When what is unseen does not exist: Disclosure, barriers and supports for students with invisible disabilities in higher education

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Abstract

This systematic review explores the research carried out to date on invisible disabilities and higher education. Out of a total of 443 studies, with no time restrictions in the search, 16 articles met the inclusion criteria. These included both qualitative and quantitative studies and involved a total of 1431 students with hidden disabilities. Following data analysis, based on a system of categories and codes, the results help answer five questions: What are the characteristics of the studies conducted in terms of country, participants and methodology? Why do students with invisible disabilities choose not to disclose their disability? How does non-disclosure of disability affect students' retention and success in higher education? What barriers do students with invisible disabilities encounter in higher education? How are students with invisible disabilities supported in their academic success? The conclusions warn about the risk of not making disability visible and forgoing the accommodations that are necessary for the progression and completion of studies in institutions that still have a long way to go before becoming truly inclusive.

Keywords: Hidden disabilities; higher education; inclusive education; barriers; success factors

Introduction

Invisible disability is an umbrella term that refers to disability that cannot be seen by others and interferes with day-to-day functioning, but does not have a physical manifestation (Barnard-Brak and Tracey 2010; Couzens et al. 2015; Matthews and Harrington 2000; Mullins and Preyde 2013). There are many types of invisible disabilities, including, among others, attention-deficit hyperactivity disorders, health problems, learning disabilities, psychosocial disabilities (more commonly known as mental illnesses or mental disorders) and invisible disabilities that are energy-fluctuating conditions (e.g., chronic fatigue syndrome, and pain conditions such as Ehler-Dahnlos) (Mullins and Preyde 2013; Vergunst and Swartz 2020).

Unlike in previous educational stages, people with disabilities entering university need to be proactive and disclose their situation to the institution they will be attending in order to receive accommodations (Hundson 2013; Mullins and Preyde 2013). When students disclose their disability, higher education institutions are under legal obligation to guarantee them various accommodations, such as learning materials in different formats or differentiated assessment processes, etc. (Cinarbas and Hos 2020).

However, disclosure of disability is a complicated issue and it is up to students to decide whether or not to do it (MacLeod et al. 2018; Osborne 2019). Many students choose to remain invisible for a variety of different reasons, such as fear of being stigmatised and labelled by faculty members and peers (Babic and Dowling 2015; Cinarbas and Hos 2020;

Seale 2017). Sometimes students do not disclose their disability because they do not see themselves as having one (Babic and Dowling 2015), or because they want to complete their studies under the same conditions as other students (Svendby 2020). Bad experiences resulting from prior disclosures or the fear or perceived risk of knowledge of their disability affecting their professional future may also influence their desire not to be seen by others (Svendby 2020). In this desire to remain invisible, the ableism approach undoubtedly plays a central role, with the ideal of a normal individual prevailing (Wolbring, 2008). A similar result has been found in studies on faculty members with invisible disabilities in the framework of ableism dynamics (Brown and Leigh 2018). For them, specifically early-career academics, public disclosure of disability involves risks beyond the personal sphere, with the concern about the consequences of making their disability visible for their careers and job insecurity.

Higher education can be an opportunity for these students to rekindle an identity that is not linked to disability and to move away from the time-consuming, bureaucratic and effort-consuming process of proving their disability and negotiating the necessary support mechanisms (MacLeod et al. 2018; Venville, Street, and Fossey 2014).

However, non-disclosure of disability has consequences for students' academic progress and success. Not only because they forego the accommodations and disability support services that are often necessary for their learning, but also because non-disclosure of disability has been shown to have consequences for academic outcomes. Indeed, in a study conducted in 2013, Hundson found that students who revealed their disabilities in the first year of enrolment had higher graduation rates than students who self-disclosed later, to the extent that for every year a student delayed disclosing their disability, the time to graduation increased by almost half a year.

The risks that students face by not disclosing their disability would be minimised if universities were inclusive and based on the social model of disability. Moving towards inclusion should therefore be a priority for higher education institutions (Louise and Swartz 2022), since this would imply that they recognise and value diversity by promoting actions to welcome all students and contribute to their learning, participation and belonging.

