SKILLS DEVELOPED IN POST-SECONDARY TRANSITION PROGRAMS FOR PEOPLE WITH INTELLECTUAL DISABILITIES: FOCUS ON INTERNATIONAL PROGRAMS IN THE UNIVERSITY CONTEXT

HABILIDADES DESENVOLVIDAS EM PROGRAMAS DE TRANSIÇÃO PARA O ENSINO SUPERIOR PARA PESSOAS COM DEFICIÊNCIA INTELECTUAL: FOCO EM PROGRAMAS INTERNACIONAIS NO CONTEXTO UNIVERSITÁRIO

HABILIDADES DESARROLLADAS EN PROGRAMAS DE TRANSICIÓN POSTSECUNDARIA PARA PERSONAS CON DISCAPACIDAD INTELECTUAL: ENFOQUE EN PROGRAMAS INTERNACIONALES EN EL CONTEXTO UNIVERSITARIO

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ABSTRACT

Post-secondary transition programs address skills that are vital in the transition process to independent living for people with intellectual disabilities. Thus, this scoping review was aimed to identify the skills and areas worked on in post-secondary transition programs for people with intellectual disabilities, taking as a starting point the United Nations Convention on the Rights of Persons with Disabilities. The search in the Academic Search Premier, Eric, PsycInfo, CINAHL, Web of Science, Scopus and gray literature resulted in 34 included studies published in English or Spanish, with young and/or adult participants with intellectual disabilities, with range between the years 2006 and 2022. Regarding the skills taught in the programs, it was found that the most evident ones were related to professional issues (employment and career), with emphasis also on independent living skills and other aspects related to social development and academic education. Post-secondary transition programs not only provide a great opportunity for learning in different areas and experience for young adults with intellectual disabilities but also allow for more inclusion in society and strengthen the possibilities of inclusive university education for people with intellectual disabilities.

Keywords: Special Education. Post-secondary Transition Programs. Transition. Independent Adult Living. Inclusive University Education.

RESUMO

Programas de transição para o ensino superior abordam habilidades vitais para a transição para a

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vida independente de pessoas com deficiência intelectual. Assim, esta revisão de escopo teve como objetivo identificar as habilidades e áreas trabalhadas em programas de transição para o ensino superior para pessoas com deficiência intelectual, tomando como ponto de partida a Convenção das Nações Unidas sobre os Direitos das Pessoas com Deficiência. A busca nas bases de dados Academic Search Premier, Eric, PsycInfo, CINAHL, Web of Science, Scopus e literatura cinzenta resultou em 34 estudos incluídos, publicados em inglês ou espanhol, com participantes jovens e/ou adultos com deficiência intelectual, entre os anos de 2006 e 2022. Em relação às habilidades ensinadas nos programas, constatou-se que as mais evidentes estavam relacionadas a questões profissionais (emprego e carreira), com ênfase também em habilidades para a vida independente e outros aspectos relacionados ao desenvolvimento social e à educação acadêmica. Os programas de transição para o ensino superior não apenas proporcionam uma grande oportunidade de aprendizado em diferentes áreas e experiências para jovens adultos com deficiência intelectual, mas também permitem maior inclusão na sociedade e fortalecem as possibilidades de educação universitária inclusiva para pessoas com deficiência intelectual.

Palavras-chave: Educação Especial. Programas de Transição para o Ensino Superior. Transição. Vida Independente na Vida Adulta. Educação Universitária Inclusiva.

RESUMEN

Los programas de transición postsecundaria abordan habilidades vitales en el proceso de transición a la vida independiente para personas con discapacidad intelectual. Por lo tanto, esta revisión exploratoria tuvo como objetivo identificar las habilidades y áreas que se trabajan en estos programas, tomando como punto de partida la Convención de las Naciones Unidas sobre los Derechos de las Personas con Discapacidad. La búsqueda en Academic Search Premier, Eric, PsycInfo, CINAHL, Web of Science, Scopus y literatura gris arrojó 34 estudios publicados en inglés o español, con participantes jóvenes y/o adultos con discapacidad intelectual, con un rango de tiempo entre 2006 y 2022. En cuanto a las habilidades que se enseñan en los programas, se encontró que las más evidentes estaban relacionadas con aspectos profesionales (empleo y carrera profesional), con énfasis también en habilidades para la vida independiente y otros aspectos relacionados con el desarrollo social y la formación académica. Los programas de transición postsecundaria no solo brindan una gran oportunidad de aprendizaje en diferentes áreas y experiencias para jóvenes adultos con discapacidad intelectual, sino que también permiten una mayor inclusión social y fortalecen las posibilidades de una educación universitaria inclusiva para las personas con discapacidad intelectual.

