

INCLUSION OF YOUNG ADULTS WITH INTELLECTUAL AND DEVELOPMENTAL DISABILITIES IN HIGHER EDUCATION: LITERATURE CONTRIBUTIONS IN THE EUROPEAN CONTEXT

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Abstract

Higher education is recognized in our society as one of the best avenues for rewarding employment and associated with significant benefits.

People with Intellectual and Developmental Disabilities, with limitations in intellectual functioning and Adaptive Behavior, although aiming to continue their academic education, are one of the most socially excluded groups, facing prejudice that hinder their access to Higher Education.

Based on a narrative literature review it is intended to gain an understanding of the process of inclusion of these students that is taking place in European higher education institutions, from the contributions of the literature. Thus, it aims to (i) describe features of programs operating in Europe; (ii) identify pedagogical methodologies that have facilitated the success of the teaching and learning process; and (iii) identify effects of their participation in programs offered by European institutions.

This study shows that, with appropriate methodologies, it is possible to include people with Intellectual and Developmental Disabilities in Higher Education.

We underline the importance of the positive effects and outcomes of improving employability from these inclusive curriculum initiatives.

Keywords: Inclusion; Higher Education; Intellectual and Developmental Disabilities.

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Introduction

After completing compulsory education, there are young people with Intellectual and Developmental Difficulties (IDD) who, like their peers, wish to continue investing in their academic education (Dias, 2014).

Despite the significant number of programs for students with IDD in Higher Education (HE) at the international level, in Portugal it's still a recent event.

This article is a narrative literature review (Bryman, 2012, p. 98) with the main purpose of describing European programs for students with IDD in HE; it also aims to analyze the pedagogical methodologies promoting their success and to identify the effects of the participation of these students in HE, in order to contribute to the awareness of a more inclusive HE system, and therefore clarify the importance of implementing inclusive curricular initiatives for students with IDD in HE institutions.

This literature review is in line with the United Nations' Sustainable Development Goal - Quality Education (Agenda 2030), which Portugal has recognized as a priority and cross-cutting path to achieve other goals, emphasizing the crucial importance of education and training in order to reverse delays and avoid exclusions, with direct impacts on people's well-being and promoting lifelong learning.

In this paper, we contextualize the concept of IDD and that of HE for students with IDD. We describe the methodology, present and interpret the data, and present some conclusions.

1. Intellectual and Developmental Disabilities: Current Meanings

The Intellectual and Developmental Difficulties (IDD) - terminology that replaced "mental/intellectual disability", recognizing that the individual can assume, within the current socio-cultural values and principles, an important and valued social role, provided that he/she has the appropriate support (Santos and Morato, 2012) - are characterized by significant limitations in terms of intellectual functioning and adaptive behavior. Intellectual functioning comprises the general cognitive function - such as learning, reasoning, problem solving -, while adaptive behavior encompasses a set of conceptual, social and practical abilities, learned and performed in everyday life (Schalock et al., 2010).

Thus, considering personal autonomy skills, the IDD conception includes ten adaptive areas:

Personal Self-sufficiency - (1) Autonomy, (2) Physical development;

Self-sufficiency in the Community - (3) Economic activity, (4) Language development, (5) Numbers and time, (6) Household activity;

Personal and Social Responsibility - (7) Pre-professional activity, (8) Personality, (9) Responsibility and (10) Socialization.

This proposal becomes pertinent, not only because of the current changes felt and perceived worldwide, but also because of the "obligation" to assume that the key word in this matter is "difficulty". This word offers the possibility for society to detach itself from the conceptions of solidarity/charity, and discreditation, which are still associated with people with Intellectual Disabilities today, based on prejudice.

It should be noted that the limitations of individuals with IDD generally coexist with strengths, and that a person's standard of living will improve if appropriate, personalized support is provided over an ongoing period (AAIDD, 2018).

2. Inclusion of young people with IDD in Higher Education

Entering Higher Education (HE) is widely recognized in our society as one of the best paths to rewarding employment. In addition, HE attendance is associated with long-term benefits, such as better health, happiness and longevity, and greater civic and democratic participation (McMahon, 2009).

An inclusive HE perceives all students as capable of learning and contemplates all types of diversity, finding appropriate responses to the specificities of each student (Álvarez Pérez, 2012).

