A Post Program Survey of Graduates from a College-Based Program for Students with Intellectual Disabilities

Jerry G. Petroff, Ph.D. *The College of New Jersey* Nadya Pancsofar, Ph.D. The College of New Jersey

Marcia Schleppy The College of New Jersey

Bryana DeMonte The College of New Jersey

This study describes the outcomes of a four-year college-based certificate program for young adults with intellectual disabilities. The traditional areas of transition to adult life (academic, employment, independent living outcomes), as well as the overall impact of the program in the areas of human development (ie. social-emotional growth) or maturity toward adulthood are identified and discussed. Findings from surveys completed by 51 graduates of this program indicated that their participation in this program resulted in increased confidence and skills necessary for independent living, employment, and securing age-appropriate social relationships. Results also indicated that there is a need for continued support post-graduation in the areas of employment and independent living.

Keywords: post-school outcomes, transition, employment, independent living, social-emotional growth, intellectual disabilities

Postsecondary education has been shown to improve the likelihood that youth with intellectual disabilities (ID) will successfully transition to adult life (Grigal & Papay, 2018). Additionally, those who have college experience tend to be employed in higher-paying jobs than those who do not have college experience (Grigal et al., 2012). While postsecondary education yields significant benefits (Gilmore et al., 2001; Hart, 2006), individuals with disabilities have typically been underrepresented in higher-education settings (Smith et al., 2012). Within the United States and Europe there is a movement to expand the postsecondary education options for youth with ID to include participation in programs within institutions of higher education (Grigal et al., 2012). These highereducation options are located within university and college settings, reflect a variety of program types offering degree, certificate, credential, or non-degree status, and can be either residential or nonresidential. Inclusive college programs often present with attributes that are different from the traditional models of special education and/or vocational rehabilitation (Cook et al., 2015). College-based programs can offer a range of opportunities for youth with ID that includes access to inclusive college classes, specialized instruction in foundational literacy/numeracy, integrated social and recreational activities, and a wide range of adult age-appropriate independent living skills (Grigal et al., 2019). However, an inclusive higher-education model must reflect supports and practices that promote equal membership of students with ID including access to

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typical college material and full inclusion in the college community (Grigal et al., 2012). Post-secondary college-based education programs for students with ID vary in their implementation, ranging from full inclusive individualized degree-bearing programs to those that are non-degree or certificate-bearing that do not have access to typical college classes (Grigal et al., 2012). However, there are programs operating within a mixed model approach, which reflects students with ID taking inclusive classes with their typical peers, as well as classes with other students with ID (Blumberg et al., 2008). This is in contrast to a substantially separate model, in which students with ID receive educational services, but these services are only provided in an environment with other individuals with ID.

Since it is well-documented that youth with ID are not realizing the desired outcomes of employment and independent living at the same rate as their peers without disabilities (Papay & Bambara, 2014), inclusive college programs may be an alternative option to help with a successful transition to adult life (Grigal & Papay, 2018). The current study reflects the results of a post-program survey involving graduates of a college non-degree-bearing four-year program offering a credential for successful completion of its course of study within a northeastern state public institution of higher education in the United States. It adds to the current literature developed through Think College, a national organization dedicated to developing, expanding, and improving inclusive higher-education options for people with intellectual disability and the National Coordinating Center for the Transition and Postsecondary Education Programs for Students with ID (TPSIDs) funded by the US Department of Education.

Outcomes of Postsecondary Education Programs for Students with Intellectual Disabilities

College-based programs that are designed to support students with ID were formally recognized within the Higher Education Opportunities Act of 2008, thereby, officially initiating a growth in postsecondary education options. However, since the postsecondary movement for college-based programs for youth with ID is still in its infancy, the literature is not robust with post-program outcomes data or corresponding evidence-based practices. In addition, efforts to yield post-program outcomes are complicated by the variability among programs regarding their design, length, and approaches to inclusivity.

