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Ensuring ADA compliance in AI hiring: review, analysis, and disability discrimination framework

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Abstract

Artificial intelligence (AI) is revolutionizing hiring processes with the use of automated tools, including resume screening algorithms, video interviews, and chatbots, which offer increased efficiency and scalability. However, these technologies often fail to accommodate the diverse needs of disabled individuals, who already face disproportionately high unemployment rates. This results in potential non-compliance with the Americans with Disabilities Act (ADA), which mandates equal opportunities and reasonable accommodations in employment. The opacity of AI algorithms, often described as a “black box,” exacerbates challenges in detecting and correcting bias. This study uses a systematic review methodology to analyze existing literature, case studies, and regulatory frameworks, evaluating the alignment of AI hiring systems with ADA standards. Insights from this approach inform recommendations for accessible design principles, explainable AI (XAI) technologies, bias audits, and the importance of human oversight. These findings provide a roadmap for harmonizing innovation with inclusivity, advancing policy discussions to ensure fairness, transparency, and equity in employment for individuals with disabilities.

Keywords: artificial intelligence (AI) in hiring, Americans with Disabilities Act (ADA), algorithmic bias and discrimination, explainable AI (XAI), AI ethics and regulatory compliance.

Introduction

Artificial Intelligence (AI) is revolutionizing various industries, including the hiring process, which redefines how companies find and select talent with tools such as algorithmic resume screening, chatbot-led interviews, and data-driven candidate assessments that promise efficiency and objectivity (Albaroudi et al., 2024; Fabris et al., 2024; Hunkenschroer & Luetge, 2022; Regina, 2023; Tippins et al., 2021). By 2025, projections indicate up to 70% of large corporations will integrate AI into their hiring workflows (Sánchez-Monedero et al., 2020). A 2023 U.S. Equal Employment Opportunity Commission survey found 83% of employers and 99% of Fortune 500 companies utilize automated tools to screen or rank candidates, demonstrating the technology’s widespread adoption (*U.S. Equal Employment Opportunity Commission*, n.d.).

In October 2023, the Executive Office of the President issued Executive Order 14110, which mandated the development of safe, secure, and trustworthy AI systems, emphasizing principles of national security, privacy, and (Executive Office of the President, 2023). Although the subsequent administration later repealed this policy, its original intent highlights the importance of establishing ethical AI frameworks, even

as governance approaches continue to evolve. While AI hiring tools offer efficiency, they also carry the risk of exacerbating existing biases, particularly for marginalized groups such as people with disabilities (Sonderling et al., 2022).

The Americans with Disabilities Act (ADA) prohibits employment discrimination and mandates reasonable accommodations during the hiring process to ensure fairness and equity for individuals with disabilities (Americans with Disabilities Act of 1990, as amended, n.d.). However, many AI-driven hiring tools fail to account for the diverse needs of individuals with disabilities, inadvertently introducing or amplifying bias (Figueroa-Armijos et al., 2023; Kammerer, 2022; Kelly-Lyth, 2021). These biases manifest in multiple ways, including resume-screening algorithms that penalize employment gaps due to medical conditions, video interview software that misinterprets speech or facial expressions, and rigid assessment tools that lack adaptive accommodations. As a result, disabled candidates face additional barriers to securing employment despite legal protections intended to ensure equity.

Disability encompasses a broad spectrum, requiring thoughtful consideration in system design, and is the only minority status anyone can acquire through a change in circumstances, reinforcing the need for inclusive AI frameworks (Binns & Kirkham, 2021; Fuchs, 2023). Despite these pressing concerns, the challenges disabled individuals face in navigating AI hiring systems remain underexplored (Kelly-Lyth, 2021). Addressing this gap is crucial as AI's role in employment continues to expand, necessitating proactive policy measures to ensure fairness, transparency, and ADA compliance in hiring practices.

Problem Statements

The increasing reliance on AI-driven hiring presents both opportunities and challenges, particularly for disabled individuals, who require accommodations tailored to a wide range of conditions, including physical, cognitive, sensory, and mental health disorders (Goddard et al., 2024). However, many AI systems fail to account for this diversity, resulting in systemic bias and exclusion (Egger, 2021).

A key issue is the “black box” nature of AI hiring tools, where opaque algorithms make decisions without clear explanations, complicating compliance with the ADA and creating regulatory hurdles for employers and policymakers (Sánchez-Monedero et al., 2020; Tilmes, 2022). For instance, the *Derek Mobley v. Workday* (2024) lawsuit revealed how proprietary algorithms disproportionately exclude individuals with disabilities and other minority groups, highlighting the need for transparency and inclusivity in AI hiring.