The principles of inclusive education based on justice and equity are closely related to the social model of disability (Oliver 1990). According to this perspective, it is the economic, social and educational structures that create the barriers faced by people with disabilities, and it is therefore these structures that must be transformed to enable full participation. In the educational context, one of the approaches that support this is Universal Design for Learning. This provides multiple forms of representation, expression and engagement, recognising different forms of learning and needs, and offering flexibility and diversity of resources, methodologies and assessments (Schreuer and Sachs 2014). Universal Design for Learning acts proactively and takes this diversity of options into account when planning syllabuses, thereby significantly reducing pressure on students by lessening disclosure requirements and minimising exposure to stigma and feelings of dependency (Schreuer and Sachs 2014).

However, although inclusive education is recognised in theory, and even in the legislation, in practice there is still a long way to go (Svendby 2020). A number of studies have looked at the university trajectories of people with invisible disabilities and identified barriers in different areas. For example, the need for accommodations involves a process that can make students with disabilities ‘extra-visible’ in a negative way, which often reduces students' willingness to apply (Goode 2007).

There is no shortage of studies on personal barriers, with Jacobs et al. (2020) and Pottinger, La Hee, and Asmus (2009) concluding that students with hidden disabilities face psychological distress and emotional difficulties (loss of confidence, low self-esteem,

anxiety), and suffer from persistent cognitive deficits and poor social and interpersonal skills that undermine their learning process and prevent many from graduating on time. Moreover, such students have to invest more time and effort in meeting academic requirements (Schreuer and Sachs 2014).

Among the external barriers identified, the one most commonly referred to in the extant literature is faculty. Many students with invisible disabilities find that faculty members are neither informed nor trained to support them and contribute to their inclusion (Burgstahler and Doe 2006; Gow, Mostert, and Dreyer 2020). Moreover, they often display negative attitudes and are unwilling to make reasonable accommodations (Gow, Mostert, and Dreyer 2020; Hamilton, Hulme, and Harrison 2021; Mamboleo et al. 2020).

Despite the difficulties encountered by students with invisible disabilities, previous studies have also identified certain personal and external factors that contribute to their retention and academic success. Students identify personal factors of self-determination and self-advocacy skills, such as making use of tutoring or disability services, forming relationships with faculty members, and having a support system on campus that facilitates their learning (Gow, Mostert, and Dreyer 2020; Kreider, Bendixen, and Lutz 2015). Students also recognise that their own tenacity and determination, as well as their own knowledge of their disability and needs, are key factors in their success (Gow, Mostert, and Dreyer 2020).

External factors include faculty training in accommodations and disability (Barnard-Brak and Sulak 2010), Universal Design for Learning (Couzens et al. 2015), the use of diverse methodologies and flexibility in teaching (MacLeod et al. 2018). Also, informal networks (family and peers) have been identified by students with disabilities as facilitators for inclusion and one of the most effective sources of support (Couzens et al. 201; Gow, Mostert, and Dreyer 2020).

While much research has been conducted on the needs of students with visible disabilities, the specific needs of students with invisible disabilities have received less attention (Vergunst and Swartz 2020). With this systematic review, we aim to explore the research carried out to date on hidden disabilities and higher education, making no distinction between different types of disability and including studies that seek to give voice to these students. Moreover, we incorporate both quantitative and qualitative research, with no time restrictions. Precisely, the studies selected for this review gave a voice to students with disabilities. Whether the results are quantitative or qualitative, their first-person experiences are narrated in the results section.

This study makes a novel contribution to the field because, to the best of our knowledge, only two other systematic reviews have been conducted to date on invisible disabilities and both are different from the one presented here. The first, published in 2016, looked exclusively at interventions aimed at enabling students experiencing mental illness or acquired brain injury to participate in postsecondary education (Venville, Street, and Fossey 2014). The second, published in 2020, reviewed studies carried out between 1994 and 2017, and examined policy implementation through qualitative studies exploring the lived experiences of students with specific learning disabilities studying at university (Gow, Mostert, and Dreyer 2020).

Method

This systematic review involved six steps. First, the research questions were formulated. Second, search descriptors were defined and databases selected. Third, inclusion and exclusion criteria were defined. Fourth, the methodological quality criteria were established. Only studies that met the quality requirements were included in the review. Fifth, data that answered the research questions were extracted after a review of the articles. Finally, the studies were analysed using a system of categories and codes.

In order to guarantee the quality of the systematic review, the literature search was based on the Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) statement (Moher et al. 2009).

Research questions

Five research questions guided this systematic review:

1) What are the characteristics of the studies conducted in terms of country, participants and methodology?

