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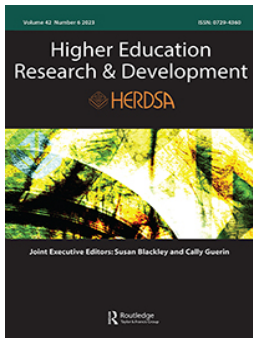
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Challenges to delivering university health-based work-integrated learning to students with a disability: a scoping review

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ABSTRACT

Students with disability experience numerous challenges when engaging in Work-Integrated Learning (WIL). Successful WIL requires stakeholder collaboration to provide an equitable and relevant WIL experience. Stakeholder disparity around disclosure, accommodations, poor attitudes, and behaviours result in negative WIL experiences for students with disability. Understanding stakeholder preparedness and capabilities, in particular host organisations, is key to providing equitable WIL opportunities. Searches of five electronic databases (CINAHL, PubMed, Embase/Scopus, A + Education Informit and Web of Science) were conducted. Twenty-one peer-reviewed articles published between 2005 and 2022 were included in the review. Four themes were identified: Disclosure of the disability; University staff and WIL supervisor attitudes and training; Surviving WIL and Adjusting WIL to the individual. Embedding a strengths-based approach to WIL through strong relationships between student, host organisation and university will produce safe environments that are essential for high quality and fit for purpose WIL experiences for students with disability.

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Work-integrated learning; disability; university students; host organisations; scoping review

Introduction

The Australian Disability Discrimination Act (Australian Government, 1992) and Disability Standards for Education, 2005 (Australian Government, 2005) state that educational programs must, by law, make ‘reasonable adjustments’ to educational programs to ensure that students with disability can access and participate in education at the same basis as students without disability. There are many definitions of ‘disability’. The 1992 Disability Discrimination Act definition is adopted in this review, whereby ‘disability’ broadly encompasses physical, mental, sensory, and intellectual impairment (Australian Government, 1992). The number of students with a disability enrolling in

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Australian higher education institutions has increased from 5.5% of total enrolments in 2014 to 7.4% in 2020 (Australian Disability Clearinghouse on Education and Training, 2023), with a similar increase in enrolments reported in health science and health professional courses (Koshy, 2020).

Over the last decade, WIL has become an integral part of tertiary health science and health professional education programs (Patrick et al., 2008; Universities Australia et al., 2015). WIL describes a variety of experiential learning approaches, such as field work, projects, placements, internships, or simulation, where students integrate theoretical knowledge, disciplinary skills, and values within an authentic relevant professional work context (Dean et al., 2020; Wood et al., 2020). Each WIL approach provides varying opportunities for learners to be socially immersed within a professional practice to 'learn through doing'; to observe, create, practice, and demonstrate skills, knowledge, and professional behaviours that are reflective of the areas of practice they are studying (Patrick et al., 2008; Universities Australia et al., 2015; Wood et al., 2020). Over the last 15 years, universities were called to action to advance WIL opportunities and enhance student learning workplace experiences and graduate employability, starting salaries, confidence, and cultural competence upon graduation (Jackson & Collings, 2018; Patrick et al., 2008).

Research continues to highlight a growing concern for equity and access to WIL experiences for students with disability. The 2015 national WIL strategy stated that current WIL practices do not always consider specific requirements of students with disability, prioritising equity and access issues to enable student participation in WIL (Universities Australia et al., 2015). A review of the implementation of the Disability Standards for Education, 2005, found that further guidance is required for educational providers to ensure equity and access to activities outside the classroom, namely, industry placements and practicums (Commonwealth of Australia, 2020). Most resources that assist with the implementation of the standards were found to focus on primary and secondary schools, with further clarification of the obligations and options regarding practical work placement needed for higher educational providers (Commonwealth of Australia, 2020).

Students with disability experience unique barriers relating to WIL such as stigma associated with a specific diagnosis, concerns about how their disability would be perceived or supported by a host organisation, and feelings that disclosure may lead to exclusion from the learning opportunity (Dollinger et al., 2022; Shpigelman et al., 2022). Students choose not to disclose and to focus on 'hiding their disability' for fear of being judged incompetent or ostracised, and experience difficulty when seeking reasonable accommodations after commencing WIL (Dollinger et al., 2022). Disparity between university and host organisation expectations of shared information and resources to support reasonable accommodations for WIL have been identified as barriers to successful experiences for students with disability (Commonwealth of Australia, 2020; Dollinger et al., 2022; Lund et al., 2020).