Without systemic oversight, these technologies risk violating ADA standards and worsening unemployment disparities for disabled job seekers (Ajunwa, 2021; Kaminski, 2023). The challenge lies in striking a balance between innovation and ethical hiring practices to ensure transparency, inclusivity, and equity.

Purpose of the Study

This study adopts an interdisciplinary approach that integrates legal analysis, technical evaluation, and policy considerations to examine how AI hiring tools align with the Americans with Disabilities Act (ADA). It focuses on both the limitations of algorithmic design (e.g., bias, opacity, inaccessibility) and the legal obligations of compliance. By combining these perspectives, the study offers a comprehensive evaluation of the risks and requirements facing AI adoption in recruitment processes.

Findings from this study provide policymakers, industry leaders, and regulatory bodies with actionable insights, guiding the development of ethical AI hiring practices that align with ADA mandates. By ensuring AI-driven recruitment systems incorporate bias auditing, explainability, and accessibility measures, this research supports the broader goal of equitable employment opportunities and responsible AI adoption.

Research Questions

RQ1: *To what extent do AI hiring systems meet ADA requirements for reasonable accommodation and fairness in recruitment?*

RQ2: *What specific features or design flaws in AI hiring tools contribute to discriminatory outcomes against individuals with disabilities?*

RQ3: *How effective are current regulatory frameworks in addressing bias and ensuring inclusivity in AI-driven hiring practices?*

RQ4: *What role can emerging technologies, such as Explainable AI (XAI), play in mitigating bias and promoting transparency in AI-driven hiring systems?*

Literature Review

Overview of AI in Hiring Systems

The integration of AI in recruitment promises efficiency and objectivity, using tools such as resume screening, video interviews, and gamified assessments (Hocken & King, 2023; Kammerer, 2022; Sonderling et al., 2022). However, scholars argue reliance on historical data and biased algorithmic design may reinforce discrimination against marginalized groups like disabled individuals (Kaminski, 2023).

A parallel trend is the increasing use of generative AI, such as ChatGPT, in hiring to automate tasks, including resume screening, job descriptions, and candidate communication. While this technology improves workflow efficiency, it raises new equity concerns—access to AI-generated job materials is unequal, and biases embedded in training data may propagate through AI-generated hiring decisions (Farrell, 2023; Marshall et al., 2024). Additionally, job descriptions generated by AI risk excluding disabled candidates if they reinforce ableist language or assumptions, potentially violating the ADA. Given the sociotechnical nature of algorithmic hiring systems, this study draws on interdisciplinary literature across information systems/ information technology (IS/IT), disability law, business ethics, and human-centred design. This cross-domain integration is essential to evaluate both system-level architecture and compliance with equity and accessibility mandates. While legal and ethics journals constitute a significant portion of the references, the conceptual framework and compliance model proposed are firmly situated within the IS/IT discourse on responsible algorithmic deployment.

Challenges Faced by Disabled Individuals in AI-driven Hiring

Disabled job seekers already experience higher unemployment rates (7.2%) compared to non-disabled individuals (3.5%), and AI hiring exacerbates these disparities (*Persons with a Disability*, n.d.). The literature highlights five major challenges:

- ***Bias in AI Resume Screening:*** AI algorithms often penalize employment gaps, ignoring disability-related medical absences or caregiving responsibilities (Binns & Kirkham, 2021; Sánchez-Monedero et al., 2020; Vogel et al., 2024).
- ***Inaccessible AI Video Interviews:*** Platforms like HireVue, which analyze facial expressions, tone, and speech patterns, unfairly disadvantage candidates with physical or speech impairments (Ajunwa, 2021; Kelly-Lyth, 2021). While some companies claim to improve accessibility, there is little external validation of whether adjustments effectively mitigate bias (Sheard, 2022).
- ***Lack of Alternative Assessments:*** Many AI-driven evaluations assume a “one-size-fits-all” model, disregarding cognitive and physical limitations that require alternative assessments (Marshall et al., 2024; Tilmes, 2022). Few regulatory measures require AI hiring tools to offer alternative assessments, leaving it up to individual employers to implement accommodations as needed.

- **Bias in Training Data:** AI models trained on historically biased data continue to underrepresent individuals with disabilities, thereby reinforcing exclusion (Binns & Kirkham, 2021; Kaminski, 2023).
- **Ideal Candidate Stereotypes:** AI hiring tools often prioritize able-bodied profiles, forcing disabled applicants to conform to biased norms that overlook diverse competencies (Burrell & McAndrew, 2023; Sánchez-Monedero et al., 2020).

