showing up."

Employer perceptions of the abilities of people with disabilities. Survey respondents frequently identified one barrier to finding paid work experiences as employers' perceptions regarding abilities of individuals with disabilities. Interviewees generally did not specifically describe this as a barrier for their program. One participant, who has most students involved with unpaid internships, explained that while he did not find this to be a barrier, "if they were to be paid, it might have been a little more difficult." Another interviewee noted that because the program seeks time-limited work experiences, he feels employers may be more willing to provide opportunities for students, regardless of their perceptions. One interviewee spoke about the inclusive-nature of their region, which they felt translated well towards finding work experience opportunities for students. This individual said, "We have a very accepting community in general. We have a sort of 'the more the merrier' feel. Everyone is family. That is really the attitude of most employers of our students in general."

Finding time in the students' schedule. None of the five interviewees who spoke directly about that lack of time in a student's schedule described this specific concern as an issue in their program. These participants generally described employment as a priority, and as such were able to develop student schedules around work experience. One explained, "We try to work around that as best we can because our program is a career preparedness program and we don't want to hinder their careers". Another interviewee said, "We try to put the vocational training internship as primary and then there are other things they can do to work around that." It may be also possible to enlist the help of employers to manage this potential barrier. One participant explained, "Employers on-campus work with us to accommodate student schedules and value any level of work students are capable of."

Inadequate number of staff hours to support students in the workplace. Specific responses from interviewees did not indicate that staffing was an issue for facilitating paid work experiences for students. One interviewee said that it is the responsibility of the employer to provide staffing. Another explained their program intentionally limits on-site staffing in order to increase the potential for long-term sustainability. This interviewee said, "What we have done for most of our students when they start the internship is we

might provide some support initially, but we really want them to have more natural supports through that internship.” In order to ease the burden of staffing students at the job site, two interviewees discussed using peer mentors as support personnel. When asked if they felt the program had a sufficient number of peers to provide the supports needed by the PSE students, one interviewee responded, “Oh yeah, we have mentors and then a back-up set of mentors who are there in case one can’t show up.”

“Other” response: Loss of benefits as a barrier. The fear of parents or students losing disability-related benefits as a result of engaging in paid work experience for students was identified as a barrier by several respondents in the survey (as an “other” barrier not included on the survey). Five participants agreed that this is a barrier for some students and families in their program. In fact, one interviewee identified this as a primary reason why their program only offers unpaid internships to students. Other interviewees discussed connecting students and families with benefits specialists in order to gain a better understanding of how receiving wages might impact their benefits. One participant explained that the fear of losing benefits is more pronounced if the family has faced this issue in the past. This interviewee described individuals and families in the situation saying “I’m not crossing that bridge again. I will choose not to have a job over taking a chance of losing my benefits”.

Three interviewees, however, explained that fear of losing benefits is not a barrier to finding paid work experiences for students in their PSE program. One interviewee explained that this is the case because the program has a goal of finding paid employment, which is made clear to families before a student is admitted. Another interviewee explained benefits-related issues arise post-program graduation. This individual said, “There’s been much more hesitation to find work, which is the opposite of what is supposed to happen as the outcomes of these programs. But, that’s how the family made the choice, at least for now.”

Meta-Inference

After analyzing quantitative and qualitative results, a meta-inference can be made regarding the most common barriers to facilitating paid work experience for student enrolled in PSE programs were: *transportation issues, employer perceptions of the abilities of people with disabilities, inadequate number of staff hours to support students in the workplace, and finding time in the students’ schedule.* Although qualitative data were consistent with identifying these barriers within the overall group, a few interviewees

provided specific information regarding these items in the subsequent discussion, with some explaining how these items were not a barrier for their particular program. Therefore, while quantitative and qualitative results have inconsistencies at the individual level, the overall meta-inference represents the most common barriers for facilitating work experience in PSE programs.

Discussion

This study used sequential mixed methods (survey informing interviews) to explore barriers to the facilitation of work experience opportunities for students with IDD enrolled in PSE programs.