Access to WIL is dependent on host organisations' willingness to offer WIL for students with disability. Host organisations have reported a desire to be more inclusive, by developing a better understanding of strategies to promote access, removed barriers, and shift inclusive intentions into meaningful action (Mackaway, 2019). There is limited available research investigating health host organisations' perceived barriers, enablers and associated strategies to host equitable WIL for students with disability. This

scoping review explored host organisation preparedness and capability to provide health students with disability-engaging and relevant WIL experiences.

Method

Arksey and O'Malley's (2005) five-stage framework was used to conduct this scoping review. A scoping review methodologically synthesises developing concepts from emerging research topics and assists with identifying the direction of research and gaps. Scoping reviews, such as this paper, address a broader topic where various study designs have been undertaken (Arksey & O'Malley, 2005). The PRISMA guidelines for a scoping review (Tricco et al., 2018) were used to shape the reporting of findings.

Stage 1: identifying the research question

Three authors (TL, TB, TM) developed research questions on host organisation preparedness and experiences of WIL for learners with disability; these are:

- (1) How are universities and host organisations facilitating the participation of students with disability in a health-based WIL experience?
- (2) What do students, universities, and industry identify as challenges and enablers to engaging and supporting students with disability on a face-to-face WIL experience?

Stage 2: identifying relevant studies

A three-staged search strategy was implemented: (i) search of relevant databases, (ii) review of reference lists, and (iii) hand searching of key journals. The search strategy was developed in collaboration with an experienced health-based librarian. Five electronic databases were used: CINAHL, PubMed, Embase/Scopus, A + Education Informit, and Web of Science. The inclusion and exclusion criteria were framed around three categories: population group, WIL experience, and paper type (Table 1). Studies published between

Table 1. Scoping review inclusion and exclusion criteria.

Criteria	Inclusion criteria	Exclusion criteria
Population Group	University students with disability (physical or sensory impairment) or mental health condition (anxiety, depression) completing a health-based degree, including health science that may or may not lead to a profession-based qualification. Host organization/WIL supervisor.	Students enrolled in Vocational Education Training programs, such as TAFE.
WIL experience	Projects, placements, internships that are face-to-face, virtual, or online, e.g., telehealth. Study focused on the WIL component of the study. Conducted in workforce within Australia or internationally. Address preparation, development or actual experience of WIL.	Simulation, virtual reality, field trips, or optional curriculum WIL experiences.
Paper Type	Studies published between 2005–2022. Written in English or with formal interpretation. Research papers from a peer-reviewed source.	Literature or systematic reviews, opinion pieces, discussion papers or conference presentations/abstracts.

2005 to August 2022 were included. The 2005 date limiter was chosen due to align with the implementation of the Disability Standards for Education, 2005 (Australian Government, 2005). The authors acknowledge that inclusive WIL education practices have been occurring prior to 2005, however the refined research questions and focus for this review was to look at research evidence that may have been shaped following the implementation of this legislation. Studies that employed all research methods were included.

Search terms were categorised under three criteria (Population, Disability or Condition, and WIL experience) (see Table 2). Search terms were combined with ‘AND’ and searched with ‘All Fields’. Search results were imported into Covidence (Literature review software) for the study selection stage. Key journals were identified from search results and reviewed for relevant studies.

Stage 3: study selection

All title and abstracts were screened by TL and TB using Covidence. Disagreements were reviewed and discussed by TL and TB with TM consulted if agreement was not reached. Full texts were screened by TL and TB for inclusion and exclusion. The selection process is outlined in the PRISMA diagram for scoping reviews (Tricco et al., 2018) (Figure 1).

Stage 4: charting the data

Data charting items included: author/s, publication year, study aim, design, methodology, participants, ethics approval, demographic findings (see Table 3); findings from a student, university, and organisation perspective and recommendations (Supplementary Material). The data form was created and pilot-tested by TL, TM, and TB to determine alignment with research questions. Each author completed data extractions on the same three papers to examine consistency, with disagreements discussed and resolved by all authors (Levac et al., 2010).

Stage 5: collating, summarising and reporting results

Basic quantitative descriptive analysis was undertaken manually and used to report the demographic characteristics of the included studies, for example, study design, tools, and ethics. Content analysis as described by Bengtsson (2016) was used to identify patterns (themes) within the data charted under findings from the student, university, and organisation perspectives, recommendations, and gaps. TL reviewed all data and developed initial coding and preliminary patterns. TB and TM reviewed 1/3 of the data set and

Table 2. Summary of scoping review search terms.

Criteria	Search terms
Population	Student/s, inter and tertiary/university; host organisation and/or supervisor/supervision; industry and partner/s.
Disability or condition	Disability and/or disabilities; disabled; impairment; impaired; special; special needs; mental health; mental illness; mental disorder.
WIL experience	Work-integrated learning; practicum; placement; practice education; internship; clinical and project placement.

