

# Representation of Acquired Disabilities in Australian Research, Policy, and Practice: a Scoping Review

Alan Zana<sup>1\*</sup>, Sam Fien<sup>2</sup>, Eileen Willis<sup>3</sup>, Ashlyn Sahay<sup>4</sup>

1. Ph.D. Research Student, Central Queensland University, Australia

2. Early Career Researcher, Central Queensland University, Australia

3. Health Sociologist, Central Queensland University, Australia

4. Leads the Health Workforce Academy, Central Queensland University, Australia

## ABSTRACT

**Purpose:** Emerging data shows that Australia has a significantly higher number of persons who acquired a disability after birth than persons with congenital disabilities. Little is known about the impact of acquired disabilities on employment outcomes to guide employers, disability service providers and policymakers. This scoping review outlines the gaps in knowledge about the impact of acquired disabilities on employment participation and discusses the conflicting positions of disability models.

**Method:** A review was conducted of academic and grey literature on disability employment research and policy, published between 1990 and 2021. These were synthesised to analyse the representation of acquired disabilities in research and policy.

**Results:** It was found that the term “acquired disabilities” is not clearly identified and defined in the literature and the application of terms of reference for disability vary between disability peak bodies and service delivery organisations.

**Conclusion:** Future research on disability studies needs to capture the definition and identification of acquired disabilities and how they impact on employment outcomes, to foster a unified definition of disability and to devise a refined model of disability that would guide research, policy and practice.

**Key words:** acquired disability, disability, disability employment, disability models, employment participation, Australia

## INTRODUCTION

The impact of acquired disabilities on employment outcomes has not been studied adequately in Australia. Although chronic illness and injury are known

---

\* **Corresponding Author:** Alan Zana, Ph.D. Research Student, Central Queensland University, Australia.  
Email:alan.zana@cquemail.com

underlying causal factors of disability according to the Australian Bureau of Statistics (ABS, 2018), very little is known about the resultant disabilities. The boundary between chronic illness and disability has not been clarified, but the terms 'chronic medical conditions', 'impairment', and 'disability' have been used interchangeably in employment policy and practice. This interchangeable use of terms is evident in the official disability employment guidelines issued by the Australian Government's Department of Social Services (DSS, 2019). Moreover, the identification and definition of 'acquired disabilities' has not been formalised.

The prevalence of acquired disability within the working age group (15-64 years old) increases with age (ABS, 2018, 2019, 2020). It is reported that in Australia around 80% of people living with a disability acquired it after birth (ABS, 2018). Additionally, 50% of Australians with a disability also have a coexisting or secondary chronic condition (ABS, 2018). Despite the statistics, there is little evidence of research on the characteristics of acquired disabilities and how they impact on the individual's ability to work.

This scoping review of relevant academic and grey literature on Australian disability employment policy and employment outcomes of people with an acquired disability seeks to identify and analyse the knowledge and gaps in the literature about the impact of acquired disabilities on employment outcomes and how they are represented in research, policy, and practice. It identifies that acquired disabilities are not represented adequately in research, employment policy, and the workplace practices in Australia, and there is very little to guide employers on the impact of acquired disabilities on employment.

## **Objective**

The review was guided by the following overarching question:

How are the factors that enable or limit people with acquired disabilities to gain and retain employment in Australia represented in research, policy, and practice?

The review assessed the representation of acquired disability in research, policy, and practice, and consequently, assessed the impact of acquired disabilities on employment outcomes. The three aims were to:

1. Report what the literature says about acquired disabilities and employment outcomes within Australia.
2. Extract the evidence of acquired disabilities in research, policy, and practice.

3. Synthesise the results and analyse the gaps.

## METHOD

### Study Design

The purpose of the scoping review is to provide a rigorous synthesis of the evidence on acquired disabilities (Levac et al, 2010), to identify research gaps (Arksey & O'Malley, 2005), and to provide a descriptive overview of the literature (Levac et al, 2010; Peters et al, 2015).

The review was guided by the Population, Concept, Context (PCC) framework (Arksey & O'Malley, 2005). The PCC framework determined the keywords, subject, and index terms used in the search criteria of the literature selected for this review. The target population (P) for this review included people with acquired disabilities within the Australian working age group of 15-64 years. The context (C) of this review lies within the framework of research, policy, and practice. The core concept (C) of this review is the identification, definition, and the conceptualisation of acquired disabilities in research, policy, and practice.

