

# Rapid Evidence Assessment: Mentoring Interventions for/by Students with Disabilities at Third-Level Education

Adriana Cardinot \* and Paul Flynn

School of Education, National University of Ireland Galway, H91 TK33 Galway, Ireland; paul.flynn@nuigalway.ie

\* Correspondence: adriana.cardinot@nuigalway.ie

**Abstract:** The number of students with disabilities enrolling in higher education has shown an increase across the world. Despite this, many students with disabilities still encounter several barriers in transitioning to third-level education. Educational mentoring programmes have emerged as interventions that have the potential to provide peer support and reduce isolation in higher education. However, there is little understanding of how this intervention could benefit students with disabilities in mentor and mentee roles. This systematic review aimed to collate, synthesise, and compare empirical studies describing mentoring programmes, interventions, or initiatives in which undergraduates with disabilities acted as mentors or mentees. The study employs a rapid evidence assessment methodology to gather, analyse, and compare relevant publications describing mentoring interventions involving students with disabilities. The search was limited to studies published between 2010 and 2021. In total, eleven studies met the PICO criteria established in this review. The results obtained in this study present evidence of the multiple benefits and key elements of mentoring programmes for/by students with disabilities to facilitate the transition to higher education in social and academic engagement. In particular, it was found that mentoring programmes can have an impact on mentors and mentees, such as the feeling of empowerment, a sense of belonging in the university, normalising academic challenges, and increased empathy and awareness of disabilities. Key recommendations for designing mentoring interventions involving students with disabilities are also outlined.

**Keywords:** mentoring; students with disabilities; higher education; rapid evidence assessment



**Citation:** Cardinot, A.; Flynn, P. Rapid Evidence Assessment: Mentoring Interventions for/by Students with Disabilities at Third-Level Education. *Educ. Sci.* **2022**, *12*, 384. <https://doi.org/10.3390/educsci12060384>

Academic Editor: Peter V. Paul

Received: 26 April 2022

Accepted: 27 May 2022

Published: 2 June 2022

**Publisher's Note:** MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



**Copyright:** © 2022 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

## 1. Introduction

The last two decades have seen an increase in government initiatives to strengthen the inclusion of individuals with disabilities at all educational levels. For instance, the number of students with disabilities attending post-compulsory education has shown consistent growth since public policies that focus on inclusion have been implemented worldwide [1,2]. Despite this, many students with disabilities still struggle with the transition to higher education for a variety of reasons, including a lack of programmes that consider the specifics of each disability [3]. To address this issue, third-level educational institutions have implemented various interventions to ensure a successful transition to post-compulsory education [4]. In particular, mentoring programmes have emerged as a powerful way to ease this transition and enhance the experience of students with disabilities in third-level education [5–7]. Mentoring programmes can include different stakeholders such as industry partnerships and academic support [8].

Educational mentoring programmes have been shown to provide peer support for students to enhance their experience in third-level education, involving staff members, lecturers, undergraduates at different years, postgraduates, and industry partners. A number of studies have highlighted the benefits of mentoring programmes to ensure employment outcomes and increase academic retention [9–11]. However, there is little understanding of mentoring programmes focused on students with disabilities in third-level education,

regardless of their course, entry route, or disability. Although Cheesmond, Davies, and Butler [12] have provided preliminary guidance on reviewing disability peer mentoring studies, critical aspects of third-level education that may influence mentoring programmes for students with disabilities were not taken into consideration in their investigation.

In order to provide effective mentoring programmes for students with disabilities in third-level education, it is necessary to raise awareness of different disabilities in the community and take into consideration the barriers faced by them to develop targeted programmes suited to their needs when transitioning into higher education. Jacobi [13] and Crisp and Cruz [14] have reviewed different mentoring programmes to promote the academic success of undergraduate students. However, students with disabilities were excluded from their review, leaving a gap in our understanding of mentoring initiatives particular to this group.

Thus, this rapid evidence assessment (REA) aims to collate, analyse, and compare evidence-based studies that employ peer mentoring for students with disabilities in third-level education. This systematic review sought out publications that focused on key characteristics of mentoring programmes in third-level institutions, such as student relationships in mentoring, the extent and ways peer mentoring supports the transition to third-level education, self-efficacy, and a sense of belonging in third-level education. By collating evidence-based practices for students with disabilities, the investigation hopes to uncover the key characteristics of successful mentoring strategies in third-level education for students with disabilities. In addition, it also described best practices for programme evaluation procedures as well as key outcomes for students in both mentor and mentees roles for the target population.

The following research questions guided this work:

- What educational peer-mentoring practices for first-year students with disabilities are currently being used in third-level education?
- What are the roles of mentees and mentors in the educational mentoring programme that includes students with disabilities in both roles in third-level education?
- How is the effectiveness of educational peer mentoring evaluated in third-level education?
- What are the main barriers or constraints faced by students with disabilities in mentoring initiatives in third-level education?
- What are the key characteristics or outcomes of successful mentoring programmes in third-level education for students with disabilities?
- What recommendations can be made for future mentoring initiatives in third-level education that wish to include students with physical, sensory, cognitive, behavioural, or emotional disabilities?

## 2. Materials and Methods

This systematic review encompasses a Rapid Evidence Assessment (REA) of the mentoring literature involving students with disabilities to assess best practices and make informed recommendations for mentoring programmes in third-level institutions. In particular, this type of systematic review was best suited to this study as it provides an investigation of mentoring interventions through a systematic methodology in a timely manner [15]. REA reviews may present limitations in the breadth and scope of the review. To address this issue, this review included both academic and grey literature publications in order to explore key aspects of mentoring programmes, such as mentoring relationships, research design, conceptual framework, outcome evidence, and validity [16]. However, it should be noted that, since the research questions of this review are focused on mentoring interventions, only empirical studies in the context of third-level education following either quantitative, qualitative or mixed methods design were considered in this review.

This REA review involved specific steps in reviewing the available literature critically. In summary, researchers initially defined the guiding research questions and rationale for this review, focusing on mentoring programmes that aim to facilitate the transition to higher education for students with disabilities. A standardised strategy employing search

strings with relevant terms was employed to gather evidence to answer the REA research questions. In order to ensure the objectivity, reliability, and reproducibility of the results, a research protocol was developed and published [17] to define the inclusion and exclusion criteria of the literature. Finally, studies were thoroughly reviewed by two independent reviewers, and best practices were evaluated to make informed recommendations.

### 2.1. Search Strategy and Data Sources

The search strategy was developed in three phases. The first involved a discussion with the core team to define the research questions under investigation, establish the methodology, and define the research protocol. Secondly, rapid analysis of third-level special education policies (national and international) was conducted to explore the subject headings employed to describe undergraduates with disabilities. Following this, the core team discussed and agreed on the key terms to be employed in the search strings, allowing the protocol to be reproducible in other contexts and provide a comprehensive search of the existing literature in a time frame. The last phase of the search strategy development involved testing the search strings in relevant databases to gather evidence to answer the research questions. Table 1 presents the final cohort of search strings employed to gather evidence about mentoring programmes that include the students with disabilities in mentor and mentees roles in higher education institutions.