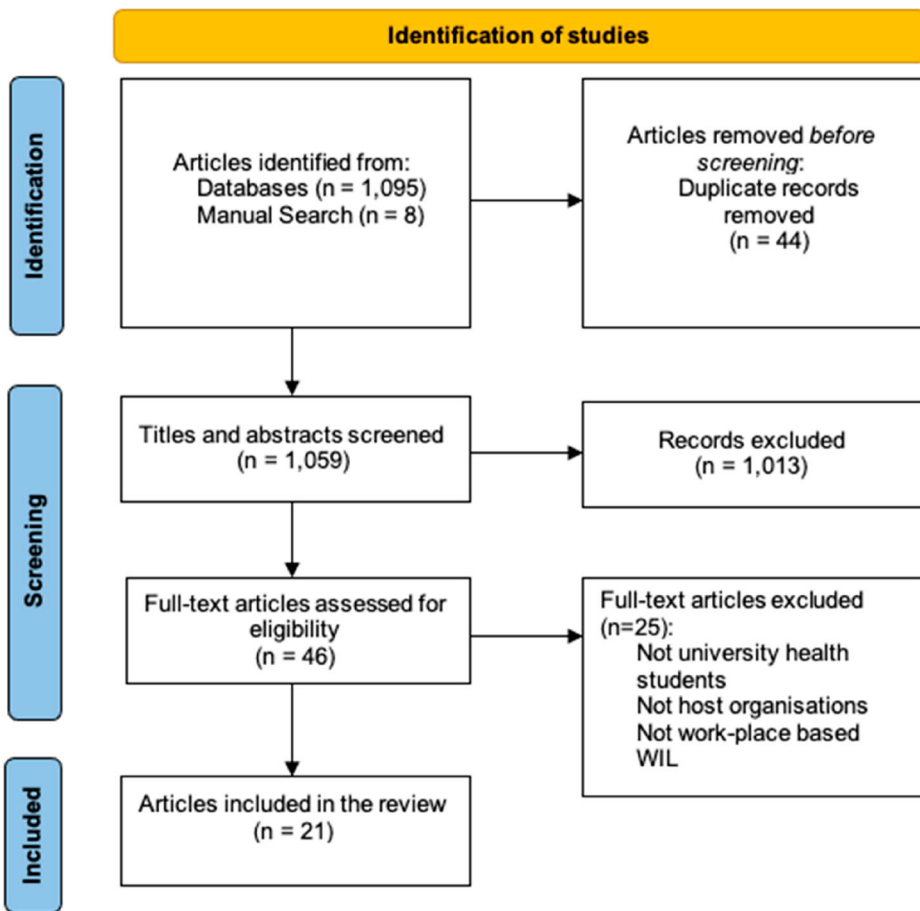


Figure 1. Study selection process for the scoping review. Figure has been adapted from: (Tricco et al., 2018).

developed their own coding and patterns. TB and TM met with TL to discuss the preliminary patterns and themes. All three authors agreed on the patterns and thematic concepts. TL completed a review and recoding of all data and presented the final pattern and thematic concepts to TB and TM. TB and TM reviewed the whole data set with the final codes and themes to assist with trustworthiness of the analysis. Key quotes were extracted, and the final paper was developed. It is acknowledged that Arksey and O'Malley (2005) recommend consultation with end users. The consultation phase will formulate an additional study.

Results

Twenty-one studies were included. Study demographic information is outlined in Table 3 and described below. Study designs varied, most being exploratory study design (n = 6), and case study (n = 4). A variety of qualitative, mixed-methods, and quantitative methods were employed across the studies. Perspectives researched were organisation or university (n = 8), student perspective only (n = 8) and student, organisation, and/or university

Table 3. Demographic information for selected studies.