In recent years, the need to value young people with IDD has been recognized, knowing they're a group of students who have traditionally been excluded due to typical criteria for admission to HE, making this level of education inaccessible to this population. However, curricular initiatives for students with IDD in HE are emerging increasingly.

2.1 Programs in HE for young people with IDD: models and contextualization

According to Hart, Grigal, Sax, Martinez and Will (2006), HE institutions present mainly three models of programs for students with IDD: (I) segregated/adapted separate enrichment; (II) mixed/hybrid; and (III) inclusive/inclusion individual support. Each model is described below, according to the level of inclusion of the students with IDD, compared to the one experienced by their peers without disabilities.

(I) Separate segregated/adapted enrichment model - Students participate only in classes for students with disabilities. Based on this model, programs are commonly referred to as "life skills" [programs]. Students may have the opportunity to participate in social activities and have employment experiences, inside or outside the HE institution. George Mason University (Virginia, USA) is one of the institutions that presents a program based on this model.

(II) Mixed/hybrid model - Students with IDD generally have the option of attending classes in the Curricular Units (hereinafter referred to as the CU) of the HE institution's regular offer, and having other CU specifically designed for them; employment opportunities, on campus or in the local community, are an essential part of the curriculum. The University of Dublin (Ireland), at Trinity College, offers a program following the hybrid model.

(III) Inclusive/inclusion individual support model - Students receive individualized support, with a tutor, in CU from undergraduate/master's degree courses. The student's interests and goals motivate the choices of the CU, as well as their supports. The focus is on establishing a career goal, identified by the student, that will guide his/her curricular options. This model has been followed, for example, by the Universities of Alberta and British Columbia (Canada) and Flinders University (Australia).

Programs according to the second or third model described above may enable one of the following CU attendance options: (i) audit attendance - students attend the CU classes of the HE institution's regular educational offer, without undergoing the evaluation regime; or (ii) credit attendance - students attend the CU classes, with undergoing the evaluation regime.

2.2 Overview of HE institutions with programs for students with IDD

The programs for students with IDD in HE Institutions have a long history in some countries, such as the USA and Canada, which were pioneers, and more recently in Europe. According to Neubert et al. (2001), programs in HE for students with IDD exist in the USA since the 1970s in response to various social movements. Given that these students were already included in regular high school classes, participating together with their colleagues without disabilities, it would be expectable that families, teachers and researchers would wish to extend these inclusive experiences to the HE context. According to these authors, it was in the 1990s that there was an increase in demand and supply for this type of programs, due in part to changes in educational policies and increased expectations of these students and their families. Currently, there are about 270 programs for students with IDD in HE in the USA.

Canada also pioneered the implementation of programs under the fully inclusive model for students with IDD. Based on the idea that the environment of HE institutions reflects society in a microcosmic sense (Hughson, Moodie, & Uditsky, 2005; Neubert et al., 2001), this country has adopted a more individualized approach, framed in the perspective of Human Rights and the social model of disability. In 1987, due to the influence of families, concerned with the lack of opportunities for their children with IDD, the "On campus" program was implemented at the University of Alberta, the first fully inclusive program (Hughson et al., 2005).