Palabras clave: Educación Especial. Programas de Transición Postsecundaria. Transición. Vida Adulta Independiente. Educación Universitaria Inclusiva.

INTRODUCTION

In many countries, the right to post-secondary education for people with intellectual disabilities is guaranteed by legal instruments for the development of activities to prepare for independent living, employment and career, and academic development (Alqazlan et al., 2019; (Grigal et al., 2021; Papay & Grigal, 2019). One of the possibilities for post-secondary education are post-secondary transition programs, which vary from country to country. In the USA, these programs prepare students for life after high school, with comprehensive planning and opportunities for individualized services and supports, creating conditions for students to achieve their purposes in terms of education, training, and preparation for career and work, in addition to independent living goals (Rowe et al., 2015).

For people with intellectual disabilities, with limitations in intellectual functioning – learning, reasoning, problem solving – and in adaptive behaviour – use of conceptual, social and practical skills that are learned and applied in everyday life (American Association of Intellectual and Developmental Disability, 2021) –, post-secondary education is vital in preparing for independent adult life, as it provides opportunities for continued learning and experiences related to employment and career, social interactions, and academic development (Alqazlan et al., 2019; Papay & Grigal, 2019).

The process of achieving individual post-secondary transition goals depends on the provision of support and services provided by schools and requires a support network between professionals, agencies, centres or services that offer support to young people with intellectual disabilities throughout this process. The process involves assessments to identify the level of support that young people need, which varies for each individual, throughout their life and according to the activity to be performed and the type of disability (Foley et al., 2012).

In Brazil, there are implemented few official programs, as well as research in the area, to monitor and guide the transition process as a way of helping these students become autonomous in their post-secondary life (Redig, 2014). Studies indicate some activities developed mainly in special schools, such as workshops aimed at professional preparation. One of the criticisms of this model concerns the requirement of a minimum level of education to have a job and the fact that workshops are often environments that alienate from the reality of work contexts and are discouraging (Redig, 2014), since most programs in Brazil are carried out through segregated

activities (Furtado, 2013; Redig, 2014), without a consistent national transition model or specific guidelines.

Due to the scarcity of national studies on post-secondary transition programs, an analysis of international literature was used. Thus, this study aimed to identify the main skills worked on in post-secondary transition programs for people with intellectual disabilities and analyse their implications in the university context.

METHOD

This scoping review study, conducted in accordance with the Joanna Briggs guidelines Institute (JBI) and with the *checklist Preferred Reporting Items for Systematic reviews and MetaAnalyses extension for Scoping Reviews*. The review protocol was registered with the Open Science Framework (OSF) (https://osf.io/ebskd).

The inclusion and exclusion criteria considered Population, Concept and Context. The population was adolescents, young people and/or adults with intellectual disabilities who participated in post-secondary transition programs. The context of development of the programs was Higher Education. The concept was post-secondary transition programs.

The inclusion criteria were: (a) having at least one participant with an intellectual disability; (b) they needed to be between 15 and 59 years old, the age range for young people and adults established by the World Health Organization (2014); (c) presenting information relevant to the research, describing the main characteristics of the post-secondary transition program; (d) having been published between January 2006 and December 2022, given the United Nations Convention on the Rights of Persons with Disabilities (2006); (e) having been published in English or Spanish and not having been carried out in Brazil; and (f) having been published in journals, as an article, dissertation or thesis, with quantitative, qualitative or mixed methods, except reviews.