Author/s, (year) Location	Study aim	Study design, methods, participants and ethics approval	Demographic
American Psychological Association (APA) (2009) Washington, United States of America	Understand the barriers students with disabilities face in psychology programs.	Not specified. 35-item online survey. 92 psychology students with disability. No.	84% female, 55% full-time students. Disabilities: 28% psychological/emotional, 27% systemic, 26% physical/orthopaedic, 26% learning/cognitive, 9% deaf/hard of hearing, 7% blind/visually impaired.
Ashcroft and Lutfiyya (2013) Canada	Increase the understanding of nursing educator's perspectives of students with disabilities.	Grounded Theory. Semi-structured interviews and field notes. 17 female nursing educators from 4 educational institutions. 8 participated in second interview. Yes.	15 staff taught clinical and theory units. 2 admin staff.
Beas-Collado and Carbo-Badal (2020) Spain	Explore Jaume I University career and diversity services in supporting the employability of students with special educational needs and/or a recognized disability.	Exploratory study design. Database analysis and Case study. Students. 5 students – followed before, during and after internship. No.	170 students identified from enrolment records – 56.5% female and 43.4% male.
Botham and Nicholson (2014) United Kingdom	Develop, implement, and evaluate a procedure to support the transition of university students with disability to a practice placement setting.	Action research process. 1. Pre-pilot – focus group: 6 academics. 2. Pilot stage – pre-placement meeting and survey: 8 students, 6 completed a pre-placement meeting, 2 students and 3 staff completed the survey. 3. Implementation – 8 physiotherapy students (different students to pilot). 4. Evaluation – Four questionnaires, one each for student, visiting tutor, personal tutor and practice educator. Number of participants not included. No – contributing to service development.	19/45 evaluation questionnaires completed – 62.5% from the student group and 29% staff groups.
Brown et al. (2006) Australia	Explore and describe positive experiences and difficulties encountered by students during practice placement education and the factors contributing to successful experiences.	Qualitative, phenomenological approach. Semi-structured, face-to-face interviews. Students with disability – One male and four female students, two were nursing students and three occupational therapy students. Yes.	Students were diagnosed with neural hearing loss, bipolar disorder (2), dyslexia and cystic fibrosis.
Cameron et al. (2019) Australia	Explore how higher education providers can manage five significant WIL risks involving intellectual property, student disability and medical	Cross-institutional collaboration of WIL practitioners who explored risk management in WIL programmes. Discussions on risk.	No demographics provided.

(Continued)

Table 3. Continued.

Author/s, (year) Location	Study aim	Study design, methods, participants and ethics approval	Demographic
	conditions, the host organisation and the legal literacy of WIL practitioners.	Five WIL Workshop participants – 3 professional staff, 2 academic staff. No.	
Epstein et al. (2020) Canada	Explore clinical supervisors/ instructors and students with disability perspectives on nursing clinical placements.	Descriptive case-report. Interactive take-home diaries, semi-structured interviews. 14 clinical instructors and 14 nursing students with disability. Yes.	No demographics provided.
Epstein et al. (2022) Canada	Use storytelling to understand experiences of students with disability in the placement process.	Exploratory. Storytelling. Students with disability from nursing, social work, education and law. Yes.	No demographics provided.
Griffiths et al. (2010) United Kingdom	1. Extend support provided for disabled students to encompass practice. 2. Design a tripartite working arrangement between university, practice partners and students. 3. Establish a policy for practice that incorporates the appropriate support for disabled students. 4. Develop a valid and reliable system to plan, implement and evaluate practice support provided for students with disability.	Developed and evaluated a model. Case study – description of model, student pathway analysis, evaluation of each of stage, review of action plans. One 20-year-old female nursing student. No – not classed as research.	No demographics provided.
Heelan et al. (2015) Ireland	Explore the Universal Design for Learning (UDL) program its and translation into practice on clinical placements sites.	Positive enquiry. Workshop discussions. 25 academics from health sciences, nursing, medicine and physiotherapy. No.	No demographics provided.
Hill and Roger (2016) United Kingdom	Improve accessibility of practice placements for students with disability and enhance the practice placement experience of all students.	Mixed-method. Online survey and individual semi-structured interviews. Students with and without disability in medicine, dentistry, nursing, midwifery, education, social work, community education. No.	353 students completed survey – 50 with disability. 21 students interviewed, 14 with disability.
Hirneth and Mackenzie (2004) Australia	Describe clinical educator experiences providing clinical placements to occupational therapy students with disability.	Phenomenological. Semi-structured interviews. 6 occupational therapy clinical educators. Yes.	No demographics provided.
Johnston et al. (2016) Australia	Share key features to an effective physiotherapy clinical placement in acute hospital setting for student with vision impairment. Discuss alternative approach to the development and	Case Study. Semi-structured interview. 1 student, 1 clinical educator. Yes.	No demographics provided.

(Continued)

Table 3. Continued.