Survey respondents were presented with 28 potential barriers that PSE staff may face when facilitating paid work experience opportunities for students in their programs. This list of potential barriers was identified through a review of the literature. The following are barriers that were frequently identified by respondents: *transportation issues, employer perceptions of the abilities of people with disabilities, inadequate number of staff hours to support students in the workplace, and finding time in the students’ schedule.* Interviewees were presented with this list and while they generally agreed that these are common barriers faced by PSE program staff when facilitating work experience, responses regarding specific items were inconsistent.

Of these items, *transportation issues* was the most frequently identified barrier to facilitating paid work experience by survey respondents. This is not surprising, as transportation-related barriers have been identified in previous literature, including Grigal and Dwyre (2010) and Petcu et al. (2015). The latter of these studies identified transportation in PSE programs as one of the more significant “challenges encountered in preparing students with IDD for competitive employment” (p. 369). Other works have mentioned transportation-related issues in other contexts, including involving getting the student to school or to social events (Dwyre, Grigal, & Fialka, 2010; Grigal et al., 2015).

Employer perceptions of the abilities of people with disabilities were also identified as a frequently identified barrier to paid work experience for students in PSE programs. While interviewees did not provide specific examples of negative views of workers with disabilities, previous literature describes common concerns held by employers regarding individuals with disabilities working in their place of business. These include: the need for accommodations (Houtenville & Kalargyrou, 2012; Jasper & Waldhart 2012),

assumptions of low productivity or an employee's inability to complete requisite job tasks (Houtenville & Kalargyrou, 2012; Kaye et al., 2011), workplace safety (Hernandez et al., 2008; Houtenville & Kalargyrou 2012), legal concerns (Hernandez et al., 2008; Lengnick-Hall, Gaunt, & Kulkarni, 2008), high rate of absenteeism (Hernandez et al., 2008), and a negative impact on co-workers and customers (Lengnick-Hall et al., 2008). Being aware of these potential negative perceptions will help PSE staff alleviate these concerns as they support employers providing work experience opportunities.

Another commonly identified barrier to paid work experience for students in PSE programs involves *inadequate number of staff hours to support students in the workplace*. This barrier was also identified in the study conducted by Petcu et al. (2015), which also used a survey of PSE staff to identify employment-related challenges. While interviewees in this study agreed that low staff hours are a significant barrier, they did not provide comments to support this notion. Many of the comments echoed the recommendation made by Grigal and Dwyre (2010), who suggest that PSE programs allocate sufficient and flexible staffing to support students who are engaged in work experiences.

A fourth item frequently identified in the survey *as a barrier to facilitating paid work experience was finding time in the students' schedule*. The difficulty of balancing academics and vocational training was also identified as a challenge in Grigal and Dwyre's (2010) study of PSE and employment training. As a result, the authors explained that successful programs "[set] paid employment as a goal" and provided "flexible student schedules" (p. 3). Comments from interviewees in this study reflected these practices, which may explain why these interviewees did not see this as barrier for their program.

Additional findings relating to barriers. In addition to the items that were frequently identified as barriers, participant responses to other survey items are also noteworthy. These items were not discussed in the qualitative interviews and as such were only explored using survey data (see Limitations for more information).

Business-related barriers. Several business-related barriers to finding work opportunities for students in PSE programs that were identified in the literature were not as present in the results of this survey. While Petcu et al. (2015) found that the lack of available jobs was a challenge for finding employment opportunities for students in PSE programs, respondents in this survey generally did not see this as being the case. Nearly three-quarters of survey respondents identified *lack of paid jobs in the area* as *not a barrier*

or a *small barrier*. A slightly lower percentage of PSE staff identified limited number of weekly available hours offered by employer as not a barrier or a small barrier. It is encouraging that PSE staff generally felt that the job opportunities are available to the students with IDD enrolled in their program.

Grigal and Dwyre (2010) identified additional business-related challenges as involving changes in management and layoffs due to seasonal work. However, survey respondents in this study described these barriers as being less critical. Over three-quarters of respondents identified each of these items as *not a barrier* or a *small barrier*.

Barriers relating to PSE programs. Internal barriers to facilitating paid work experience for students enrolled in PSE programs were described by Grigal and Hart (2010). These include a lack of PSE staff training regarding integrated employment, customized employment, and job development. Respondents in this survey generally felt like their staff was well-trained. Over three-quarters of respondents felt that each of these items was either *not a barrier* or a *small barrier*. This is perhaps reflective of an increased emphasis on supporting competitive employment outcomes for individuals with disabilities.

