

**Title:** Help or hinder? An assessment of the accessibility, usability, reliability and readability of disability funding website information for Australian mental health consumers.

**Abstract:**

This study aimed to assess the accessibility, usability, reliability and readability of those websites most likely encountered by Australian mental health consumers when using the internet to find information regarding the National Disability Insurance Scheme (NDIS). Websites were systematically identified with 127 deemed relevant for assessment in 2018. The LIDA instrument, the Simple Measure of Gobbledygook and Flesch-Kincaid Grade Level were used to evaluate the quality of information provided to mental health consumers.

The study identified mediocre results for the accessibility, usability, reliability and readability of websites as they pertain to the needs of mental health consumers. Furthermore, it was identified that mental health support websites did not provide a more appropriate online experience for mental health consumers than general information websites, despite their focus on this demographic.

These findings suggest a lack of understanding regarding the needs of mental health consumers and their experience of the online environment, which may in turn affect their access to information, agency, and ultimately, their uptake of the NDIS. The establishment of guidelines around enhancements to the online environment for mental health consumers would provide an experience that instils confidence, returns dignity and aids this group in realising their personal recovery journey.

***What is known about this topic and what this paper adds?***

**What is known about this topic:**

- There have been lower than anticipated NDIS engagement numbers amongst mental health consumers in Australia despite international reports of the benefits of self-directed disability funding schemes.
- There is an increasing reliance on the internet to present NDIS information to mental health consumers.
- There is a lack of understanding about what constitutes a user-friendly and engaging online experience for mental health consumers.

**What this paper adds:**

- An examination of the accessibility, usability, reliability and readability of disability funding website information (NDIS) for mental health consumers.
- Evidence to support the importance of establishing formal guidelines around what constitutes a welcoming and engaging online experience for mental health consumers.

***Keywords***

Mental health, recovery, internet, disability, self-directed funding, national disability insurance scheme, quality of information

## INTRODUCTION

Disability policy and service delivery in Australia is currently undergoing a major reform with the implementation of the National Disability Insurance Scheme (NDIS). The NDIS was introduced in 2013 in response to a Productivity Commission (2011) that found the existing, block-funded disability support systems were underfunded, unfair, fragmented and inefficient. The scheme is designed as a user-directed, insurance-style arrangement whereby individuals living with permanent and impairing disability can apply for a personalised package of Government funding; optimising personal choice and control over the services and supports required to increase an individual's social and economic independence. The NDIS brings Australia in line with its international counterparts including England, the Netherlands, Germany and France who have adopted similar user-directed funding schemes for a group historically affected by marginalisation and disadvantage (Crozier, Muenchberger, Colley, & Ehrlich, 2013).

Whilst the NDIS aims to promote more equitable and sustainable support for people with disability, since implementation, there have been reports of shortcomings, particularly for those individuals falling under the psychosocial disability definition (Smith-Merry et al., 2018; Warr et al., 2017). The NDIS defines psychosocial disability as “disabilities that may arise from mental health issues” (National Disability Insurance Agency, 2016, p.1). Identified difficulties for this cohort include lengthy wait times for application decisions, complex processes and language, and a lack of understanding amongst NDIS staff about the lived experience of psychosocial applicants (Hancock et al., 2019; Smith-Merry et al., 2018; Warr et al., 2017).

In theory, the key goals and tenets of the NDIS including recognition of capability and promotion of agency, align with the main principles of the mental health recovery framework

(Arblaster et al., 2018; National Disability Insurance Agency, 2018a). This is important because recovery is the dominant paradigm in mental health service delivery both within Australia and internationally (Department of Health, 2009; Slade, Amering, & Oades, 2008; Wyder, Bland, Herriot, & Crompton, 2015). Concepts of recovery are different from the traditional, medicalised systems of treatment, instead referring to an individual's personal concept of optimal functioning and participation (Slade et al., 2008). Recovery-oriented service delivery promotes the development of meaning and purpose in an individual's life, along with an understanding of their abilities and challenges, and identification of goals and hopes for the future.

Supporting recovery means providing those living with mental health challenges with the ability to make choices in how they want to lead their life, as well as promoting personal autonomy for their well-being (Department of Health and Ageing, 2013). When recovery principles are considered, an alignment with the processes and goals promoted within the NDIS can be identified. In particular, the scheme's reported focus on supporting mental health consumers to identify and achieve their aspirations within the planning process is highly recovery-oriented (National Disability Insurance Agency, 2018a). However, recent reviews have demonstrated that the NDIS is not meeting these aims, instead identifying that people with mental illness are not engaging with the NDIS or being supported by NDIS processes (Hancock et al., 2019; National Disability Insurance Agency, 2019a, 2019b; Smith-Merry et al., 2018).

The National Disability Insurance Agency (NDIA) initially estimated that around 13.9% of the Australians living with severe mental health conditions would meet eligibility criteria for a NDIS package. However, a recent report by the NDIA suggested that only 9% have successfully applied for support funding, representing just over half of the estimated numbers (National Disability Insurance Agency, 2019a). In addition, there have been high levels of

declined applications amongst those applying under the psychosocial disability definition, with over 27% of participants in the soon to be terminated mental health support programs Partners In Recovery (PIR) and Personal Helpers and Mentors (PHaM) programs, deemed ineligible for a NDIS funding package (Hancock et al., 2019). Worryingly, reports also show that over 20% of PIR and PHaM participants, and a large proportion of mental health consumers more broadly, were not intending to apply for NDIS funding due to distress caused by the complex application process and a lack of understanding and confusion about the scheme (Hancock et al., 2019; Smith-Merry et al., 2018).

Generally, when individuals seek information related to their health and wellbeing, they turn to the internet to educate themselves (Australian Bureau of Statistics, 2018). In addition, many organisations (including the NDIA) require potential and current participants to utilise websites to find and access services. NDIS participants are required to utilise an online portal to access and manage their funding details, receive messages from the NDIA and identify information about access to services (National Disability Insurance Agency, 2018b).

However, a recent report suggested Australians living with disability have different experiences of accessing the internet to those of the general population (Thomas et al., 2019). Challenges reported amongst those living with disability include affordability, accessibility, and a lack of knowledge or skill regarding how to use and navigate the online environment (Duplaga, 2017; Thomas et al., 2019).

In addition, there is concern regarding the unvetted nature of the online environment and the accuracy of the content presented therein (Harland & Bath, 2007; Morozov, 2011; Pant et al., 2012). Whilst reviews of the accessibility, usability, reliability and readability of general health-related sites (Berland et al., 2001), as well as those related to specific conditions (Devitt et al., 2017; Harland & Bath, 2007; Kaicker, Dang, & Mondal, 2013; Maloney, Ilic, & Green, 2005; Nasser, Mullan, & Bajorek, 2012; Simpson & Baldwin, 2017; Surman &

Bath, 2013) have been undertaken, to date there has been limited focus on the online experience of those living with mental illness. There is limited understanding of what makes the internet a comprehensible and approachable place for this group (Kalckreuth, Trefflich, & Rummel-Kluge, 2014).

Of the minimal evidence available, it is suggested that problems encountered by mental health consumers when accessing the online environment include feelings of being overwhelmed, difficulty understanding the information presented and the potential for an increase in symptomology as a result of the complex processing transactions required to move around many websites (Kalckreuth et al., 2014; National Mental Health Consumer and Carer Forum, 2011). Given that the National Standards for Mental Health Services (Australian Government, 2010) require organisations providing specialised mental health support to provide services that respond to the specific needs of this group, it is a natural assumption that this responsibility would extend to the presentation of online information.

