

Leveraging Chat-Based Interviews for Disability Inclusion

The Americans with Disabilities Act (ADA) was passed in 1990. This year, Australia's Disability Discrimination Act turned 30. Even after all that time, discrimination against candidates and employees with disabilities continues to be an important topic. Applying for a new role can be stressful enough. As a candidate with a disability, meeting barriers at the first gate is simply unacceptable.

The unemployment rate for those with a disability (10.1%) in 2021 was about twice as high as the rate for those without a disability (5.1%) (U.S. Bureau of Labor Statistics, 2022). Coupled with increased laws and regulations regarding the protection of disabled job applicants and employees (e.g., U.S. EEOC, 2022), it is no surprise that academics, employers, and selection vendors are keen to understand where potential disability bias exists so it can be reduced or, ideally, eliminated.

Many of the tasks allocated to candidates during recruitment -- such as video interviewing -- discriminate against candidates with disabilities. This type of unconscious bias can turn candidates away, undermining efforts by organisations to create an inclusive workplace culture.

At Sapia.ai, we've pioneered using smart chat-based experiences for candidate assessment. Chat is globally accepted as an effective and inclusive way to communicate, and its low-pressure nature removes barriers that traditional hiring methods can create. But it's not enough to simply believe in inclusivity. You have to measure it. We've worked to understand how chat interviews are perceived, adopted by, and how they impact people with disabilities.

The data shows that chat-based interviewing as an initial screening tool ensures your second-round candidate pool fairly represents all aspects of the community. It makes candidates feel comfortable and confident in bringing their best selves to their application.

Our mission at Sapia.ai is to deliver ethical Al for hiring that people love and trust. If you want to make your hiring process more inclusive, let's chat.



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Traditional face-to-face or video interviews create potential barriers for individuals with disabilities, due to the well-documented stigma and prejudice against those with disabilities (Scior, 2011; Thompson et al., 2011).

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One study found that fake accountant job applicants who had disclosed a disability were 26% less likely to receive employment interest from the employer than those with no disability. Worse, experienced candidates with disabilities were 34% less likely to receive interest, despite presenting equally high levels of qualifications (Ameri et al., 2015). In addition to the bias held by hiring managers or recruiters, another concern is that certain selection methods create a poor candidate experience for individuals with disabilities, causing them stress or anxiety and therefore stopping them from putting their best foot forward. For individuals with

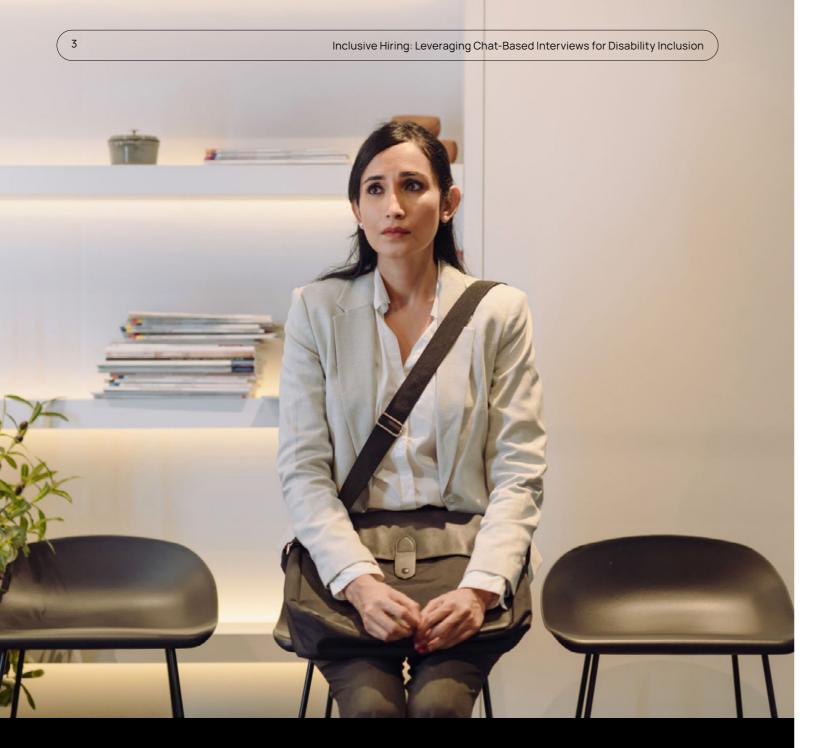
Autism Spectrum Disorder (ASD) in particular, in-person or video interviews can be very stressful, with less than 10% believing they are given the opportunity to demonstrate their skills and abilities in this process (Cooper & Kennady, 2021)¹.

Stuttering is another form of disability where traditional in-person and video interviews in which the candidate has to speak may lead to stress and anxiety (Manning and Beck, 2013). One study found that people who stutter find their stuttering to be a "major handicap" in their working lives and over 70% thought that they had a decreased opportunity to be hired and promoted (Klein & Hood, 2004). Other disabilities, such as dyslexia and other learning and language disabilities may cause candidates to struggle with timed online selection assessments, so it is important to identify and remove these barriers (Hyland & Rutigliano, 2013).