Student-related barriers. Petcu et al. (2015) found factors relating directly to the students in the PSE program as impacting employability, including "skill level, motivation, responsibility and accountability, difficulty in identifying realistic employment goals, problem behavior, and attendance to work" (p. 369). However, survey respondents in this study generally had more positive views of the views of their students. The overwhelming majority PSE staff who completed the survey in this study found each of these items to be either *not a barrier* or a *small barrier*.

Other barriers related to student preparation were identified by Grigal and Hart (2010). These items are less about student characteristics, but rather involve low levels of pre-program employability training and vocational assessments. While survey respondents in this survey identified these as more of a barrier than the aforementioned student characteristics described by Petcu et al. (2015), most identified these items as either *not a barrier* or a *small barrier*.

Limitations

While measures have been taken to create a rigorous design, there are certain limitations that must be considered when interpreting the results. Considering the limitations of this particular study may be especially important due to the wide variance of PSE program design, the generally low numbers of PSE programs in existence, and small sample size. In addition to the

inherent limitations involved with survey and interview-based research, other items should be considered when considering the findings of this study.

The items asked respondents to identify strategies they use to facilitate paid work experiences. As some PSE programs only provide internships or unpaid work experiences for students, these respondents may have been unsure how to respond. Four survey respondents provided written responses that indicated this was the case for their program. Other respondents who do not offer *paid* work experience may have also been unsure how to respond to these items.

Missing data were also a concern in the qualitative phase of the study. Interviewees were presented with a list of items identified frequently in the survey responses. Participants were then only asked a general question about the groups of items, specifically “Does anything on this list surprise you?” While this question leads to broad agreement with the items on the lists, more detailed information could have perhaps been collected if each item was asked about individually. As a result of this broad question, some items on the list were not specifically addressed by the interviewees. Not having this detailed information about each item may have misguided the meta-inference process or perhaps have left a gap to answer the research questions in a holistic manner.

Future Implications for Research and Practice

This study explored barriers associated with facilitating work experience opportunities for individuals enrolled in PSE programs serving students with IDD. Work experience is a key component of career development activities for individuals with disabilities (Test et al., 2009), and as such an essential piece of a program designed to increase employability for students in PSE programs (Grigal et al., 2011). Implications for both Disability Service personnel and PSE program staff are discussed below.

Implications for Offices of Disability Service

As the structure and organization of PSE programs continue to develop, as does their relationship with Offices of Disability Services. The Association on Higher Education and Disability (AHEAD) released a white paper providing guidance to Disability Service professionals regarding PSE programs for students with IDD (Thompson, Weir, & Ashmore, 2011). The document acknowledges that while Disability Service providers are not necessarily involved in the direct operation of PSE programs, these professionals “are in a unique position professionally to inform institutional decisions to design and implement

programs that are welcoming and inclusive for students with intellectual disabilities” (p. 1).

PSE programs that have a goal of providing inclusion to the fullest extent possible may aim to provide their students access to the same institutional supports as traditional students (Grigal et al., 2011). As such, program developers may seek to partner with Disability Service personnel to support the goals of students. Partnerships like this highlight an institution’s value of intellectual diversity by providing students with IDD access to the same resources as their peers (Jones et al., 2015). It is not uncommon for Offices of Disability Services to be involved with PSE programs. Plotner and Marshall (2015) found that 30% of PSE programs had involvement from Disability Services during PSE program development. Also, 24% of PSE programs in their study continued receiving supports from Disability Services.

While supporting the facilitation of work experience may be outside of the typical services offered by Offices of Disability Services, personnel may be able to lessen some of the barriers identified in this study. The aforementioned AHEAD white paper recommends that “Disability Service professionals need to define their relationship to an existing or developing [PSE programs] focusing on such things as the delivery of accommodations, campus access, and technology usage” (Thompson et al., 2011, p. 2). While accommodations mostly involve the classroom setting, the latter two services typically offered by Disability Services may help the address barriers to paid work experience identified in this study.