### Databases Search and Selection of Scoping Reviews

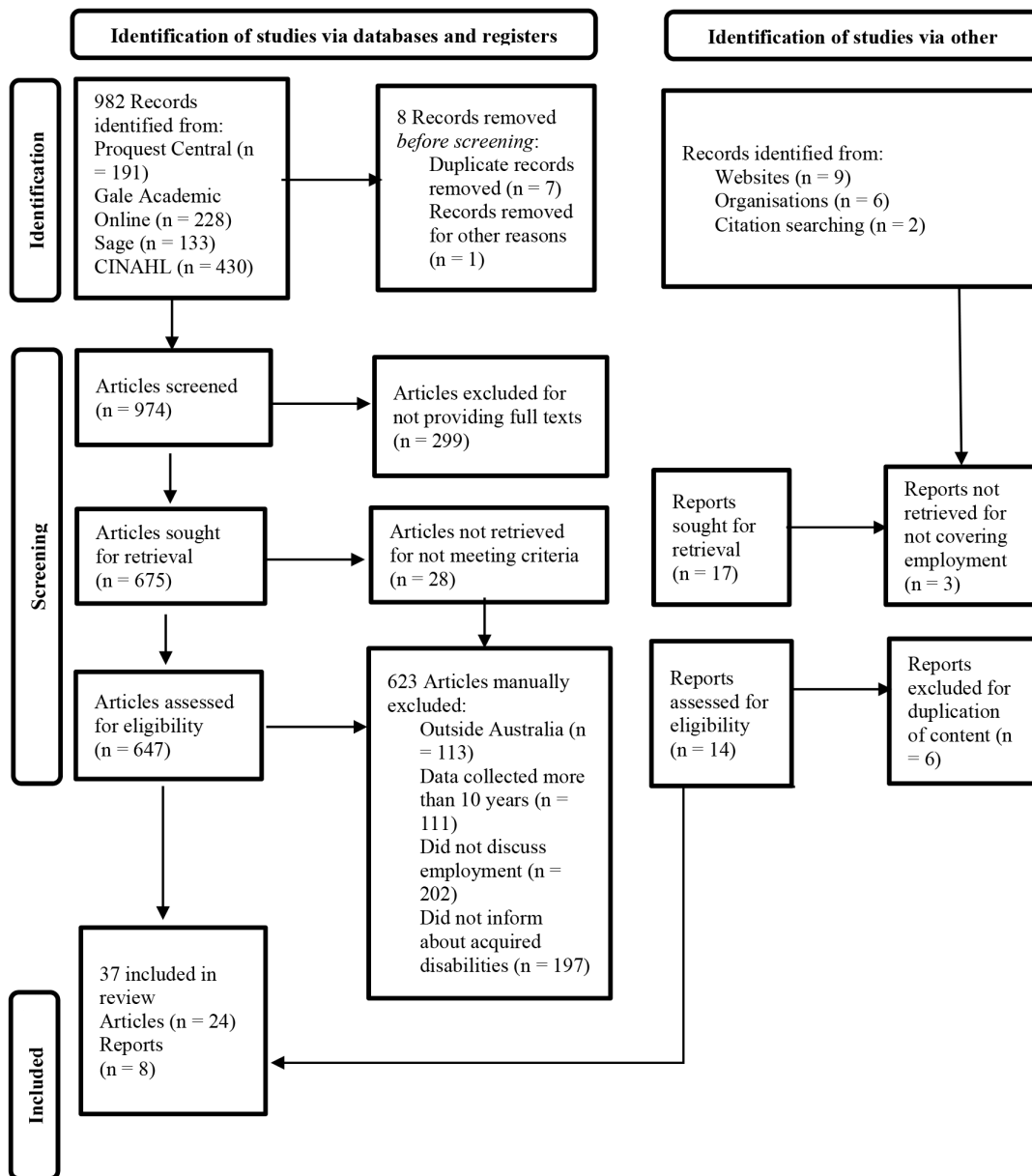
An initial search was conducted on the Proquest Central database in May 2022 to extract keywords within titles, abstracts, and index terms. Following the outcomes of the initial search, a second search was conducted in June 2022. This involved all reviewers applying the keywords across four databases independently: CINAHL, Gale Academic Online, SAGE Journals, and Proquest Central. The databases were selected as they contained public health or social sciences in their description.

### Inclusion criteria:

The search was limited to publications from 1990 to 2022. The year 1990 was chosen as the starting point as, arguably, this is when current disability employment legislation and frameworks took shape against the background of the social model of disability (Oliver, 1990; Oliver & Barnes, 1998; Barnes & Mercer, 2005; Shakespeare & Watson, 2010).

Figure 1 displays the PRISMA search pathway used in the selection of the literature.

Figure 1: Preferred Reporting Items for Systematic Reviews and Meta-analyses (PRISMA) flow diagram



Source: (Page et al., 2021)

Only publications in English were selected. The Boolean operators were applied against search terms, subjects, and keywords. Terms were searched using either

the exact phrase or abridged terms as follows: Disab\* OR impair\* OR “acquired disab\*” AND employment AND Australia\* AND “model\* of disability”. Irrelevant and duplicate publications were removed manually by the reviewers collectively. Only 24 articles were included in the review and imported into Endnote.

A further manual hand search on grey literature investigating Australian public health, disability employment, and relevant peak body websites was conducted. Initially, 17 reports were selected, but only 13 contained relevant data/information on disability employment outcomes. These were included in the review.

## RESULTS

A total of 37 publications were analysed for this review. These included 24 peer-reviewed articles and 13 reports from Government and Australian disability peak body websites. Of the 13 reports, 5 used the national data mostly derived from the Australian Bureau of Statistics (ABS). These included the Disability, Ageing and Carers report (ABS, 2018), the People with Disabilities report (ABS, 2019), the Labour Force report (ABS, 2020), the Australian Federation of Disability Organisations (AFDO, 2019), and the Australian Institute of Health and Welfare (AIHW, 2022).

Two reports were performance reviews of the Disability Employment Services programme. These were the Australian National Audit Office (ANAO, 2020), and the Taylor Fry report (Fry, 2018 #159). Another report was a statistical report of Disability Employment Services (DES) participants by the National Ethnic Disability Alliance (NEDA, 2014). The remaining four were either policy or the Australian Government service delivery guidelines from the Department of Employment (DoE, 2018) and the Department of Social Services (DSS, 2019, 2021a, 2021b).

The 24 peer-reviewed articles contained 6 longitudinal studies (Hogan et al, 2012; Milner et al, 2014; Schofield et al, 2014; Aitken et al, 2017; Cregan et al, 2017; Milner et al, 2020), 3 literature reviews (Athanasou, 2003; Contreras et al, 2012; Bloom et al, 2019), 2 frontline DES staff surveys (Considine et al, 2011; Considine et al, 2020), 4 qualitative studies (De Jonge et al, 2001; Soldatic, 2017; Soldatic, 2018; Devine et al, 2019), 1 quantitative study (Schönberger et al, 2011), 3 mixed method studies (Thornton & Marston, 2009; Prescott et al, 2019; Devine et al, 2020), 3 programme evaluations of DES and NDIS initiatives (Fowkes, 2011; Reddihough et al, 2016; Miller & Hayward, 2017), a case study and a conference

paper (Hemphill & Kulik, 2016).

Four distinct areas of focus emerged from the review. These were as follows:

1. Definition and identification of acquired disability,
2. Relevant disability employment policies in Australia,
3. Australian disability employment practice and employment outcomes,
4. Discussion of the gaps in the literature.