While postsecondary education programs for individuals with ID are situated within the context of higher-education institutions, only 18% of postsecondary education programs report college course access as a primary goal of the program, behind both life skills and employment (Grigal et al., 2012). Among the few studies to consider academic experiences and outcomes of these postsecondary education programs, McKay et al. (2015) conducted interviews with students with ID enrolled in the Supported Higher Education Program (SHEP), housed in the University of Kentucky. They found positive impacts of postsecondary education programs across academic and personal experiences, highlighting the importance of considering holistic student life and multidimensional student outcomes.

Most postsecondary programs reflect an emphasis on career development that will lead to employment (Grigal et al., 2012). It has been reported that individuals with ID who complete a postsecondary education program are more likely to find employment, earn higher wages, and require less support on the job than individuals with ID who had not participated in postsecondary education (Hart, 2006). According to Papay et al. (2017), 61% of individuals who completed the postsecondary programs that were surveyed had a paid job one year after completing their program. This is especially high when compared to the 17% of individuals with intellectual or developmental disabilities that have a paid job in the overall population (Lipscomb et al., 2017). Additionally, Papay et al. (2017) reported that 29% of those who did have a job also were involved in unpaid career development activities such as community service/volunteering or working in an additional unpaid job. The majority of those individuals not working a paid job were either participating in unpaid career development or continuing their education. Only 9% of individuals were not involved in any of the described activities one year after completing their program (Papay et al., 2017). In addition, Migliore et al. (2009) found graduates from those postsecondary college programs earn 73% higher wages than the average individual with ID.

Life skills or independent living is an area often identified as critical for postsecondary college-based programs. However, the long-range outcomes regarding independent living for individuals in postsecondary education programs have not been encouraging (Grigal et al., 2012). Papay et al. (2017) found that approximately two-thirds of individuals with ID who completed their program were still living with their families at home one year after completion. The remaining one-third of individuals were either living alone, with a roommate/significant other, or did not report their living situation (Papay et al., 2017). It should be recognized that adult independence may be viewed much wider than the settings in which someone lives and includes dimensions such as routine community participation, control of personal finances, and independent travel.

Since it is well documented that youth with ID are not realizing the desired outcomes of employment and independent living at the same rate as their peers without disabilities (Papay & Bambara, 2014; Sannicandro, 2019), inclusive college programs may be an alternative option to help achieve a successful transition to adult life (Grigal & Papay, 2018). The literature in this area of post-school outcomes suggests that postsecondary education programs for students with ID can be successful to varying degrees in supporting student growth in the areas of academics, employment, and independent living, with the area of employment seeing the most robust and consistently positive outcomes (Grigal et al., 2012; Hart, 2006; McKay et al., 2015; Migliore et al., 2009; Papay et al., 2017).

This exploratory study was designed to focus on a specific program to capture descriptive data from graduates and reflect outcomes within the common areas of transition to adult life (academic, employment, independent living outcomes), as well as gather some indication of the overall impact of the program in the areas of human development (i.e. social-emotional growth) or maturity toward adulthood. The current study reflects the results of a post-program survey involving graduates of a four-year college-based

certificate program for young adults with intellectual disabilities. The study was designed to address the following research questions:

- 1) For individuals with ID who completed this postsecondary education program, what are their outcomes in the areas of: academics, career development/employment, independent living, community engagement, social engagement, and self-advocacy?
- 2) To what extent did these graduates feel that the participation in this four-year college-based program contributed to their overall growth?

Description of the Program

This postsecondary education program is a four-year college-based certificate program for young adults with ID ages 18-25 years. This postsecondary program is designed to prepare students for adult life through a rigorous academic course of study, career discovery/readiness and social-emotional growth as member of a college community of same-age peers. The program's core beliefs include the idea that access to liberal learning promotes the development of critical thinking, self-reflection, and an understanding of the interrelatedness required for civic responsibility (Carroll et al., 2008). The program emphasizes the importance of lifelong learning through the context of a liberal arts college curriculum, in which "liberal learning is based on a well-established tradition and belief in the role of institutions of higher education in supporting the development of youth as productive and engaged citizens." (Carroll et al. 2009, p. 3). Students engaged in coursework that explored issues and ideas within the humanities, arts, culture, and social sciences, which required critical thinking, improvement in written and verbal expression, and engagement in acts of creative thought. A liberal arts education has an inherent value that may be difficult to measure; however, it is known to contribute to adult well-being and provides a way of viewing through self-actualization that supports the transition to adulthood (Harward, 2016; Morrissey, 2013).