Author/s, (year) Location	Study aim	Study design, methods, participants and ethics approval	Demographic
Langørgen et al. (2020) Norway	implementation of inherent requirement statements. Explore academic staff and placement supervisor perspectives on supporting students with disability in professional programmes.	Exploratory. Focus groups. 13 academics, 8 WIL supervisors from healthcare, social work, teaching. Yes.	No demographics provided.
Langørgen and Magnus (2020) Norway	Identify enablers and barriers to professional education for students with disabilities attending professional undergraduate courses in social work, healthcare teaching.	Exploratory. Semi-structured interviews. 14 students from healthcare, social work, teaching. 2 students participated in second interview. Yes.	Eleven had congenital disabilities and three acquired disabilities.
Lund et al. (2014) United States of America	Understand the characteristics of psychologists and trainees with disability during training.	Exploratory. Online survey. 56 psychology students. Ethics: Yes.	71.4% female, av. age 41.49. Twenty-six participants (46.4%) indicated that their disability is visible or readily apparent.
Nolan et al. (2015) Dublin, Ireland	Investigate practice educators concerns and issues relating to the provision of professional placements for students with disability.	Exploratory. Method: Online survey. Practice Educators/ Supervisors, 251 students with disability registered with university disability service. From: Social Sciences, Speech and Language Therapy, Deaf Studies, Human Nutrition and Dietetics, Dentistry, Medicine, Nursing, Occupational Therapy, Physiotherapy, Radiation Therapy. Yes.	68 practice educators/ supervisors, 30% not supervised a student with disability. 63 students with disability.
Rankin et al. (2010) Australia	Investigate host healthcare organisation' perspectives on providing clinical practice placements and supporting students with physical disabilities while on WIL.	Exploratory. Advisory group meetings, focus groups. Advisory group – members from university (legal, course conveners, disability support). Focus groups – nurse clinicians with professional placement liaison role. Yes.	3 advisory groups (n = not identified) and 3 focus groups (n = 10 participants)
Rowe et al. (2019) South Africa	Explore the stakeholder experiences involved in the process of placing a visually impaired student in an intensive care unit.	Case Study. Interviews. 4 – undergraduate students, supervising clinician, clinical coordinator, student academic supervisor, visually impaired student coordinator. Yes.	No demographics provided.
Ryan (2011) Australia	Explore stakeholder knowledge of Australian Disability Discrimination Act (DDA) requirements and responsibilities, and attitudes towards students with disabilities.	Mixed-methods. Survey, focus groups, individual interviews Undergraduate student, lecturers, clinical educators, nurse clinicians, and university disability	415 surveys completed: Student nurses – 330 (response rate 72%); Nurse educators (including nurse academics) – 48 (response rate 83%), Disability officers – 29

(Continued)

Table 3. Continued.

Author/s, (year) Location	Study aim	Study design, methods, participants and ethics approval	Demographic
		practitioners from nursing. Yes.	(response rate 83%), Nurse clinicians – 32 (response rate 11%), status not indicated – 3.
Tee and Cowen (2012) United States	Enhance awareness and a positive approach to disability amongst academic staff and mentors.	Action Research. Interviews. Students from various disciplines. No.	Number of participants not identified.

(n = 5). Thirteen studies obtained ethics approval, while eight studies stated they did not require, obtain or note ethics approval.

Four themes, with sub-themes, were identified as shown in Table 4. Regardless of the student or organisation perspective, the themes and sub-themes were the same.

Theme 1: disclosure of the disability

Generally, university staff and WIL supervisors were aware that students are not required to disclose their disability (Botham & Nicholson, 2014; Cameron et al., 2019; Griffiths et al., 2010; Hirneth & Mackenzie, 2004). Host organisations, though, felt they should be informed of a student's disability due to their duty of care to staff, patients, and clients (Rankin et al., 2010). WIL supervisors reportedly feel frustrated when students do not disclose or provide reasonable accommodation plans, particularly at the commencement of WIL. Supervisors state they are unable to organise accommodations, or reduce potential risks to clients, students, and staff (Ashcroft & Lutfiyya, 2013; Botham & Nicholson, 2014; Cameron et al., 2019; Hirneth & Mackenzie, 2004) with non-disclosure seen to be a reputational, financial and/or legal risk (Cameron et al., 2019).

Supportive, positive, and accommodating staff, environments, and communication were enablers to students disclosing their disability (APA, 2009). Students disclosed their disability on a need to know basis (Brown et al., 2006; Epstein et al., 2020) and/or relevance to the university application process (APA, 2009; Botham & Nicholson, 2014). While WIL supervisors perceived disclosure to result in positive outcomes for the students (Rankin et al., 2010), students stated disclosure did not always correspond to a positive WIL experience (Brown et al., 2006; Epstein et al., 2020). Students did not disclose due to: fear of being rejected, discriminated against, patronised or stigmatised,

Table 4. Themes and sub-themes to providing students with disability a WIL experience.

Theme	Sub-theme
Disclosure of the disability	Disclosure
University staff and WIL supervisor attitudes and training	Students with disability want to be seen as individuals Attitudes and behaviour Limited training
Surviving WIL	Understanding disability and impact on WIL experience Reasonable accommodations
Adjusting WIL to the individual	Strengths-based approach – programs improving WIL experience Improvements to current practices

shame, and negative staff attitudes (APA, 2009; Botham & Nicholson, 2014; Brown et al., 2006; Epstein et al., 2020; Hill & Roger, 2016; Lund et al., 2014; Nolan et al., 2015).