<b>Author/ Year</b>	<b>Publication Type</b>	<b>Data type</b>	<b>Relevance</b>
ABS. 2018	Census Report	National data	Australian statistics relevant to disability
ABS. 2020	Census Report	National data	Statistics on the Australian labour force
AFDO. 2019	Disability peak body report	Disability peak bodies, DES, ABS data	Disability Employment Services
AIHW. 2020.	Disability peak body report	ABS data	Disability policy and practice
Aitkens et al. 2017	Peer reviewed article	Longitudinal study (HILDA survey)	Long-term health conditions and disabilities
ANAO. 2020	Audit report	DES performance review	Disability Employment Services
Athanasou J. E. 2003	Peer reviewed article	Review of literature	Return-to-work rates following acquired brain injury
Bloom et al. 2019	Peer reviewed article	Systematic Review	Return-to-work rates following a spinal cord injury
Considine et al. 2011	Peer reviewed article	DES front line surveys	Disability Employment Services
Considine et al. 2020	Peer reviewed article	DES front line surveys	Disability Employment Services
<b>Author/ Year</b>	<b>Publication Type</b>	<b>Data type</b>	<b>Relevance</b>
Considine et al. 2021	Discussion Paper	N/A	New DES model
Conteras et al. 2012	Peer reviewed article	Review of literature	Disability Employment Services
Cregan et al. 2017	Peer reviewed article	Longitudinal study (ABS survey)	Impact of restrictive impairments on workplace participation
De Jonge et al. 2001	Peer reviewed article	Qualitative inquiry on people with disabilities requiring assistive technology	Return-to-work strategies
Devine et al. 2019	Peer reviewed article	Qualitative inquiry on people impacted by psychosocial factors	Disability Employment Services
Devine et al. 2020	Peer reviewed article	Embedded mixed methods	Disability Employment Services
DoE. 2018	Government Outcomes Report	DES data	Disability Employment Services
DSS. 2019	Government Disability Demography report	National data	Disability Employment Services
DSS. 2021a	Social policy guideline	N/A	Guide to disability assessments (ESAt/JCA)
<b>Author/ Year</b>	<b>Publication Type</b>	<b>Data type</b>	<b>Relevance</b>
DSS. 2021b	Policy review	N/A	Review of the ESAt assessment
Fowkes, L. 2011	Book	Program evaluation	Disability Employment Services

Fry, Taylor. 2018	Review report	Technical review on DES performance measures	Disability Employment Services
Hemphill and Kulik, 2016	Peer reviewed article	Case study on employers' attitude towards disability	Disability employment participation
Hogan et al. 2012	Peer reviewed article	Longitudinal study (ABS)	Disability employment participation
Miller and Hayward 2017	Peer reviewed article	Review of the NDIS program	Disability employment policy
Milner et al. 2014	Peer reviewed article	Longitudinal study (HILDA)	Disability employment participation
Milner et al. 2020	Peer reviewed article	Longitudinal study (HILDA)	Disability employment participation
NEDA. 2014	Disability peak body report	Focus Groups	Disability Employment Services
OECD. 2010	International report	International data including Australia	Disability best practise
Prescott et al. 2019	Peer reviewed article	Mixed methods	Return-to-work – self-awareness after ABI
Reddihough et al. 2016	Peer reviewed article	Review of the NDIS program	Disability employment policy
<b>Author/ Year</b>	<b>Publication Type</b>	<b>Data type</b>	<b>Relevance</b>
Schofield et al. 2014	Peer reviewed article	Longitudinal study (ABS)	Return-to-work strategies for people with arthritis
Schönberger et al. 2011	Peer reviewed article	Quantitative study	Return-to-work strategies for people with TBI
Soldatic et al. 2018	Peer reviewed article	Qualitative inquiry	Impact of policy reforms on income for ATSI populations
Soldatic, K. 2017	Peer reviewed article	Narrative in-depth interviews	Impact of policy reforms on income for ATSI populations
Thornton and Marston, 2009	Peer reviewed article	Observation and semi-structured interviews	Disability Employment Services
WHO. 2014	International report	N/A	ICF framework

## Definition and Identification of 'Acquired Disability'

### i. The definition of 'acquired disabilities'

There is no clear and unified definition of 'acquired disabilities' in the literature. Eight reports on Australian disability statistics and performance reviews (NEDA, 2014; ABS, 2018; DoE, 2018; Fry, 2018; AFDO, 2019; DSS, 2019; ANAO, 2020; AIHW, 2022) were analysed for their definition and/or identification of acquired disabilities. Only one report defined 'acquired disability' as a disability that has developed during the person's lifetime as a result of an accident or illness rather than a disability the person was born with (ABS, 2018).

Notably, the representation of acquired disabilities by peak bodies is absent in the reports. As noted in the AFDO report (2019), most acquired disability categories

are not represented by peak bodies or advocacy agencies. As a result, individuals with acquired disabilities are deprived of support in employment and other platforms.

Of the 24 peer-reviewed articles, 8 provided a definition or described the characteristics of acquired disabilities (Athanasou, 2003; Schönberger et al, 2011; Milner et al, 2014; Schofield et al, 2014; Aitken et al, 2017; Soldatic et al, 2017; Bloom et al, 2019; Prescott et al, 2019). Only one included descriptions of acquired disabilities in the definition of disability (Milner et al, 2014). Two included a description that aligns with the characteristics of acquired disabilities as prescribed by the ABS (2018) and International Classification of Functioning, Disability and Health – ICF (WHO, 2014). However, the descriptions did not provide a distinction between acquired disabilities and the underlying medical conditions (Aitken et al, 2017; Soldatic, 2018).

## **ii. The identification of ‘acquired disabilities’**

Three of the reports that were reviewed indicate that the identification of disability varies depending on the context and type of service under discussion (ABS, 2018; AIHW, 2019; DSS, 2019). For example, the identification of disability for the purpose of receiving welfare varies between the wider categorisation used in the application for Disability Support Pension (DSP) and National Disability Insurance Schemes (NDIS) that only considers certain categories of functional capacity (DSS, 2019). Two other reports point out that the lack of a unified categorisation of disability makes it difficult to have a shared language that is less confusing to employers and the community (AFDO, 2019; AIHW, 2022).