In light of the difficulties experienced by those with mental illness in accessing the NDIS, the aim of this study was to assess the accessibility, usability, reliability and readability of websites that provided information about the NDIS to mental health consumers. Of additional interest was whether mental health support organisations were exhibiting an online presence that was more appropriately meeting the needs of mental health consumers than general information sites.

## **METHODOLOGY**

In November 2018, a world wide web search to identify websites providing NDIS information to mental health consumers was conducted via the Google search engine, using a Chrome web-browser on a Windows platform. This search engine was chosen as it is

preferred by the majority of people searching online, both internationally and within Australia (Chris, 2016; Roy Morgan Research, 2016; Sharma, Gupta, Mateen, & Pratap, 2017). The Google search engine default settings were used, and a Google incognito browser was utilised to eliminate the researchers' previous browsing history influencing search results.

### **Search term selection**

Relevant search term strings that mental health consumers would most likely use when searching for NDIS related information online were identified. Due to the relative newness of the scheme at the time of the research being conducted, common methods for determining relevant search terms (i.e. trending keyword databases) were not effective for this study. The thirty-eight search terms (Table 1) were therefore generated by a combination of research conducted with mental health consumers (Visser, Stewart & Slattery, in press), discussions between research team members, consultation with a lived experience practitioner/academic, and a list of the most common search terms from the Google related searches function.

[Insert Table 1 near here]

### **Website selection**

To identify websites to be included in the study, the thirty-eight identified search terms were entered into Google. Chitika (2013) notes the average search engine visitor does not venture past the first page of ten search results. Specifically, 91.5% of people view only results displayed on the first page with a further 4.8% moving onto page two and the remaining 3.7% viewing page three and beyond, therefore only the first three website pages were recorded for each search term identified. In order to be included, a website had to be relevant to the NDIS and mental health consumers, be free to access and written predominantly in English. Once sponsored websites were excluded, a total of 1167 websites remained (Figure 1). From this

list, duplicate results were removed. Also eliminated at this stage were websites susceptible to the content being presented becoming out-of-date quickly (e.g., news websites), or containing information not relevant to for mental health consumers (e.g., designed for health professionals). Two websites were excluded due to loading errors. Additionally, social media results, (e.g., Facebook and YouTube), were excluded as they were unable to be assessed with the chosen instruments.

[Insert Figure 1 near here]

A further three websites were added to the final list. Two websites that a user was automatically directed to when clicking on NDIS information links within an identified website and a beta stage version of the new NDIS website released in December 2018 were included in the assessment process. This version of the NDIS website was designed to be more accessible and understandable for participants (National Disability Insurance Agency, 2018d).

A total of 127 websites were deemed relevant for analysis. The website selection process was undertaken within a period of one week to ensure the process was not affected by the rapid changes inherent in the online environment (Surman & Bath, 2013). To allow for further interpretation of the data, websites were categorised by the primary purpose of the service or organisation. Five broad organisation types were used for analysis: mental health support (n=30, organisations focussed on providing support to mental health consumers or their carers); general disability support (n=57, organisations who provide support to individuals living with a range of disabilities including mental health challenges); health information provision (n=11, organisations providing generalised information regarding health and wellbeing); government (n=20, incorporating local, state and federal government websites and departments thereof) and others (n=9).

## **Website Accessibility, Usability and Reliability**

The original LIDA instrument (Minervation Ltd, 2012) is a 43-item online tool used to assess website *accessibility* (the underlying structure and coding of the website meets best practice standards), *usability* (information can be located effectively and the website provides a user-friendly experience) and *reliability* (the website is a safe space to access information that is current, accurate and trustworthy). The LIDA has demonstrated good internal and convergent validity for evaluating health-related websites (Küçükdurmaz, Mutlu, Mutlu, & Parvizi, 2015; Modi, Laskar, & Modi, 2016; Raj, Sharma, Singh, & Goel, 2016; Redmond, Nason, Kelly, & McMahon, 2014; Tanabe et al., 2018). Due to advancements in website technology and coding, the LIDA developers recommended the accessibility component of the LIDA be amended to reflect the latest Web Content Accessibility Guidelines (WCAG) (version 2.0). The 16 original LIDA accessibility questions were based on the WCAG (version 1.0) (World Wide Web Consortium, 2008) and were replaced by the 12 question WCAG 2.0 checklist provided by the World Wide Web Consortium (2017). This change therefore reduced the overall number of LIDA questions from 43 to 39 (accessibility = 12, usability = 18 and reliability = 9).

The number of pages reviewed per website varied. The website home page was first reviewed, followed by NDIS specific pages if present. These pages served the basis of the assessment of the accessibility and usability components. An average of three pages were assessed with a range of two to 10 pages. Further web pages were then explored in relation to reliability assessment criteria (e.g. ownership and funding details). All LIDA questions were rated using a 4-point Likert scale (0 = never, 1 = sometimes, 2 = mostly and 3 = always) with the maximum score for each website across all questions being 117. While the LIDA provided guidance regarding utilisation of Likert ratings for some of the questions the majority did not include such direction. For those questions without clear guidance, a scoring

approach and associated guide was developed to assist with consistency as well as the interrater reliability process. Additionally, the WCAG 2.0 questions that replaced the original LIDA accessibility questions were transferred to Likert ratings to ensure consistency in scoring. Table 2 provides examples of how the Likert scoring was applied.

[Insert Table 2 near here]

A scoring approach used in similar studies was adopted for this research (Gouveia, Qureshi, Kern, Liu, & Capasso, 2017; Raj et al., 2016) with the total scores for accessibility, usability and reliability converted to a percentage score out of 100 and the results classified into low (<50%), moderate (50% to 90%) and high quality (>90%). Inter-rater reliability for LIDA scores was calculated based on two coders' ratings of seven websites (5%) using Spearman's correlation. Inter-rater agreement ranged from low for reliability ( $r_s = .48$ ) to moderate for accessibility ( $r_s = .60$ ) and usability ( $r_s = .55$ ) as per the guidance provided in Mukaka (2012) and Schober, Boer, and Schwarte (2018).

### **Website Readability**

The Simple Measure of Gobbledygook (SMOG; McLaughlin, 1969) and the Flesch-Kincaid Grade Level (FKGL; Kincaid, Fishburne, Rogers & Chissom, 1975) were used to measure website readability and educational level. The SMOG and FKGL are considered as highly reliable and have been thoroughly validated and were chosen based on their efficacy to determine literacy levels for health related materials (Badarudeen & Sabharwal, 2010; Friedman & Kao, 2008; McInnes & Haglund, 2011; Nasser et al., 2012; Readabilityformulas.com, n.d.; Shedlosky-Shoemaker, Sturm, Saleem, & Kelly, 2008; Surman & Bath, 2013; Wang, Miller, Schmitt, & Wen, 2013). Both formulas aim to evaluate whether the text is linguistically understandable and utilise a grade-level rating system with a lower grade level representing a lower assumed ability for literacy and comprehension.

According to the Australian Government (n.d.) an ideal grade level for the readability of digital content is grade three to four (ages nine to ten), however, grade seven to eight (ages 12 to 14) may be a more achievable target for website developers and therefore both levels were used for analysis. An automated readability tool at Readabilityformulas.com (<http://readabilityformulas.com>) was utilised for calculating SMOG and FKGL scores. Online readability tools use automatic coding to apply pre-existing formulas, such as SMOG and FKGL, to blocks of text to provide a quick and reliable method of analysing online text (Beaunoyer, Arsenault, Lomanowska & Guitton, 2017).

## **FINDINGS**

**LIDA scores.** The total mean overall LIDA score for accessibility, usability and reliability for all websites was 65%, ranging from 43% to 81% (Table 3). The majority of websites (96%) fell within the moderate quality category with 4% of websites falling within the low quality category. No websites returned a score within the high quality “gold standard” category. Across all organisation types, there was little variation in the average overall LIDA scores. Government operated and health information focused websites returned the highest results and mental health support websites performed the lowest.