Students with a disability wanted to be seen as individuals and treated the same as everyone else. Apparently, staff would treat students with disability as clients or patients, not students (Hirneth & Mackenzie, 2004). As students reported being 'watched' more closely than those without a disclosed disability (Epstein et al., 2020), they went out of their way to prove themselves, so they could change the perception of supervisors towards them (Brown et al., 2006; Langørgen et al., 2020).

Theme 2: university staff and WIL supervisor attitudes and training

Students found the support from university staff and WIL supervisors to be mixed (Botham & Nicholson, 2014; Brown et al., 2006; Heelan et al., 2015; Hill & Roger, 2016; Lund et al., 2014; Rowe et al., 2019). Staff and supervisors with disability were found to be more supportive (Ryan, 2011). The more visible the disability, students reported, the more negative the attitudes from university staff and WIL supervisors. These attitudes were reported by students to impact their confidence, self-esteem, and decision to disclose their disability (Brown et al., 2006; Epstein et al., 2020). High case-loads, limited university support, being seen as incompetent due to the additional time spent with students, limited understanding of WIL expectations, and difficulties interpreting professional competencies for students with disability contributed to WIL supervisor negative attitudes (Beas-Collado & Carbo-Badal, 2020; Hirneth & Mackenzie, 2004; Langørgen et al., 2020; Nolan et al., 2015; Rankin et al., 2010; Rowe et al., 2019). University staff, WIL supervisors, and students agreed the level of training or disability awareness across the university and host organisations, particularly in relation to mental health, chronic pain, invisible disabilities, purpose of reasonable accommodations, and disability legislation was limited (APA, 2009; Beas-Collado & Carbo-Badal, 2020; Botham & Nicholson, 2014; Epstein et al., 2020; Epstein et al., 2022; Griffiths et al., 2010; Langørgen et al., 2020; Langørgen & Magnus, 2020; Ryan, 2011).

The fitness to practice of students with disabilities was questioned by staff and supervisors. Disability was seen to equal unsafe practices and the student was identified as an academic and clinical risk (Ashcroft & Lutfiyya, 2013; Epstein et al., 2020; Nolan et al., 2015). Some WIL supervisors questioned whether students should be permitted to enrol in a health professional course (Epstein et al., 2020; Ryan, 2011). Staff and WIL supervisors reported concerns a student would not cope and/or reach the required standard of proficiency/competencies and level of safety (Heelan et al., 2015; Nolan et al., 2015; Tee & Cowen, 2012). There was also uncertainty as to how many accommodations a student be allowed to reach competency, whether students with disability needed to meet all competencies and how to evaluate the competencies to ensure a student was fit for practice (Hirneth & Mackenzie, 2004; Langørgen et al., 2020), thus placing a huge burden on supervisors (Epstein et al., 2020; Langørgen et al., 2020).

Theme 3: surviving WIL

Understanding their disability and the associated challenges was seen as key to students developing their identity (Nolan et al., 2015). Students were worried their disability

would negatively impact their WIL, as they required more time to complete the WIL, experienced disability and/or medicine-related complications, attended appointments and were managing pain (APA, 2009; Epstein et al., 2020; Griffiths et al., 2010; Langørgen & Magnus, 2020; Rowe et al., 2019). To gain the most from their WIL experience, students engaged in coping mechanisms such as: having a positive outlook, setting personal goals and expectations, planning travel to and from the site, conducting a site visit, and obtaining support from peers, family, and non-WIL staff (Brown et al., 2006; Epstein et al., 2022; Nolan et al., 2015). Students stated their disability played a key role in their chosen course (Lund et al., 2014) and used WIL to test how they would cope and determine which accommodations were best in the workplace (Langørgen & Magnus, 2020). In WIL students used their disability to their advantage as they found they better identified with the client/patients and understood what it means to be 'different' in society (Brown et al., 2006; Epstein et al., 2020; Langørgen & Magnus, 2020).