Three peer-reviewed articles highlighted chronic health conditions as disabling factors without directly associating the conditions with a disability (Athanasou, 2003; Bloom et al, 2019; Prescott et al, 2019). Lastly, 2 peer-reviewed articles posited chronic health conditions as causal factors of acquired disabilities (Schönberger et al, 2011; Schofield et al, 2014). The literature does not put a clear boundary around chronic health conditions and a disability, making it difficult to tell where the illness ends, and disability begins.

In both the reports and articles, words such as ‘impairment’, ‘activity limitation’, and ‘participation restriction’ were used interchangeably with ‘disability’ (Contreras et al, 2012; WHO, 2014; ABS, 2018; DoE, 2018; Prescott et al, 2019; ANAO, 2020; Devine et al, 2020; DSS, 2019, 2021a, 2021b). Additionally,



expressions such as ‘people living with a disability, persons with a disability’ and ‘disabled persons’ were used interchangeably in different contexts to refer to the same cohort (Thornton & Marston, 2009; Milner et al, 2014; Cregan et al, 2017; Devine et al, 2020; Milner et al, 2020; AIHW, 2022).

Three reports applied the term ‘disability’ in different contexts (AFDO, 2019; DSS, 2019; AIHW, 2022). There were some notable variations in the applications between the National Disability Insurance Scheme (NDIS) and the Disability Employment Services (AFDO, 2019; DSS, 2019; Zyphur & Pierides, 2019; AIHW, 2022); and between the Australian Federation of Disability Organisations (AFDO, 2019) and the National Ethnic Disability Alliance (NEDA, 2014). For instance, the DES application includes chronic health conditions and injuries, whereas NDIS only includes the narrower population of traditional visible disability cohorts (AFDO, 2019; DSS, 2019; AIHW, 2022). These gaps in the application of the term ‘disability’ and the identification criteria used may make one individual eligible for a Disability Support Pension under the social welfare scheme, but not eligible for the NDIS and vice versa (Milner et al, 2014; Devine et al, 2020; Milner et al, 2020; AIHW, 2022).

## **Relevant disability employment policies in Australia**

### **i. Economic participation and social inclusion**

Fourteen publications on Australian disability employment discussed policy in terms of economic participation and/or social inclusion, focusing mostly on the relationship between participation in employment and access to social welfare (De Jonge et al, 2001; Athanasou, 2003; Considine et al, 2011; Fowkes, 2011; Hogan et al, 2012; WHO, 2014; Reddihough et al, 2016; Aitken et al, 2017; Cregan et al, 2017; Soldatic et al, 2017; Soldatic, 2018; ABS, 2020; Considine et al, 2020; DSS, 2021b; AIHW, 2022). Four reports define the Disability Support Pension as an income support payment for individuals aged between 16 and 64 years who have been assessed for a reduced work capacity of below 15 hours a week for, at least, the next two years due to a disability (Soldatic et al, 2017; Soldatic, 2018; DSS, 2019; AIHW, 2022).

However, the Department of Social Services reports that those in receipt of the disability pension who return to the labour force are likely to work fulltime hours, and those initially assessed to be fit to work end up applying for Disability Support Pension (DSS, 2019). It is reported that individuals with a disability

assessed to qualify for the Jobseeker Payments (JSP) increased from 26% in 2014 to 42% in 2019 (Soldatic et al, 2017; Soldatic, 2018; AIHW, 2022). JSP is a means-based income for individuals assessed for a work capacity of 30 hours and under, but not below 15 hours a week (AIHW, 2022).

## **ii. Vocational rehabilitation and the return-to-work initiative**

Three articles discussed disability within the framework of return-to-work strategies following chronic illness or injury without referencing the disability associated with the condition (Athanasou, 2003; Bloom et al, 2019; Prescott et al, 2019). For instance, Athanasou (2003) discussed the recovery and return-to-work of people with an acquired brain injury without referencing the resultant disability even after the condition lasted for over 12 months. The pattern of not attaching a disability to chronic illness that is likely to be permanent is evident in other studies (Bloom et al, 2019; Prescott et al, 2019).

Five publications discussed the complexity of the relationship between a chronic illness and a disability, especially when the disability is invisible or does not fit in the traditional disability categories (WHO, 2014; Aitken et al, 2017; ABS, 2018, 2019; AIHW, 2022). According to the Australian Institute of Health and Welfare (AIHW, 2022) this relationship is dual - that individuals with a chronic illness are more likely to develop a disability, and that those with a disability are more likely to develop chronic illness. This view is also held by Aitken et al (2017) who examined the impact of acquired disabilities on mental health.

However, 2 reports suggest that the above assumption needs to be viewed alongside the claims of the ICF model (WHO, 2014; AIHW, 2022). According to the ICF, not every chronic illness becomes a disability, and the same chronic illness that causes a disability may evolve into other forms of disability (WHO, 2014). Contrary to this, the AIHW (2022) report argued that it should not be assumed that disability is the causal factor of a chronic illness or vice versa. According to the AIHW (2022) report, the causal factor of 21% of acquired disabilities could not be identified, while only 15% are a consequence of a chronic illness and 12% arise from injuries. The rest are attributed to other factors including mental illness, multiple underlying conditions, and ageing. Following this, the review sought to understand employment strategies for people with acquired disabilities that are captured in policy.

### **iii. The disability model used in Australian policy**

Only 3 of the studies discussed disability policy and the identification of acquired disability in line with a disability model (WHO, 2014; Aitken et al, 2017; AIHW, 2022). In Australia, the identification of disability is based on the International Classification of Functioning, Disability and Health (WHO, 2014; Aitken et al, 2017; AIHW, 2022). Within this model, disability is defined as impairments of body function or structure, activity limitations or participation restrictions (AIWH, 2022).