[Insert Table 3 near here]

**Accessibility.** The mean accessibility score was 73%, ranging from 45% to 92% (Table 2). The majority of websites (96.1%) were of moderate quality, 2.4% returned a high quality score and the remaining 1.6% low quality. Government organisations had the highest accessibility score (81%) and mental health support organisations the lowest (71%). Of significant concern was the high number (n=77) of websites that failed the automated browser test. An automated browser test utilises an online system to check a webpage across a variety of popular browsers (e.g. Internet Explorer, Chrome, iOS, Android, Firefox) for

missing, redundant or incorrect coding or elements that lead to problems with a user loading and navigating a website successfully (Choudhary, Versee & Orso, 2010).

**Usability.** The mean LIDA usability score across all 127 websites was 69%, ranging from 44% to 91% (Table 3). The majority (97.6%) of websites were of moderate quality and a minority were considered high (0.8%) or low quality (1.6%). Organisations which focused on mental health support, general disability support and health information provision, provided the highest quality experience for usability with a mean score of 70%. Average usability scores were impacted by a lack of effective search functionality on many websites, limiting access to relevant content (See Table 2 for examples). Additionally, there was inadequate evidence of personalisation options across the websites. ‘Personalisation’ requirements included the ability to access website content in another language or the ability to navigate to a section of the website specific to individual situations (e.g., a section dedicated to ‘carers’, or those ‘living with disability’). When present, personalisation elements such as these lead to a more relevant and cohesive online experience for the visitor.

**Reliability.** The LIDA reliability scores had the largest variability (10% - 81%). The mean score was 53%, with 43.3% of websites considered low quality and the remaining 56.7% moderate quality (Table 3). Similar to the outcome for accessibility, those organisations directly supporting mental health consumers scored the lowest with a mean score of 47%. These low scores were primarily due to a lack of supporting references or sources for health-related information (See Table 2 for details). Health information provision websites returned the highest result (61%), due to the supply of evidence (e.g. references or source details) regarding the origin of health-related statements. Across the majority of sites assessed, there was no evidence of users being able to submit publicly accessible comments on the information and content presented on a website thereby restricting the ability of those with lived experience having their voice heard.

**Readability.** No website returned an acceptable readability score using either the SMOG or FKGL based on the Australian Government’s recommended educational grade level (three to four) (Australian Government, n.d.). When utilising the less ideal alternative of grade level eight (Australian Government, n.d.), 27.6% of websites were deemed to have acceptable readability using the SMOG tool. SMOG readability scores across all websites ranged from grade level 5.5 to 15.5 with a mean score of grade level 10 (Table 4). When calculating readability via FKGL, 25.2% of websites were assessed as having the acceptable grade eight level, ranging from grade 6 to 18.5 with an average readability score of grade level 11. In contrast to the other quality markers assessed by LIDA, mental health support organisational websites returned more acceptable readability scores (9.8 for SMOG and 10.4 for FKGL) than other organisation types. These scores suggested that mental health support websites consist of more acceptable language and sentence structure than their counterparts.

[Insert Table 4 near here]

**The NDIS website – original versus beta.** The timing of this research project allowed for a direct comparison between the original NDIS website and a beta version. The beta site showed small improvements in the elements of usability (72% to 78%) and reliability (74% to 78%), and the overall LIDA score (77% to 78%). Accessibility did not show an improvement, with the score reducing from 83% to 78%. However, there were significant improvements in the readability scores for both SMOG (12.5 to 8) and FKGL (14 to 8) for the beta version of the NDIS website, allowing those with an education level of Grade 8 greater access to information.

## **DISCUSSION**

As Australians living with disability transition to the NDIS there is a need to ensure that information presented online about the scheme is of a high quality and accessible to those

needing it the most. This need is particularly pertinent amongst those living with mental health conditions given the reported shortfalls in scheme uptake amongst this group (Smith-Merry et al., 2018). This study aimed to determine the accessibility, usability, reliability and readability of websites providing information to people with psychosocial disability in regard to the NDIS. Additionally, the study aimed to investigate if mental health support organisations, with their specialised knowledge regarding the needs of mental health consumers, translated to the provision of a more appropriate online environment for this group than that of other organisation types.

The results identified that further attention needs to be given to the presentation of online information regarding the NDIS for people experiencing mental illness. Accessibility measures the functions of a website that make using the site latently navigable, particularly for those living with disability. Many people experience concurrent disabilities, with 19% of those living with hearing impairment and between 24.5% and 30.9% of those with visual impairment also experiencing psychological comorbidities (Shoham, Lewis, McManus, & Cooper, 2019). Accessibility is an important element, allowing information, services and products to be used by the widest range of people with different characteristics and capabilities (Borg, Lantz & Gulliksen, 2015). Most websites were of moderate accessibility quality, however those providing specific services to mental health consumers returned a collectively lower mean accessibility score of 71% versus the overall accessibility mean of 73% of all the websites combined. A website that lacks accessibility makes interacting with a site insidiously challenging as it deals with the underlying or automatic functions of a website, such as coding, that a person may not be cognizant of. Limiting distractions (moving, flashing or blinking content), providing better signposting of required fields on embedded web forms and clear explanations of submission errors can reduce confusion and frustration when visiting and navigating websites (Bernard, Sabariego, & Cieza, 2016).

Along with accessibility, it is important that people are able to access accurate and trustworthy information – the key elements of reliability. This study found that overall, the websites assessed scored an average of 53% for reliability, the lowest collective mean score for any of the LIDA elements. Additionally, mental health support organisations as a sub-group returned a mean reliability score of 47%. Reliability is particularly important for mental health consumers who may experience higher levels of anxiety and paranoia (Healthdirect Australia, 2018; Mind, 2016; SANE Australia, 2005) and have often turbulent relationships with health service providers (Major & O'Brien, 2005; Mental Health Australia, 2018; Wahl, 1999). Improvements to website reliability can be achieved by providing reference or source details when presenting health information or making health statements (e.g., fact sheets related to mental health diagnosis), providing details about when the information was updated, and transparency around organisation funding, affiliations and objectives (Minervation Ltd, 2007). Ensuring website material is reliable allows users to understand where information has been sourced, check credibility and currency, and make sure that they have access to appropriate information on which to base decisions. In a digital world where there are no restrictions regarding the content published online (Harland & Bath, 2007; Morozov, 2011; Pant et al., 2012), being able to measure and determine reliability is imperative. In relation to the NDIS more specifically, website reliability is important due to the pace of policy and service delivery change. Measures of reliability assist in ensuring that potential and current NDIS participants have access to the most current and accurate information on how best to use the scheme.

When considering usability (whether a website provides visitors with a user-friendly experience), the mean usability score across all organisation types collectively was 69%, with mental health support organisations scoring only marginally higher, at 70%. Many of the websites, particularly those providing health information, required a high level of computer

literacy and literacy skills to access and understand content. Presenting information in a way that is easy to understand, limiting jargon and complex terminology without explanation, and using graphics to support the written information being presented are simple changes that improves access to information (Minervation Ltd, 2007). Additionally, an easy to find search facility that provides relevant and reliable search results can make a website more navigable, as does including options for personalisation such as content translators and sections targeting particular experiences (e.g., ‘Looking to Apply for the NDIS’ and ‘Already an NDIS Participant’) (Minervation Ltd, 2007). It is concerning that mental health support organisations do not attend to many of the enhancements that would improve the usability of their websites. As there is limited information about the specific online needs of mental health consumers, it is important that lived experience perspectives are better understood and included in website design

On a more positive note, mental health support organisation websites consistently scored more favourable readability results in comparison to other organisations. The overall readability means for all websites assessed were grade level 10 for SMOG and grade level 11 for FKGL, whilst mental health support services scored a grade level of 9.8 for SMOG and 10.4 for FKGL, placing them both closer to the acceptable grade level score of eight proposed by the Australian Government (Australian Government, n.d.). Generally, a lower grade level for readability results in a more approachable and understandable online environment which is more conducive to engaging in and attaining knowledge. This is an important consideration for mental health consumers given that the experience of mental illness often interrupts people’s participation in education (Esch et al., 2014), with improved readability scores facilitating independence, agency, empowerment and equity in accessing important information (Barclay & Bowers, 2017).