Program Description and Context

The program was developed through a 2003 pilot demonstration project that illustrated the effectiveness of engaging students with ID in college related social and employment training opportunities based within the context of a college course of study. It was found that students with and without disabilities evaluated the experience positively and saw the college campus community as a welcoming environment. This experience, combined with research into existing program models, and a commitment to the inclusion of youth with disabilities, led to the birth of this postsecondary education program. Subsequently, a grant from the National Down Syndrome Society assisted in the development of the current full-time course of study.

Today, the program enrolls 40-45 students using a traditional system of requirements and coursework that identifies freshmen through senior classes in which students graduate in 4 years and receive the certification that is sanctioned by the Board of Trustees at the College. The CCS program also offers a select group of transfer students through an articulation agreement with a local community college-based program and offers a 5th

year graduate option that is limited to 2 students per year. The program staff includes a Faculty Director, Assistant Director, three full-time professional positions (Academic Coordinator, Student Life Coordinator, and Career and Vocational Coordinator) and a Program Assistant. However, at the heart of the program are the cadre of trained peer mentors who are current college students that provide a consistent foundation of support. The program employs approximately 60-70 peer mentors each semester who provide peer support for academics, practicum/internships, and overall involvement in campus life within student and residential life settings.

Academic, Career, and Independent Living Experiences

Students progress across a series of courses that include typical college course offerings and separate specialized coursework that are designed to support skills necessary for career preparation and general supported academic skills. These specialized courses are peer mentor-enhanced classes exclusively for students within this program with ID and are designed to further support success within inclusive classes and college life. The courses include Writing Techniques and Strategies, Academic Support Seminar, Personal/Career Exploration, Psychology of Relationships, and Assistive Technology. The Career Exploration and Preparation component of the program includes coursework exploring different careers, focusina on futures planning, and a robust practicum/internship program that increases in length each year and culminates with a year-long internship in a student's senior year. The Career/Vocational Program Coordinator works with peer mentors who are trained to support students, in a role similar to that of a job coach. Protocols are established to assess readiness for independence on the job site. Therefore, peer mentors are faded as guickly as possible.

Following the college structure, each undergraduate course is equivalent to four semester hours and students take four courses each semester. Students enrolled in the program follow this same structure; however, they take one or two typical inclusive courses each semester. Participation in the inclusive coursework is managed primarily by the Academic Coordinator who works closely with professors to negotiate an appropriate approach to course content, in which requirements are modified based on each individual student's academic skills. The Academic Coordinator works with the peer-mentors who are assigned to each student for the purpose of identifying, refining, and applying individualized modifications, and ensuring that each student is receiving their accommodations with fidelity.

Nearly all students attending the program live in college housing either contiguous to the campus or nearby. Students live in small coeducational learning communities (residences) according to their class rank for the first two years of the program (Freshmen and Sophomores) and then students' residences are reconfigured so that Juniors and Seniors are mixed within the upperclassmen residences. Each residence is assigned a live-in house mentor and additional peer mentors who do not live in the house. The role of these peer mentors are equivalent to typical resident advisors often utilized in college housing. All students participate fully in college community activities and events which include clubs, intramural sports, attending concerts, lectures, and other social activities sponsored by the college student union. The program is infused in the fabric of the college

community, and accesses the wide range of opportunities offered to all students. Each student within the program is encouraged and supported to participate to the extent they are comfortable in college activities which results in the development of relationships and creates the basis to exercise self-determination and advocacy skills.