Given that this systematic review aims to explore evidence-based studies, both academic and grey literature databases were included in the search strategy, maximising the scope of the review and increasing the external validity of findings. The following scholarly databases were searched: Web of Science, Scopus, EBSCOhost, ERIC, and ProQuest. Grey literature databases included Lenus, Open Grey, National Mentoring Resource Centre, MENTOR, and AHEAD. In addition, web-searching (e.g., GoogleScholar), hand searches of journals, and backwards-citation searching (i.e., harvesting references relevant to the review) were performed to gather additional information on relevant initiatives.

**Table 1.** Search strings employed in this research to gather entries for the review.

Number	Search String
S1	"mentor*" AND "student*" AND "disab*" AND ("third-level" OR "universit*" OR "undergraduat*" OR "higher education")
S2	"mentor*" AND "student*" AND ( "special education" OR "special needs" ) AND ("third-level" OR "universit*" OR "undergraduat*" OR "higher education")
S3	"mentor*" AND "student*" AND "health condition" AND ("third-level" OR "universit*" OR "undergraduat*" OR "higher education")
S4	"mentor*" AND "student*" AND "learn* difficult*" AND ("third-level" OR "universit*" OR "undergraduat*" OR "higher education")
S5	"mentor*" AND "student*" AND "impairment*" AND ("third-level" OR "universit*" OR "undergraduat*" OR "higher education")
S6	"mentor*" AND "student*" AND "learning differenc*" AND ("third-level" OR "universit*" OR "undergraduat*" OR "higher education")
S7	"mentor*" AND "student*" AND "disorder*" AND ("third-level" OR "universit*" OR "undergraduat*" OR "higher education")
S8	"mentor*" AND "student*" AND "syndrome*" AND ("third-level" OR "universit*" OR "undergraduat*" OR "higher education")
S9	"mentor*" AND "student*" AND "deficit*" AND ("third-level" OR "universit*" OR "undergraduat*" OR "higher education")
S10	"mentor*" AND "student*" AND "autis*" AND ("third-level" OR "universit*" OR "undergraduat*" OR "higher education")

**Table 1.** *Cont.*

Number	Search String
S11	"mentor*" AND "student*" AND ("deaf*" OR "hard of hearing") AND ("third-level" OR "universit*" OR "undergraduat*" OR "higher education")
S12	"mentor*" AND "student*" AND ("neurodiver*" OR "cognitive function*" OR "complex need*" OR "Multiple Sclerosis" OR "dyspraxia" OR "self-injurious behaviour" OR "psychosis" OR "fragile" OR "dyslexia" OR "aphasia" OR "non-verbal" OR "down syndrome" OR "dyscalculia" OR "cognitive decline" OR dysgraphia OR dementia OR "cerebral palsy" OR "brain injury") AND ("third-level" OR "universit*" OR "undergraduat*" OR "higher education")

## 2.2. Eligibility Criteria

In line with the literature [18,19] recommendations for REA reviews, publications eligibility was evaluated through the PICO criteria, which clearly defines the type of publications to be included in the review by specifying the population, intervention, comparison and outcome under investigation. Table 2 shows the PICO criteria established for this review in more detail.

**Table 2.** Eligibility criteria employed to select data entries for the review.

Criteria	Inclusion	Exclusion
Publication	Studies written in English and published between 2010 and 2021, including academic and grey literature coverage that adheres to the other eligibility criteria.	Any publication prior to 2010; non-English studies; duplicate publications; studies not presenting full papers, and abstracts only, editorials, or letters.
Study design	Quantitative, qualitative and mixed methods.	Studies that do not describe research design.
Population	Undergraduate students with physical, sensory, cognitive, behavioural, and/or emotional disabilities in mentor and/or mentee roles enrolled in third-level educational institutions.	Studies that involve non-students with disabilities only or students from primary, secondary, or postgraduate education levels and faculty staff.
Intervention	All mentoring initiatives, interventions, and programmes involving students with disabilities in mentor and/or mentee roles in higher education designed to facilitate the transition to post-secondary education.	Publications that describe mentoring initiatives, interventions and programmes that do not adhere to the target population or higher education.
Comparison	Key aspects and outcomes of evidence-based mentoring programmes.	No exclusion based on control or comparison groups.
Outcome	Collate and compare peer mentoring interventions for/by students with disabilities in third-level education. Collate and compare student peer mentoring outcomes by disability category (whether available). Collate and compare research design of peer mentoring initiatives for/by students with disabilities in third-level education.	Theoretical or non-empirical studies.

### 2.2.1. Population

This REA review focused on mentoring programmes conducted in post-secondary educational institutions, such as universities, institutes of technology, and colleges of education, providing peer support for students with a disability to transition to higher education. However, several terms can fall under the umbrella of disability. The definition employed in this research to define the population scope follows the people with disability definition provided by the United Nations [20], which refers to "those who have long-term physical, mental, intellectual or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others" (p. 4). For instance, this protocol compromises evidence-based studies in which mentors or mentees present learning or intellectual disabilities, speech disorders, sensory or mobility impairments, emotional disturbance, assessed syndromes, and neurological conditions. It should be noted that this review incorporates studies involving one or multiple disabilities in their mentoring programmes in order also to provide recommendations that any specific disabilities may require to facilitate transition and inclusion in higher education.

Moreover, this protocol targets studies in which undergraduates only served as mentors, and mentees will be included in the review. In the instance where faculty staff,

industry partners or postgraduates are either mentors or mentees, the study will be excluded from this review because this review aims to gather evidence about undergraduate peer mentoring programmes.

#### 2.2.2. Intervention

Mentoring interventions that adhere to the target population described above to facilitate the transition and participation in third-level institutions were included in the review. Studies involving different types of mentoring relationships such as formal, informal, long-term, short-lived, planned, spontaneous, one-on-one, individual-team, friend-to-friend, peer group, and long-term or a combination of these were included.

Given that mentoring relationships involve the development of a sense of belonging, the duration and consistency of the mentoring programme are essential to adjust mentors' and mentees' expectations and sustain a successful relationship, in particular for the target population described above. Thus, this review focused only on interventions with a minimum duration of six weeks within a third-level educational institution.

Moreover, mentoring interventions in non-tertiary educational institutions (e.g., community-based, secondary schools) involving a population outside the scope of this review (e.g., parents) and only focusing on employment, research, or training outcomes were excluded. In addition, mentoring intervention publications that do not provide supporting evidence are also excluded from this review.

#### 2.2.3. Comparison

This REA included interventions with different methodological designs, e.g., experimental, quasi-experimental and non-experiment, so publications with concurrent control or comparison groups were also included.

#### 2.2.4. Outcome

Collate and compare the impact of mentoring initiatives, interventions, and programmes for/by students with disabilities to facilitate the transition to third-level education and the holistic well-being of the target population.