2) Why do students with invisible disabilities choose not to disclose their disability?

3) How does non-disclosure of disability affect students' retention and success in higher education?

4) What barriers do students with invisible disabilities encounter in higher education?

5) How are students with invisible disabilities supported in their academic success?

Exploration and database search

The search was carried out in ERIC, Scopus and Web of Science. These databases are characterised as viable, reliable and internationally known. The keywords used in the search were 'hidden' and 'disability', 'invisible' and 'disability', in combination with 'higher education' or 'university' or 'college' or 'postsecondary'.

Inclusion and exclusion criteria

Different search criteria were established to select the articles. There were seven inclusion criteria: 1) articles published in English; 2) research articles using either quantitative or qualitative methods; 3) peer-reviewed studies, in order to meet a minimum standard of reliability and quality in the opinion of other academics; 4) articles focusing on invisible disability at university; 5) students with invisible disabilities as participants in the studies (we were interested in those studies that gave a voice to students with disabilities); 6) articles focusing on education and the university experience (in any type of journal included in the

three databases, including health-related journals); 7) any date of publication, with no time limitation.

Three exclusion criteria were also established: 1) studies on invisible disability in a field other than education, e.g. health-related (we were interested in analysing only the academic university experiences); 2) other scientific publications such as books, chapters, conference papers, systematic reviews and theoretical reviews (we only include primary studies); 3) analysis of results carried out in general rather than from the perceptive of invisible disability.

The search was conducted in June 2021. The initial search identified 443 publications, although this number was reduced to 109 after repetitions of publications appearing in more than one database were eliminated (334 duplicates). All abstracts were read and, based on their content, 58 studies were selected and evaluated according to the inclusion and exclusion criteria. Of these, 28 were eliminated. A re-reading of the remaining 30 publications excluded a further 14 articles for failing to meet the inclusion criteria and/or the methodological quality criteria. Finally, 16 articles were selected for analysis.

Trustworthiness and relevance of the research methodology used

During the fourth phase of the review, the methodological quality of the 30 full-text articles selected in the third in-depth reading was assessed using the Critical Appraisal Skills Programme (CASP 2018). The articles were reviewed and assessed by two independent reviewers to determine whether they adequately met the criteria for inclusion in the systematic review. The 10 questions included in the CASP qualitative checklist guided this decision: 1) Are the results of the study valid? (Was there a clear statement of the aims of the research? Is a qualitative methodology appropriate? Was the research design appropriate to address the aims of the research? Was the recruitment strategy appropriate to the aims of the research? Were the data collected in a way that addressed the research issue? Has the

relationship between the researcher and participants been adequately considered? What are the results? Have ethical issues been taken into consideration?); 2) Was the data analysis sufficiently rigorous? (Is there a clear statement of findings?); and 3) Will the results help locally? (How valuable is the research?). The methods section of each paper was key to this review. Those that were excluded did not include or explained the sample recruitment, data collection instruments, data analysis or ethical issues. Only articles that scored 100% were included in the final analysis.

Data extraction and analysis

Data from the 16 articles included in this systematic review were extracted to a table with six columns (Appendix): article reference, purpose, participants (number and type of disability), country, methodology and data collection, and results. This allowed us to systematise the analysis of the publications and facilitate comparisons between them, so that differences and similarities could be identified and examined.

In a second phase, we developed a system of categories and codes to analyse the data from each article. These categories included participants (unknown invisible disabilities, psychiatric labels, attention deficit hyperactivity disorder, learning disability, brain injury, chronic illness), country (Australia, Canada, Greece, Jamaica, South Africa, USA), methodology (qualitative, quantitative) and results (do not disclose disability, no-disclosure impact, barriers, facilitators).

Findings

Descriptive data

Almost half of the studies (44%) were conducted in the United States (n=7), 31.3% (n=5) in Australia and only one each in Canada, Greece, Jamaica and South Africa (6.3%).

The total number of students participating in the 16 studies was 1431. Of these, the majority (n=1274) did not specify the type of invisible disability they had, often because they

preferred not to disclose it. In those cases in which the disability was identified, the most common type was related to psychiatric labels (n=97); followed by learning disabilities, including 15 cases of dyslexia (n=32); neurological impairments, such as brain injury (n=15); attention deficit hyperactivity disorder (ADHD) (n=11); and chronic illness (n=2).