Campus access. As personnel from the Office of Disability Services may have established connections with variety of people and organizations on campus, they may be able to support campus access to students in PSE program (Plotner & Marshall, 2014). When work experience occurs on-campus, these connections may be especially valuable to establish job placements for students. When considering the barrier *employer perceptions of individuals with disabilities*, having personnel from Disability Services helping to network with potential on-campus employers might reduce the impact of this barrier. In addition, Disability Services may be able to help address the transportation issues barrier by assisting with pre-existing *transportation services* offered on-campus.

Technology usage. As the Office of Disability Services may have an Assistive Technology (AT) expert on-staff, this individual may have the expertise to connect students in PSE programs with technology to support vocational goals. Shaw and Dukes (2013) have advocated for PSE programs to increase their use of evidence based practices and for the field to

set an agenda of research including technology interventions to support transition and employment needs.

As AT devices may help a student be more independent in the workplace, this expertise from Disability Services may help alleviate the barrier *inadequate number of staff hours to support students in the workplace*. When students are able to be more independent, fewer supports from PSE staff may be necessary. In addition, AT may be able to help address the barrier relating to *transportation issues*. Disability services can use research-based tools to support student's transportation needs. For example, Mechling and Seid (2011) used a handheld personal digital assistant (PDA) to provide prompts (picture, auditory, and video) for adults with IDD and McMahon, Cihak, and Wright (2015) used augmented reality navigation on mobile devices to help students with IDD in a PSE program navigate to employment opportunities.

Implications for PSE Staff

Being aware of potential barriers to facilitating paid work experience will help PSE staff develop appropriate program components to better serve students. While this is valuable information for existing programs, it may be especially useful to individuals interested in creating new programs on campuses in the U.S. and beyond. Knowing these potential barriers may provide PSE staff with guidance as they explore the local job landscape. For example, knowing that transportation issues may hinder the ability to provide job training opportunities for students is something that PSE program developers may want to consider when designing programs. In addition, while survey respondents identified *finding time in the students' schedule* as a common barrier, some interviewees explained that this was minimized by making work experiences a priority. When a PSE program has paid employment as a primary program outcome goal, student schedules should be developed around providing job experience to ensure this component is prominently featured.

Especially encouraging is that concerns related directly to the student (e.g., behavior, academic skills, personal hygiene) were not frequently identified as barriers to finding paid work experience. This should not be interpreted to mean that programs should ease their instruction in these areas, but it is rather perhaps an indication that training in these areas have been effective and should continue to ensue these barriers are minimized. This is especially important when considering that *employer perceptions of the abilities of people with disabilities* were a frequently identified barrier in this study, meaning that students who lack basic job skills may perpetuate this concern of employers.

Future Research

While this study provides information that can be translated directly into practice for those facilitating paid work experiences for student with IDD in PSE programs, there is more research necessary to better understand how to support these opportunities. Future research should focus on identifying strategies used by PSE programs to minimize the barriers identified in this study. Although it is important to understand common issues when facilitating paid work experiences, understanding strategies employed by PSE program staff to increase paid work experiences for students may be especially useful. Valuable data could be collected by exploring the perspectives of employers who provide work experiences to students with IDD enrolled in PSE programs. As PSE program personnel are generally reliant upon business owners and managers to provide work experiences, understanding their perspectives regarding barriers may also lead to an increase in opportunities for students seeking these experiences. Employers are a key component in this process and as such, hold information that can be potentially quite useful in this process.

Future researchers may consider exploring any potential relationships between PSE program characteristics. For example, research could explore factors such as the size of the college or university and the setting (e.g., rural, urban, suburban) on barriers for facilitating paid work experiences. Interview data from this study suggest that these relationships may have an impact on barriers to facilitating paid work experience, such as transportation issues. Several participants identified family or student concerns regarding the potential loss of disability-related benefits as a barrier to facilitating paid work experience. As this was confirmed by several interviewees, future research should involve an exploration of how this may impact paid work experience in PSE programs. Finally, research might also involve exploring how PSE program staff address family and student concerns over the potential loss of benefits and long-term strategies for managing this potential issue.