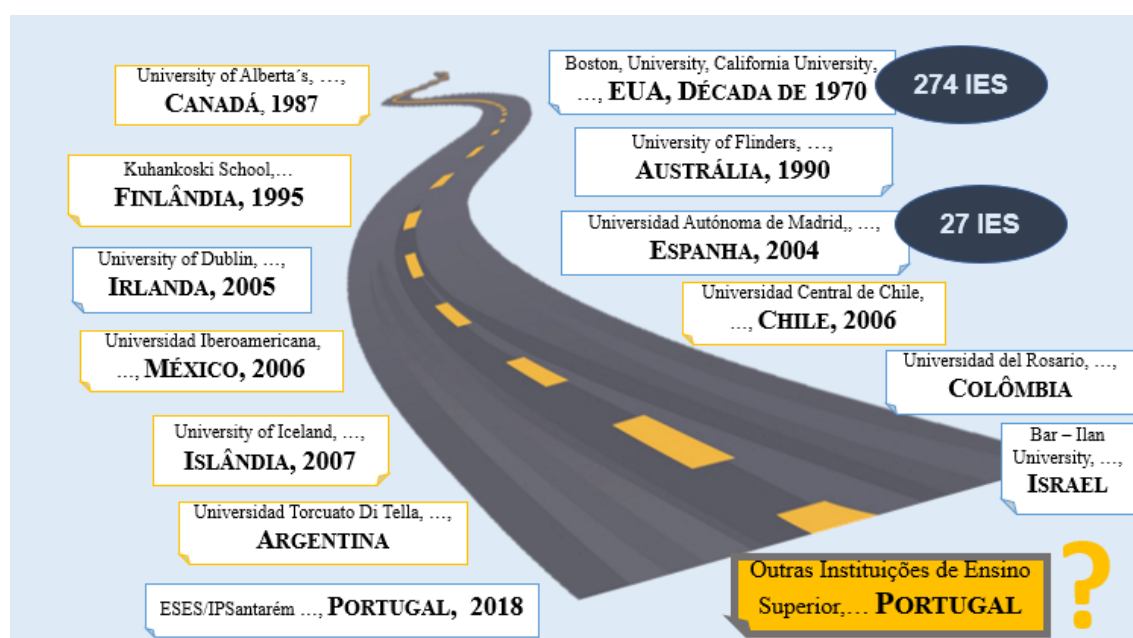
This type of program served as an incentive for the development of similar initiatives in other countries, such as Australia and Finland (Gasset, 2012).

With a focus on the European context, the "Promotor Program", developed by the Autonomous University of Madrid and the Prodis Foundation in 2004, was the first program in HE implemented for students with IDD in Spain, and one of the former in Europe. Currently, in Spain, there are about twenty HE institutions with programs for students with IDD. In 2005 the first fully inclusive program in Ireland emerged, and over the last few years the offer has been increasing, with five more institutions presenting this type of program. In 2007, Iceland implemented a program for students with IDD. In Portugal, the Instituto Politécnico de Santarém - Escola Superior de Educação [the Higher School of Education], was the first Portuguese institution in HE to offer education for young people with IDD, called "Digital Literacy for the Labour Market". Implemented in

the school year 2018-19, this course presents itself as a replica of the model that is running at the Autonomous University of Madrid.

Figure 1 shows some examples of HE institutions with programs for students with IDD, at the national and international level. Although this is a very recent process in Portugal, we can challenge ourselves: Why not offering more inclusive programs in Portuguese HE institutions?

Figure 1. International overview of HE institutions with programs for students with IDD (examples)



3. Methodology

For this narrative literature review (Bryman, 2012, p. 110), a comprehensive search of studies in the b-on, ERIC, Scopus and Scielo databases was performed. The following descriptors were used to identify articles: 'higher education', 'intellectual and developmental difficulties', 'education', program, curriculum, inclusion.

Inclusion criteria were as follows: (i) publication date - selection of studies from the last decade (2009-2019); (ii) availability - full text; and (iii) geography, namely European countries.

The choice of keywords was made in according to the purpose of this literature review, combining them as follows: "higher education" AND ("post-secondary education OR "postsecondary education") AND ("intellectual disability" OR "intellectual disabilities").

After checking the appropriateness of the study for our purpose, ten empirical studies were included. Considering the theoretical framework in which the concept of Intellectual and Developmental Disabilities (IDD) is positioned, and the phases inherent to a program - namely, design and implementation, development and evaluation - the selected studies were analyzed.

4. Presentation and interpretation of data

The ten studies selected come from three countries: four from Ireland, four from Spain and two from Iceland. The research carried could not find Portuguese literature on the subject of this review.

Most of the authors selected methodological options of a qualitative nature, as can be seen in Table 1 (Annex), which presents the characteristics of the selected studies.

4.1 Description of the programs presented in the studies

Based on the selected articles, we present the characteristics of three programs operating in European HE institutions, namely, in the Autonomous University of Madrid - "Programa Promotor" (PP) -, in the University of Iceland - "Vocational Diploma Programme" (VDP) -, and in the University of Dublin - Certificate in Contemporary Living (CCL).