Overall, the study results suggest that when a mental health consumer goes online to learn more about the NDIS they are met with an experience that is often confusing and challenging, with the potential to exacerbate symptoms of their illness and discourage seeking access to essential information regarding supports available (Stewart et al., 2020). Furthermore, these barriers to accessing information about the NDIS has the potential to lead to further marginalisation of this already vulnerable group of people, denying access to appropriate supports.

Theoretically, the NDIS is aligned with the message of empowerment and agency that is prevalent in recovery discourse (Department of Health and Ageing, 2013). When equipped with accessible, usable, reliable and readable information, those living with mental illness are better empowered to enact their personal recovery journey. However, in its current state, the NDIA's goal of supporting NDIS participants to realise their personally determined goals and aspirations is not being achieved (Lyons, 2018; Mental Health Australia, 2018; National Disability Insurance Agency, 2018c). Whilst it is encouraging to see an awareness being shown by the NDIA that further work needs to be done to make their online presence more appropriate for a range of disability experiences, more consideration and effort needs to be provided by all levels of Government, NDIS providers and organisations to ensure equitable access to information and resources.

As previous literature has highlighted, the lack of existing knowledge about precisely what constitutes a positive online experience for mental health consumers' needs further investigation (Bernard, Sabariego, Baldwin, Abou-Zahra, & Cieza, 2015; Bernard, Sabariego, & Cieza, 2016). Through better understanding, a framework or guidelines could be developed, providing standards and highlighting the elements and adaptations to be considered when designing a website that best suits the needs of mental health consumers. Such consideration would go well beyond NDIS specific information, providing more

approachable and responsive online environments to benefit mental health consumers all over the world. The success of such an approach has been seen in the global adoption of accessibility guidelines, now embedded in the legal requirements of website presentation in many countries (World Wide Web Consortium, 2018). The Australian Government is well-placed to lead this innovation, given their undertaking to revolutionise the provision of support for those living with mental health issues. Ideally, this would be done in collective consultation with individuals with lived experience of mental health issues, as well as mental health support organisations.

### **Study limitations**

Whilst the LIDA was determined to be the most appropriate assessment instrument, shortcomings were encountered including the relevance of the questions for mental health specific websites. Currently, there is no website assessment tool available that concentrates on the specific needs of mental health consumers, further supporting the need for focussed attention around what constitutes a positive online experience for this group and how to assess this specifically. Short of designing and validating a new assessment instrument, future research endeavours could seek to obtain the input of individuals with lived experience of mental health challenges to inform the selection of, and advise on appropriate amendment of, existing website assessment tools.

Additionally, the highly subjective nature of the LIDA questions contributed to the less than ideal inter-rater agreement scores within this study (Bavbek & Tuncer, 2017; Patel & Cobourne, 2014; Prasanth, Jayarajah, Mohanappirian, & Seneviratne, 2018). To improve inter-rater agreement, it is recommended that more specific guidelines be developed for the LIDA tools accompanied by greater discussion between raters before commencing the website scoring. In addition, inter-rater agreement assessments for at least 10% of websites would ideally be conducted on the same day in order to avoid any potential for rating

discrepancies caused by changes to the website, pertinent given that the internet is a fast-paced and everchanging environment.

## **CONCLUSION**

The results of this study suggest that the current lack of understanding regarding the needs of mental health consumers when accessing the online environment is a potential barrier to engaging with important opportunities and supports such as the NDIS. Governments and organisations are increasingly relying on the internet as the primary means to convey important information to consumers. Ensuring that mental health consumers feel that the online environment is safe, welcoming and will not exacerbate the symptoms of their mental health challenges is imperative. Establishment of formal guidelines and implementation strategies relating to what constitutes a positive online experience for this cohort, similar to the broad accessibility guidelines adopted internationally, could be an ideal place to start. The benefits of such effort would not only flow through to improved understanding and uptake of the NDIS in Australia but would also aid mental health consumers globally in the pursuit of their personal recovery goals.

## REFERENCES

- Arblaster, K., Mackenzie, L., Matthews, L., Willis, K., Gill, K., Hanlon, P., & Laidler, R. (2018). Learning from consumers: An eDelphi study of Australian mental health consumers' priorities for recovery-oriented curricula. *Australian Occupational Therapy Journal*, 65(6), 586-597. doi:10.1111/1440-1630.12518
- Australian Bureau of Statistics. (2018). *8146.0 - Household use of information technology, Australia, 2016-17*. Retrieved from <http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/8146.0Main+Features12016-17?OpenDocument>
- Australian Government. (2010). *National standards for mental health services*. Retrieved from <http://www.health.gov.au/internet/main/publishing.nsf/Content/mental-pubs-n-servst10>
- Australian Government. (n.d.). Writing style. Retrieved from <https://guides.service.gov.au/content-guide/writing-style/>
- Badarudeen, S., & Sabharwal, S. (2010). Assessing readability of patient education materials: Current role in orthopaedics. *Clinical Orthopaedics and Related Research*, 468(10), 2572-2580. doi:10.1007/s11999-010-1380-y
- Barclay, P. A., & Bowers, C. A. (2017). Design for the illiterate: A scoping review of tools for improving the health literacy of electronic health resources. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting*, 61(1), 545-549. doi:10.1177/1541931213601620
- Bavbek, N. C., & Tuncer, B. B. (2017). Information on the internet regarding orthognathic surgery in Turkey: Is it an adequate guide for potential patients? *Turkish Journal of Orthodontics*, 30(3), 78-83. doi:10.5152/TurkJOrthod.2017.17027

- Beaunoyer, E., Arsenault, M., Lomanowska, A., & Guitton, M. (2017). Understanding online health information: Evaluation, tools, and strategies. *Patient Education and Counselling, 100*, 183-189. doi:10.1016/j.pec.2016.08.028
- Berland, G. K., Elliott, M. N., Morales, L. S., Algazy, J. I., Kravitz, R. L., Broder, M. S., . . . McGlynn, E. A. (2001). Health information on the Internet: Accessibility, quality, and readability in English and Spanish. *JAMA, 20*, doi:10.1001/jama.285.20.2612
- Bernard R., Sabariego C., Baldwin D., Abou-Zahra S., Cieza A. (2015) BETTER-project: Web accessibility for persons with mental disorders. In: M. Kurosu (Ed.), *Human-Computer Interaction, Users and Contexts 17th International Conference, HCI International* (pp.25-34). Switzerland: Springer International Publishing.
- Bernard, R., Sabariego, C., & Cieza, A. (2016). Barriers and facilitation measures related to people with mental disorders when using the web: A systematic review. *Journal of Medical Internet Research, 18*(6), e157. doi:10.2196/jmir.5442
- Borg, J., Lantz, A. & Gulliksen, J. (2015). Accessibility to electronic communication for people with cognitive disabilities: A systematic search and review of empirical evidence. *Universal Access in the Information Society, 14*, 547–562. doi: 10.1007/s10209-014-0351-6
- Chitika. (2013). *Chitika insights: The value of Google result positioning*. Retrieved from <http://info.chitika.com/uploads/4/9/2/1/49215843/chitikainsights-valueofgoogleresultspositioning.pdf>
- Choudhary, S., Versee, H., & Orso, A. (2010). WEBDIFF: Automated identification of cross-browser issues in web applications [Paper presentation]. IEEE International Conference on Software Maintenance, Timisoara, Romania. doi:10.1109/ICSM.2010.5609723