How do we better accommodate people with disabilities or neurodiversity in the way we interview and hire?

Cooper and Mujtaba (2022) recommend alternative approaches that allow candidates with ASD to showcase their skills without having to verbally communicate them or properly interpret nonverbal cues. The use of an online, untimed, chat-based interview can not only help reduce discrimination against those with disabilities but also create a more positive candidate experience for them.

This format is particularly helpful for individuals with disabilities where traditional in-person interviews, video interviews, or timed assessments may cause stress or discomfort, therefore not allowing the candidates to express themselves freely and adequately demonstrate their skills.



Traditional face-to-face interviews are a large entry barrier for people with disabilities

Designing for Inclusivity

Our platform is designed to support candidates with disabilities in several ways.

Blind Assessment

Untimed

Interview



The Al behind the interview does not know the candidate's gender, race, age, or disability status, ensuring only the interview responses are used in the candidate assessment.

Voice-to-Text & Screen Reader



Compatibility with these OS features ensures that candidates with visual or motor impairments can easily participate in the assessment.

Candidates can take their time to craft thoughtful answers without the pressure of a ticking clock. This flexibility is particularly beneficial for individuals with cognitive or communication impairments.

Psychological Safety



The absence of face-to-face interaction reduces anxiety, allowing candidates to present their true selves.

We conduct bias testing of every model before deployment, and ongoing. The training data to build each model is not based on historical workforce patterns, ensuring that any bias inherent in previous hiring outcomes is not introduced to the model and therefore cannot impact the Al's recommendations. See our Statement on Accessibility

Assessment inclusivity starts with how you hire

In a world of Al recruitment tools, many are obsessing over the algorithms exclusively and how they ensure equity for all, ignoring that inclusivity starts with your hiring process itself

Bias in people decisions can originate at three points: from the data, the algorithms and user interaction.

How a user interacts with an Al-based system can impact the inclusivity of users. For example, are timed tests fair for candidates with cognitive disabilities?

For many people, applying for a job is a stressful experience, and by their very nature, timed tests may exclude that candidate pool. Before you have even applied any Al, you may have inadvertently excluded a demographic group or two from your applicant pool.

If your applicant pool is then not representative of the community as a whole, your algorithms have a greater risk of being biased.

For example, an interface that is not accessible to people who are visually impaired or who have Dyslexia may filter out data from those sub-groups, making the resulting dataset less representative of the population you are interested in modelling. By having inclusivity as a key measure, leaders must then consider this as part of the system design, beyond the Al model.

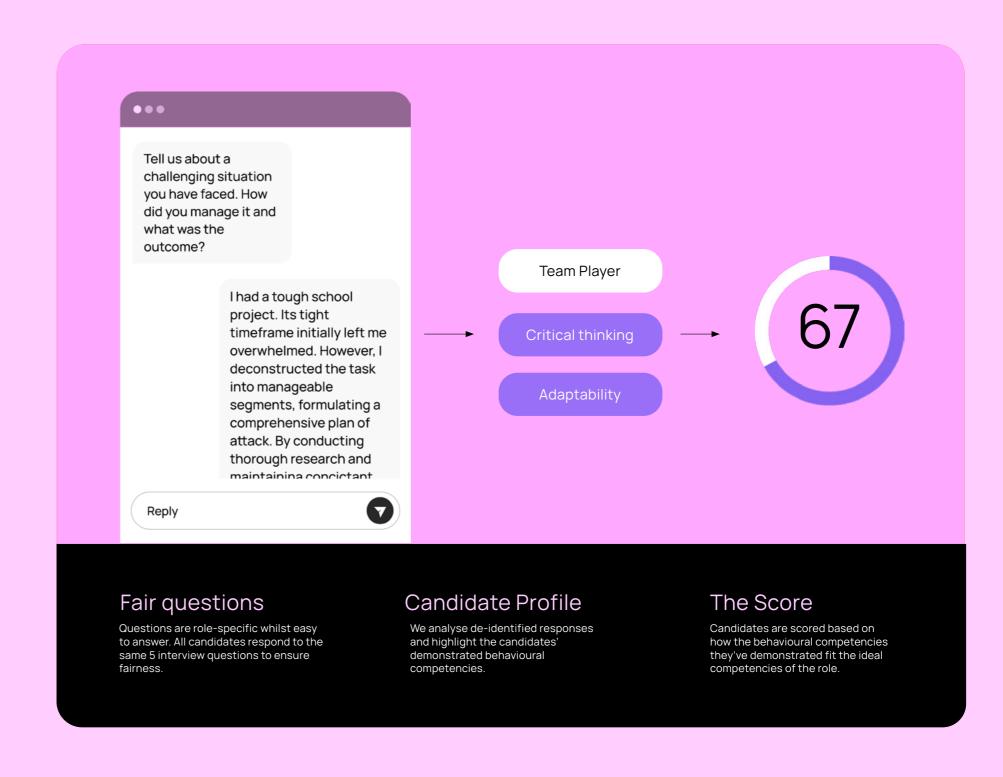
What measures can be used to demonstrate inclusivity is open to the customer to define and justify. One option is to use user experience metrics such as satisfaction scores, time to complete (an assessment), candidate dropout rates, candidate bounce rates and feedback comments.