4.1.1 Structural characteristics

Gasset and Herrero (2016) report that the Prodis Foundation and a group of professors from the Department of Didactics and Theory of Education of the Universidad Autónoma de Madrid (UAM) have shared their interest in setting up an inclusion program accessible to students with IDD. It began with a pilot experiment conducted with eight students. In 2009, a two-year program (70 ECTS credits) was implemented with about 15 students.

Gasset (2012) states that the course lasts two years and that the curriculum is constantly adapted to the needs of the students and the demand of the labour market.

Björnsdóttir (2017) reports that students select regular CU according to their educational interests. About one third of the program includes orientation and internship. Only these CU are separate, which suggests that the program should be categorized as mixed.

O'Brien, Shevlin, O'Keefe, Fitzgerald, Curtis and Kenny (2009) explain that Trinity College Dublin's National Institute for Intellectual Disability (NIID) has developed a two-year program under the mixed model.

The duration of these programs is two years, although at other universities there are programs that can vary between one and four years.

4.1.2. Intentional characteristics

Gasset and Herrero (2016) state that the Spanish PP program is structured according to two fundamental premises: on the one hand, to strengthen professional inclusion and, on the other, to contribute to social development through humanistic studies focusing on the acquisition of social values and skills.

Stefánsdóttir and Björnsdóttir (2016) report that the Icelandic programme, VDP, is based on the social understanding of disability, drawing attention to the environment and the need for social change. This study is situated in a Nordic European context, where disability is seen in relational terms and understood as a result of the discrepancy between the skills of the person with disability and the demands of society.

The Kubiak study (2015) shows that the aim of the Irish program, CCL, is to promote the full inclusion of individuals with IDD. The program facilitates lifelong learning by providing opportunities to acquire the strategic skills for these students to become independent and develop their full potential to participate in society.

Regardless of the model adopted and the country in which it is implemented, the main purposes of the programs are: (i) to contribute to the development of personal, social and professional skills of people with IDD, aiming at improving their employability; (ii) to promote their social and professional inclusion; (iii) to improve their quality of life.

4.1.3 Requirements and conditions for admission

Gasset and Herrero (2016) state that in the admission process of the PP program, students undergo a psycho-pedagogical evaluation in order to determine whether they meet the minimum requirements to enter the program: in general terms, being able to travel on campus and not suffering from serious mental health problems.

In the Icelandic program, Stefánsdóttir and Björnsdóttir (2016) report that no diagnosis is made. On the other hand, Kubiak (20115) states that people interested in attending CCL are invited to participate in a formal interview and workshop.

The requirements and conditions for admission vary according to the universities: some programs require a psycho-pedagogical assessment of the candidate (e.g., Universidad Autónoma de Madrid); others require only an interview with the course coordination. Among the requirements for young people with IDD, at the international level, we can find: (i) to hold a certificate of attendance at compulsory education; (ii) to have autonomy to get around on campus; (iii) to have basic reading and writing skills; (iv) to have family support; (v) to be motivated to achieve the proposed objectives, among others.

4.2 Teaching and learning process of students with IDD in HE: pedagogical methodologies and strategies

This literature review has made possible to find pedagogical methodologies and strategies that have facilitated the inclusion and learning process of students with IDD in HE, and therefore contributed to the positive effect of the programs developed and implemented for this population.

Björnsdóttir (2017) mentions that the inclusion of IDD students was made possible by adapting the general curriculum according to individual needs, flexible teaching methods and cooperation between teachers, program coordinators, mentors and the students themselves.

The methodologies and strategies mentioned in the revised studies as having contributed to the inclusion of these students in HE, in articulation with other empirical studies, are presented below; subsequently, the same is done for the CU of the regular educational offer.

Universal Design for Learning (UDL) - Inclusive education requires a didactic approach that responds to the developmental needs of all students. It is therefore about providing diverse means to promote learning and apply different teaching techniques and different forms of motivation, as demonstrated by the study developed by Gasset and Herrero (2016). According to Hart, Grigal and Weir (2010), since students learn in different ways, UDL allows that classes become more accessible, through distinct approaches that ensure learning opportunities for all students.

Person Centred Planning (PCP) - Gasset (2012) presents this methodology, which focuses on people's strengths and capabilities, helping to prepare the "ground" for higher expectations and positive results.