Regarding the methodological designs of the studies, the majority (75%, n=12) were qualitative and used interviews, which in most cases were semi-structured. The remaining four studies were quantitative (25%) and used surveys.

Why do students with invisible disabilities choose not to disclose their disability?

Whether or not to disclose their disability was a dilemma faced by the majority of students with hidden disabilities in the studies reviewed. This has been a constant since the first study included in this systematic review and has not changed over the decades (Stage and Milne 1996). The analysis carried out allows us to affirm that when most students entered university, they preferred not to let others know about their disabilities and to remain invisible (Grimes et al. 2017; Olney and Brockelman 2005; Stampoltzis et al. 2015), even though this meant renouncing the accommodations to which they were entitled by law (Grimes et al. 2017). Some even went so far as to associate their future success with staying silent about their learning challenges (Grimes et al. 2020).

Students gave a wide range of different reasons for remaining invisible: previous negative experiences, stigma, credibility, non-disability identity, and normality.

1) Negative previous experiences in other educational stages

The educational trajectories of the students in the studies had not been easy and for many of them, previous educational stages had been a veritable obstacle course, characterised by different treatment from everyone else and negative attitudes from faculty and peers (Grimes et al. 2020; Thompson-Ebanks 2014). Consequently, they did not want to experience such discrimination again at university or in their future careers (Grimes et al. 2020).

2) Stigma

Another reason students opted for non-disclosure was the stigma associated with disability (Barnard-Brak and Tracey 2010; Thompson-Ebanks 2014). Some went so far as to indicate that they were afraid of others knowing that they had a disability because of the consequences of the associated stigma, in terms of both faculty seeing them as lesser students and how it may impact their future employment prospects. How others saw them, from a stigmatised point of view, influenced their own perception and beliefs about how they saw themselves. This in turn affected their self-esteem and self-efficacy and rendered them reluctant to advocate their learning needs (Grimes et al. 2019; Kreider, Bendixen, and Lutz 2015; Mullins and Preyde 2013; Thompson-Ebanks 2014). Indeed, Olney and Brockelman's (2005) study found that people with visible disabilities appeared to have a more stable self-concept as people with disabilities than people with hidden disabilities.

3) Credibility: demonstrating that you have a disability

Another reason for non-disclosure was related to the fact that students had to prove that they had a disability, as faculty, and sometimes peers, sometimes questioned it (Ryan 2007). In the study by Mullins and Preyde (2013), participants stated that they needed to provide documentation attesting to their disability, claiming that this was emotionally difficult and made them feel less legitimate. The invisibility of their disability rendered their legitimacy questionable in many situations and faculty members sometimes felt that the disability was being used as an excuse (Stage and Milne 1996; Vergunst and Swartz 2020).

4) Not considering themselves to have a disability

A fourth argument for remaining invisible was the belief in an identity not linked to disability. In the study by Connor (2012), the author found that students with learning disabilities did not disclose their situation because they did not identify with a disability identity and believed that they simply had limitations in certain areas. Also, in the study by

Kreider, Bendixen, and Lutz (2015), students said they did not really believe in their disability status or found it difficult to accept that they needed additional support to continue to be academically successful at university. Finally, in the study by Olney and Brockelman (2005), students with hidden disabilities said they did not feel there was a ‘community’ to which they belonged.

Many students simply accepted that they had academic needs and developed strategies to address their learning challenges (Grimes et al. 2019; Kreider, Bendixen, and Lutz 2015), referring to their desire to succeed in the classroom without academic accommodations whenever possible.

5) The desire to develop a 'normal' identity

Over and above all the previous reasons given was students’ desire to re-develop an identity that had deteriorated during previous stages, and to move away from a 'disabled' identity towards a 'university student' (Grimes et al. 2017) or 'normal' student one (Grimes et al. 2019; Vergunst and Swartz 2020). In the study by Mullins and Preyde (2013), the participants argued that it was easier to be ‘normal’ because their disability was invisible. They only decided to disclose their disability when the difficulties became so significant that they jeopardised their chances of staying at university and accommodations became vital to continuing their studies (Olney and Brockelman 2005).

How does non-disclosure of disability affect students’ retention and progress in higher education?