WIL supervisors perceived that all students with a disability required reasonable accommodations (Botham & Nicholson, 2014; Nolan et al., 2015). Attitudes towards accommodations varied, with staff reporting positive attitudes to accommodations for coursework but not for the clinical setting (Ashcroft & Lutfiyya, 2013; Epstein et al., 2020) and that accommodations should not undermine the requirements of a health professional program (Epstein et al., 2020; Johnston et al., 2016). The approach to accommodations was seen, by students, to be reactive rather than proactive and was dependent upon the visibility of the disability (Epstein et al., 2022). Students applied for reasonable accommodations either through formal university processes or informally from staff without the requirement to disclose their disability (APA, 2009; Botham & Nicholson, 2014; Epstein et al., 2022; Griffiths et al., 2010; Lund et al., 2014). Students reported not being consulted or offered WIL accommodations (Epstein et al., 2020; Epstein et al., 2022; Heelan et al., 2015; Nolan et al., 2015). Moving to a part-time WIL experience (Langørgen & Magnus, 2020) and technology adaptations such as monitor colours or having an iPad (Epstein et al., 2020; Heelan et al., 2015; Rowe et al., 2019) were commonly unapproved accommodations. Further challenges reported by students included: limited training options compared to non-disabled students, lack of awareness of policies or guidelines, poor access to the WIL site, difficulty managing the increased course workload, accessing support, and lack of role models or mentors in the WIL space (APA, 2009; Botham & Nicholson, 2014; Epstein et al., 2022; Hill & Roger, 2016).

Theme 4: adjusting WIL to the individual

A strength-based individualised approach, with collaboration between relevant stakeholders (university disability office, WIL coordinators/staff, host organisation, and student) was central to six studies and the student's success in WIL (Beas-Collado & Carbo-Badal, 2020; Botham & Nicholson, 2014; Griffiths et al., 2010; Johnston et al., 2016; Rowe et al., 2019; Tee & Cowen, 2012). Five studies focused on strengthening the current university and WIL processes to ensure each stage of WIL provided an improved outcome for students with disability. These approaches included: assessing the student's needs and reasonable accommodations prior to the WIL, mentoring, supporting, and adapting the WIL experience to provide a scaffolded approach to building confidence, knowledge, and competence throughout the WIL, and an evaluation at the

end of the WIL (Beas-Collado & Carbo-Badal, 2020; Griffiths et al., 2010; Johnston et al., 2016; Rowe et al., 2019). Heelan et al. (2015) transformed a non-clinical framework into a clinical setting and encouraged stakeholders to rethink, and professions to be flexible and variable when providing WIL for students with disability. The student's lived experience was used to develop resources to facilitate university staff and WIL supervisors understanding of students' needs and challenges (Tee & Cowen, 2012) while Botham and Nicholson (2014) described the development, implementation, and impact of a WIL procedure on all stakeholders.

Joint and early collaboration between university, WIL supervisors, and the student was suggested by many as an imperative to facilitating appropriate accommodations and a safe and effective WIL experience (Botham & Nicholson, 2014; Cameron et al., 2019; Epstein et al., 2022; Griffiths et al., 2010; Hirneth & Mackenzie, 2004; Johnston et al., 2016; Langørgen & Magnus, 2020; Rankin et al., 2010). Establishing a trustworthy relationship between all stakeholders was reported as key to collaborations (Langørgen et al., 2020; Langørgen & Magnus, 2020) as this was seen to facilitate disclosure (Cameron et al., 2019), early planning and order of WIL (Johnston et al., 2016) and matching of the student to an appropriate WIL site (Hirneth & Mackenzie, 2004).

Students stated they require additional information about the organisation, activities, and WIL expectations. Pre-WIL workshops or WIL job descriptions could help better understand their own and their WIL supervisors' roles and responsibilities (Cameron et al., 2019; Epstein et al., 2020; Hill & Roger, 2016; Hirneth & Mackenzie, 2004; Nolan et al., 2015). Engaging with a mentor or role model early was seen by students, university staff, and WIL supervisors to provide a positive and helpful WIL experience (Epstein et al., 2022; Heelan et al., 2015; Lund et al., 2014).

Students and WIL supervisors stated universities need to take greater responsibility and provide relevant and up-to-date policies and guidelines that take into account student disabilities and compliance with relevant legislation (Ashcroft & Lutfiyya, 2013; Botham & Nicholson, 2014; Hirneth & Mackenzie, 2004). Support for staff and WIL supervisors through practice support groups and training programs was suggested to improve awareness of policies, systems, applying and evaluating reasonable accommodations, and facilitate learning strategies to support students with disability (Botham & Nicholson, 2014; Epstein et al., 2020; Griffiths et al., 2010; Heelan et al., 2015; Hirneth & Mackenzie, 2004).

Discussion

This scoping review has explored host organisation capacity and capabilities to facilitate the participation of health students with disability in WIL. The perspectives from students and host organisations provide a holistic view of host organisation capacity with similar themes found. The perceptions within each theme vary between stakeholders and highlight the complexity of providing students with a disability an engaging and relevant WIL experience. The studies included in this scoping review have, for the most part, reported a deficit approach to providing WIL. As indicated by the first three themes, university staff and host organisation beliefs, behaviours, and actions are underpinned by organisational and professional culture and the perceived need for students to disclose their disability or accommodations. A strengths-based approach, as indicated in

theme 4, whereby the creation of safe environments and strong relationships between the student, host organisation, and university allowing for open discussion is deemed essential for relevant WIL experiences for students with disability.