The study developed by Hart et al. (2010) adds that the development of a plan for the future based on the interests and desires of the person, allows to establish steps, articulate the appropriate adaptations to achieve the objectives set by the student himself, and mobilize the required support. In this context, the PCP is used to identify the suitable CU, based on the interests of the student with IDD, as well as on what the student needs and aspires to, as pointed out by Wintle (2012).

Problem-based learning (PBL) - The implementation of this methodology helps students to develop decision making skills addressing the problems within specific cases they may encounter in various natural contexts (e.g., employment), as reported in the study by Gasset and Herrero (2016).

Seminars - The invitation of specialists to participate in the programs aims to develop a specific subject of educational interest for students, according to Gasset and Herrero (2016).

Service-Learning - This is a reflective and relational pedagogy that prepares students for community-based practices aimed at problem solving. These practices are articulated with learning moments, offering the opportunity to explore the connections between the theoretical domain of the class and the needs of the community. This methodology aims to develop values for the acquisition of greater personal and social maturity, exemplified by the Promentor Program, in which students participate in various activities in a home near the university (Gasset & Herrero, 2016).

Cooperative learning - In order to foster cooperation and mutual support among students with IDD, teaching techniques are developed to set common learning goals and allow

them to learn how to live with people with different characteristics. This methodology is used in the programs mentioned in the studies of Gasset and Herrero (2016), Prendergast, Spassiani and Roche (2017) and Björnsdóttir (2017) and aims to make the CU more accessible.

Inclusive university tutoring - Tutoring aims to enhance the capabilities of each student and helps them overcome the difficulties that arise throughout the learning process. This strategy is present in most of the revised studies. According to international literature, the tutor/facilitator (Uditsky & Hughson, 2012) or “coach” (O'Connor, Kubiak, Espiner, & O'Brien, 2012) is the person that provides individual support to the student with IDD, in order to succeed in the learning process and insert him/herself in the academic community. The tutor knows the strengths of the students with IDD and guides them facing the challenges for their insertion into the natural environments of HE. This person needs to know when to be present and when to step aside, so that relationships can arise naturally. Tutors can help: (i) the teachers - in adapting activities, tasks, curriculum; (ii) the students with IDD - in carrying out activities, supporting inclusion in study groups or among friends, organizing mentors, encouraging friendly relations, supporting inclusion in campus within clubs and social activities, communicating with families, and other (Uditsky & Hughson, 2012; O'Connor et al., 2012).

Group dynamics - The studies of Kubiak (2017) and Prendergast, Spassiani and Roche (2017) show that students learn through group work. In line with this, O'Connor et al. (2012) state that this methodology improves the classroom environment and breaks down barriers to learning, providing advantages for all students.

Mentoring - The studies of O'Brien et al. (2009), Kubiak (2017), Stefánsdóttir and Björnsdóttir (2016) and Björnsdóttir (2017) show that mentors are a valuable asset for the inclusion process of students with IDD. Mentors help students with individual and group participation and contribute to the expansion of students' social networks and sense of belonging. Accordingly, the international literature reveals that the role of the mentor is central to the process of complete and meaningful inclusion in HE for students with IDD (Blumberg et al., 2008). Mentors are usually recruited through student associations, clubs, course internships, and volunteer colleagues attending the same CU (O'Connor et al., 2012). According to Kleinert et al. (2012), the commitment of academic support by mentors who are colleagues in the same class and offer support in class whenever the student with IDD needs it, besides being a growing trend in HE, is the ideal of a truly

inclusive academic community. In fact, the social environments of a university campus can be one of the most challenging aspects of attending HE. Therefore, mentors are extremely helpful as they can increase the social circles of students with IDD, as well as they can discuss challenging social situations with them (Hart et al., 2010). However, these authors alert that it is important to ensure that all mentors receive prior training on IDD, specific needs of the individuals they're working with, etc.

Curricular Accommodations - Studies related to the Icelandic program address the accommodations made in the CU of the regular offer and are in line with the studies of Kleinert et al. (2012) and O'Connor et al. (2012).