According to Aitken et al (2017) and the World Health Organisation (WHO, 2014), the ICF model employs a biopsychosocial approach and considers socio-environmental, socio-demographic, and behavioural factors of disability as well as the interaction between the individual with the disability and the environment. The model integrates both the biomedical limitations and psychosocial factors (WHO, 2014). Therefore, disability is the result of the interaction between health conditions, personal attributes, and environmental factors (Aitken et al, 2017). This definition suggests that access to social support has a direct impact on impairments, activity limitations and participation restriction.

Five publications position Australian disability employment policy in direct contrast to the claims of the ICF model (Hogan et al, 2012; WHO, 2014; Aitken et al, 2017; Miller & Hayward, 2017; AIHW, 2022). On the one hand, the ICF model seem to posit disability as an unfavourable interaction with the individual's environment (WHO, 2014; Aitken et al, 2017; AIHW, 2022). On the other hand, it is argued that the Australian policy becomes a social barrier by making accessibility to social supports more complicated for some disability types (Hogan et al, 2012; Aitken et al, 2017; Miller & Hayward, 2017).

### **iv. Workplace relations regulations**

Seven publications discussed Australian policy in terms of legislation (Hogan et al, 2012; Reddihough et al, 2016; Soldatic et al, 2017; Soldatic, 2018; DSS, 2019; ABS, 2020; AIHW, 2022). Four of these publications focused on the Disability Discrimination Act (Hogan et al, 2012; Soldatic, 2018; DSS, 2019; AIHW, 2022). According to Hogan et al (2012), this legislation was implemented to enable those with a disability to access the same employment opportunities as those without disability. Access to employment opportunities would then reduce the number of people with a disability accessing the Disability Support Pension (Soldatic et al, 2017; Soldatic, 2018). However, approximately 30% of all social welfare benefit

recipients aged between 16 and 64 years receive Disability Support Pension, with most of them (82%) remaining on it for at least 5 years (AIHW, 2022). Among these, 36% report psychological or psychiatric conditions as their disability (ABS, 2020; AIHW, 2022).

Additionally, some have placed the challenges of return-to-work processes on the cost of workplace modifications, the cost of accommodating people with disability in employment, and a general lack of confidence in government subsidies and support (Fowkes, 2011; Contreras et al, 2012; Hemphill & Kulik, 2016). Others dismiss the emphasis on workplace accommodation citing that statistics show that most people with a disability do not require workplace modifications or supports (AIHW, 2022).

### **Australian disability employment practice and employment outcomes**

A total of 14 publications positioned the goal of moving people with a disability from welfare to sustainable employment on DES and/or the NDIS (Considine et al, 2011; Fowkes, 2011; Contreras et al, 2012; Milner et al, 2014; DoE, 2018; Fry, 2018; AFDO, 2019; Devine et al, 2019; DSS, 2019, 2021a, 2021b; Considine et al, 2020; Milner et al, 2020; Considine et al, 2021). These are discussed below:

#### **i) Disability Employment Services (DES)**

Four government reports indicate that the majority of funding is disseminated as service and outcome fees as well as wage subsidies channelled to DES providers (DoE, 2018; DSS, 2019, 2021a, 2021b). Three publications gave a historical account of the disability employment policy from the period when the Australian Government started outsourcing disability employment services to commercial and community organisations and the inception of the DES in 2010 to replace previous programmes (Thornton & Marston, 2009; Devine et al, 2019; DSS, 2019). This outsourcing of services is said to have shifted the role of the Government from provider to purchaser of services (Considine et al, 2011; Considine et al, 2020).

Eleven publications position DES within the broader welfare system (Considine et al, 2011; Milner et al, 2014; NEDA, 2014; Hemphill & Kulik, 2016; Soldatic et al, 2017; DoE, 2018; Soldatic, 2018; AFDO, 2019; Devine et al, 2019; DSS, 2019; Devine et al, 2020). Five of these point out that most of the DES participants are referred into the services as a part of mutual obligations for receiving welfare-

to-work payments (Hemphill & Kulik, 2016; Soldatic et al, 2017; Soldatic, 2018; Devine et al, 2019; Devine et al, 2020). Three articles argued that the welfare-to-work mutual obligations are punitive and lack a focus on rehabilitation (Soldatic et al, 2017; Soldatic, 2018; Devine et al, 2020).

Two publications argued that the services provided by DES were not aligned with the goals of individuals referred to the programme (Milner et al, 2014; Devine et al, 2019). Various factors are identified as contributing to the misalignment. Some suggest that DES frontline staff do not have the right qualifications, attitudes, or skills to assist individuals with a disability to meet their goals (Considine et al, 2011; Contreras et al, 2012; NEDA, 2014; AFDO, 2019; Considine et al, 2020).

However, 6 articles and 2 reports questioned the competence of the current DES model to address the disability gap (Considine et al, 2011; Fowkes, 2011; Contreras et al, 2012; NEDA, 2014; AFDO, 2019; Devine et al, 2019; Considine et al, 2020; Devine et al, 2020). Three discrepancies are highlighted as the causal factors. These are:

The ability of DES consultants to deliver a recovery-oriented programme (NEDA, 2014; Devine et al, 2019; Devine et al, 2020),

The lack of professional qualifications required to become a DES specialist (Considine et al, 2011; AFDO, 2019; Considine et al, 2020), and

The high staff turnover that disrupts continuity of service delivery (AFDO, 2019; Devine et al, 2019).

According to the AFDO reports, only 30% of DES participants remain in employment for more than 26 weeks (AFDO, 2019) and only 13% of those with chronic illnesses reach this milestone (Fry, 2018).