- Chris, A. (2016). Top 10 search engines in the world. Retrieved from <https://www.reliablesoft.net/top-10-search-engines-in-the-world/>
- Crozier, M., Muenchberger, H., Colley, J., & Ehrlich, C. (2013). The disability self-direction movement: Considering the benefits and challenges for an Australian response. *48*(4), 455-472. Retrieved from <https://onlinelibrary.wiley.com/journal/18394655>
- Department of Health. (2009). *Priority area 1: Social inclusion and recovery*. Retrieved from [www.health.gov.au/internet/publications/publishing.nsf/Content/mental-pubs-f-plan09-toc~mental-pubs-f-plan09-pr1](http://www.health.gov.au/internet/publications/publishing.nsf/Content/mental-pubs-f-plan09-toc~mental-pubs-f-plan09-pr1)
- Department of Health and Ageing. (2013). *A National framework for recovery-oriented mental health services: Guide for practitioners and providers*. Retrieved from [http://www.health.gov.au/internet/main/publishing.nsf/Content/67D17065514CF8E8CA257C1D00017A90/\\$File/recovgde.pdf](http://www.health.gov.au/internet/main/publishing.nsf/Content/67D17065514CF8E8CA257C1D00017A90/$File/recovgde.pdf)
- Devitt, B. M., Hartwig, T., Klemm, H., Cosic, F. T., Green, J., Webster, K. E., . . . Baker, J. F. (2017). Comparison of the source and quality of information on the internet between anterolateral ligament reconstruction and anterior cruciate ligament reconstruction: An Australian experience. *Orthopaedic Journal of Sports Medicine*, *5*(12). doi:10.1177/2325967117741887
- Duplaga, M. (2017). Digital divide among people with disabilities: Analysis of data from a nationwide study for determinants of internet use and activities performed online. *PLoS ONE*, *12*(6). doi: 10.1371/journal.pone.0179825
- Esch, P., Bocquet, V., Pull, C., Couffignal, S., Lehnert, T., Graas, M., . . . Anseau, M. (2014). The downward spiral of mental disorders and educational attainment: a systematic review on early school leaving. *BMC Psychiatry*, *14*(1), 237. doi:10.1186/s12888-014-0237-4

- Friedman, D. B., & Kao, E. K. (2008). A comprehensive assessment of the difficulty level and cultural sensitivity of online cancer prevention resources for older minority men. *Preventing Chronic Disease, 5*(1), A07. Retrieved from <https://www.ncbi.nlm.nih.gov.libraryproxy.griffith.edu.au/pmc/journals/245/>
- Gouveia, C. J., Qureshi, H. A., Kern, R. C., Liu, S. Y.-C., & Capasso, R. (2017). An assessment of online information related to surgical obstructive sleep apnea treatment. *Sleep Science and Practice, 1*(1), 6. doi:10.1186/s41606-016-0007-y
- Hancock, N., Gye, B., Digolis, C., Smith-Merry, J., Borilovic, J., & De Vries, J. (2019). *Commonwealth mental health programs monitoring project: Tracking transitions of people from PIR, PHaMs and D2DL into the NDIS. Final report.* Retrieved from <https://www.ntmhc.org.au/wp-content/uploads/2019/10/CMHA-and-University-of-Sydney-NDIS-Transitions-Final-Report-September-2019.pdf>
- Harland, J., & Bath, P. (2007). Assessing the quality of websites providing information on multiple sclerosis: Evaluating tools and comparing sites. *Health Informatics Journal, 13*, 207-221. doi:10.1177/1460458207079837
- Healthdirect Australia. (2018). Symptoms of mental illness. Retrieved from <https://www.healthdirect.gov.au/symptoms-of-mental-illness>
- Kaicker, J., Dang, W., & Mondal, T. (2013). Assessing the quality and reliability of health information on ERCP using the DISCERN instrument. *Health Care Current Reviews, 1*(1). doi:10.4172/hccr.1000104
- Kalckreuth, S., Trefflich, F., & Rummel-Kluge, C. (2014). Mental health related internet use among psychiatric patients: A cross-sectional analysis. *BMC Psychiatry, 14*. doi:http://dx.doi.org/10.1186/s12888-014-0368-7
- Kincaid, J., Fishburne, R., Rogers, R., & Chissom, B. (1975). Derivation of new readability formulas (automated readability index, Fog count and Flesch reading ease formula)

- for Navy enlisted personnel. *Institute for Simulation and Training*, 56. Retrieved from <https://stars.library.ucf.edu/istlibrary/56>
- Küçükdurmaz, F., Mutlu, S., Mutlu, H., & Parvizi, J. (2015). A comparison of the quality of online information about total knee arthroplasty available in Turkish and English: A cross-sectional study. *Acta Orthopaedica et Traumatologica Turcica*, 49(4), 370-374. doi:10.3944/AOTT.2015.14.0291
- Lyons, A. (2018). New report reveals systemic problems with NDIS review process. Retrieved from <https://www1.racgp.org.au/newsgp/professional/new-report-reveals-systemic-problems-with-ndis-rev>
- Major, B., & O'Brien, L. T. (2005). The social psychology of stigma. *Annual Review of Psychology*, 56, 393-421. doi:10.1146/annurev.psych.56.091103.070137
- Maloney, S., Ilic, D., & Green, S. (2005). Accessibility, nature and quality of health information on the Internet: a survey on osteoarthritis. *Rheumatology*, 3. doi:10.1093/rheumatology/keh498
- McInnes, N., & Haglund, B. J. A. (2011). Readability of online health information: Implications for health literacy. *Informatics for Health and Social Care*, 36(4), 173-189. doi:10.3109/17538157.2010.542529
- McLaughlin, G. H. (1969). SMOG grading: A new readability formula. *Journal of Reading*, 12(8), 639-646. Retrieved from <https://www.jstor.org/journal/jread>
- Mental Health Australia. (2018). *National Disability Insurance Scheme: Psychosocial Disability Pathway*. Retrieved from [https://mhaustralia.org/sites/default/files/images/ndis\\_psychosocial\\_pathway\\_consultation\\_project\\_-\\_final\\_report\\_-\\_may\\_2018.pdf](https://mhaustralia.org/sites/default/files/images/ndis_psychosocial_pathway_consultation_project_-_final_report_-_may_2018.pdf)

- Mind. (2016). Causes of paranoia. Retrieved from <https://www.mind.org.uk/information-support/types-of-mental-health-problems/paranoia/causes-of-paranoia/#.XL5jR5gzbIU>
- Minervation Ltd. (2007). The LIDA instrument [Manual]. <http://www.minervation.com/wp-content/uploads/2011/04/Minervation-LIDA-instrument-v1-2.pdf>
- Minervation Ltd. (2012). Is the LIDA website assessment tool valid? Retrieved from <http://www.minervation.com/does-lida-work/#more-964>
- Modi, M., Laskar, N., & Modi, B. N. (2016). Cardiac resynchronization therapy online: What patients find when searching the World Wide Web. *Pacing and Clinical Electrophysiology*, 39(6), 542-547. doi:10.1111/pace.12853
- Morozov, E. (2011). *The net delusion: The dark side of internet freedom* (1st ed.). New York: Public Affairs.
- Mukaka, M. M. (2012). Statistics corner: A guide to appropriate use of correlation coefficient in medical research. *Malawi Medical Journal*, 24(3), 69-71. Retrieved from <http://www.mmj.mw/>
- Nasser, S., Mullan, J., & Bajorek, B. (2012). Assessing the quality, suitability and readability of Internet-based health information about Warfarin for patients. *Australasian Medical Journal*, 5(3), 194-203. doi:10.4066/amj.2012862
- National Disability Insurance Agency. (2016). *Psychosocial disability, recovery and the NDIS* [Fact sheet]. Retrieved from <https://www.ndis.gov.au/medias/documents/heb/h21/8799160959006/Fact-Sheet-Psychosocial-disability-recovery-and-the-NDIS-PDF-774KB-.pdf>
- National Disability Insurance Agency. (2018a). *Creating your plan*. Retrieved from <https://www.ndis.gov.au/participants/creating-your-plan>