Method

Participants

Participants in this study completed this postsecondary certification program at a mid-Atlantic college between the years of 2010 and 2017. This college is a public undergraduate liberal arts college in the mid-Atlantic region of the United States hosting approximately 7,000 undergraduates and 2,000 graduate students. For the purposes of this study, a multi-part survey was developed by the program's faculty director, based on questions from a previous post-school study of youth with disabilities (Petroff et al., 2019) and applying the components of this program that focused on their expected post-program outcomes. The survey was designed to be simple and easy to understand, while yielding enough data to make appropriate conclusions. The survey was reviewed by several professionals in special education and transition to adult life, an expert in postsecondary education, and several current students for the purposes of seeking content validity and readability. Surveys were distributed through college email addresses which remained with all graduates until they indicated they no longer wanted access. Additionally, a notice was posted on the program's social media platforms.

Each of the sixty individuals who had completed the program between the years of 2010-2017 were contacted or contacted the program to complete the survey. Participants had the option to complete a hard copy of the survey at an alumni event or to complete the survey online. Fifty-one participants completed the survey, yielding an 85% response rate. All participants started the program when they were 18-25 years of age, and all participants had an intellectual disability. Of these respondents, 48% were male (n = 24) and 52% were female (n = 26). Seventy-six percent (n = 39) of respondents were Caucasian, 13% (n = 7) Asian, 5.8% (n = 3) African-American, 3.9% (n = 2) Latino and 5.8% (n = 3) chose not to disclose their race/ethnicity. Eighty-five percent of students who complete the program are from New Jersey. The remaining 15% of students are from other states such as Pennsylvania, New York, North Carolina, Florida, and Oregon.

Measures

Participants completed a survey that included 31 questions addressing the following aspects of the individuals' lives: demographics, continued educational experiences, continued career education, employment, independent living, community involvement, and social lives. Some of the participants were aided by peers in completing the survey, specifically to clarify survey items for which they requested further explanation.

Academic Outcomes

Participants were asked to provide information about their academic and continuing education. Participants rated the extent to which the program influenced their skills in a variety of academic areas on a 5-point Likert scale in which 1 = Not at all and 5 = Huge degree. They were also asked to indicate by checking boxes if they continued to develop their education through a variety of continuing education options. Respondents could also enter other additional forms of continuing education they participated in through a text box.

Career Development/Employment Outcomes

Participants were asked to provide information about their employment experiences by indicating if they were currently working for pay, working full time, or receiving benefits through their employer (yes/no). Participants also indicated the industry that best described their area of employment from a list of possible choices (e.g. food services, retail, education). Participants who were currently unemployed were asked to select from a list of factors that they think made it hard to get a job (select all that apply). Participants were asked to select from a list of ways in which they may have continued to develop their career/job skills after graduating from the program. Participants rated the extent to which the program prepared them for the world of work on a 5-point Likert scale in which 1 = Not at all and 5 = Huge degree. Participants also rated their satisfaction with their current employment status on a 4-point Likert scale in which 1 = Not satisfied.

Independent Living Outcomes

Participants were asked to indicate their current living arrangement by selecting from a list of possible choices (e.g. at home with your parents, living alone independently). Participants were asked to provide information about whether they had a personal checking or savings account or a personal credit card (yes/no). Participants rated the extent to which the program prepared them to live independently on a 5-point Likert scale in which 1 = Not at all and 5 = Huge degree. Participants also rated their satisfaction with their current living arrangement on a 4-point Likert scale in which 1 = Not satisfied at all and 4 = Very satisfied.

Community Engagement

Participants were asked to indicate community activities that they routinely participated in at least twice a month by selecting from a list of possible choices (e.g. shopping/running errands, go out to a restaurant, attend a religious service). Participants were also asked to how they travel in the community by selecting from a list of possible choices (e.g. I drive a car, I use public transportation). Participants rated the extent to which the program prepared them to participate in the community on a 5-point Likert scale in which 1 = Not at all and 5 = Huge degree. Participants also rated their satisfaction with their current level of community engagement on a 4-point Likert scale in which 1 = Not satisfied at all and 4 = Very satisfied.