In addition to the pedagogical methodologies referenced as enhancers of the successful implementation of these programs, the reviewed literature recognizes that the collaboration between teachers, tutors, mentors, academic community, families and other stakeholders is the key element for the promotion of significant experiences and the efficient process of teaching and learning involving people with IDD in HE.

According to Wintle (2012), students with IDD who have gone through a segregated experience in high school may eventually experience some difficulties in interacting with colleagues without IDD at the beginning of the program in HE. Therefore, these situations should be taken into consideration and the relevant support provided in order to overcome the barriers derived from a society that has been organized in a non-inclusive way. Hence Wintle (2015) and Mosoff et al. (2009) advocate a course of preparation for students with IDD, to be held before entry into HE.

In the context of the Irish CCL program, the study of Kubiak (2015) reveals a variety of teaching strategies - presentations, graphic facilitation, brainstorming, conceptual maps, spidergrams, mental maps - and methods of active learning.

4.3 Effects of participation of students with IDD in HE

The study by Judge and Gasset (2015) reveals the results of the first four cohorts that completed the Spanish PP program, suggesting that there are many more success factors than risk. As a result, the program has become one of the main strategies for young people with IDD to achieve an independent life.

Stefánsdóttir and Björnsdóttir (2016) report that teachers in the Icelandic program considered the experience had a positive impact.

O'Brien et al. (2009) reported that the overall reaction to the Irish CCL program is positive and has opened up a new world for all involved.

This evidence coincides with the results of the studies reviewed by Thoma et al. (2011), and O'Rourke (2011).

4.3.1 Effects on students with IDD

Considering the personal independence skills related to the adaptive areas inherent to the IDD concept, the evidence of the selected studies on the effects on the students involved is now presented.

Autonomy - The studies by Judge and Gasset (2015), Martin et al. (2013) and O'Brien et al. (2009) report that people who participated in these programs improved their autonomy, expressed in the ability to travel independently and in other areas of their lives.

Language development and numeracy - Martin et al. (2013) show that the PP program has had positive effects on the ability to read and write, participants' oral communication and numeracy.

Personal and social responsibility – Furthermore, Martin et al. (2013) report that students with IDD have improved their ability to make decisions and take responsibility for themselves. In this study and in those of Gasset and Herrero (2016), and Stefánsdóttir and Björnsdóttir (2016), it was found that students improved their self-esteem. According to Martin et al. (2013), the opportunity to participate in activities that are usual for other people of the same age and the experience of being accepted in the university environment reinforced the self-esteem of the students with IDD. As the university is a valued environment in our society, the participation of these students reduces the differences of perception they have of themselves and their peers, since they tend to be seen more as "university students" and less as "students with disabilities". Therefore, the self-image

referenced in the study of Gasset and Herrero (2016) and the self-confidence reported in the studies of Judge and Gasset (2015) and O'Brien et al. (2009) have also increased. This evidence is in line with the studies of Hart et al. (2006) and Uditsky and Hughson (2012).

Socialization - Gasset and Herrero (2016) state that the Spanish program has improved the social inclusion of participants. Stefánsdóttir and Björnsdóttir (2016) report that most students valued the opportunity to interact with non-disabled people of the same age group and with the same interests, and that there was greater social participation both in and out campus. These students made friends, were encouraged to participate in social events and generally felt they were treated like other students, as evidenced by the study by Stefánsdóttir and Björnsdóttir (2016). The study developed by O'Brien et al. (2009) confirms the expansion of these students' social networks.

Pre-professional activity - The study by Martin et al. (2013) reveals that students with IDD have notably improved their abilities to perform work in working environments.

4.3.2 Effects on the academic community

Stefánsdóttir and Björnsdóttir (2016) report that students with IDD have contributed to a multicultural atmosphere; their presence in the corridors, the library, the canteen, influences the environment, making it different and more diverse. Martin et al. (2013) point out that the existence of this type of programs does not exclusively benefit students with IDD, as it also enriches the university context, improves the perception of people with IDD and the way they can contribute to society. The study of these authors reveals that programs such as "Promentor", which include people with IDD, when properly designed and implemented, allow the development of values such as equality, equity and respect, and objectively improve the university institution, contributing to the construction of a fairer society.

The teachers who participated in Stefánsdóttir and Björnsdóttir's study (2016) claimed that the experience also had a positive impact on their own perceptions of people with IDD.