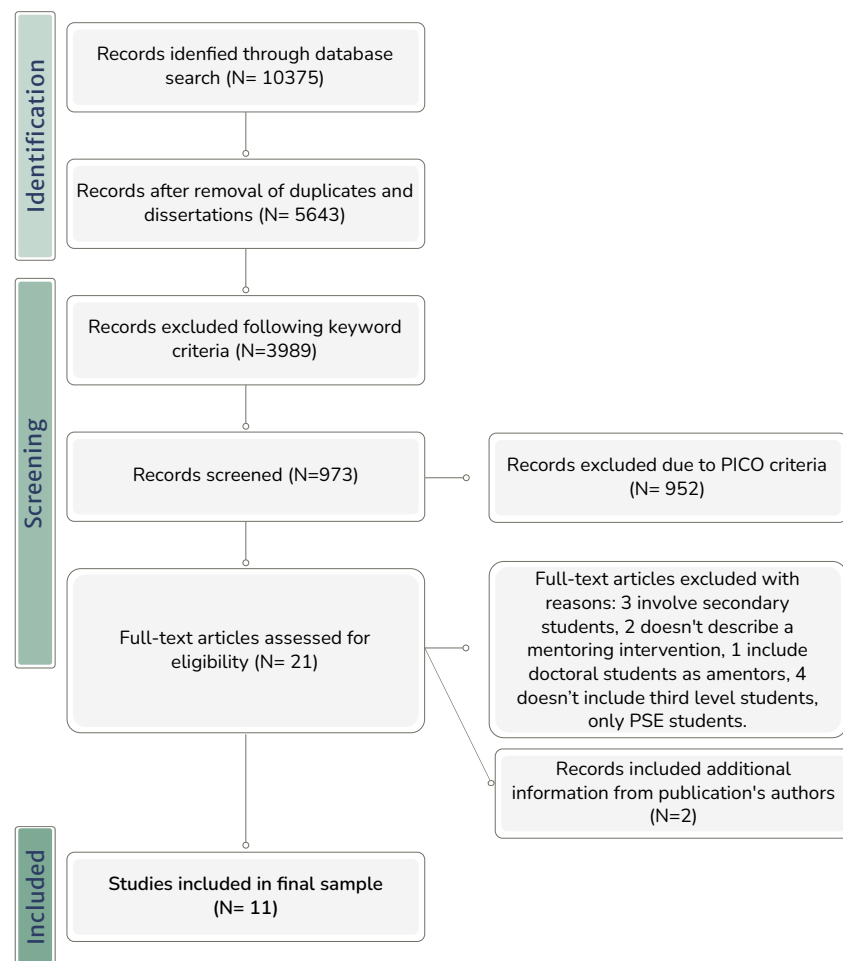
### 2.3. Data Abstraction and Synthesis

Data extraction occurred in two-phase research. Firstly, a date-restricted string search was conducted on academic and grey literature databases to identify potential studies for the review. The resulting list of studies was saved onto a single spreadsheet file to remove duplicates. By employing a Python script, entries were refined using a word-filtering technique to remove studies that do not meet this review's inclusion criteria. For instance, a list of 106 words was used to filter out entries compared against their title and abstract. The words were selected by analysing a representative sample of entries excluded from the research to identify the most common terms in abstracts and titles. Following this filtering technique, a new list of publications ( $N = 662$ ) was produced and evaluated by two independent reviewers to determine their inclusion in the review. Where it was not possible to determine relevance from the title and abstract alone, the full paper was accessed to determine whether it should be included. Figure 1 shows a visual summary of the research flow process.

Secondly, the final publications dataset was fully screened following the PICO criteria. In the event that a publication did not meet the inclusion criteria, it was rejected following the dual appraisal method as described previously. The overall quality rating of the peer mentoring initiatives, interventions or programmes described in each study were scored and compared based on the evidence provided in the study. The following information was extracted where it was available:

1. Title;
2. Authors;
3. Publication date (limited to studies published between 2010 and 2021);

4. Journal or publication source;
5. Objectives and rationale for the study;
6. Research design;
7. Methods;
8. Demographics of study participants;
9. Number of participants;
10. Role of participants (mentor and mentee);
11. Type of disability of mentors and mentees;
12. Peer mentoring definition and model employed;
13. Key findings/outcomes;
14. Strengths and limitations.



**Figure 1.** REB flow diagram employed of the research process in this review.

#### 2.4. Methodological Quality Assessment

The risk of bias and quality was assessed using the Critical Appraisal Skills Programme Checklist (CASP) [21], which involves a methodological checklist with ten questions to evaluate qualitative studies. In order to reduce the risk of bias, at least two independent researchers assessed potential studies taking into consideration the PICO criteria described in Table 2. Disagreements were discussed between the research team to reduce the risk of bias in the results. It should also be noted that studies were not excluded based on this quality assessment. Rather it was intended to evaluate the quality of the studies being reviewed.

Evidence of mentoring initiatives, interventions, or programmes for/by students with disabilities was summarised according to the PRISMA-P [22] reporting checklist. Due to



the lack of a common standard for reporting findings for a rapid assessment review and given that the review targeted evidence-based mentoring programmes, the MPG Practice Scoring Instrument [23] was implemented as a framework to assess the effectiveness of interventions and communicate the findings described in each study. Data extracted from the studies were coded and grouped by type of programme (e.g., mentoring with mixed groups of students with and without disability), research design, and key findings. Depending on the findings, qualitative analysis was performed through thematic analysis as described by Braun and Clarke [24]. Where necessary, quantitative data were also analysed through inferential and descriptive statistical methods [25].

### 3. Results

The results outlined in this chapter present evidence that mentoring programmes for/by students with disabilities can have many benefits for both mentors and mentees. Interestingly, the majority of the studies included in this review had a psychosocial component as a key element of the mentoring intervention, resulting in impressive results in different areas such as communication, motivation, and academic success. However, the results also showed different aspects that should be considered during the design and implementation of mentoring interventions for/by students with disabilities in higher education.

#### 3.1. Study and Participant Characteristics

Our search yielded 5643 articles, of which 11 met the PICO inclusion criteria for this REA review. Reported studies were conducted in the United States (7), Israel (1), Spain (1), and Canada (2). The majority of the studies (9) reported a screening process for the mentors involving interviews, reference contacts, screening documents and surveys to determine the mentor's background knowledge of disabilities.

Matching mechanisms were employed in all studies to pair mentors and mentees according to their availability for the duration of the mentoring intervention, course, gender, personal interests, compensation of strengths (e.g., matching students with high abilities to those with learning difficulties), communication skills, and expectations for their participation in the mentoring. Mentors' and mentees' information employed in the matching mechanisms was gathered through application forms and interviews conducted before the intervention. Only two studies provided the instruments used to collect these initial data points from the students involved in the mentoring intervention for students with ASD [10,26].

Mentors' sample sizes in the studies varied from 3 to 35 in both disability only and mixed programmes. However, in four studies, it is suggested that the overall mentoring programme involves more students than the numbers reported in the study, which was conducted with a representative sample. In addition, four studies did not include information regarding the number of mentors included in the research or mentoring programme. Convenience sampling was the main technique used to recruit participants for the research. Furthermore, four studies [24,27–29] did not report the social demographics of the mentors, one study only had male mentors [30], but it was a traditionally male institution, and six studies had a mixed cis-gender mentor population with the majority being female and enrolled in social sciences courses [26,31–35]. Mentors received different types of incentives such as course credit (3) [33–35], payment (2) [28,32], and certificate (2) [27,29] for their participation in the mentoring. Mentor positions were available to any students (3) [27–29], only to specific courses or cohort of students (3) [32–34], students who receive support from the university disability service (2) [31,35], and to students who have previous experience or an interest in working with students with disabilities (1) [26].