Social Engagement and Self-Advocacy

Participants rated how often they stayed in touch with their college friends and peers on a 5-point Likert scale in which 1 = Not at all and 5 = Daily. Participants were asked to indicate in what ways they communicated with their college friends by selecting from a list of possible choices (e.g. in person, video chat, email). Participants were also asked to indicate which social media accounts they currently used by selecting from a list of possible choices (e.g. Instagram, Twitter, Facebook). Participants also rated the extent to which the program influenced their skills in a variety of areas of self-advocacy (e.g. making decisions about your life, understanding your abilities) on a 5-point Likert scale in which 1 = Not at all and 5 = Huge degree.

Results

Academic Outcomes

The majority of participants responded that the program influenced their skills to either a huge or great extent in the following areas: reading (n = 33, 64.7%), writing (n = 38, 76%), listening (n = 37, 74%), speaking (n = 41, 80%), general knowledge of the world (n = 35, 70%) and problem solving (n = 37, 74%). After completing the program, several respondents continued their education in a variety of ways. Nearly 18% of respondents (n = 9) went on to attend a certificate or degree program at a community college or four-year college, 8% (n = 4) were taking adult school courses, and 6% (n = 3) were taking online courses for credit or non-credit. Graduates also reported other, more individualized efforts towards furthering their education, such as having a tutor support their reading, participating in a day program, attending childcare classes, participating in a Disney College Program, and participating in the 5th year of the program.

Career Development/Employment

Eighty percent of respondents (n = 41) were currently working for pay, with 5% of working graduates (n = 2) working full time (35 or more hours per week), and 42% working 11-34 hours per week (n = 18). Of those who reported having jobs, 39% of graduates had paid vacation and sick time (n = 16), while 27% had health insurance benefits (n = 11), and 27% (n = 11) had life insurance benefits. Across all of their jobs, graduates worked in various industries including office/clerical (n = 14), food services (n = 11), retail (n = 8), daycare/childcare (n = 8), health (n = 2), housekeeping (n = 1), transportation (n = 1), and education (n = 1).

Of the 10 respondents who were unemployed, five stated that the reason for their unemployment was that it was hard to get a job because there was a lack of jobs in the area in which they lived. Other reasons that made it hard to get a job included a lack of support services (n = 1), no one to help find a job (n = 1), no transportation available (n = 1), being placed on a waiting list for supported/customized work services (n = 2), employment not being a goal of the graduate (n = 1), and a lack of motivation/initiative (n = 1).

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After completing the program, students also continued their career education in a variety of ways. Twenty percent of graduates attended a community-based vocational training program (n = 10), 12% attended a college-based vocational training program (n = 6), and 10% attended a vocational rehabilitation center (n = 5). Others reported more individualized experiences such as childcare classes, PIN program, and blacksmith classes.

All of participants responded that the program at least somewhat prepared them for the world of work, with 63% (n = 32) reporting that the program prepared them for work to either a huge or great degree. Seventy-eight percent (n = 32) of employed graduates reported feeling either satisfied or extremely satisfied with their current work.

Independent Living Outcomes

Fourteen percent of graduates (n = 7) reported living independently, while seventy-three percent of graduates (n = 37) reported living at home with their parents, and one graduate was living in a supportive living arrangement or semi-independent setting. Ninety-four percent of graduates reported having a personal checking or savings account (n = 45), and 58% had a personal credit card (n = 28). Seventy percent (n = 33) of respondents reported that the program prepared them to live independently to a huge or a great degree, and 83% (n = 39) of graduates were satisfied or very satisfied with their current living arrangement.