Conclusion

PSE programs for students with IDD have become increasingly common in the U.S. Such programs provide opportunities students who would traditionally not otherwise have to access postsecondary education endeavors. In addition, PSE programs are valuable due to their potential to increase post-school opportunities for students with disabilities. While not all programs have a focus on career

development, most PSE offerings for students with IDD's have a goal of increased employment opportunities for program graduates.

In order to increase employability skills for youth with disabilities, many PSE programs feature paid work experience opportunities for their students. As PSE program staff are reliant on businesses (on-campus or in the community) to provide these authentic training opportunities, it is essential that they be aware of potential barriers to facilitating such experiences.

This study featured research exploring and describing common barriers to facilitating paid work experience. While this is only one component of a well-designed career development program, PSE program staff will be able to use this information to increase opportunities, and as such expand the employability of youth with disabilities.

Especially because PSE programs feature wide variances in program design and characteristics, understanding barriers to facilitating work is important. PSE program staff may use the information presented in this study to help design work experience programs that are well-aligned with the context of their own program. Increasing paid work experience opportunities for students in PSE programs can provide opportunities for members of this under-employed population to be employed in a meaningful way. Doing so not only benefits individuals with IDD's, but also provides an opportunity for the greater society to be even better through integration.

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Table 1

Descriptive Information About Interview Participants

Region	Type of Institution of Higher Learning	Works with Vocational Rehabilitation?	Comprehensive Transition Program?
Pacific	University	No	Yes
New England	University	Yes	No
South Atlantic	University	Yes	Yes
West South Central	University	No	No
Middle Atlantic	College	No	No
Middle Atlantic	University	Yes	No
South Atlantic	University	Yes	No
Pacific	Community College	Yes	No
West North Central	University	Yes	No
East South Central	State PSE Hub	Yes	Yes/No (Multiple Programs)

Note. Regions based on US Census Regions and Divisions (U.S. Census Bureau, n.d.).

Table 2

Barriers to Finding Paid Work Experience for Students Included in the Questionnaire

Barrier	Percent of Respondents			
	Not a Barrier	Small Barrier	Large Barrier	Critical Barrier
Our staff's lack of training in integrated employment#	56.9	27.7	7.7	1.5
Our staff's lack of training in customized employment#	52.3	27.7	12.3	1.5
Our staff's lack of training regarding job development#	53.8	21.5	9.2	6.2
Inadequate number of staff hours to support students in the workplace#	38.5	24.6	13.8	18.5
Students' lack of job skills^	9.2	66.2	21.5	0.0
Students' low self-motivation (lack of initiative) ^	21.5	47.7	20.0	3.1
Students' lack of self-responsibility (not trustworthy) ^	40.0	49.2	7.7	0.0
Students' low self-accountability (low quality control) ^	30.8	49.2	15.4	0.0
Students' problem behaviors^	44.6	43.1	7.7	1.5
Students' poor hygiene^	41.5	50.8	4.6	0.0
Students' poor attendance^	38.5	55.4	0.0	1.5
Students enter the program without adequate employability training^	13.8	49.2	15.9	13.8
Students enter program without adequate vocational assessments^	26.2	38.5	23.1	4.6
Finding time in the students' schedule^	47.7	6.2	41.5	4.6
Transportation issues^	10.8	33.8	26.2	26.2
Students' low reading skills^	24.6	53.8	15.4	3.1
Students' low math skills^	26.2	56.9	10.8	3.1
Students' low-level of fluency with technology^	26.2	52.3	16.9	1.5
Changes in management in businesses*	35.4	46.2	10.8	1.5
Limited number of hours offered by employers*	20.0	46.2	20.0	7.7
Employers unwillingness to work with people with disabilities*	21.5	47.7	13.8	10.8
Employer perceptions of the abilities of people with disabilities*	15.4	32.3	24.6	21.5
Employer concerns regarding accommodations*	20.0	47.7	18.5	7.7
Layoffs due to seasonal work*	58.5	20.2	12.3	3.1
Lack of paid jobs in the area*	43.1	27.7	10.8	13.8
Concerns of family members@	26.2	47.7	15.4	7.7
Over-involvement of family members@	18.5	46.2	21.5	10.8
Under-involvement of family members@	26.2	52.3	16.9	4.6

Note. n=65; # = staff factor; ^ =student factor; * = business factor; @ = family factor