In the first stage, the terms were mapped in the Eric and PsycInfo databases to map the descriptors/words that could compose the final search expression. The titles and abstracts of the studies located were read, and the thesaurus of both databases was consulted. These mapped terms were used to develop a complete search strategy for PsycInfo, which was adapted for the other databases:

(“intellect* disab *” OR “intellect* development*” OR “development* disab *” OR

“learning* disab *” OR “intellect* disorder*” OR “development* disorder*” OR “learning* disorder*” OR “cognitive impairment*” OR “mental retardation*”) AND (“transition*” AND “program”) AND (“post-secondary*” OR “post-secondary*” OR “postsecondary*” OR “post-school*” OR “post school*” OR “postschool*” OR “college*” OR “high-school*” OR “high school*” OR “ highschool *” OR “university*” OR “higher*”)

In the second stage, the searches were carried out in the following databases: Academic Search Premier ASP (EBSCO), Education Resource Information Center (Eric), PsycInfo (APA), CINAHL with Full Text (EBSCO), Web of Science Core Collection (Clarivate Analytics) and Scopus (Elsevier). We also performed targeted searches in the gray literature using Google Scholar, Global ETD Search and DART- Europe E- thesis. For searches in the gray literature, the first one hundred results of each search were considered for analysis.

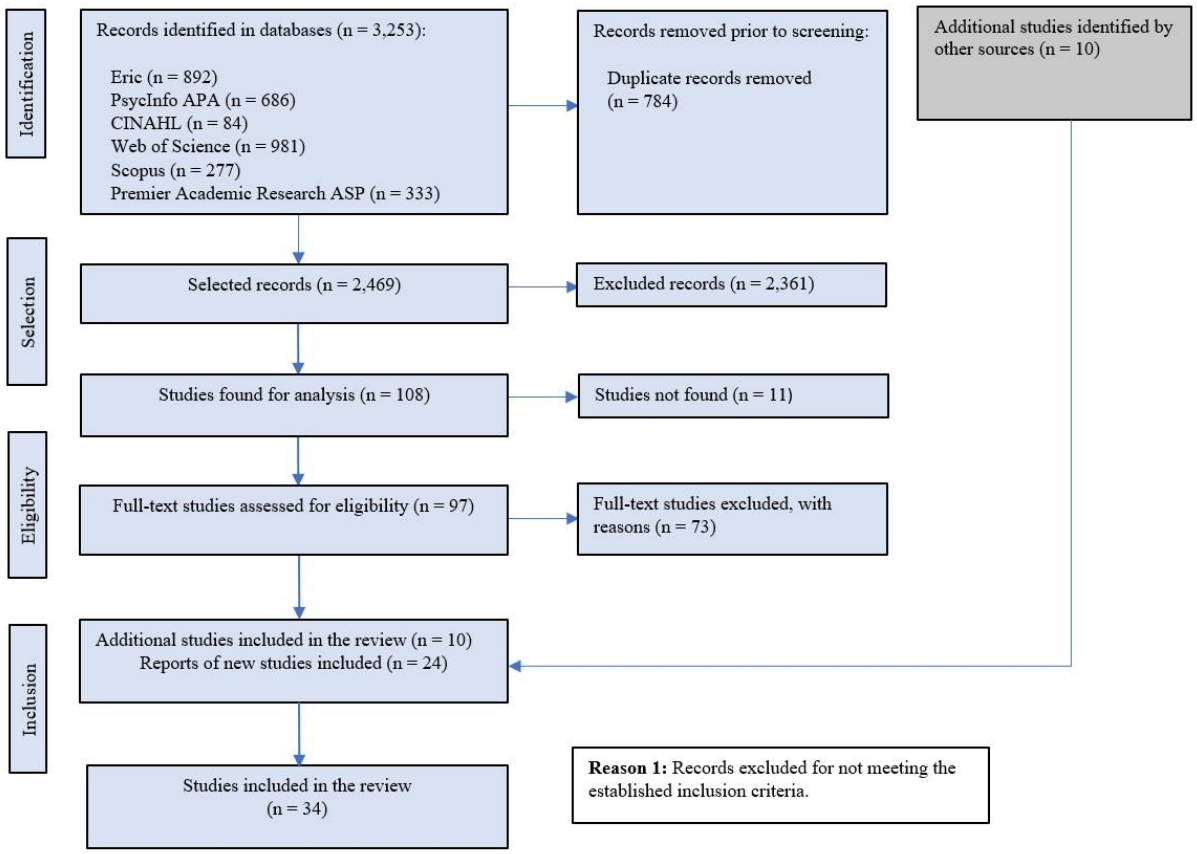
In the third stage, the reference list of the included articles was checked to select additional relevant studies related to the purpose of the research.

After defining the search expression and databases, the studies were selected and exported to EndNote for reference management and removal of duplicate files. Relevant sources were imported into the JBI System for unified management, evaluation and review of information. Selection involved reading titles and abstracts, followed by reading the articles in full and checking the reference list.