Community Engagement

Table 1 presents information regarding activities in which graduates routinely participated in the community. The majority of graduates regularly participated in community activities such as shopping or running errands, exercising as a member of a gym or in exercise classes, outdoor activities, going to the movies, concerts or shows, hanging out with friends, and going out to a restaurant. Activities in which fewer graduates regularly participated included sports, going on a date or to a party, attending a club or organization meeting, going to the library, attending a religious service, or volunteer work. Table 2 presents information on means of transportation used by graduates. The mode of transportation most often identified by respondents was depending on friends and family to travel in the community. Seventy percent of graduates (n = 33) reported that the program prepared them to participate in the community to a great or huge degree. Seventy-five percent of graduates (n = 36) were moderately satisfied or very satisfied with their current level of community engagement.

Social Engagement and Self-Advocacy

Table 3 presents information on graduates' social engagement. Sixty-six percent of graduates were in touch with college friends and peers on a at least a weekly basis. Graduates most often used text messaging and social media to connect with their college friends. Graduates used a wide range of social media platforms, with Facebook being used most widely.

Table 4 presents the findings regarding the role the program played in graduates' selfunderstanding and confidence. The majority of graduates rated the program as very or extremely influential in all of the surveyed areas of self-advocacy, including understanding their own abilities, understanding their rights as an individual with a disability, being able to speak up for themselves, being able to make decisions about their life, understanding their needs for support, and their confidence as an adult.

Discussion

The findings of this study show that the majority of graduates from this postsecondary education program felt that the program had positively influenced their academic knowledge and skills through this postsecondary program. This finding may provide the impetus to further study the effects of attending a postsecondary college program that is rooted in the central goal of academic progress through a tradition of liberal arts education and the development in skills related to critical thinking/problem-solving and how this may influence graduates to be committed to life-long learning and self-reflection. In addition, measuring these outcome areas would require further inquiry that considers additional variables such as the effects of having four consistent years of college, the quality and type of inclusive practices (i.e. modifications and accommodations), and the influence of peer mentors as the primary support system.

Another critical variable for youth with ID involves the effects of a college-based program on the ability to find, get, and keep employment in an area that is satisfying to the graduate. Previous scholarship has indicated that individuals with ID who participated in postsecondary education were twice as likely to be employed as their peers without postsecondary education experience (Sannicandro, 2019). The National Coordinating Center for Transition Postsecondary Programs for Students with Intellectual Disability reported that 65% of the students who completed one of the TPSID programs had a paid job a year after they exited (Grigal et al., 2019). Although 80% of the participants in this study reported working for pay and 78% of employed graduates were satisfied or extremely satisfied with their current work, only a small percentage were working full-time (35 hours or more per week). These data indicate that transition to the world of work is complex and most likely fragile. Although the program provides a schedule of diminishing support for vocational placements and the students have corresponding coursework that includes reflections on current work-related experiences, this may not fully generalize to new environments or job settings. Therefore, it seems that the graduates may continue to need individualized attention from professionals, as well as peers, to adequately be rooted in a career. Formalized follow-along services and a community of peer support may be a strategy to better support success in a career and full-time employment for postsecondary program graduates. It should be noted that respondents reported additional challenges that compound the problem, such as transportation and job availability. These barriers are common and well documented in the post-school literature (Kelley & Prohn, 2019).

In this study, independent living was characterized by a combination of factors including where and with whom the graduate was living, as well as the skills of independence, such as community engagement and maintaining personal finances. According to a report from the US Census Bureau (Vespa, 2017), a third of all college educated young adults live at

home with their parents. Considering that individuals with ID have historically been placed in congregate care facilities, or faced lengthy waiting lists to engage in supported community living, it is not surprising that the overwhelming majority of the respondents reported living at home with their parents. That said, it does appear that the participants are exercising skills that they have developed while living semi-independently at college, which include an array of adult skills in accessing community and taking care of their individual finances. The results in this area provide an overall impression of graduates' independence, which may indicate a direction for further study. For example, are the graduates and their families working toward the goal of living independently, and if so, in what ways is this evident? Given that the majority of the graduates in this study were wellengaged in their communities, but not necessarily living independently, a transition from college to independent adult life may need to be more formally planned and supported.