Similarly, mentees' sample sizes also ranged greatly across the studies, from 3 to 70 incoming students with disabilities. The type of disability included in the mentoring intervention varied in the studies, embracing students with different disabilities with single (6) or combined diagnoses (5) of Asperger's Syndrome, ASD, ADD/ADHD, learning disabilities, ongoing illnesses, or intellectual disabilities.

### 3.2. Methodological Quality

Studies were assessed for methodological quality using the MPG Classification of Evidence [36]. This classification framework was chosen because it has significantly been employed to evaluate mentoring interventions for youth in the United States [37]. This review found that five studies provided the most robust evidence to support their mentoring programme. Moreover, one study provided medium-level evidence, suggesting that their reported mentoring processes could effectively achieve the intervention goals. The remaining five provided the lowest level of evidence, providing inadequate data to determine the effectiveness of the interventions. Points were generally lost for not providing information regarding (1) matching criteria for controls or not having controls; (2) biases and how they were addressed; (3) how study size was determined; (4) methods describing subgroup interactions; (5) how missing data were addressed; (6) sensitivity analyses and (7) reasons for non-participation at each stage. It was also found that five studies assessed using the CASP Quality Research Checklist [21] adequately met research quality standards. Moreover, the reported data analysis in three of the eleven articles was insufficiently rigorous.

The studies included in this review employed different research designs such as randomized controlled design (1), quasi-experimental design with a control group (2), and independent group design (9). Data collection involved repeated measures design (2), mixed methods (4), qualitative only (1), and quantitative only (2). In addition, experimental designs followed a pre-test/post-test design (6), cross-sectional survey (2), post-test only (2), and one did not provide information. Of these, only one study included a follow-up evaluation one year after the participation. However, two studies did not provide sufficient information about the research design. Instrumentation methods included one-on-one semi-structured interviews, evaluation surveys, and progress reports. Moreover, most of the research (10) was conducted by the team conducting the mentoring programme, which also involved external consultants (1) to complete part of the evaluation (mostly interviews), and only in one study it was not clear who conducted the research.

### 3.3. Types of Interventions

Only evidence-based studies focused on facilitating the transition to higher education for students with disabilities were included in this review. Across all mentoring initiatives, participants were recruited through the university disabilities office. The intervention involved either a structured (e.g., weekly or monthly goals for mentors and mentees to achieve during the mentoring defined by the mentoring programme coordinators) or flexible curriculum (e.g., a mix of pre-defined activities and open days in which mentor and mentees can adjust their meetings as needed). Mentoring interventions can involve multiple outcomes for both mentor and mentees. For instance, the psychosocial goal was crucial in all studies included in this review. In addition, eight studies also had an academic purpose as part of the mentoring intervention. Moreover, all mentoring initiatives involved regular meetings (in-person or online) for an average of 1 h per week, mainly within the university campus.

Hillier et al. [33] describe a multicomponent mentoring programme grounded in two theoretical frameworks. The first is the socio-motivational model in which mentees' participation in the mentoring intervention enhances their feelings of relatedness, autonomy, and competence in the university. In addition, the authors also employ the conceptual framework set out by Nora and Crisp [23], in which the mentoring intervention is divided into four aspects: emotional support, goal setting, subject knowledge, and peer role model.

Similarly, McGarry [24] describes a mentoring intervention for autistic students to facilitate their transition and adjustment to the university by broadening their social, emotional, and academic engagement and supporting them in becoming independent learners. As part of the mentoring programme, mentees are registered for one of two courses where individualized social skills modules are identified and assigned based on individual needs and skill development. Although the mentoring programme is open to



all students, mentees pay an annual fee to participate in the mentoring and additional academic, social, and counselling support as needed.

Suciu [29] describes an empirical mentoring programme in which peer mentors offer mentees additional support for any questions and concerns related to the university. In addition, the mentoring programme also aims to increase awareness of ASD among both university staff and students. The mentoring intervention occurs in a traditionally mature university in which the academic year consists of three trimesters. Courses are also offered online, allowing students to be located across the country while finishing their studies. Thus, the mentoring programme aims to broaden ASD participation in online tertiary education.

Moreover, two mentoring interventions also had an academic support goal, in which mentors help students navigate coursework, social challenges, and adjustments to the university. Trevisan et al. [26] implement a person-centred mentoring that aims to support students with disabilities in four areas: academic, social adjustment, transition to higher education, and psychological support. Similarly, Izzo and Shuman [35] implemented a mentoring programme in which mentors and mentees with intellectual disabilities shared life experiences and knowledge to improve engagement within the university and the self-determination of mentees with intellectual disabilities.

### 3.4. Components of Interventions

The evidence-based studies reviewed varied greatly in their number and profile of participants, duration, recruitment process, mentors training, assessment, and expectations. All of the reported interventions recruited mentees through the university disabilities office, i.e., mentees were students who would automatically receive or request support from them. However, mentors were recruited as part of the activities of specific modules and courses or through an advertisement for all senior students. Moreover, although eight of the studies indicated that the number of participants in the mentoring process is larger than the sample described in the research, it mainly involved small groups (less than 70 students). Students' profiles varied greatly, in which five of the studies targeted only one type of disability, given the lack of intervention aimed at that population.

The length of training can vary from two hours to three days of training delivered through workshops with staff who specialise in supporting students with disabilities and with expertise in mentoring students. Most of the programs (8) also include ongoing training sessions throughout the academic year to equip and support mentors on either a biweekly or a monthly basis, depending on the group's needs [26–29,32–35]. Mentors and mentees were matched after an initial assessment to establish expectations from students for their participation in the mentoring, learn about their personal interests, and gather personal information from students. This was mostly done through interviews or online questionnaires (depending on the disability type).

Moreover, a key component of the mentoring was the communication with both mentors and mentees, which was maintained throughout the mentoring to ensure that objectives were being met, the development of the meetings (frequency, opinions, duration), shared feedback and concerns, and ongoing support for mentors. In addition, mentor support groups were implemented in half of the programmes through online discussion boards. Most programmes had an expectation of both frequencies of contact (e.g., usually once a week for one hour) and the length of the participation (e.g., at least one semester or academic year). The structured curriculum was implemented in five studies [27,33–35]; two had a mixed agenda including unstructured sessions [24,26] and there was not enough information about an established curriculum in four studies [28–32].

### 3.5. Outcomes and Study Findings

The publications reviewed for this report had a wide variety of outcome measures used to assess peer relationships [30–33], academic success [24,31], transition to the university [24,30,32,33], social skills [24,27,28,30,32–34], personal growth [27,32] awareness of disabilities among non-students with disabilities and staff [28,29], challenges to mentor-

ing [32,33], and self-efficacy [24]. A secondary outcome reported in all studies was the empowerment of students with disabilities about themselves internally (e.g., knowledge of their strengths) and externally (e.g., receiving feedback from mentors). Given the qualitative nature of most of the studies included in this review, effect sizes were not reported in many of them, except for Grogan and McConnell [28], who reported a medium effect on students' self-efficacy post-scores. In addition, some of the impacts of the interventions may be under-reported since outcomes were not statistically evaluated.