The selection process is presented in a flow diagram (Figure 1) adapted from Page et al. (2021) and Tricco et al. (2018), with the results of the search and the process of including studies in this scoping review.

Figure 1

Flowchart of the Study Search and Selection Process



Source: Prepared by the authors adapted from PRISMA Extension for Scoping Reviews (PRISMAScR).

The search strategy identified 3,253 articles, of which 784 were removed due to duplication using EndNote. During the analysis process by title and abstract, 2,361 articles that did not meet the established inclusion criteria were excluded. Thus, 108 articles were included in the analysis, but 11 articles were not accessible. Therefore, 97 articles were read in full, of which 73 were excluded. In the end, 34 articles comprised the corpus of analysis, 10 studies from gray literature and 24 studies from the selected databases.

Data were extracted using a form created by the reviewers[3] with prior validation. Some of the information extracted included: characterization of the studies, methodological aspects, characteristics of the post-secondary transition programs, results and conclusion.

[3]The process for selecting and extracting the retrieved studies was carried out by two reviewers independently, all with qualifications and experience in the area of Special Education research, and disagreements were verified by a third reviewer.

Data analysis followed the JBI scoping review guidelines and included qualitative analysis. Data were organized into categories of the main areas worked on: Employment and Career; Self-Determination, Independent Living; and Social Development.

RESULTS AND DISCUSSION

Employment and Career

The post-secondary transition programs studies included employment development as one of the central axes in their activities, which included the promotion of skills necessary to prepare for obtaining and maintaining integrated and competitive employment during and after completion of the program.

Career exploration generally included three main activities: career assessments, informational activities, and employment pathway activities. Career assessments measured career interests, values, skills, and preferred jobs to help students identify career paths they would like to pursue (Blixseth, 2022; Grigal et al., 2019; Lee et al., 2021; Qian et al., 2018; Qian et al., 2018b; Schillaci et al., 2021).

Informational activities allowed students to better explore certain jobs or details about specific jobs, being able to conduct informational interviews, interview employers, learn about other positions, understand other aspects involved in the career, visit companies, participate in a career fair, work with another employee of the company to understand aspects inherent to the activity (Blixseth, 2022; Grigal et al., 2019; Lee et al., 2021; Qian et al., 2018; Qian et al., 2018b; Schillaci et al., 2021).

Career path classes consisted of activities related to general employment orientation, from resume writing to interviewing, for example, guidance on behaviour in a job interview, appropriate attire, practice of questions commonly asked in a job interview, creation or revision of resume, LinkedIn profile, labour market research, interest inventory, and information about job openings (Blixseth, 2022; Grigal et al., 2019; Lee et al., 2021; Qian et al., 2018; Qian et al., 2018b; Schillaci et al., 2021). All activities were designed so that students could identify which career path they would like to pursue and prepare to acquire paid employment upon completion of the program.

De Souza and Vongalis-Macrow (2021) pointed out that participation in the program helped in developing confidence and various skills, such as reading a schedule, working on a laptop, doing things step by step with images and words, making friends, interacting, etc. In addition, participants reported that one of the most important contributions of a university education is getting a job (Herrero et al., 2020). Regarding employment, we noted that inclusion in Higher Education increased employability and, consequently, the quality of life of participants. Of the 145 graduates of the Promentor Program, 75% worked in regular companies with an employment relationship (Gasset & Herrero, 2016).

Other studies have also reported increases in paid employment after program participation. Ryan et al. (2019) found that 96% (n = 25) of students had at least one paid job after completing the program, and 84% were employed. On average, graduates worked 22 hours per week, earning $8.93 per hour. Graduates reported they were active within their local communities, with 48% (n = 12) participating in volunteer activities. Knight (2018) reported that 78% (n = 9) were employed after the program. Sheppard-Jones et al. (2018) found that 37% of participants were working in the community, and 66.7% were volunteering. Judge and Gasset (2015) found that 94% (n = 60) of graduates were working part-time and 6% were working full-time. Grigal et al. (2006) found that 95% of students graduating from the program in 2004 were connected to the adult services agency, of which at least 70% left with paid employment.

Additionally, there were positive outcomes related to the acquisition of employment skills. Blixseth (2022) noted that program participants engaged in career and employment preparation and exploration activities, which assisted in career decision-making and in addressing workplace barriers. Rogan et al. (2014) found that 65% of graduates from the program analysed were in paid employment.