College life provides an opportunity for young adults to hone their skills of social interaction, discover themselves in ways that are different from high school, and make life-long friends. Students within the program are provided with consistent and ongoing opportunities for interaction with peers that are both deliberate and designed, as in a peer mentor relationship, as well as unstructured participation within the campus community (i.e. clubs, sports). The vast majority of the graduates reported that they stay in touch with their college friends through avenues of social media. This is positive data that may mirror college graduates without ID; however, future correlational studies could determine specific variables that are associated with the extent and frequency of graduates' contact with friends.

Some of the most powerful results of this study were the graduates' perceptions regarding the effects of this college program on a variety of understandings or skills in self-advocacy. The extremely high ratings regarding self-understanding, confidence, and skills in knowing their needs and supports indicate that the deliberate and embedded overall values of the program had an influence on their maturity. However, it is unknown if the graduates have the resources to exercise these skills in ways that would result in achieving a quality of life that reflects independence and self-reliance.

Implications for Policy and Program Enhancement

This post-program study was designed to identify the adult life outcomes of graduates from a 4-year college-based postsecondary program. The outcomes reflected employment, independent living, community involvement, social engagement, and participation in continued education. It was the researchers' intention to use the aggregated data as an overall measure of program success and for the purposes of identifying any implications for policy and program enhancement. As a result, a closer look at the aggregated data may suggest that the program has a positive influence on the adult lives of its graduates; however, there seem to be indications for the program to modify support and facilitation of career and employment opportunities, as well as to connect graduates with definitive supports as a transition from college to adult life within the community. This could include program-provided post-graduate support in the community, such as vocational rehabilitation, supported work, and case management to firmly secure graduates in employment or career trajectories. These findings may have implications for other inclusive higher-education postsecondary programs. In other words, in order to assure the successful transition to adult life, it may be necessary for inclusive college programs to provide deliberate short-term support that bridges the preparation provided in college to post-program life within the community. This would require ongoing and consistent support that could fade over time.

Limitations

The limitations of this study must be recognized, especially when applying the results to other college programs for students with ID. This is a descriptive study conducted from the perspectives of the individual graduates, relying on their judgement, recollections, and perceptions at a single point in time. The data were derived from the participants' perception through self-report and may be influenced by their emotions, as well as who was present as they completed the survey. It should be noted that the program's foundation has been maintained since its inception; however, during the span of years that participants attended the program, there were ongoing improvements in, for example, curricula, and scheduling. Although these were minor changes unlikely to influence the overall program outcomes for any student, it needs to be recognized when interpreting these findings. In addition, there are constraints to addressing complex inquiries with a limited number of survey questions that are developed with a precaution not to overburden the participant. It is also a limitation that the survey was conducted by the program that respondents completed, so respondents may have been reluctant to provide negative feedback.

Further, family involvement was not considered within the context of this study, and it is clear that parents and siblings are an important factor to adult success. Future research in this area should consider family involvement, as well as the collaboration and communication between program staff and students' families, particularly as the student completes the program.

The exploratory nature of this study makes it difficult to correlate specific program features and services to isolated post-program outcomes. However, this study does provide an indication of the collective impact of a variety of programmatic factors that work in tandem across four years that positively influence students' growth and abilities. Therefore, it may not be any one factor but rather a combination of experiences, approaches to support, and individualized attention of peers within an age-appropriate setting that results in successful adult life outcomes. Future work in evaluating this program will look more closely at how specific elements within the program may be associated with specific adult life outcome. Future research should also include observational measures of adult life outcomes to supplement self-report survey data, as well as pre- and post-program data.