### 3.6. Benefits to Mentees

The studies reviewed showed that the mentoring interventions facilitated the transitions of students with disabilities to the university in different aspects. Students were exposed to and actively participated in social activities that enhanced communication skills, self-esteem, and self-efficacy. For instance, in Hillier et al., “mentors appeared to have more impact in knowing how things work at the university, knowing how and where to find opportunities to meet people on campus and managing time and organization” ([34], p. 498). Moreover, mentees described that the supportive relationship with their mentors contributed to reduced stress in adjusting to the university, better awareness of how to succeed academically, access to support throughout the university, and social engagement with peers. Interestingly, mentees also reported benefiting from the mentoring even after one year of the completion of the intervention [34]. Furthermore, Roberts and Birmingham [32] described a mentee-centred approach in which the supportive relationship between mentors and mentees resulted from flexible meetings leading to the enjoyment of their time together and establishing a balance of hierarchy and boundaries.

### 3.7. Benefits to Mentors

Benefits from mentoring students with disabilities were also investigated in the majority of the studies. The most common effects noted across the studies after participating in the mentoring was building a relationship with others, normalising the challenges of university life, enhancing communication and social skills, and feeling more committed to university [31–33]. In addition, mentors provided social and emotional support for their mentees [32], helped mentees to navigate through university services [30,31], and discussed their own experience and career pathways [24,28].

### 3.8. Challenges

In addition to evaluating the benefits of mentoring for both mentors and mentees, a limited number of studies also highlighted common challenges faced in their programmes when implementing mentoring for students with disabilities. In Hillier et al. [33], a number of challenges faced by mentors working with mentees with disabilities were reported, such as “building rapport, boundary issues and feeling inadequate in their role” (p. 14). In addition, a further study conducted also showed that the low number of mentors with disabilities limited the extent of discussions of diversity and inclusion in the mentoring programme as well as the promotion of peer role models to encourage academic success [34]. Similarly, Roberts and Birmingham [32] also reported difficulties in developing mentor–mentee relationships for various reasons, e.g., lack common interests and expectations. Moreover, challenges in designing an evaluation plan and measuring the effectiveness of their programme were also reported in four studies [27,29,31,33].

## 4. Discussion

Enhancing the experience of students with disabilities is key to increasing their inclusion and participation in higher education. In recent years, the number of students with disabilities has shown a steady increase in all tertiary institutions in Ireland and elsewhere [38,39]. Despite this, the transition to higher education is still a challenge for students with disabilities, particularly those with a sensory impairment [40,41]. Although small in scope, the results revealed several facilitators and barriers to implementing mentoring

programmes to facilitate social participation and enhance the inclusion of students with disabilities in higher education. Interestingly, the findings were consistent with mentoring interventions among tertiary students without disabilities, such as improving social skills and self-efficacy, developing peer relationships, and facilitating the navigation in the university [13,14].

As shown in the results, there were clear differences in how mentors and mentees benefited from their participation in the mentoring intervention. Mentors without disabilities were senior student peers with very low opportunities to engage with students with disabilities. As a result of their involvement, mentors normalised issues in academic life, empathised with the experiences of their mentees with disabilities by identifying many common difficulties in adjusting to the university, and became positive peer role models to address challenges that students with disabilities face, such as developing a sense of belonging, receiving peer support, and transitioning to the university. In addition, it was also noted that peer mentoring intervention for mentees with disabilities that have shared interests with their mentors contributed to reduced stress during the transition to the university, increased academic success, and enhanced social engagement.

Thus, grounded on the results obtained from this REA review, we recommend that the following elements be taken into consideration when implementing mentoring interventions involving students with disabilities in both mentor and mentee roles.

#### *4.1. Training for Mentors*

Training is a critical aspect for effectively implementing mentoring interventions for/by students with disabilities. For instance, training allows mentors to understand the mentoring expectations and programme rules and raise awareness of disabilities. Our review showed that mentor training contributed to the success of the mentoring intervention and the development of the relationship between peers. It should be noted that training was mandatory for all mentors and included training both before being matched with a mentee and throughout the mentoring intervention. Thus, best practices for training should have:

1. Mandatory initial training to all mentors, regardless of their previous experience with mentoring, to make sure that mentors are updated on the mentoring programme guidelines, address any concerns, and provide opportunities to access new resources for the mentoring.
2. Offer refresher mentor training sessions throughout the mentoring intervention at convenient locations and times, ensuring that the location is accessible to all students.
3. Distribute a training manual for mentors with additional information regarding mentoring programme guidelines and expectations, suggestions for accessible meetings, and staff contact information. In addition, the material could also include common frustrations that may occur during the mentoring and guidance on how to overcome them to better support mentors. The materials should also be offered in accessible and alternative formats (e.g., Braille options, electronic versions).
4. Resources that are physically and programmatically accessible to all students.
5. Promote activities for mentors to stay connected with their mentees to create an enjoyable experience in their meetings.
6. Encourage mentors to communicate regularly with their mentees, including through discussions about disabilities and how mentees can advocate for themselves.
7. Address any disability-related questions or concerns.

#### *Topics to Cover during Training Sessions*

The curriculum of mentor training had common themes across the programmes reviewed, such as activities to raise awareness of disabilities and how they may affect student adjustment to university, the establishment of expectations for mentors and the mentoring relationship, mentoring intervention and university policies, and the development of soft skills (e.g., problem-solving, communication, time management, and organisation).

Among the studies reviewed, Hillier et al. [33] provided a comprehensive training structure for mentoring intervention, including for students with and without disabilities. The training is designed to engage mentors in different aspects of mentoring, such as mentoring requirements, guidelines and expectations, and what it means to be a mentor (e.g., setting realistic expectations about the mentoring relationship with their mentees and about what they can accomplish during the mentoring), and to raise awareness of disabilities among students.

#### 4.2. Matching Mechanisms

As shown in the results, the impact of mentoring may also depend on the matching mechanisms employed to pair mentors and mentees. For instance, most studies included multiple strategies to match students, such as course, interests, schedule, and compensation of strengths (e.g., matching gifted mentors and mentees with learning disabilities). Matching mentors and mentees should involve more than one strategy to foster stronger intervention benefits for mentors and mentees. In particular, there are two key strategies to consider when matching mentors and mentees:

1. Trying to match mentors and mentees with more than their course/subject in common. For instance, pairing students with similar career interests and goals may enhance the mentoring experience. This information could be obtained during the screening process, described later in this chapter.
2. Pairing mentors and mentees based on their disabilities should not be the sole factor in making a match. For instance, in Ireland, the AHEAD Report [38] has shown that the population of students with disabilities in Irish higher education can vary greatly. Some disabilities can be significantly underrepresented in some courses/subjects. As mentioned previously, cross-disability matching is recommended to be associated with other matching mechanisms, as it may be challenging to match students based only on similar disabilities. It should be noted that students' preferences should also be considered when matching mentors and mentees to increase mentors' and mentees' compatibility during the mentoring intervention. For instance, some students may have a strong preference to be matched with peers with the same disability, while others may be open to working with anyone with similar interests.

Although in the studies reviewed there was no information on how the matching was carried out, there are different options [42] available for this, including mentee self-matching (with students selecting their mentors, which may limit exposure to diversity), coordinator matching (with mentoring staff responsible for matching mentors and mentees based on the information provided on the registration forms), automated processes (with matching based on a compatibility score generated by mentoring software, which, although it may reduce the workload of programme coordinators, may be an expensive option to sustain), and random matching (in which mentors and mentees are randomly assigned, without taking student preferences into consideration). When choosing the matching tools, it is important to consider programme aims, scope, and size in order to ensure the success of the mentoring relationship throughout the programme.