The analyses of the studies indicated that post-secondary transition programs have promoted significant results in relation to employment and career development. In general, the results indicated positive vocational experiences, acquisition of competitive employment, salaries compatible with the role performed, contributing to greater autonomy and personal fulfilment.

In summary, the results suggest that most students who participated in the programs had relevant opportunities for developing job preparation skills, career exploration, contributing to obtaining paid employment and, consequently, to other aspects of life, such as increased functional skills and more expressive social interactions.

Self-determination

Self-determination is crucial for students with intellectual disabilities and was present in the post-secondary transition programs studied. It involves attitudes and skills that enable the person to act according to their will, make choices, take decisions, solve problems, set achievable goals, develop self-management, self-advocacy, etc. The university context is a convenient space to develop or improve them.

Regarding the development of self-determination skills, the studies indicated activities such as: person-centred planning (the student was directly involved in planning their study itinerary); participation in seminars and workshops; development of self-advocacy and self-representation (to argue in favour of oneself, one's defence and one's representation); decision-making, self-management and security (self-awareness, so that they felt safe to make decisions and manage their lives independently); in addition to skills not specified by the studies.

Thus, it is noted that the programs benefited learning, self-representation support, conscious decision-making and achievement of aspirations (Jiménez, 2021), as well as promoted increased self-perception, self-advocacy and decision-making capacity with participation in the program (Folk et al., 2012).

Family barriers to the development of self-determination were also observed, such as the impediment to transferring responsibilities to the student in discussions about planning the transitional PEI, in addition to the excessive control and involvement of some parents in the student's activities during the program. It was observed that some parents were against the opening of a bank account, the management of finances by the child and the democratic exercise of the right to vote (Neubert & Redd, 2008).

The study developed by Monsalve-Robayo et al. (2014) highlighted the importance of learning taking place in an inclusive and natural environment, such as a university, involving activities applied to work and interpersonal relationships, as the program thus promotes the development of self-determination in participants by working on the ability to act and carry out one's own actions consciously and without interference or control from another person.

Cranston-Gingras et al. (2015) found that students learned to maintain personal schedules, appointments, activities, and assignments, and to document their activities in a daily planner. Some students also had a more active participation in setting goals determined in the Individualized Education Plans (IEP) and in the process of evaluating goal achievement.

What we can observe, therefore, from the studies mentioned here, is that the programs have increased different activities for the development of self-determination. It is important to highlight that self-determination is individual in nature, as the needs are different for each person, and consequently the strategies for developing these skills must understand the complexity of the issues involved, so that they assume the central role in their own self-determination, with the support of teachers and family.

Furthermore, it was noted that the participation of students with intellectual disabilities in programs has a potential impact on self-determination outcomes, influencing various aspects of life. For example, students with greater self-determination are better able to participate in discussions and decisions about post-secondary education and the transition to independent adulthood. In this context, in addition to teachers, the family plays an important role and can encourage or limit the development of these skills.

Just as in the university context, self-determination can also be explored in the workplace or expanded through specific and guided activities. The most important thing is to ensure conditions so that students with intellectual disabilities practice the components of self-determination in their daily lives, that is, they are encouraged to make decisions, participate in problem-solving, set goals, among others.

Independent Living

After-school transition programs offer a variety of activities that help young people with intellectual disabilities function better and succeed in adult life by promoting independent living skills that are essential for successful outcomes in employment, career, education, daily life, and well-being through experiences in independent living apartments, support services, community participation, activities to promote mobility and the use of public transportation, health activities, etc.

Programs have explored opportunities in universities, as this environment is conducive to students generalizing the skills they are learning to other contexts. Most activities with this purpose have been developed in natural settings, either at the university or in the community, and have involved interaction with peers, mentors, or supporters to provide greater community participation, autonomy in daily life, and participation in recreational and leisure activities after completion of the program.

In Jiménez's (2021) study, although the future of living apart from their parents was uncertain, students felt that this was their decision, despite the fear and sadness of living away from their parents. Students also reported significant gains and that the things they learned made them feel good about themselves (Jiménez, 2021).

Studies have also found that participation in the program was instrumental in improving participants' levels of independence. Cook et al. (2017) reported that participants acquired independent living skills, such as cooking, making shopping lists, and managing money. They also felt that, even though they did not live alone, the program gave them skills to make choices and recognized that these skills are relevant to one day being able to live independently of their parents or guardians (Cook et al., 2017).