Summary

A participant in this study wrote in the last survey item, which was open-ended to allow for comments, "The ... Program changed me." This simple and blanket statement seems to have captured the overall conclusion of this study. This graduate's expression, further supported by the aggregate data, seems to demonstrate that participation in an inclusive

higher-education program can provide a positive foundation for continued growth in the areas of academics, employment, independent living, community engagement, social life, and self-advocacy for an emerging adult with ID. The consistency in the responses from the participants in this study seems to illustrate that the attributes of this four-year college program, which provides opportunities to exercise independence within a semi-structured inclusive environment, supports human development and reinforces capability rather than disability. This descriptive study provides support that the program has provided the expected results of increased confidence and skills necessary for independent living, employment, and securing age-appropriate social relationships. It also identifies areas for continued support post-graduation in the area of employment and independent living to address known obstacles in these areas for adults with ID. Since youth with ID are often not viewed by others as fully capable of independence, have limited opportunities to develop meaningful relationships with same-age peers, and have constraints on their ageappropriate independence as compared to their peers without ID (Lipscomb et al., 2017), comprehensive inclusive higher-education opportunities may be the key to further developing age-appropriate adult roles. However, more evidence from future research is needed that demonstrates specific components of inclusive higher-education design and practices that lead to successful adult lives.

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Activity	п	<u>48).</u> %	
Shopping or running errands	37	77	
Team sports	19	40	
Individual sports	8	17	
Exercise as a member of a gym/participate in exercise classes	35	73	
Enjoy outdoor activities (walking, jogging, hiking etc.)	28	58	
Attend sports events	13	27	
Go to the movies, concert or show	35	73	
Go on a date or to a party	15	31	
Hang out with friends	37	77	
Attend a club or organization meeting	11	23	
Go to the library	13	27	
Go to a restaurant	38	79	
Attend a religious service	12	25	
Volunteer	19	40	

Table 1.

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Ways that graduates travel in the community ($n = 47$).		
Activity	п	%
I drive a car	11	23
I use Uber or Lyft	14	30
I use paratransit (eg. AccessLink)	12	26
I use public transportation (eg. NJ Transit)	10	21
I depend on friends and family	27	57
l walk	11	23
Other	6	13

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Table 3.

<i>Graduates social engagement outcomes (n =)</i> Question	n	%
How often do you stay in-touch with your colle	ege friends and peers	
Daily	18	38
Weekly	13	27
Monthly	8	17
Rarely	8	17
Not at all	0	0
In what ways do you connect with your colleg	e friends	
In person	21	45
On the phone	25	53
Video chat	12	26
Text message	38	81
Email	12	26
Social media	32	68
Social media accounts that you use		
Instagram	20	43
Facebook	41	87
SnapChat	15	32
Twitter	7	15
Pinterest	9	19
Tumblr	4	9
Other	9	19

Table 4

Self-knowledge and self-a	<i>dvocacy outcomes (</i> n <i>= 47)</i>
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	Not at all	Slightly	Somewhat	Very	Extremely
	influential	influential	influential	influential	influential
Understanding your	2%	2%	13%	36%	47%
abilities	(<i>n</i> = 1)	(<i>n</i> = 1)	(<i>n</i> = 6)	(<i>n</i> = 17)	(<i>n</i> = 22)
Understanding your rights	2%	4%	11%	32%	51%
as a person with a	(<i>n</i> = 1)	(<i>n</i> = 2)	(<i>n</i> = 5)	(<i>n</i> = 15)	(<i>n</i> = 24)
disability					
Ability to speak up for	0%	2%	13%	28%	57%
yourself	(<i>n</i> = 0)	(<i>n</i> = 1)	(<i>n</i> = 6)	(<i>n</i> = 13)	(<i>n</i> = 27)
Make decisions about	0%	9%	11%	28%	53%
your life	(<i>n</i> = 0)	(<i>n</i> = 4)	(<i>n</i> = 5)	(<i>n</i> = 13)	(<i>n</i> = 25)
Understanding your needs	0%	6%	9%	43%	43%
for support	(<i>n</i> = 0)	(<i>n</i> = 3)	(<i>n</i> = 4)	(<i>n</i> = 20)	(<i>n</i> = 20)
Your confidence as an	0%	2%	13%	26%	60%
adult	(<i>n</i> = 0)	(<i>n</i> = 1)	(<i>n</i> = 6)	(<i>n</i> = 12)	(<i>n</i> = 28)