Not disclosing a disability is not a neutral decision, since it has consequences for retention and success at university, as well as a personal impact. The first and most immediate effect is that students cannot benefit from the accommodations to which they are entitled by law (Kreider, Bendixen, and Lutz 2015; Stage and Milne 1996). For many students, it is an emotionally complex process to have to share personal information with

their faculty members and to have to negotiate their accommodations when faculty members doubt their disabilities and are reluctant to provide the necessary support (Stage and Milne 1996). Other students, on the other hand, saw earning a university degree without the necessary support as a challenge they needed to overcome, since they believed that when they entered the labour market no accommodations would be made for them. Therefore, for them, it was an opportunity to learn and prepare for the future (Kreider, Bendixen, and Lutz 2015).

In contrast, some students felt embarrassed, guilty or regretful about having to ask for accommodations (Grimes et al. 2020; Ryan 2007). Indeed, Barnard-Brak and Tracey's (2010) study concluded that students who reported having visible disabilities appeared to have more positive attitudes towards requesting accommodations in the online learning environment than students who reported having hidden disabilities (Barnard-Brak and Tracey 2010).

Not disclosing their disability also meant that students had to forego the support they could otherwise have received from university disability services. Some even felt that these services were not designed for them, but rather for those students with greater needs (Couzens et al. 2015).

Another consequence of remaining invisible in terms of disability was students felt they could never really be themselves and often tried not to participate fully in classroom activities (Stage and Milne 1996). In the study by Grimes et al. (2020), students agreed that stigma had affected their ability to learn and their academic progress. They also believed that they were academically less able than their peers (Grimes et al. 2020; Thompson-Ebanks 2014).

Finally, another undesirable personal effect was that, for some students with learning disabilities, being challenged and not having their needs recognised led to anxiety and even depression. This was mainly due to the negative attitudes of faculty members and how they were treated by them (Ryan 2007).

What barriers do students with invisible disabilities encounter at university?

The studies included in the review differentiated between barriers linked to personal and contextual factors, with students identifying barriers that made the university experience difficult and stressful (Childers and Hux 2016; Mullins and Preyde 2013; Thompson-Ebanks 2014). Most of the participants reported that they felt their university experience was different from the 'typical' university experience because of the additional challenges they faced (Mullins and Preyde, 2013).

One barrier that emerged in the study by Childers and Hux (2016) was the perceived invisibility of their disability. Moreover, the type of disability in question and the influence it had on students' lives varied. Some participants stated that their disability influenced them predominantly at an academic level, while others commented on how the impact of their disability was unpredictable and fluctuated throughout the semester, stating that this hampered their ability to meet academic requirements. Another important consideration regarding the nature of the disability, as reported by participants, was the extra effort required from them (in terms of concentration, task completion and teamwork) due to the disability itself (Mullins and Preyde 2013; Kreider, Bendixen, and Lutz 2015; Thompson-Ebanks 2014).

In relation to external factors, the study by Thompson-Ebanks (2014) identified finances, as in most cases it took students longer to complete their studies. This increased the cost of their degree and impacted their access to many federal funds.

Other obstacles were linked to the organisational structure of the education system, with the excessive number of students in class, noise, the professor's way of talking or methodologies that did not facilitate interactions with students all hindering their learning (Mullins and Preyde 2013; Stage and Milne 1996; Stampoltzis et al. 2015).

These were accompanied by barriers related specifically to faculty, as some had negative

attitudes towards disability and were untrained, insensitive to students' needs and unwilling to provide the accommodations to which they were entitled (Mullins and Preyde 2013; Ryan 2007; Stampoltzis et al. 2015; Stage and Milne 1996; Vergunst and Swartz 2020). For example, in the study by Stampoltzis et al. (2015), participants confirmed that not all staff members were willing to make adaptations to the oral examination (Vergunst and Swartz 2020).

In relation to accommodations, not only did students state that faculty members were reluctant to make them, they also commented on the complexity of the process for obtaining them. As Mullins and Preyde (2013) report, participants indicated that they were required to complete excessive bureaucratic procedures and go through an enormous amount of red tape in order to receive the accommodations to which they were entitled.

Another barrier encountered by students was linked to social relationships (Mullins and Preyde 2013), with many claiming that the university culture was not conducive to making friends (Connor 2012). Some students found it difficult to manage their social life at university (Kredier et al. 2015; Mullins and Preyde 2013).

All of these barriers meant that the academic performance of students with hidden disabilities was consistently poorer than that of their nondisabled peers (Pottinger, La Hee, and Asmus 2009). Potentially bright students were at risk of failing at university due to hidden disabilities and the associated emotional and social challenges. However, despite the barriers, there are also resources and facilitators that can minimise these risks. These will be discussed in the following section.