#### 4.3. Recruitment

The studies reviewed employed a similar approach to recruiting participants. Mentors and mentees with disabilities mainly were invited to the mentoring programme through the disabilities service offices (DSS). Furthermore, depending on the entry route, students were directly recommended to the programme. Although this is the best strategy to reach students with disabilities, it is also recommended to involve other colleges and offices to recruit participants, as there may be students with disabilities who do not receive support from the DSS, and to reduce the stigma of special education and ableism against students with disabilities. For non-students with disabilities, the mentoring programme was offered through email announcements and social media advertisements to relevant groups. In addition, in some of the studies reviewed, the mentoring programme was often part of a

course (e.g., mentors were students enrolled to obtain course credits), potentially increasing diversity and participation in the programme.

#### 4.4. Screening

Mentoring programmes for/by students with disabilities should implement matching mechanisms involving different aspects to sustain mentor and mentee relationships over time. In order to collect all necessary demographic and background information of participants to increase the chances of a potential match between mentors and mentees, an initial screening should be conducted, particularly for mentors. Among the studies included in this review, the initial screening of mentors included online questionnaires (for larger mentoring programmes) or individual interviews with potential participants in programmes with a limited availability of mentor roles.

#### 4.5. Support Groups

Support groups for mentors were included in most programmes, mainly being an online forum where student mentors could connect with each other and with the mentoring administrative staff. This allowed them to share resources and concerns and seek help from each other, as the training may not account for all potential things that could happen during the mentoring intervention. Furthermore, some mentoring programmes included a support group for the mentoring staff to connect directly with the mentees. Although the studies reviewed involved smaller groups of mentors (mostly less than 20 mentors) in the mentoring intervention, the support groups not only facilitated the communication between mentor peers and staff but also allowed regular match follow-up with mentors to ensure that the relationship was positive and to provide additional support and resources for mentors to maintain the relationship with their mentees. As noted by Hillier et al. [33], support groups can also help to identify problems early and ensure mentor retention.

#### 4.6. Mentoring Programme Structure

The mentoring programmes reviewed had a different approach to the intervention, which included an open or pre-defined structure of activities for mentors and mentees. Although a pre-defined schedule of weekly or monthly goals could help participants to see their progress throughout the mentoring programme, a blended programme (i.e., a mix of open meetings and pre-defined goals) would allow the students to adjust to any challenges that may arise during the semester and include additional activities to mitigate any problems that may present during the semester. The structured part of the curriculum allows students to set goals and clearly understand what they should do or achieve. The review results showed that this might be particularly important for some students with disabilities, such as ASD [27,28,32], to ensure the success of the mentoring relationship. However, most of the studies included in the review involved ASD students, and this fact may have influenced this conclusion.

In addition, the mentoring studies reviewed had expectations of meetings on a weekly or monthly basis. Although the number of meetings varied, the mentoring relationship involved at least one meeting weekly or biweekly. This seems beneficial for mentors and mentees to set goals and match their schedules accordingly.

Moreover, another crucial aspect of a successful mentoring relationship is ensuring that the mentors and mentees have a natural progression and multiple opportunities to get to know each other. Roberts and Birmingham [32] promoted different events during the academic year in which mentors and mentees could get together and enhance the social skills of students with disabilities. Events could include activities students enjoy, such as a game night or pizza party. Ideas for social events could be obtained during the screening process. Students could be asked their preferences regarding different types of events or suggestions of activities they enjoy in their free time. Although Roberts and Birmingham [32] reported that only half of the participants attended these events, the authors strongly encouraged the social events due to the positive effects on students.



#### 4.7. Evaluation Design

Among the studies within our review, there was no consensus on the evaluation design employed in the studies. For instance, some studies [31–34] implemented qualitative forms of data collection and analysis, such as individual interviews and observation, as this was more suitable for the students with disabilities given that some students found it hard to answer questionnaires or keep journals and diaries. However, for programmes that involved non-students with disabilities, a mixed-methods approach was recommended. This allowed for more comprehensive data collection allowing data and conclusions drawn from it to be reliable and reproducible to other contexts.

An evaluation design involving a mixed-methods longitudinal research design with a comparison group (quasi-experimental) would be recommended for a mixed mentoring programme. That is employing a mix of questionnaires and interviews before, during, and immediately after the mentoring. In this way, a follow-up evaluation could be a potential interview or focus group that would allow for identifying whether the benefits of participating in the mentoring as either mentor or mentee are lasting and how it impacts their life as an undergraduate student. Only one study included a follow-up evaluation in this review, and the results were very promising [33].

#### 4.8. Theoretical Rationale

When developing a mentoring programme, it is critical to determine the definition of program success and what the interventions aim to achieve. As shown in the findings in previous chapters, although the studies described involved students with disabilities with a major goal of facilitating their transition to higher education, each mentoring intervention had specific aims, structures, and weekly or monthly activities which helped to define the success criteria and design an evaluation plan that is relevant to the mentoring programme. Moreover, a theoretical rationale also helps to clarify how participation in the mentoring programme will lead to the expected outcomes at the mentor/mentee and community levels [43]. For instance, the majority of the mentoring programmes reviewed had a clear theoretical rationale, such as including a socio-motivational model of mentoring [44], a model of positive psychology [45], helper theory/service providers [46], a resource/consulting model [47], or Bourdieu capital [48]. In addition, mentoring programmes may also involve an empirical rationale by employing the same constituents as other interventions.

In terms of the evaluation, the theoretical rationale describes how the mentoring programme structure (i.e., activities, rules, goals) is designed and evaluated. Theory-based approaches to evaluation can also help address challenges inherent to the intervention and overcome limitations of the research design. A theoretical rationale is not a specific method of research. It explains the underlying mechanisms of change resulting from participation in the mentoring intervention. In order to define how to select the theoretical rationale, the following should be considered:

1. Define the nature of the mentoring intervention, i.e., aims, target population, intervention policies, context, and settings.
2. Select and specify the research questions and expected outcomes of the mentoring intervention. This should consider the context and change at an individual and a community level.
3. Evaluate and explain relevant theories by conducting a systematic review of mentoring programmes for/by students with disabilities to determine the relevant theories that best fit the research questions and critically analyse the observed mentoring outcomes.

#### 5. Limitations

While it is rich in information, the reader should consider the following limitations when using this report:



1. A limited number of studies were included in this report as it focuses only on studies written in English and is limited to full-text availability. For instance, there may be relevant literatures in other languages which were not included in our review due to the PICO criteria established in this work. The sample also has a limited representation of mentoring programmes since only studies focusing on the transition to higher education were included.
2. This rapid review focuses on mentoring interventions to support transition and life within higher education settings. Therefore, the search strategy was limited to databases relevant to educational studies. In this way, the authors acknowledge that this search strategy may miss some evidence relevant to the review.