The assessment: How Sapia.ai scores candidates fairly

Traditional personality assessments are long, confusing, and inaccessible. They have also been shown to adversely impact people with disabilities such as Autism¹, due to the way they assess certain behavioural traits and competencies.

In comparison, the Sapia.ai chat interview is a five-question structured interview. The questions are relevant to the role and organisation and the median time to complete is ~30 minutes, though the interview is untimed and candidates can take as long as they need to complete.

Using a candidate's written natural language allows for freedom of expression and leads to fairer, more accurate, and more equitable insights for people with a disability. Our independently validated job analysis approach ensures all traits and competencies remain job-specific and our approach to assessment ensures all insights and scores remain unbiased.



1 - https://muse.jhu.edu/article/899458

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Fair for all

Traditional hiring methods often inadvertently exclude candidates with disabilities. Video interviews, for instance, can be stressful and disadvantageous for individuals with social anxiety, hearing impairments, or neurodiverse conditions such as autism. Sapia.ai's chat-based interviews offer a written, untimed format that candidates can complete at their own pace, providing a level playing field for all applicants.

Inclusiveness is measurable and must be measured if you are committed to the responsible use of Al. Our research supports the efficacy and fairness of chat-based assessments. A recent study presented at SIOP 2023 involving 595 candidates across multiple organisations with disabilities revealed no major adverse impact flags for candidates with a disability, including ASD, stutter, or dyslexia. There were minimal differences in candidate experience and passing rates between candidates without a disability and those with.

We continuously monitor these crucial fairness metrics. The table below is a sample of updated data, highlighting the stability of chat-based assessments' fairness.

Reported Disability Status	Candidate Happiness (/10	Engagement (%)	Time Taken (avg. mins)	Percentage Progressed*
Neurodiverse (N=10,881)	8.6	81%	27	81%
Dyslexia (N=5,483)	8.8	84%	28	63%
Physical (N=2,766)	8.8	86%	27	66%
Deaf or hard of hearing (N=2,518)	8.8	85%	29	75%
Intellectual (N=2,523)	8.9	86%	24	57%
Blind or low vision (N=2,545)	9	86%	29	74%
Psychosocial (N=2,348)	8.6	80%	25	75%
Head injury, stroke, or acquired brain injury (N=441)	8.9	85%	30	61%
Other or not specified (N=26, 975)	8.9	84%	27	71%
None Reported (N=832,123)	9.1	82%	34	78%

Real-World Impact

Leading brands have successfully embraced chat-based interviewing, resulting in more inclusive candidate pools and improved hiring rates for people with disabilities.

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98% of candidates willingly share their disability status when asked in the chat interview process.

When organisations measure and track disability status through an inclusive hiring process that gives every candidate a chat interview as the first step in the process, they see 98% hiring equity from application to hire.

One major retailer doubled their representation of people with disability in their hired pool, another is on track to 4x their representation.

By embracing a chat-based assessment, they eliminate the opportunity for unconscious biases in important stages in the hiring funnel. Biases that place even more barriers in the way between people with a disability and employment.

Assessing a candidate's fit to a role based on their traits and competencies, and nothing else, sees people with a disability progress to the hiring decision at the same rate as other groups. This ensures that the diversity of each stage of the hiring process accurately represents the communities you work within.

When hiring managers are given unbiased information about a candidate's fit, and candidates feel comfortable sharing their disability status, we see a remarkable increase in the representation of people with disabilities in the hired pool.

What candidates say

"I really like this approach for an interview as you can prepare your answers with time and not fumble while being put on the spot you can actually think it through:)"

Neurodiverse Candidate

"The process feels legitimate with genuine questions about me. I am excited that this method has been utilised by a big organisation to expedite the recruitment process and feel that I have as much chance as the next candidate to secure a role"

Candidate with an Intellectual Disability

"I loved it, it's very easy to understand and navigate through each question, each question is offered very clearly with clear instructions, it's very helpful, thank you."

Candidate with Dyslexia

"I like this way i think it helps with people who suffer anxiety like myself and it doesnt matter if you get something wrong or right you take your time."

Candidate with an Intellectual Disability

"Pretty easy to work through, and I did find the conversational elements of the Al made it easier to communicate my answers as opposed to typing them out on a form."

Visually Impaired Candidate

Sapia.ai's approach to ethical Al.

We continuously recognise and reflect on the role that our tools play in the lives of individuals, the health of organisations, and society as a whole. We take this responsibility seriously and think other organisations should too.

Our Fair AI for Recruitment (FAIR) framework is centred on a close examination of what constitutes 'fair', outlining steps that should be taken to ensure trust in a technology system, especially when Al is in use.

It considers aspects of the technology vendor organisation and its systems for transparency and bias mitigation. We use this framework to ensure that our products are 'FAIR'; and encourage any organisation to use it when selecting an Al technology vendor.

Access the FAIR framework

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