How are students with invisible disabilities supported in their academic success?

Not only did participants encounter barriers, they also received personal and contextual support that had a positive impact on their academic success. One of the personal factors mentioned was self-determination. Participants identified their personal

determination, beliefs and actions as factors that positively affected their perceptions of their experiences as university students (Childers and Hux 2016). Certain self-directed actions also influenced their success. These included identifying themselves to the disability support offices in order to claim the accommodations they required, and being proactive with their faculty members, explaining their needs and how their faculty members could help them (Connor 2012). Another personal factor that contributed to their success was motivation. They wanted first and foremost to study at university and to succeed. As a result, they were committed and took responsibility for their learning (Stage and Milne 1996).

Students also used coping strategies to compensate for their difficulties, and those that were useful to them may also prove helpful to other students (Stage and Milne 1996; Stampoltzis et al. 2015). The tactics described ranged from various stress-relieving exercises to different types of study plans and methods of managing their own feelings of inadequacy. The most commonly mentioned strategy was to spend more time than their peers on coursework (Kreider, Bendixen, and Lutz 2015). In general, the strategies used included underlining what the faculty emphasised; constantly reviewing material; and sticking to a daily routine of lectures and study, etc.

One of the principal contextual or external factors highlighted by the studies as promoting students' success at university was family and peers. For many students, informal support was the most effective (Childers and Hux 2016; Couzens et al. 2015; Kreider, Bendixen, and Lutz 2015). They also mentioned, albeit with less emphasis, the role of faculty members as facilitators of their learning (Childers and Hux 2016; Mullins and Preyde 2013). This depended on the students' subjective experiences and although faculty sometimes acted as a barrier, at other times students reported that they had taken an interest in them, helped them and made the necessary accommodations (Stage and Milne 1996).

A final factor contributing to success was the disability offices, which often mediated

to facilitate the accommodations required by students and provide them with access to the support they needed (Childers and Hux 2016; Kreider, Bendixen, and Lutz 2015; Mullins and Preyde 2013). However, it is important to note that some students did not become aware of the existence of a campus disability office until they were already experiencing academic difficulties (Kreider, Bendixen, and Lutz 2015).

Discussion

When disability is not visible, students face numerous threats that may jeopardise their university experience and put them at risk of not progressing and successfully completing their studies. Previous studies have concluded that any student with a disability faces frequent barriers (Gow, Mostert, and Dreyer 2020; Jacobs et al. 2020; Pottinger, La Hee, and Asmus 2009), but in the case of those whose disability is invisible, the challenges are even more pronounced, as students often lack the support they need (Childers and Hux 2016; Mullins and Preyde 2013; Thompson-Ebanks 2014). To avoid the label of disability and the stigma attached to it, most students prefer not to be seen, not to benefit from the support and accommodations to which they are entitled, and to present themselves to others as a non-disabled student (Babic and Dowling 2015; Svendby 2020).

This decision, which, a priori, may pose an obstacle to students, would not be a problem if teaching practices in higher education were inclusive and based on the social model of disability and Universal Design for Learning (Scheurer and Sachs 2014). However, the reality is that, as Svendby (2020) reports, most university systems are based on the medical model of disability and teaching systems are inflexible, overly homogenous and faculty-centred (Louise and Swartz 2022). The ableism approach is therefore predominant in higher education institutions (Wolbring 2008).

The systematic review presented here corroborates this finding. In most of the research that has been conducted in the United States or Australia (although with little

evidence from other contexts, thereby highlighting the need for more research on hidden disabilities in other countries), the authors have found more threats than opportunities for students in university contexts who require inclusive practices.

A first finding is that, of the 1431 students who participated in the studies, 1264 chose not to disclose their disability. In other words, even in the context of their participation in a research project, they preferred to remain unnoticed and not identify themselves. This is a constant that has remained unchanged over the years. More than 20 years have passed since Stage and Milne's study (1996), yet the results are similar to those reported by the two most recent articles included in this systematic review (Grimes et al. 2020; Vergunst and Swartz 2020). This finding both surprises and concerns us, and prompts us to ask: have universities made so little progress over the years? And why do students associate success with keeping their disability invisible? We believe that students are still forced to bear a heavy burden as a result of their disability (previous negative experiences, stigma, proving the legitimacy of their disability, non-disability identity, and the desire to revive and develop a 'normal' identity) and the weight of the ‘disability’ label continues to dominate their academic lives (Barnard-Brak and Tracey 2010; Thompson-Ebanks 2014).