## **ii) National Disability Insurance Scheme**

Five publications call for the reform of DES programmes to give participants total control over who provides services to them and how their funds are managed (Milner et al, 2014; Hemphill & Kulik, 2016; Reddihough et al, 2016; AFDO, 2019; Devine et al, 2020). Two of these cited the NDIS as the ideal model (Hemphill & Kulik, 2016; Reddihough et al, 2016). However, the authors of 2 articles noted that it is too early to measure the effectiveness of the NDIS programme. The NDIS programme was rolled out in 2013 to improve the personal goals of people with disabilities including reducing the disability employment gap by allocating funds

to individuals instead of organisations (Hemphill & Kulik, 2016; Reddihough et al, 2016; Miller & Hayward, 2017; DSS, 2019).

Australia is rated among OECD countries with the lowest participation rates of disability employment participation and the highest rates of disability income and welfare payment (OECD, 2010; Soldatic, 2018). Participation rate is a calculation of people in the labour force against the adult population in the working age groups (ABS, 2018, 2020). According to Cregan et al (2017), there is minimum evidence that disability employment policies are achieving the intended goals of social inclusion.

## DISCUSSION

### Gaps in the Literature

The publications that were reviewed show gaps in several areas. These gaps were apparent in the lack of a unified definition of acquired disability, the identification of acquired disabilities in policy and practice, and the limited guidance around the impact of acquired disabilities in employment outcomes. The lack of a unified definition has a clear impact on research, policy, and practice in that it blurs the framework and conceptualisation of the phenomenon.

The term 'disability' is applied differently in varying contexts. Notably, the identification of acquired disabilities differs from one article to the next and between reports. This leaves very little to inform and guide employers, service delivery, and policymakers about the impact of acquired disability on employment outcomes.

The Government reports show that the term 'disability' is applied differently for different programmes, and the assessment tools used to reach these conclusions are different. For example, the review has noted that one may be eligible for Disability Support Pension within the DES context, but not eligible for NDIS and vice versa (DSS, 2019, 2021b). These varied categorisations not only make disability service delivery complicated, but also make accessing the services complicated for participants.

The inconsistencies in identification and definition of disability in the Australia context demand an examination of policy, definition and identification of disability, and the application of the adapted ICF framework in disability assessments, its claims and effectiveness in practise. Government reports show

that some individuals who were initially assessed for the Disability Support Pension but decided to return to the workforce, worked fulltime hours (DoE, 2018; DSS, 2019). When viewed in conjunction with Soldatic's (2018) assertion that there has been a fluctuating increase of individuals with a disability who were initially assessed for a work capacity benchmark of at least 15 hours attempting to access the Disability Support Pension, it shows a surprising discrepancy between assessment outcomes and actual resultant participation.

Australian research has mostly utilised data from peak bodies specialising on specific disability types, or from demographics selected from specialised organisations. This is problematic for a variety of reasons. Firstly, most acquired disabilities are not represented by any peak body or disability organisation (AFDO, 2019), thereby resulting in the data not accurately representing the problem on the ground. Secondly, as shown in the ABS (2018) data, Australians tend to experience more than one type of disability as they advance in age, and some of these acquired disabilities can be invisible.

### **Limitation of this Review**

The lack of a unified identification and definition of disability in the literature made it difficult to differentiate acquired disability from the underlying chronic health conditions. In most cases it was impossible to tell from the descriptions whether the literature under review was discussing a disability or a medical condition. In some cases, disability was used synonymously with impairment, chronic illness, and/or injury. As a result, it became a challenge to work out whether the impact was due to the underlying health condition or to the acquired disability – or whether the two should be read as synonyms.

## **CONCLUSION**

Understanding the factors affecting the ability of people with acquired disabilities to obtain or sustain employment appears to be a necessary body of knowledge to close the gap between the participation in employment of those with a disability and those without. Three areas of knowledge are particularly important:

- 1) There is a need for research to understand the relationship between health, impairment and disability.
- 2) There is a need to understand the impact of acquired disabilities on employment outcomes, as well as gaining knowledge to foster guidelines for positive outcomes.

- 3) There is a need to test the application of the ICF model, including its claims and effectiveness in assessing disabilities and guiding policymakers, employers, and communities for improved employment outcomes.

Extant research has not effectively captured the identification and definition of acquired disabilities and the impact on the employment outcomes. Therefore, future research needs to study these factors and how this knowledge might inform disability studies, not only to enhance entry into the workforce for people with a disability, but also to understand how acquired disabilities influence exit from employment. Such research is necessary to foster a unified definition of disability and to devise a refined model of disability that would guide research, policy and practice.

## ACKNOWLEDGEMENT

The RHD candidature was supported under the Commonwealth Government's Research Training Programme/Research Training Scheme, and the financial support provided by the Australian Government is gratefully acknowledged.

The authors declare there is no conflict of interest.

No ethics approval was required as this is a scoping review.

All material used herein is the original work of the researchers. All cited work was referenced using the APA referencing style.

## REFERENCES

- Aitken Z., Krnjacki L., Kavanagh A. M., LaMontagne A. D., Milner A. (2017). Does social support modify the effect of disability acquisition on mental health? A longitudinal study of Australian adults. *Social Psychiatry and Psychiatric Epidemiology*, 52 (10), 1247-1255. <https://doi.org/10.1007/s00127-017-1418-5> PMID:28676948
- Arksey H., O'Malley L. (2005). Scoping studies: towards a methodological framework. *International Journal of Social Research Methodology*, 8, 19 - 32. <https://doi.org/10.1080/1364557032000119616>
- Athanasou J. E. (2003). Acquired Brain Injury and Return to Work in Australia and New Zealand. *Australian Journal of Career Development*, 12 (1), 58-65. <https://doi.org/10.1177/103841620301200108>
- Australian Bureau of Statistics - ABS (2018). Disability, Ageing and Carers, Australia: Summary of Findings. Retrieved from <https://www.abs.gov.au/ausstats/abs@.nsf/Lookup/4430.0main+features202015>



Australian Bureau of Statistics - ABS (2019). People with disabilities in Australia. Retrieved from <https://www.aihw.gov.au/reports/disability/people-with-disability-in-australia/summary>

Australian Bureau of Statistics - ABS (2020). Labour Force, Australia. Retrieved from <http://abs.gov.au>