- National Disability Insurance Agency. (2018b). *How to use the Myplace portal*. Retrieved from <https://www.ndis.gov.au/participants/using-your-plan/managing-your-plan/how-use-myplace-portal>
- National Disability Insurance Agency. (2018c). *Improving the NDIS participant and provider experience*. Retrieved from <https://www.ndis.gov.au/medias/documents/pathway-review-report/Report-NDIS-Pathway-Review.pdf>
- National Disability Insurance Agency. (2018d). *New and improved NDIS website* [Press release]. Retrieved from <https://www.ndis.gov.au/news/1093-new-and-improved-ndis-website>
- National Disability Insurance Agency. (2019a). *COAG Disability Reform Council: Quarterly report 30 September 2019*. Retrieved from <https://www.ndis.gov.au/media/1994/download>
- National Disability Insurance Agency. (2019b). *Information, linkages and capacity building (ILC)*. Retrieved from <https://www.ndis.gov.au/community/information-linkages-and-capacity-building-ilc>
- National Mental Health Consumer and Carer Forum. (2011). *Unravelling psychosocial disability*. Retrieved from [https://nmhccf.org.au/sites/default/files/docs/nmhccf\\_psychosocial\\_disability\\_booklet\\_web\\_version\\_27oct11.pdf](https://nmhccf.org.au/sites/default/files/docs/nmhccf_psychosocial_disability_booklet_web_version_27oct11.pdf)
- Pant, S., Deshmukh, A., Murugiah, K., Kumar, G., Sachdeva, R., & Mehta, J. L. (2012). Assessing the credibility of the “YouTube approach” to health information on acute myocardial infarction. *Clinical Cardiology*, 35(5), 281-285. doi:10.1002/clc.21981
- Patel, A., & Cobourne, M. T. (2014). The design and content of orthodontic practise websites in the UK is suboptimal and does not correlate with search ranking. *European Journal of Orthodontics*, 37(4), 447-452. doi:10.1093/ejo/cju078

- Prasanth, A. S., Jayarajah, U., Mohanappirian, R., & Seneviratne, S. A. (2018). Assessment of the quality of patient-oriented information over Internet on testicular cancer. *BMC Cancer*, 18(1). doi: 10.1186/s12885-018-4436-0
- Productivity Commission. (2011). *Disability care and support: Productivity commission inquiry report - overview and recommendations (No.54, 31 July 2011)*. Retrieved from <https://www.pc.gov.au/inquiries/completed/disability-support/report/disability-support-overview-booklet.pdf>
- Raj, S., Sharma, V. L., Singh, A. J., & Goel, S. (2016). Evaluation of quality and readability of health information websites identified through India's major search engines. *Advances in Preventive Medicine*, 2016. doi:10.1155/2016/4815285
- Readabilityformulas.com. (n.d.). *How to use the SMOG readability formula on health literacy materials*. Retrieved from <http://www.readabilityformulas.com/articles/how-to-use-smog-readability-formulas-on-health-literacy-materials.php>
- Redmond, C. E., Nason, G. J., Kelly, M. E., & McMahon, C. (2014). Transrectal ultrasound guided biopsy of the prostate: Is the information accessible, usable, reliable and readable? *Current Urology*, 8(1), 32-37. doi: 10.1159/000365686
- Roy Morgan Research. (2016). *Australians spent 552 million hours Googling in 2015: Article No. 6743* [Press release]. Retrieved from <http://www.roymorgan.com/findings/6743-google-dominates-bing-and-yahoo-as-top-australian-search-website-december-2015-201604050438>
- SANE Australia. (2005). *Mental illness and social isolation*. Retrieved from [https://www.sane.org/images/PDFs/0510\\_INFO\\_RB1.pdf](https://www.sane.org/images/PDFs/0510_INFO_RB1.pdf)
- Schober, P., Boer, C., & Schwarte, L. A. (2018). Correlation coefficients: Appropriate use and interpretation. *Anesthesia & Analgesia*, 126(5), 1763–1768. doi:10.1213/ANE.0000000000002864

- Sharma, D., Gupta, A., Mateen, A., & Pratap, S. (2017). Making sense of the changing face of Google's search engine results page: an advertiser's perspective. *Journal of Information, Communication and Ethics in Society*, 16(1), 90-107.  
doi:10.1108/JICES-06-2017-0035
- Shedlosky-Shoemaker, R., Sturm, A. C., Saleem, M., & Kelly, K. M. (2008). Tools for assessing readability and quality of health-related web sites. *Journal of Genetic Counseling*, 18(1), 49. doi:10.1007/s10897-008-9181-0
- Shoham, N., Lewis, G., McManus, S., & Cooper, C. (2019). Common mental illness in people with sensory impairment: Results from the 2014 adult psychiatric morbidity survey. *BJPsych open*, 5(6), e94. doi: 10.1192/bjo.2019.81
- Simpson, A., & Baldwin, E. M. (2017). Googling NDIS: Evaluating the quality of online information about the National Disability Insurance Scheme for caregivers of deaf children. *Deafness & Education International*, 19(1), 22-28.  
doi:10.1080/14643154.2017.1285979
- Slade, M., Amering, M., & Oades, L. (2008). Recovery: An international perspective. *Epidemiologia e Psichiatria Sociale*, 17(2), 128-137.  
doi:10.1017/S1121189X00002827
- Smith-Merry, J., Hancock, N., Bresnan, A., Yen, I., Gilroy, J., & Llewellyn, G. (2018). *Mind the gap: The National Disability Insurance Scheme and psychosocial disability. Final report: Stakeholder identified gaps and solutions*. Retrieved from University of Sydney website: <http://sydney.edu.au/health-sciences/documents/mind-the-gap.pdf>
- Stewart, V., Visser, K., & Slattery, M. (2020). Supporting choice, recovery and participation: Information is the key to NDIS access for those with psychosocial disability. *Journal of Social Inclusion*, 11(2).