## 6. Conclusions

This REA report aimed to collate, synthesise, and compare empirical studies of mentoring interventions for/by undergraduates with any disability. The rapid review was chosen as it provides a structured methodology to search and critically appraise evidence-based studies in a timely manner. In total, eleven articles were included in this review that focused on social and academic support within mentoring interventions for/by students with disabilities. While this report included a limited number of studies, it provides a comprehensive overview of the best practices described in the literature to make informed recommendations for mentoring interventions in higher education for/by students with disabilities. In particular, a number of elements were described as essential aspects to consider in mentoring programmes involving students with disabilities, namely:

1. Training for mentors—There are key areas which should be covered in the initial training for mentors, such as the disability awareness module to identify different types of disabilities and explain how these may impact student adjustment to university; mentoring expectations (e.g., time commitment, setting appropriate boundaries with mentees); program policies and instructions; curriculum or structure of the programme; and overview of a range of topics including problem-solving, planning, and communication with program staff. In addition, follow-up training is also recommended throughout the mentoring programme on a monthly basis to maintain the motivation and engagement of mentors and better equip them for any challenges that may arise during the mentoring meetings.
2. Matching mechanisms—Matching of mentors and mentees should involve multiple mechanisms for better matching between students to ensure the success of the mentoring relationship. Studies included in this report employed different criteria for matching mentors and mentees, such as course/discipline, personal interests, mentoring goals, schedule, and compensation of strengths.
3. Screening—Matching of mentors and mentees must involve multiple strategies to ensure better matching and success of the mentoring relationship.
4. Support groups—Support groups for mentors encourage them to connect with their peers and the mentoring staff. Such groups provide a safe space to discuss activities, share resources and concerns, and seek help, as the initial training may not account for all possible things that could happen during the mentoring intervention.
5. Recruitment—It is key to involve the university disabilities service office to recruit participants with disabilities for both mentor and mentee roles. In addition, it is also recommended to include other strategies to promote the mentoring programmes, such as gaining course credits and involving another college/offices.
6. Mentoring programme structure—Mentoring programmes for/by students with disabilities should include a flexible and blended structure of activities. This would allow the mentors and mentees to adjust to any challenges that may arise during the semester and mitigate any problems that may present. In addition, the mentoring programme should also implement social activities to increase interaction and awareness among participants.

7. Evaluation design—A longitudinal mixed-methods approach to evaluation is recommended to allow for more comprehensive data collection taking into consideration the needs of the participants. In addition, it is also recommended to follow a research design with a comparison group (quasi-experimental) to make statistically significant conclusions about the programme's effect on participants.
8. Theoretical rationale—Mentoring programmes should be rooted in a clear and objective theory in order to define programme goals and evaluation methods and to critically analyse the intervention. This should be specified from the beginning as it informs later stages of the intervention (e.g., structure, components, and policies).

**Author Contributions:** The authors contributed equally to this work. All authors have read and agreed to the published version of the manuscript.

**Funding:** This research was funded by Enhancing Access and Inclusion at NUI Galway Project supported by the Fund for Students with Disabilities.

**Institutional Review Board Statement:** Not applicable.

**Informed Consent Statement:** Not applicable.

**Data Availability Statement:** Not applicable.

**Acknowledgments:** We would like to express our sincere thanks to the following people who have supported us throughout this research: Imelda Byrne, Daniel Savery, Jane Ennis, Trish Bourke, Pearce Johnson, Kate Brooke, Joseph Nyirenda, Sara Gartland and CoPPER Team.

**Conflicts of Interest:** The authors declare no conflict of interest.

## References

1. Aston, D.; Banks, J.; Shevlin, M. *Post-School Transitions for Students with Intellectual Disabilities in the Republic of Ireland*; Trinity College Dublin: Dublin, Ireland, 2021.
2. Agarwal, R.; Heron, L.; Naseh, M.; Burke, S.L. Mentoring Students with Intellectual and Developmental Disabilities: Evaluation of Role-Specific Workshops for Mentors and Mentees. *J. Autism Dev. Disord.* **2021**, *51*, 1281–1289. [CrossRef]
3. Lucas, R.; James, A.I. An evaluation of specialist mentoring for university students with autism spectrum disorders and mental health conditions. *J. Autism Dev. Disord.* **2018**, *48*, 694–707. [CrossRef] [PubMed]
4. Spencer, B.; Sherman, L.; Nielsen, S.; Thormodson, K. Effectiveness of occupational therapy interventions for students with mental illness transitioning to higher education: A systematic review. *Occup. Ther. Ment. Health* **2018**, *34*, 151–164. [CrossRef]
5. Ames, M.E.; McMorris, C.A.; Alli, L.N.; Bebeko, J.M. Overview and evaluation of a mentorship program for university students with ASD. *Focus Autism Other Dev. Disabil.* **2016**, *31*, 27–36. [CrossRef]
6. Culnane, M.; Eisenman, L.T.; Murphy, A. College peer mentoring and students with intellectual disability: Mentors' perspectives on relationship dynamics. *Inclusion* **2016**, *4*, 257–269. [CrossRef]
7. Dipeolu, A.O.; Storlie, C.; Johnson, C. College students with high-functioning autism spectrum disorder: Best practices for successful transition to the world of work. *J. Coll. Couns.* **2015**, *18*, 175–190. [CrossRef]
8. Gershenfeld, S. A review of undergraduate mentoring programs. *Rev. Educ. Res.* **2014**, *84*, 365–391. [CrossRef]
9. Eisenman, L.; Freedman, B. Peer mentoring for students with intellectual disabilities: Examining relationship dynamics. *Coll. Fast Facts* **2017**, *10*, 1–2.
10. Hotez, E.; Shane-Simpson, C.; Obeid, R.; DeNigris, D.; Siller, M.; Costikas, C.; Pickens, J.; Massa, A.; Giannola, M.; D'Onofrio, J.; et al. Designing a summer transition program for incoming and current college students on the autism spectrum: A participatory approach. *Front. Psychol.* **2018**, *9*, 46. [CrossRef]
11. Jones, M.M.; Goble, Z. Creating effective mentoring partnerships for students with intellectual disabilities on campus. *J. Policy Pract. Intellect. Disabil.* **2012**, *9*, 270–278. [CrossRef]
12. Cheesmond, N.; Davies, K.; Butler, K. *Systematic Review of Current Definitions and Role Descriptions of Disability Peer Mentoring*; PROSPERO, 2020. Available online: [https://www.crd.york.ac.uk/prospere/display\\_record.php?RecordID=203148](https://www.crd.york.ac.uk/prospere/display_record.php?RecordID=203148) (accessed on 15 June 2021).
13. Jacobi, M. Mentoring and undergraduate academic success: A literature review. *Rev. Educ. Res.* **1991**, *61*, 505–532. [CrossRef]
14. Crisp, G.; Cruz, I. Mentoring college students: A critical review of the literature between 1990 and 2007. *Res. High. Educ.* **2009**, *50*, 525–545. [CrossRef]
15. Collins, A.; Coughlin, D.; Miller, J.; Kirk, S. *The Production of Quick Scoping Reviews and Rapid Evidence Assessments: A How to Guide*; Joint Water Evidence Group, Department for Environment Food & Affairs: London, UK, 2015.
16. Varker, T.; Forbes, D.; Dell, L.; Weston, A.; Merlin, T.; Hodson, S.; O'Donnell, M. Rapid evidence assessment: Increasing the transparency of an emerging methodology. *J. Eval. Clin. Pract.* **2015**, *21*, 1199–1204. [CrossRef] [PubMed]