Australian Federation of Disability Organisations - AFDO (2019). Annual Report (2018). '2018-2019'. Retrieved from [https://www.afdo.org.au/wp-content/uploads/2020/01/2018-19\\_AFDO-Annual-Report\\_screen.pdf](https://www.afdo.org.au/wp-content/uploads/2020/01/2018-19_AFDO-Annual-Report_screen.pdf)

Australian Institute of Health and Welfare - AIHW (Producer) (2022). People with disabilities in Australia. Retrieved from <https://www.aihw.gov.au/reports/disability/people-with-disability-in-australia-2022-in-brief/contents/about>

Australian National Audit Office - ANAO (2020). Management of Agreement for the Disability Employment Services', Performance Audit Report, June 24, 2020. Retrieved from [https://www.anao.gov.au/work/performance-audit/management-contracts-disability\\_employment-services](https://www.anao.gov.au/work/performance-audit/management-contracts-disability_employment-services)

Barnes C., Mercer G. (2005). Disability, work, and welfare:challenging the social exclusion of disabled people. *Work, Employment and Society*, 19(3), 527-545. <https://doi.org/10.1177/0950017005055669>

Bloom J., Dorsett P., McLennan V. (2019). Investigating employment following spinal cord injury: outcomes, methods, and population demographics. *Disability and rehabilitation*, 41(20), 2359-2368. <https://doi.org/10.1080/09638288.2018.1467968> PMID:29726730

Considine M., Lewis J. M., O'Sullivan S. (2011). Quasi-markets and service delivery flexibility following a decade of employment assistance reform in Australia. *Journal of Social Policy*, 40 (4), 811 - 833 <https://doi.org/10.1017/S0047279411000213>

Considine M., O'Sullivan S., McGann M., Nguyen P. (2020). Locked-in or Locked-out: Can a Public Services Market Really Change? *Journal of Social Policy*, 49(4), 850-871. <https://doi.org/10.1017/S0047279419000941>

Considine M., O'Sullivan S., Nguyen P., McGann M., Lewis J. M. (2021). Proposed Licencing System for the New Employment Services Model. Retrieved from <https://www.dewr.gov.au/new-employment-services-model/consultations/submissions-proposed-licencing-system-new-employment-services-model-discussion-paper/submission/10323>

Contreras N., Rossell S. L., Castle D. J., Fossey E., Morgan D., Crosse C., Harvey C. (2012). Enhancing work-focused supports for people with severe mental illnesses in Australia. *Hindawi Publishing Corporation Rehabilitation Research and Practice* (2012). <https://doi.org/10.1155/2012/863203> PMID:22966462 PMCid:PMC3395169

Contreras N., Rossell S. L., Castle D. J., Fossey E., Morgan D., Crosse C., Harvey C. (2012). Enhancing work-focused supports for people with severe mental illnesses in Australia. *Hindawi Publishing Corporation Rehabilitation Research and Practice* (2012). <https://doi.org/10.1155/2012/863203> PMID:22966462 PMCid:PMC3395169

- Cregan C, Kulik C T, Bainbridge H T J (2017). Differences in well-being among people with disabilities in paid employment: level of restriction, gender and labour market context. *Social Policy and Administration*, 51 (7), 1210-1230. <https://doi.org/10.1111/spol.12263>
- De Jonge D, Rodger S, Fitzgibbon H (2001). Putting technology to work: Users' perspective on integrating assistive technology into the workplace. *Work*, 16 (2), 77-89.
- Department of Employment - DoE (2018). Employment Services Outcomes Report - Disability Employment Services. Retrieved from [https://docs.employment.gov.au/system/files/doc/other/employment\\_services\\_outcomes\\_report\\_january\\_2018\\_to\\_december\\_2018\\_-\\_disability\\_employment\\_services.pdf](https://docs.employment.gov.au/system/files/doc/other/employment_services_outcomes_report_january_2018_to_december_2018_-_disability_employment_services.pdf)
- Department of Social Services - DSS (2019). 'DSS Demographics', September 2019. Retrieved from <http://data.gov.au>
- Department of Social Services - DSS (2021a). 'The Social Security Guide', August 2021. Retrieved from <https://guides.dss.gov.au/guide-social-security-law/1/1/j/10>
- Department of Social Services - DSS (2021b). 'The Bolton Consulting Group: 2020 ESAt Review). Retrieved from [https://dss.gov.au/sites/default/files/documents/05\\_2021/residential-aged-care-providers-registration-requirements-accessible.pdf](https://dss.gov.au/sites/default/files/documents/05_2021/residential-aged-care-providers-registration-requirements-accessible.pdf)
- Devine A., Dickinson H., Brophy L., Kavanagh A., Vaughan C. (2019). 'I don't think they trust the choices I will make.' - Narrative analysis of choice and control for people with psychosocial disability within reform of the Australian Disability Employment Services program. . *Public Management Review* 23 (1), 10-30. <https://doi.org/10.1080/14719037.2019.1648700>
- Devine A., Vaughan C., Kavanagh A., Dickinson H., Byars S., Dimov S., Gye B., Brophy L. (2020). 'I'm proud of how far I've come. I'm just ready to work': mental health recovery narratives within the context of Australia's Disability Employment Services. *BMC Public Health*, 20 (1). <https://doi.org/10.1186/s12889-020-8452-z> PMID:32164650 PMCID:PMC7068916
- Fowkes L. (2011). *Rethinking Australia's Employment Services*. Whitlam Institute, University of Western Sydney: Perspectives.
- Fry T. (2018). Technical review of the DES Star Ratings model. *Time Window*, 2.5, 12-20.
- Hemphill E., Kulik C.T. (2016). Which Employers Offer Hope for Mainstream Job Opportunities for Disabled People? *Social Policy and Society*, 15 (4), 537-554. <https://doi.org/10.1017/S1474746415000457>
- Hogan A., Kyaw-Myint S. M., Harris D., Denronden H. (2012). Workforce Participation Barriers for People With Disability. *International Journal of Disability Management Research*, 7(1), 1-9. <https://doi.org/10.1017/idm.2012.1>
- Levac D., Colquhoun H., O'Brien K. (2010). Scoping studies: advancing the methodology. *Implementation Science*, 5, 69. <https://doi.org/10.1186/1748-5908-5-69> PMID:20854677 PMCID:PMC2954944
- Miller P., Hayward D. (2017). Social policy 'generosity' at a time of fiscal austerity: The strange case of Australia's National Disability Insurance Scheme. *Critical Social Policy*, 37(1), 128-147. <https://doi.org/10.1177/0261018316664463>