A strengths-based approach is well established within inclusive education, however, there is limited research in using the same approach within WIL (Cederbaum & Klusaritz, 2009) and in particular students with disability on WIL (Lopez & Louis, 2009). At the core, this approach focuses on the learners' capabilities and what is required to assist with creating a successful learning opportunity. As such this approach becomes particularly important for students with disability as they know their disability best and how they would be best accommodated on WIL. This scoping review has identified that a strengths-based approach needs to be implemented both systemically and individually, from the top-down and the bottom-up to be effective. This scoping review has also identified many areas where a strengths-based approach can be used, and there are two areas the authors would like to highlight: organisational and individual change and improving methodological rigour of the studies.

WIL experiences vary for all students and in particular students with disability, with this experience is greatly influenced by the prior beliefs, systems, and actions of the host organisation, supervisor, and university (Cederbaum & Klusaritz, 2009). Organisational and individual attitudinal and behavioural change can take time. Despite studies documenting some success in achieving university and organisational cultural change (Epstein et al., 2020; Griffiths et al., 2010; Langørgen et al., 2020; Rowe et al., 2019; Tee & Cowen, 2012), this review suggests challenges, concerns, attitudes, and behaviours towards students with disability and creating equitable WIL experiences have not changed over the 12-year review period. Most studies, though, recommended that greater awareness of disability is needed to change attitudes and behaviours. For students with disability to be successful in life, university, and WIL, stakeholders need to create an environment where disability does not equal incompetence and acknowledge people with disability can be successful health professionals. Up-to-date policies, guidelines, and regular training for students, university staff, and WIL supervisors referencing the most recent recommendations and legislation is required to increase awareness and understanding of disability. Global disability legislation, despite recent reviews, is outdated and uses old medical models to define disability (Australian Government, 1992; Commonwealth of Australia, 2020; United States Department of Justice, 1990). Updating legislation including the definition of disability, roles, requirements, and expectations will encourage changes in practices and potentially remove bias and perceptions towards people disability. Moving away from the medical model of disability to a social model of disability can improve the perception of disclosure and accommodations.

The methodological rigour of the studies included in this review is varied and while the quality of the studies was not assessed, the ambiguity of how ethics is presented within the included research requires further exploration. Five studies did not declare a completed ethics process, and a further three obtained consent from participants, but human ethics was not required. The authors acknowledged that ethics processes vary between countries, however, international ethical guidelines state research involving humans should be carried out in accordance with the fundamental ethical principles of respect, beneficence, non-maleficence, and justice (Council for

International Organizations of Medical Science, 2016). People with a disability are a vulnerable group and are being asked to discuss sensitive personal content (NHMRC, 2018). When ethical processes are ambiguous or not declared, a completed assessment of the quality and safety of the research is not achievable, potentially devaluing the findings of the publications and in this case disability itself. Additionally, research with students is often being completed by the educational institution that the student is attending and additional power considerations between researcher and students need to be addressed through formal ethical processes (Brown et al., 2006; Johnston et al., 2016). Completing and communicating the formal ethical process will assist with ensuring the safety of the participant and researcher as well as developing the integrity and credibility of the research produced (NHMRC, 2018).

Limitations and future research

This scoping review is not without its limitations. The review did not consider all WIL approaches and focused on those undertaken in the work environment such as internships and placements. While simulation can be conducted in the work environment, there is an acknowledgement that host organisations may not be fully involved in the actual simulated WIL process may be low (Wood et al., 2020). As noted, an assessment of the quality of the studies in the review was not undertaken. The authors believed that the lack of ethical approval obtained by the included studies does in itself assess the ethical quality of the undertaken studies. Extending the review to include other professions will provide a holistic view of WIL and WIL processes. Further work integrating a strengths-based approach into the WIL process from the different stakeholder perspectives is needed to ensure safe and equitable WIL opportunities are available for students with disability.

Conclusion

Students with disability WIL experiences are dependent upon university and host organisation attitudes, behaviours, and capabilities. Challenges to disclosure, poor university and host organisation awareness of disability, and accommodations negatively impact a student's WIL experience. Implementing a strengths-based approach in WIL pedagogy and process is required, through improved policy, governance, resources, awareness of disability and organisational culture change to ensure students with disability feel safe and engage in equitable rewarding WIL. This approach will be further enhanced through a sustainable collaborative relationship between all stakeholders.

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