Other important skills for independent living included improvements in medication use, health, the ability to help others, and personal independence (Sheppard-Jones et al., 2018). They also reported participating in social activities, such as going out to eat (89.5%), attending a religious event (66.7%), and going on vacation (84%). In the choice dimension, 100% of students indicated being able to choose what to do in their free time, and 78.9% could determine their schedule. Additionally, 94% reported being able to go on a date (Sheppard-Jones et al., 2018).

The results of the studies indicated that participation in university programs and topics provided academic development and intellectual growth, important for independent adult life, which, for Rillotta et al. (2020), can provide individuals with intellectual disabilities with a transition path to additional education, such as university courses and formal qualifications.

Ryan et al. (2019) found that 44% of graduates of the program studied lived independently, and 91% reported preparing their meals independently several times a week. Neubert and Redd (2008) identified students' desire to live independently on their own; however, parents' expectations were framed in supervised apartments or group homes. In addition, a gap was identified in the IEPs analysed, omitting goals related to independent living after school.

Kirkendall et al. (2009) found that students were able to identify acquired independent living skills such as reading instructions for preparing food, using money, doing laundry, and problem-solving, although they acknowledged that they needed additional support. Parents also reported positive gains in autonomy after participating in the program. Results indicated that the experience of living away from home was somewhat comparable to that of a typical college student, with improvements in skills, greater awareness of personal goals, enhanced career goals,

and greater maturity or assertiveness (Kirkendall et al., 2009). In another study, students expressed enthusiasm for their acquired ability to travel alone (O'Brien et al., 2009).

In the study by Ross et al. (2013), approximately 83% of the participants lived in rented housing, 3% owned their own residence, and 14% owned a home owned by their parents. In addition, 67 graduates (54%) reported living alone; 35 (28%) had a roommate, including three spouses; 13 (10%) had two roommates; 3 (2%) lived with three roommates; and another 7 (6%) lived with their parents. All 125 respondents reported having access to transportation at the time of the interview. The majority (n = 117 or 94%) used public transportation (Ross et al., 2013).

Prohn et al. (2018) reported that all participants had improved scores on support needs scales at the end of the school year, indicating improvements in adaptive skills and less daily support. There was an overall reduction in the need for support, with fewer hours per week of direct support in the last trimester than in the first.

Participation in the programs was considered positive from the parents' perspective, contributing to greater independence in activities of daily living, which are important for independent adult life (De Souza & Vongalis-Macrow, 2021; Neubert & Redd, 2008).

Social Development

The programme activities have had several implications for the social development of people with intellectual disabilities. Social skills need to be enhanced in post-secondary education to avoid further social isolation in adulthood and in the community, which can have positive outcomes for other aspects such as employment and relationships. As young people approach adulthood, the required social skills of everyday life need to be identified and addressed, including social skills needed for the workplace, job acquisition and retention, social relationships and social inclusion.

Studies have found that students felt excited about attending university. Rillotta et al. (2020) observed that students felt contentment, fulfilment, and a sense of well-being about being at university, where they were able to observe and adopt university norms, make friends, learn, and practice social skills. Other studies have identified that the emotional impact of being part of university is one of the most relevant aspects in the participant's view. In the study by Herrero et al. (2020), students described the experience as “exciting” and “intense,” and also reported special moments, such as graduation, shared with family and professionals (Herrero et al., 2020).

The learning experiences described were diverse, with special references to extracurricular learning experiences, emotional competence, personal maturity, social skills and the development of moral values. Improved social relationships were seen as one of the main benefits of university education by some students. Studies also compared the level of satisfaction with inclusion and social relationships established in high school and university (Herrero et al., 2020).

Qian et al. (2018) found that for many students, the campus club was their primary or only social outlet on campus, providing additional opportunities for students with intellectual disabilities to socialize outside of class and foster friendships. Additionally, students reported that the club fostered confidence and leadership skills, and that mentors helped expand their social relationships across campus. The program experience was positive for most participants, despite facing several challenges, with improved self-esteem, which was beneficial when they landed jobs in the open job market after graduation (Stefánsdóttir & Björnsdóttir, 2016).