The studies by Judge and Gasset (2015), Gasset and Gerrero (2016), Björnsdóttir (2017), O'Brien et al. (2009) and Kubiak (2015), regardless of attitudes and challenges, show that there is much evidence that students with IDD are not only tolerated; they are welcome and really belong to the academic community.

These findings, regarding the effects on both students and the academic community, are in line with the studies of Mosoff et al. (2009), O'Connor et al. (2012), Kleinert et al. (2012) and Hughson et al. (2005), which reveal that even if these students do not obtain an academic degree, they acquire lasting friendships, knowledge and invaluable life experiences.

4.3.3 Effects on access to HE

Gasset and Herrero (2016) mention the evolution of the number of candidates to the "Promentor" program, reflecting its trajectory and impact on access to HE for students with IDD.

However, as the studies of Judge and Gasset (2015) and Gasset and Herrero (2016) report, this increase in demand becomes a cause for concern: the lack of physical space at the university where this program takes place does not allow for an increase in the number of students with IDD each year, and in the end there is a waiting list.

4.3.4 Effects on employability of students with IDD

Stefánsdóttir and Björnsdóttir (2016) state that the Icelandic program has had a positive impact on employability.

Judge and Gasset (2015) state that, of the 60 students who completed the program by spring 2010, 55 (92%) are employed. Of these, 74% have permanent contracts. These authors report that the degree of satisfaction of employers with workers (former students) with IDD is high.

Gasset and Herrero (2016) show that, of the 145 students of the Promentor Program who have already completed their studies, 75% are working. These data suggest that this program effectively contributes to increasing the employability of people with IDD.

Conclusions

The reviewed literature comprises ten articles published over a decade - between 2009 and 2019 - within the European context. These studies focused on subjects such as: The process of including students with IDD in HE and its importance (Björnsdóttir, 2017; Martin, Gasset, & Gálvez, 2013); The effects of the participation of students with IDD in HE (Gasset, 2012; O'Brien, Shevlin, O'Keefe, Fitzgerald, Curtis, & Kenny, 2009; Stefánsdóttir & Björnsdóttir, 2016); the process of teaching and learning students with IDD in HE (Kubiak, 2015; Kubiak, 2017); the professional inclusion of university students with IDD (Judge & Gasset, 2015); the evaluation of the results of a program in HE (Gasset & Herrero, 2016); the design and implementation of a university curriculum module (Prendergast, Spassiani, & Roche, 2017); and the importance of listening to the voices of students with IDD in HE (Kubiak, 2017). Some of these articles interrelated the participation of students with IDD and the results of employment, highlighting the improved employability of a significant number of people with IDD who participated in programs in HE.

The HE system for students with IDD is a relatively new topic in Europe, which is reflected in the scarcity of the correspondent scientific literature. Most of the literature related to this topic comes from the USA and Canada, which is understandable due to the fact that these countries have a longer history in this thematic. It was not found any Portuguese literature about research carried out in Portugal on this subject. This was not surprising, considering that the first program was implemented in the country in the school year 2018-19.

Although the placement of students with IDD alongside students without disabilities does not guarantee the development of relationships, the results of the studies suggest that students with IDD have the opportunity – and take it - to participate in various academic and social activities.

Although the programs described follow the mixed model, no evidence was found regarding comparisons between participation in separate and regular CU. Lifshitz et al. (2018) showed that the most prominent differences between these two types of participation focused on vocabulary, knowledge, and memory, related to the employment context. The results of this study also indicated that students with IDD can participate in CU of the HE regular offer. The programs described in this literature review do not follow the full inclusion model; however, the existence of CU designed only for students with

IDD is justified in order to meet their needs. This is because there are students with IDD who complete compulsory education without mastering essential skills, such as add and subtract, which is reflected in daily activities.

In general, this literature review highlighted the importance of including students with IDD in HE. The evidence from the studies suggests that this inclusion is possible through the adaptation of the general curriculum, appropriate pedagogical methodologies and strategies, and collaboration among teachers, program coordinators, mentors, families and the students themselves.