- Surman, R., & Bath, P. A. (2013). An assessment of the quality of information on stroke and speech and language difficulty web sites. *Journal of Information Science*, 39(1), 113-125. doi:10.1177/0165551512469775
- Tanabe, K., Fujiwara, K., Ogura, H., Yasuda, H., Goto, N., & Ohtsu, F. (2018). Quality of web information about palliative care on websites from the United States and Japan: Comparative evaluation study. *Interactive Journal of Medical Research*, 7(1), e7. doi:10.2196/ijmr.9574
- Thomas, J., Barraket, J., Wilson, C., Rennie, E., Ewing, S., & MacDonald, T. (2019). *Measuring Australia's digital divide: The Australian digital inclusion index 2019*. RMIT University and Swinburne University of Technology, Melbourne, for Telstra. doi:10.25916/5d6478f373869
- Visser, K., Stewart, V., & Slattery, M. (2019). *Supporting choice, recovery and participation: Information is the key to NDIS access for those with psychosocial disability*. Manuscript submitted for publication.
- Wahl, O. F. (1999). Mental health consumers' experience of stigma. *Schizophrenia Bulletin*, 25(3), 467-478. doi:10.1093/oxfordjournals.schbul.a033394
- Wang, L., Miller, M. J., Schmitt, M. R., & Wen, F. K. (2013). Assessing readability formula differences with written health information materials: Application, results, and recommendations. *Research in Social and Administrative Pharmacy*, 9(5), 503-516. doi:https://doi.org/10.1016/j.sapharm.2012.05.009
- Warr, D., Dickinson, H., Olney, S., Hargrave, J., Karanikolas, A., Kasidis, V., . . . Wilcox, M. (2017). *Choice, control and the NDIS*. Retrieved from Melbourne Social Equity website: [https://socialequity.unimelb.edu.au/\\_\\_data/assets/pdf\\_file/0008/2598497/Choice-Control-and-the-NDIS.pdf](https://socialequity.unimelb.edu.au/__data/assets/pdf_file/0008/2598497/Choice-Control-and-the-NDIS.pdf)

World Wide Web Consortium. (2008). *Web Content Accessibility Guidelines (WCAG) 2.0*.

Retrieved from <https://www.w3.org/TR/WCAG20/>

World Wide Web Consortium. (2017). *Easy checks: A first review of web accessibility*.

Retrieved from <https://www.w3.org/WAI/test-evaluate/preliminary/>

World Wide Web Consortium. (2018). *Web accessibility laws & policies*. Retrieved from

<https://www.w3.org/WAI/policies/>

Wyder, M., Bland, R., Herriot, A., & Crompton, D. (2015). The experiences of the legal processes of involuntary treatment orders: Tension between the legal and medical frameworks. *International Journal of Law and Psychiatry*, 38, 44-50.

doi:<https://doi.org/10.1016/j.ijlp.2015.01.006>

Table 1

*Final NDIS Search Terms*

---

1. Examples of psychosocial disability	20. NDIS Schizophrenia
2. Integrating Mental Health into the NDIS	21. Psychosocial Disability Assessment
3. Is Autism a Psychosocial Disability?	22. Psychosocial Disability Definition
4. NDIS and Bipolar	23. Psychosocial Disability NDIS
5. NDIS and Psychosocial Disability	24. Psychosocial Disability Types
6. NDIS Depression	25. What is a Psychosocial Disability?
7. NDIS Mental Health	26. What is meant by psychosocial disability?
8. NDIS Mental Health Eligibility	27. What does NDIS Pay For?
9. NDIS Mental Health Fact Sheet	28. Disability Support Pension and NDIS
10. NDIS Mental Health News	29. NDIS Funding Amounts
11. NDIS Mental Health Providers	30. NDIS
12. NDIS Mental Health Services	31. NDIS Tasmania
13. NDIS Mental Health Support	32. NDIS Victoria
14. NDIS Psychiatric Disability	33. NDIS New South Wales
15. NDIS Psychiatrist	34. NDIS Queensland
16. NDIS Psychology Providers	35. NDIS Western Australia
17. NDIS Psychosocial Disability Eligibility	36. NDIS South Australia
18. NDIS Psychosocial Disability Fact Sheet	37. NDIS Australian Capital Territory
19. NDIS Psychosocial Pathway	38. NDIS Northern Territory

---

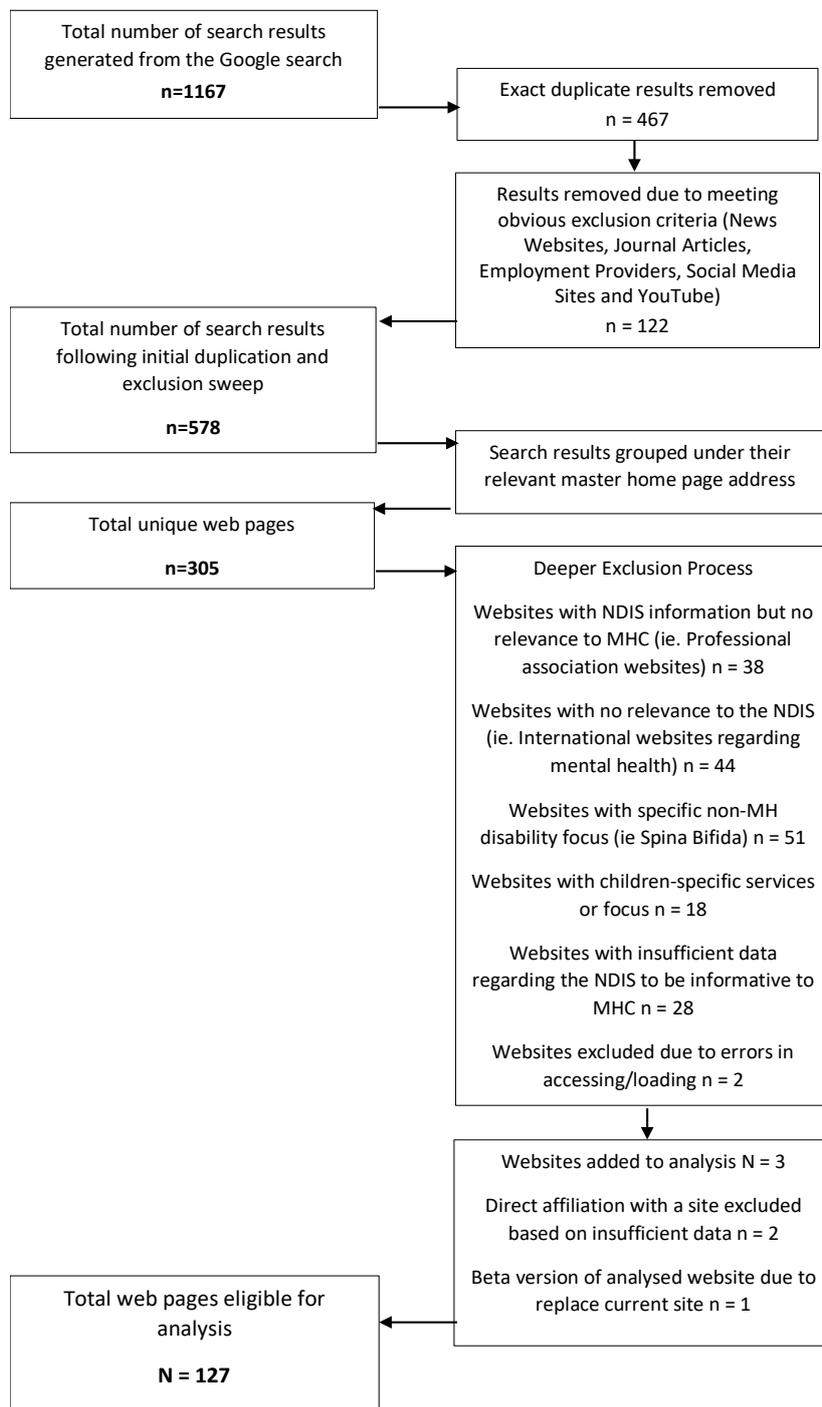
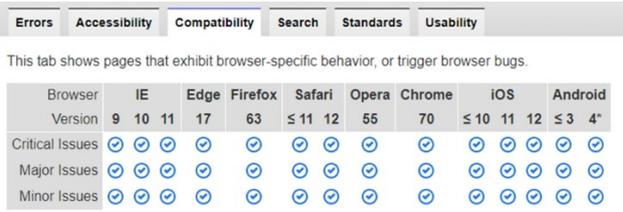
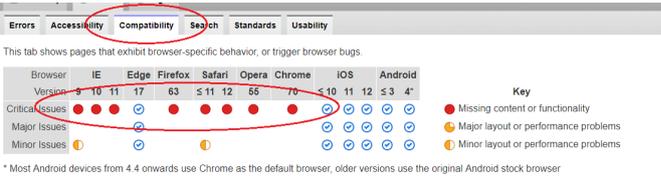


Figure 1. Flow diagram for website selection.