Milner A., Krnjacki L., Allisey A., LaMontagne A. D. (2014). Does disability status modify the association between psychosocial job quality and mental health? A longitudinal fixed-effects analysis. *Social Science & Medicine*, 144, 104-111. <https://doi.org/10.1016/j.socscimed.2015.09.024> PMID:26409168

Milner A., Aitken Z., Byars S., Butterworth P., Kavanagh A. (2020). Do gender and psychosocial job stressors modify the relationship between disability and sickness absence: An investigation using 12 waves of a longitudinal cohort. *Scandinavian Journal of Work, Environment & Health*, 46 (3), 302-310. <https://doi.org/10.5271/sjweh.3865> PMID:31802134

National Ethnic Disability Alliance - NEDA (2014). Disability Employment Services (DES) Consumer Engagement Project 30 June. Retrieved from [http://www.neda.org.au/sites/default/files/2017-12/NEDA\\_DES\\_PROJECT\\_2014.pdf](http://www.neda.org.au/sites/default/files/2017-12/NEDA_DES_PROJECT_2014.pdf)

Oliver M. (1990). *The Politics of Disablement*. Basingstoke: Macmillan. <https://doi.org/10.1007/978-1-349-20895-1>

Oliver M., Barnes C. (1998). *Disabled People and Social Policy: From Exclusion to Inclusion*. London: Longman.

Organisation for Economic Cooperation and Development - OECD (2010). Sickness Disability and Work: Breaking the barriers: A synthesis of findings across OECD countries. Retrieved from <https://www.oecd-ilibrary.org/deliver/9789264088856-en.pdf?itemId=/content/publication/9789264088856-en&mimeType=pdf>

Page, M. J., McKenzie, J. E., Bossuyt, P. M., Boutron, I., Hoffmann, T. C., Mulrow, C. D., Moher, D. (2021). The PRISMA 2020 statement: an updated guideline for reporting systematic reviews. *BMJ (Clinical Research ed.)*, 372 (71).

Peters M. D., Godfrey C. M., Khalil H, McInerney P., Parker D., Soares C. B. (2015). Guidance for conducting systematic scoping reviews. *International Journal of Evidence-based Healthcare*, 13(3), 141-146. <https://doi.org/10.1097/XEB.000000000000050> PMID:26134548

Prescott S., Fleming J., Doig E. (2019). Effect of self-awareness on goal engagement and outcomes after acquired brain injury. *British Journal of Occupational Therapy*, 82(12), 726-731. <https://doi.org/10.1177/0308022619851434>

Reddihough D. S., Meehan E., Stott N. S., Delacy M. J. (2016). The National Disability Insurance Scheme: a time for real change in Australia. *Developmental Medicine and Child Neurology*, 58, 66-70. <https://doi.org/10.1111/dmcn.13007> PMID:26782069

Schofield D. J., Callander E. J., Shrestha R. N., Passey M. E., Percival R., Kelly S. J. (2014). How co-morbidities magnify the effect of arthritis on labour force participation and economic status: a costs of illness study in Australia. *Rheumatology International*, 34 (4), 481-489. <https://doi.org/10.1007/s00296-014-2967-5> PMID:24562914

Schönberger M., Ponsford J., Olver J., Ponsford M., Wirtz M. (2011). Prediction of functional and employment outcome 1 year after traumatic brain injury: a structural equation modelling approach. *Journal of neurology, Neurosurgery and Psychiatry*, 82 (8), 936-941. <https://doi.org/10.1136/jnnp.2010.210021> PMID:21217165

Shakespeare T., Watson N. (2010). Beyond Models: Understanding the Complexity of Disabled People's Lives. In G. Scambler & S. Scambler (Eds.), *New Directions in the Sociology of Chronic and Disabling Conditions: Assaults on the Lifeworld* (pp. 57-76). London: Palgrave Macmillan UK. [https://doi.org/10.1057/9780230297432\\_4](https://doi.org/10.1057/9780230297432_4)

Soldatic K. (2018). Disability, poverty and ageing in regional Australia: The impact of disability income reforms for indigenous Australians. *The Australian Journal of Social Issues*, 53 (3), 223-238. <https://doi.org/10.1002/ajs4.51>

Soldatic K., Somers K., Spurway K., van Toorn G. (2017). Emplacing Indigeneity and rurality in neoliberal disability welfare reform: The lived experience of Aboriginal people with disabilities in the West Kimberley, Australia. *Environment and Planning*, 49 (10), 2342-2361. <https://doi.org/10.1177/0308518X17718374>

Thornton S., Marston G. (2009). Who to Serve?: The Ethical Dilemma of Employment Consultants in Nonprofit Disability Employment Network Organisations. *The Australian journal of social issues*, 44 (1), 73-89. <https://doi.org/10.1002/j.1839-4655.2009.tb00131.x>

World Health Organisation (2014). International Classification of Functioning, Disability and Health (ICF) framework to facilitate Interprofessional education and collaborative practice. Retrieved from [https://www.who.int/hrh/news/2014/hrh\\_icf\\_framework/en/](https://www.who.int/hrh/news/2014/hrh_icf_framework/en/)

Zyphur M. J., Pierides D. C. (2019). Making Quantitative Research Work: From Positivist Dogma to Actual Social Scientific Inquiry. *Journal of Business Ethics*, 167, 49-62. <https://doi.org/10.1007/s10551-019-04189-6>