Therefore, the educational process of young people with IDD should not end at secondary school. It is necessary to offer these young people, as well as everyone else, options that will allow them to continue to develop in order to face the future in a constructive way. In fact, the transition of students with IDD into meaningful and valued adult roles can be effectively facilitated by universities.

In Portugal, when students with IDD and their families consider what will happen after completion of compulsory education, the possibility of entering in HE is not yet promoted as a viable option. However, this situation needs to change, as the recognition of the pre-eminent role HE can play in the lives of students without IDD is as relevant as it is for students with IDD.

The main limitation of this literature review seems to focus on the role played by the authors of the articles, as most are involved in the implementation and development of the programs, as teachers and/or coordinators, so it is difficult to guarantee their neutrality as researchers.

While making HE more inclusive for students with IDD may be a complex, time-consuming and labor-intensive process, the literature highlights significant benefits both for the students themselves and for the academic community in general. In fact, society still underestimates what people with IDD can achieve, and is often unaware of how they can be successfully included. Therefore, the literature review has listed contributions from pedagogical methodologies that have had an effect on the efficient teaching and learning process of these students in HE, of which we highlight the central role of mentoring.

We agree with Uditsky and Hughson (2012) that HE is just one example of the many paths of life that it is important to encourage among this population. However, we

recognize that HE is highly valued in our culture, being considered respectable for young adults to be seen as university students, developing skills in a microcosm of society.

Although in Portugal, the possibility of young people with DID attending HE is still an exceptional situation, what was absolutely impossible half a century ago is now beginning to seem more accessible.

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Table 1. Characterization of selected empirical studies, in chronological order of their year of publication

Authors / Publication year	O'Brien, Shevlin, O'Keefe, Fitzgerald, Curtis e Kenny (2009)	Gasset (2012)	Martin, Gasset e Gálvez (2013)	Kubiak (2015)	Judge e Gasset (2015)
Country	Ireland	Spain	Spain	Ireland	Spain
Theme	Effects of IDD student participation in HE	Effects of IDD student participation in HE	Importance of including people with IDD in the university	Learning of students with IDD in HE	Professional inclusion of university students with IDD
Method / Nature of the study	Qualitative study	Systemic methodology	Mixed method	Qualitative study, phenomenological method	Case study
Main results	Inclusion in the university environment has led students with IDD to see themselves more like their peers. They felt better accepted, more competent and more socially included.	The results focus on the impact of the Promentor Program on the lives of students with IDD.	The results assess the importance of including students with IDD in the university.	The results provide evidence of the learning potential of people with IDD, challenge misconceptions, and justify why this population should be part of a diverse student	The results of the first four cohorts that completed the program suggest that there are many more success factors than risk. High levels of satisfaction were obtained.

body and university
environment.

Authors / Publication year	Gasset e Herrero (2016)	Stefánsdóttir e Björnsdóttir (2016)	Prendergast, Spassiani e Roche (2017)	Kubiak (2017)	Björnsdóttir (2017)
Country	Spain	Iceland	Ireland	Ireland	Iceland
Theme	Evaluation of the results of the Promentor Program	Effects of student participation with IDD in HE	Design and implementation of a university curriculum module	Process of teaching and learning students with IDD and importance of listening to students	Process of inclusion of students with IDD in HE
Method / Nature of the study	Mixed method, longitudinal study	Qualitative study	Case study	Qualitative study, phenomenological method	Qualitative study
Main results	The experience of the Promentor Program has shown that the inclusion of students with IDD in university is possible and desirable, both for these	The evidence suggests that there is agreement on the importance of the initiative in improving access to education and society for people with	The study provides evidence that students with IDD, low and moderate levels, perceive the importance of mathematics in their	The results suggest that recognizing students' voices is critical to changing the way teachers think about their students' learning.	Inclusion has been made possible through curriculum adaptation, flexible teaching methods and cooperation between

young people and for the university, and also has positive effects in the context of employment	disabilities. Students described increased social participation, knowledge and self-esteem. The respondents described inclusive courses as positive, both for students with disabilities and for other students. The results related to employment were, in general, positive.	daily lives and respond positively to challenges.	teachers, coordinators, mentors and the students themselves. There is much evidence that students are not only tolerated; they are welcome at university and belong to the academic community. Collaboration with mentoring students has proven valuable.
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