Participating in a post-secondary transition program also fostered a sense of belonging. Bueno (2017, p. 179) noted that students with intellectual disabilities enjoyed being at university because they "participate with others in the things they do, being equal," or because they "are at university with my friends and learn from the rest of my classmates about the activities they do, and I can do them too." According to one participant, "Being a university student means being included, being one of them." It was also noted that students associated "being a university student" with that phase of youth and transition to adulthood in which a person is more independent, graduates in a specific area for their future job, and lives with people of similar ages and characteristics.

In the study by Neubert and Redd (2008), contact with peers of the same age without disabilities was encouraged through participation in campus organizations, courses, and social activities. They felt more accepted, more competent, and more sociable. The study by O'Brien et al. (2009) found that students perceived that the university environment brought advantages associated with greater independence, confidence, and increased their social networks, increasing expectations for their future. In addition, students saw themselves as more similar than different from their peers and showed a deep appreciation for their acceptance in the university environment. In the study by Cook et al. (2017), an increase in confidence in abilities and a sense of pride in relation to courses and completion of academic work was also observed.

Post-secondary transition programs have proven to be interesting environments for improving existing social skills and acquiring new interpersonal and social skills, promoting emotional well-being, a sense of belonging, pride and social inclusion. The natural context of the university and the interactions that occurred in this environment had a positive impact and changes in the lives of participants in relation to social development.

DISCUSSION

The findings of this review regarding employment suggest that students with intellectual disabilities have acquired important skills for obtaining and maintaining employment. The percentage of people with intellectual disabilities in paid employment is higher compared to the same group who did not participate in a post-secondary transition program, which is in line with previous studies (Alqazlan et al., 2019; Avellone et al., 2021; Bouck & Park, 2019; Butler et al., 2016; Grigal et al., 2019).

For example, Butler et al. (2016) found that students with intellectual disabilities who participated in the program were nearly three times more likely to have a paid job than those in the comparison group. All students in the program expressed a desire to work, compared to 53.4% of the comparison group.

Individuals with intellectual disabilities have historically experienced lower independent adulthood and employment outcomes, but these outcomes have improved with increased availability and access to post-secondary transition programs for this group. Students with intellectual disabilities who participated in a post-secondary transition program had higher employment rates, higher wages, and received less government financial support than those who only completed high school. However, enrolment of these students in programs remains low (Bouck & Park, 2019).

Bouck and Park (2019) indicated that students with intellectual disabilities often work in segregated or sheltered environments and are employed in a setting with other peers with disabilities, in addition to having lower employment rates, lower wages, and fewer hours worked compared to people with other disabilities overall.

Avellone et al. (2021) identified similar employment- and career-related components but were unable to identify which components are most beneficial. The authors point out other

limitations: research reports need to be more detailed, with key program components and more rigorous study methods.

Although some studies did not specifically report or detail the set of skills developed in the programs, it was possible to find that students benefited from the activities developed, entering higher-paying jobs. Employment skills were, in most cases, developed through paid internships or volunteer work at the university or in the community. In addition, students were able to explore careers and prepare for employment.

Another component of many of the programs analysed that helps students succeed is self-determination, which is directly related to helping people with disabilities have more responsibility and control over their own lives, especially when planning for the transition to independent adulthood (Shogren & Wehmeyer, 2020).

The university context is a favourable environment for developing self-determination skills, as it allows students to expand their ability to make choices, make decisions, solve problems, set goals, work on self-regulation, self-management, and self-advocacy. They can also participate more actively in the IEP and deal with issues such as setting goals for post-secondary education and adult life, developing problem-solving skills, self-management, and self-advocacy (Angell et al., 2019).

The literature highlights that self-determination represents an important aspect for the development of independence in students with disabilities and that higher levels of self-determination are related to better academic and employment results, with a better understanding of their transition and education goals, their strengths and how to use them to achieve their goals (Angell et al., 2019; Foley et al., 2012).

The results of this review are consistent with previous studies that have found evidence of self-determination as a significant element in improving outcomes in the transition process to independent adulthood and post-secondary education. Laragy (2004) found that this more inclusive and participatory approach provided more opportunities for achieving self-determination and, consequently, achieving more desired outcomes for students, such as paid employment and participation in community activities. Ju et al. (2017) indicated that self-advocacy, self-awareness, problem-solving, and goal setting and achievement are important aspects of self-determination. Training to improve self-advocacy and self-efficacy skills increased the likelihood of academic success (Ju et al., 2017).