Table 2

Overview of the LIDA Criteria, Metrics and Rationale

Criteria	Metrics	Rationale
<b>Accessibility</b>	<b><i>The underlying functions of a website that make using the site latently navigable.</i></b>	
Moving, flashing, or blinking content	<p>No moving, flashing or blinking content present. If moving, flashing or blinking content is present, there should be functionality to stop or pause.</p> <p>A score of three required a website to have no moving, flashing, or blinking content or, if present, the content needed to be able to be stopped or paused via mouse and keyboard.</p> <p>A score of zero was represented by excessive use (multiple examples per page) of uncontrollable moving, flashing, or blinking content.</p>	<p>Moving, flashing or blinking content can move too quickly for people with lower processing capabilities. Additionally, it can distract a visitor away from the information they may be trying to read elsewhere on the page.</p>
Browser compatibility test	<p>A website needs to be functional across a range of browsers. A positive result required a site to have no critical or major errors across five of the most utilised browsers (Internet Explorer, Chrome, Firefox, iOS, and Android).</p> <p>The criteria was measured using an automated online browser compatibility tool (<a href="https://www.powermapper.com/">https://www.powermapper.com/</a>)</p> <p>A score of three (as shown in image below) was represented by a website that recorded no critical or major errors across the five common website browsers listed above.</p>  <p>A score of zero was given for websites that returned a critical or major error for any of the five common website browsers listed above (as shown in image below).</p> 	<p>Critical errors in browser compatibility result in a webpage not appearing correctly in such a way that it prevents user functionality, leading to a confusing and frustrating user experience.</p>
Registration	<p>A website that was freely accessible, with no registration requirements for any areas of the site represented a positive example and scored a three.</p> <p>If a website required a person to not only register, but to pay for registration, it was marked zero.</p>	<p>Requiring user registration to utilise a website, or parts thereof, can be a barrier to access for people</p>

Criteria	Metrics	Rationale
		<p>who hold concerns around the confidentiality of their information, stigmatisation or a wariness of authority. Requiring payment creates a barrier to those without the financial means to access the site.</p>
<b>Usability</b>	<b><i>Whether a website provides visitors with a user-friendly experience.</i></b>	
Does the site provide an effective search facility?	<p>This criteria was marked utilising a search for ‘NDIS’ on each page.</p> <p>An effective search facility is one that is easily locatable from the home page and that provided relevant results (i.e. No ‘dead’ links). A mark of three required these elements, as well as the ability to filter or refine a search.</p> <p>A score of zero was represented by a website that had no evidence of a search facility.</p>	<p>Many websites provide a broad range of information. An effective search facility allows a user to navigate easily and directly to the information that they require. A large number of search results, without the ability to filter or refine can feel unwieldy and overwhelming to a visitor.</p>
Does the web site integrate non-textual media?	<p>Non-textual media refers to drawings, diagrams, graphs, as well as audio, video and animation designed to support the text-based information presented.</p> <p>A mark of three required non-textual, professional and appropriate media to be present.</p> <p>A score of zero was given when unprofessional or inappropriate non-textual media appeared (e.g. overly complex, contradictory, graphic) or did not load correctly. The image below shows a screenshot of zero score website showing an image of a medical procedure deemed ‘graphic’.</p> 	<p>Non-textual media is useful for individuals with literacy or learning difficulties. Unprofessional non-textual media can cause a person to question the legitimacy of a website and can lead to confusion, misinformation or discomfort.</p>

Criteria	Metrics	Rationale
<b>Reliability</b>	<b><i>Evidence that the website provides an accurate and trustworthy experience and information.</i></b>	
Is site content updated at an appropriate interval?	<p>If evidence of a date stamp could be found on most pages of a website and, on the pages that were NDIS relevant, the site scored a three (as shown in image below).</p> <ul style="list-style-type: none"> <li>&gt; About the NDIS</li> <li>&gt; Receive regular updates</li> <li>&gt; What about carers?</li> <li>&gt; What about people living with a mental illness?</li> <li>&gt; What about young children?</li> <li>&gt; What if I am unhappy with my experience of the NDIS?</li> </ul>  <p>If there was no way to determine when a page was last updated, it was scored a zero.</p>	At the time of assessment, the NDIS was an area of rapid development. Access to up-to-date and accurate information was important to those seeking information as to their eligibility for the scheme.
Can the information be checked from original sources?	<p>If a website provided information relating to diagnosis, treatment or statistical information, appropriate detail to enable accessing the source of the information is needed.</p> <p>If information was referenced and the original source was easily located, a rating of three was given. Zero rating was given if diagnosis, treatment or statistical information was provided with no evidence of a source or reference point.</p>	Given the ungoverned nature of much of the information on the internet, empirical evidence to support information relating to diagnosis, treatment or statistical data is imperative.
Is it clear who runs the site?	<p>To score a three a website needed to clearly detail which organisation or individual was behind the site, including contact details and location.</p> <p>For a score of three, organisations required details regarding board members/managers/owners and for private practice or other individuals, details of the persons relevant qualifications or experience was required.</p> <p>A score of zero was given when a search of the most conventional pages where such information would be found did not locate sufficient detail.</p>	Providing detail as to who they are interacting with can provide a user with the information that they need to make a decision around whether they feel comfortable with trusting the information being provided.
Can users submit comments	This criteria sought to locate an option to provide 'in-page' comments which are those that remain on the page and visible to other users. A website that provided opportunity for a person to contribute in-page feedback or comment on parts of	Hearing the voice of mental health consumers is an integral part of

Criteria	Metrics	Rationale
on specific content?	<p>the website without the need to register was given a mark of three. The image below shows the comments form available on a websites blog section that represented an example of a site scored three for this question.</p> <p><b>Post a comment</b></p> <p><b>Name</b></p> <input data-bbox="408 521 971 562" type="text"/> <p><b>Email</b></p> <p><small>Note: this will be kept private</small></p> <input data-bbox="408 629 971 669" type="text"/> <p><b>Comment</b></p> <input data-bbox="408 723 971 781" type="text"/>	<p>the recovery framework. Therefore, allowing a person to express a view, ask clarifying questions or provide feedback is in line with government policy.</p>
	<p>If no option to provide in-page feedback could be located, a website scored a zero.</p>	

Table 3

*LIDA Overall, Accessibility, Usability and Reliability Percentage Scores – Mean, Range and Results by Organisation Type*

	Overall LIDA Score (%)	Accessibility Score (%)	Usability Score (%)	Reliability Score (%)
- Overall Mean Score	65	73	69	53
- Range	43-81	45-92	44-91	10-81
Mean Score by Organisation Type				
- Mental Health Support	63	71	70	47
- Government	68	81	66	58
- General Disability Support	65	72	70	52
- Health Information Provision	68	73	70	61
- Miscellaneous	67	77	68	56

Table 4

*SMOG and FKGL Grade Level Readability Scores – Mean, Range and Results by Organisation Type*

Readability	SMOG Grade Level	FKGL Grade Level
- Overall Mean Score	10	11
- Range	5.5-15.5	6-18.5
Mean Readability Score by Organisation Type		
- Mental Health Support	9.8	10.4
- Government	10.9	11.7
- General Disability Support	9.9	10.7
- Health Information Provision	11.1	12.1
- Miscellaneous	10.4	11.6