As several studies on disability and higher education reveal, different practices and actions, for example, the inherent requirements in higher education or teaching methodologies, are still focused on ableism dynamics, not recognising or valuing diversity, with homogeneous responses (Bê, 2019; Corcoran, Whitburn, and Knight 2022; Fernandez 2021). In university contexts, it would be necessary to move toward the social model of disability (Oliver, 1990) and a competence approach, based on the concept of social justice and emphasising the ethical aspects of inclusion (Van Aswegen and Shevlin 2019).

Therefore, higher education continues to be anchored in a model that neither recognises nor values disability. This systematic review shows that there is still a long way to

go to ensuring university institutions in which all students have a place and can enjoy the experience of being part of a community. But it is also clear from the review that future research needs to move from merely describing the experiences of students with invisible disabilities to taking action. Practically no studies have sought to change or transform the current situation. In other words, the work that has been done does not include programmes or actions designed to improve or contribute to changing university practices in favour of inclusion. We firmly believe that educational research must be at the service of social transformation. Although studies that describe and render the situation visible are important, those that design, develop and evaluate practical initiatives that contribute to changing it are also necessary. Therefore, a future line of research should focus on promoting inclusive practices.

Moving in this direction is important because for students with invisible disabilities, the decision not to be seen is a complex one that is far from neutral. Rather, it has inevitable consequences that may threaten their retention and progress at university. There is a paradox here: what is not seen does not exist, and these students must therefore pursue their studies under the exact same conditions as their peers, a circumstance that involves a great deal of extra effort and work in order to compensate for the needs arising from their disability. This leads to complex emotional situations for some students, causing anxiety and even depression (Ryan 2007). Students not only do without accommodations and support from disability offices, they also feel they cannot act naturally in class and tend to participate less than other students (Pottinger, La Hee, and Asmus 2009). They often prefer to stay in the shadows, trying to remain unnoticed, something which undoubtedly affects their learning and academic results (Hudson 2013). This is further compounded by the negative attitudes of faculty members and the need for them to be trained in disability and inclusive education, as well as by methodologies that are excessively rigid and not student-centred (Mullins and Preyde

2013; Stage and Milne 1996; Stampoltxis et al. 2015). A prerequisite, therefore, is that higher education be committed to training faculty members, equipping them with the resources and strategies they need to cater to the needs of any learner. Universal Design for Learning has been shown to be effective in responding to all students (Scheurer and Sachs 2014). We therefore recommend universities to train their academic staff in Universal Design for Learning and encourage its use in the classroom.

Other factors, both personal (self-determination, self-directed self-identification with disability offices, claiming the necessary accommodations, being proactive with faculty, motivation, coping strategies) and contextual (family and peers, faculty and disability offices), are key elements for ensuring that students with invisible disabilities are able to successfully complete their studies (Childers and Hux 2016; Kreider, Bendixen, and Lutz 2015; Stampoltxis et al. 2015).

In short, these factors can be opportunities for universities to develop initiatives to increase students' personal competences and transform and strengthen the didactic and organisational aspects of teaching practice.

Limitations

This review may have limitations in terms of arbitrariness in the choice of primary studies and, consequently, selection bias, which may affect the conclusions drawn in this type of research. Moreover, as some of the articles included in the review are more detailed than others, some relevant information may be missing from the analyses.

Conclusions

Higher education can be an opportunity for training and may increase the employment prospects of any student. In the case of students with invisible disabilities, it can also be a chance to rebuild an identity that has been eroded in previous educational stages. However,

opportunities can sometimes become threats when university institutions are not sufficiently sensitive to diversity and teaching practices are not inclusive.

Transforming risks into facilitators should be a priority for higher education. All students, without exception, whether they have a disability or not, and whether their disability is visible or invisible, have the right to learn. Moreover, that learning should be of high quality and students should be able to particulate fully in university life, both academically and socially. In order to achieve this, an effort is required from everyone (students, their families, university managers, administrative, support and academic staff). However, the commitment cannot come solely from higher education institutions themselves, since the challenges linked to inclusion transcend the boundaries of education to affect the political and social spheres also.

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