17. Cardinot, A.; Flynn, P.; McAuley, V.; Gartland, S.; O'Donnell, L.; Tierney, C. *Rapid Evidence Assessment: Increasing the Transparency of an Emerging Methodology*; PROSPERO. 2021. Available online: [https://www.crd.york.ac.uk/prospero/display\\_record.php?RecordID=270778](https://www.crd.york.ac.uk/prospero/display_record.php?RecordID=270778) (accessed on 15 June 2021).
18. McKenzie, J.E.; Brennan, S.E.; Ryan, R.E.; Thomson, H.J.; Johnston, R.V.; Thomas, J. Defining the criteria for including studies and how they will be grouped for the synthesis. In *Cochrane Handbook for Systematic Reviews of Interventions*; Cochrane: Chichester, UK, 2021.
19. Barends, E.; Rousseau, D.M.; Briner, R.B. *CEBMa Guideline for Rapid Evidence Assessments in Management and Organizations (Version 1.0)*; Sticing Center for Evidence Based Management; 2017; p. 38. Available online: <https://www.cebma.org/wp-content/uploads/CEBMa-REA-Guideline.pdf> (accessed on 15 June 2021).
20. United Nations. *UN Convention on the Rights of Persons with Disabilities (UNCRPD)*; Technical Report; United Nations: New York, NY, USA, 2006.
21. Casp. *Critical Appraisal Skills Programme (CASP)*; Qualitative Checklist; 2013. Available online: <https://casp-uk.net/> (accessed on 15 June 2021).
22. Shamseer, L.; Moher, D.; Clarke, M.; Ghersi, D.; Liberati, A.; Petticrew, M.; Shekelle, P.; Stewart, L.A. Preferred reporting items for systematic review and meta-analysis protocols (PRISMA-P) 2015: Elaboration and explanation. *BMJ* **2015**, *349*, g7647. [CrossRef] [PubMed]
23. Nora, A.; Crisp, G. Mentoring students: Conceptualizing and validating the multi-dimensions of a support system. *J. Coll. Stud. Retent. Res. Theory Pract.* **2007**, *9*, 337–356. [CrossRef]
24. McGarry, B. *Autism Initiative at Mercyhurst*; Supplemental Inrformation Obtained from the Project Reports and Communication; Mercyhurst University: Pennsylvania, PA, USA, 2012.
25. Cohen, L.; Manion, L.; Morrison, K. *Research Methods in Education*; Routledge: London, UK, 2002.
26. Trevisan, D.A.; Leach, S.; Iarocci, G.; Birmingham, E. Evaluation of a Peer Mentorship Program for Autistic College Students. *Autism Adulthood* **2021**, *3*, 187–194. [CrossRef]
27. Tobajas, F.; De Armas, V.; Cabello, M.D.; Grijalvo, F. Supporting students with special needs at university through peer mentoring. In Proceedings of the 2014 IEEE Global Engineering Education Conference (EDUCON), Istanbul, Turkey, 3–5 April 2014; pp. 701–705.
28. Grogan, G. *Not Just Another Autism Program*; Austin Peay State University: Clarksville, TN, USA, 2015.
29. Suci, M. UNE Mentoring Program for Students Living with Autism Spectrum Disorders (ASDs). *JANZSSA* **2014**, *44*, 55–59.
30. Hartman, H.; Forin, T.; Sukumaran, B.; Farrell, S.; Bhavsar, P.; Jahan, K.; Dusseau, R.; Bruckerhoff, T.; Cole, P.; Lezotte, S.; et al. Strategies for improving diversity and inclusion in an engineering department. *J. Prof. Issues Eng. Educ. Pract.* **2019**, *145*, 04018016. [CrossRef]
31. Krisi, M.; Nagar, R. The Effect of Peer Mentoring on Mentors Themselves: A Case Study of College Students. *Int. J. Disabil. Dev. Educ.* **2021**, *68*, 1–13. [CrossRef]
32. Roberts, N.; Birmingham, E. Mentoring university students with ASD: A mentee-centered approach. *J. Autism Dev. Disord.* **2017**, *47*, 1038–1050. [CrossRef]
33. Hillier, A.; Goldstein, J.; Tornatore, L.; Byrne, E.; Ryan, J.; Johnson, H. Mentoring college students with disabilities: Experiences of the mentors. *Int. J. Mentor. Coach. Educ.* **2018**, *7*, 202–218. [CrossRef]
34. Hillier, A.; Goldstein, J.; Tornatore, L.; Byrne, E.; Johnson, H.M. Outcomes of a peer mentoring program for university students with disabilities. *Mentor. Tutor. Partnersh. Learn.* **2019**, *27*, 487–508. [CrossRef]
35. Izzo, M.V.; Shuman, A. Impact of Inclusive College Programs Serving Students with Intellectual Disabilities on Disability Studies Interns and Typically Enrolled Students. *J. Postsecond. Educ. Disabil.* **2013**, *26*, 321–335.
36. National Institute of Justice. *MPG Mentoring Practicing Scoring Instrument*; US Department of Justice: Washington, DC, USA, 2013.
37. National Mentoring Resource Center. *Resource Assessment*; OJJDP: Washington, DC, USA, 2021.
38. Hynes, C. *Students with Disabilities Engaged with Support Services in Higher Education in Ireland 2018/19, 2020 (Report)*; AHEAD Educational Press: Dublin, Ireland, 2020.
39. Majoko, T. Participation in higher education: Voices of students with disabilities. *Cogent Educ.* **2018**, *5*, 1542761. [CrossRef]
40. Hynes, C. *Numbers of Students with Disabilities Studying in Higher Education in Ireland 2016/17, 2018. (Report)*; AHEAD Educational Press: Dublin, Ireland, 2018.
41. OECD. *Inclusion of Students with Disabilities in Tertiary Education and Employment*; Technical Report; OECD Publishing: Paris, France, 2011. [CrossRef]
42. Organisational Development. *Recruiting and Matching Mentors and Mentees: Guidance for Mentoring Scheme Coordinators*; University of Sussex: Brighton, UK. Available online: <https://www.sussex.ac.uk/organisational-development/mentoring/guidance-for-coordinators/mentors-and-mentees> (accessed on 16 February 2022).
43. Garringer, M.; Kupersmidt, J.; Rhodes, J.; Stelter, R.; Tai, T. Elements of effective practice for mentoring [TM]: Research-informed and practitioner-approved best practices for creating and sustaining impactful mentoring relationships and strong program services. *MENTOR Natl. Mentor. Partnersh.* **2015**. Available online: <https://eric.ed.gov/?id=ED594036> (accessed on 16 February 2022).
44. Larose, S.; Tarabulsky, G.M. Academically at-risk students. In *Handbook of Youth Mentoring*; SAGE Publications: Southern Oaks, CA, USA, 2005; pp. 440–453.

- 
45. Riessman, F. The “helper” therapy principle. *Soc. Work.* **1965**, *10*, 27–32.
  46. Brill, C.L. The effects of participation in service-learning on adolescents with disabilities. *J. Adolesc.* **1994**, *17*, 369–380. [[CrossRef](#)]
  47. Dettmer, P.; Thurston, L.P.; Dyck, N. *Consultation, Collaboration, and Teamwork for Students with Special Needs*; Allyn & Bacon: Boston, MA, USA, 2005.
  48. Bourdieu, P. The forms of capital. In *Handbook of Theory and Research for the Sociology of Education*; Greenwood: Westport, CT, USA, 1986; pp. 241–258.