The literature emphasizes that self-determination is a crucial issue in the transition to independent adult life for students with intellectual disabilities. However, several challenges still exist for the implementation of skills that promote self-determination. One of the reasons is that teachers, who are most often present and directly involved in the transition process of students with disabilities, in many cases have not received training to deal with these aspects, such as counselling and career development (Mynatt & Gibbons, 2011).

In recent years, emphasis has been placed on teaching self-determination skills, such as self-representation, as they provide better conditions for young people to participate in the schooling process and greater success in post-secondary education (Holzberg et al., 2019). In addition to gains in academic development, self-determination is related to better social outcomes, that is, the application of learned skills in other contexts.

The third area identified in the studies was the concept of independent living, which includes personal skills (taking care of oneself), domestic skills (keeping a home) and community skills (school and community life) (Sparrow et al., 2006). The acquisition of these skills determines how the individual is able to live independently in their family and community environment, in addition to impacting levels of quality of life and well-being (Auld et al., 2022).

The results of this scoping review reveal positive aspects of post-secondary transition programs in promoting gains related to independent living for people with intellectual disabilities, such as use of public transportation, home maintenance, medication management, healthy habits, time management, and the ability to make choices for recreation and leisure. However, it is difficult to say whether these achievements were promoted by the programs or by involvement in the university context, and, compared to previous reviews, it was not possible to identify which characteristics are associated with better results in the acquisition of independent living and social skills (Alqazlan et al., 2019).

Overall, the findings of this review highlight that independent living skills tend to improve with inclusion in post-secondary transition programs and continue to develop with new experiences and activities, which are consistent with the literature in the area (Grigal et al., 2012; Petcu et al., 2015). It is necessary to pay attention to the independent living aspects of people with intellectual disabilities due to their historically unfavourable outcomes after schooling (Bouck & Shurr, 2020; Mazzotti et al., 2016).

Much of the independent living-related outcomes have focused on gains in self-sufficient use of public transportation. According to Test et al. (2014), skills that enable better functioning

in the community are essential to increase comfort, confidence, participation, and a sense of belonging in the community. However, the lack of adequate public transportation services to meet the specific needs of people with intellectual disabilities is a concern that can limit or inhibit the form and quality of engagement and participation in the community (Safari et al., 2023).

An interesting finding of this review was the strong family influence on the future perspectives of young people with intellectual disabilities regarding independent living, employment, and schooling (Newman, 2005; Qian et al., 2018). Qian et al. (2018) noted that family socioeconomic status is associated with expectations regarding education, independent living, and employment. Families with lower levels of education and socioeconomic indices have lower expectations regarding the development of these areas. Furthermore, the development of independent living skills may influence parental expectations regarding post-secondary education, but it is important to consider that the opportunities and support available may alter how these individuals develop and carry out such activities (Qian et al., 2018).

CONCLUSIONS

Independent living is crucial to success and inclusion in society. For people with intellectual disabilities, this autonomy has an even greater impact on the direction and way in which they can participate and contribute to their communities, that is, how they acquire responsibilities and carry out their own actions.

Most of the post-secondary transition programs analysed presented significant opportunities for the development of independent living skills. However, some studies did not report the maintenance and generalization of these skills in different contexts beyond the university campus. This limitation does not allow us to infer whether the positive independent living outcomes were maintained or changed after participation in the program.

Nevertheless, the participation of students with intellectual disabilities in post-secondary transition programs has been beneficial for growth in different areas. Butler et al. (2016) state that enrolling in higher education increases employment possibilities and provides opportunities for personal and social development for students with intellectual disabilities. Other positive outcomes for this group include improved health and well-being, community and social integration, employment (Heron et al., 2023), higher levels of confidence, social skills, and greater independence (Alqazlan et al., 2019).

The university context is a favourable environment for the development of social skills, in which students with intellectual disabilities begin to interact more frequently with their peers without disabilities, bringing benefits and learning of behaviours and social norms that are important for university and adult life. However, it is essential that this occurs in elementary and high school, as self-determination develops throughout life.

Post-secondary transition programs for students with intellectual disabilities are aligned with international inclusion policies, ensuring effective educational opportunities at all levels. Although not yet accessible to all, existing programs have shown promise for development in different areas and for social inclusion and can be structured with different purposes and meet the individual needs of each student. The challenge now is to ensure that more people with intellectual disabilities can access post-secondary education options.

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