ADA Compliance, Legal, and Ethical Implications

The ADA mandates reasonable accommodations and prohibits disability-based discrimination in hiring, extending compliance requirements to AI-powered tools (Americans with Disabilities Act of 1990). However, scholars argue AI hiring tools frequently violate these legal standards due to opaque decision-making and a lack of regulatory oversight (Paez, 2021; Paterick, 2023). The lack of transparency in AI hiring tools has significant legal and ethical implications as candidates and regulators struggle to challenge potentially discriminatory outcomes or hold employers accountable for violations (Vogel et al., 2024). For example, lawsuits like *Derek Mobley v. Workday* illustrate how proprietary algorithms disproportionately exclude individuals with disabilities, as well as other marginalized groups, highlighting the urgent need for regulatory intervention (*Derek Mobley v. Workday Inc.*, 2024).

To address these shortcomings, scholars advocate for the adoption of explainable AI (XAI) and independent bias audits. XAI systems enhance interpretability by explaining how hiring managers make decisions, promoting fairness, and enabling candidates to understand their evaluations (Hickman et al., 2024; Hofeditz et al., 2022). However, XAI has limitations in hiring contexts, as even transparent explanations cannot fully eliminate bias if the underlying training data or algorithms are flawed (Packin, 2021). Policy developments such as Illinois' Artificial Intelligence Video Interview Act and New York City's Bias Audit Law represent early efforts to regulate AI hiring tools by requiring applicant consent, audits, and increased transparency (820 ILCS 42/, n.d.; NYC Bias Audit Law, n.d.). At the global level, the European Union's Artificial Intelligence Act provides a comprehensive regulatory framework that emphasizes accountability and inclusivity, which could serve as a model for enhancing ADA compliance in the United States (*AI Act*, 2024). Despite these advancements, the ethical and legal challenges posed by AI hiring systems remain significant, underscoring the importance of proactive measures, such as bias audits, inclusive design, and human oversight, to ensure AI hiring practices align with legal and ethical standards.

Gaps in the Literature

Despite growing research, critical gaps remain:

- **Disability Representation:** Most studies focus on gender and racial biases, with limited research on AI-related disability discrimination (Moss, 2021).
- **Intersectionality:** There is little exploration of how overlapping identities (e.g., disabled individuals from marginalized racial groups) compound discrimination in AI hiring (Moss, 2021).
- **Policy Effectiveness:** Although there is advocacy for bias audits, few studies have assessed whether these audits reduce disability-based discrimination (Hunkenschroer & Luetge, 2022).

Methodology

This study employs a systematic review methodology to analyze scholarly literature, case studies, industry reports, and policy documents on the impact of AI hiring systems on individuals with disabilities. Following the PRISMA guidelines (Moher et al., 2009), the review ensures rigour and transparency through a structured approach, which includes defining the scope, applying selection criteria, systematically extracting data, and synthesizing findings to address the research questions.

Data Collection and Selection Criteria

This study identified a total of 112 documents across Google Scholar, IEEE Xplore, and PubMed using boolean search operators and keywords such as “AI hiring systems,” “disability discrimination,” and “ADA compliance” to optimize retrieval and subsequently retained 42 sources after duplicate removal, abstract screening, and full-text evaluation based on the criteria defined in Table 1 below for the final thematic synthesis. Coding was then done to identify patterns and construct three cross-cutting themes based on recurrence, regulatory relevance, and alignment with the research questions. A three-phase screening process refines the selection:

1. Filter by publication year (2019–2025) to ensure up-to-date research.
2. Title and abstract review to determine relevance to AI hiring and disability inclusion
3. Full-text evaluation to confirm alignment with research objectives and methodological rigour.

Table 1. Content evaluation criteria

S/N	Inclusion Criteria	Exclusion Criteria
1	Language of publication: English.	Language of Publication other than English.
2	Published between 2019 and 2025.	Duplicate articles.
3	Directly answers one or more research questions.	Opinion pieces.
4	Peer-reviewed publications.	Non-peer-reviewed publications.
5	Discussed the legal and ethical implications of ADA compliance.	Does not focus on ADA compliance.
6.	Addresses disability discrimination.	Addresses other forms of discrimination.
7	Focused on AI applications in hiring, particularly those addressing fairness, bias, and inclusivity.	Focused on AI applications outside the context of hiring or employment.
8	Included case studies demonstrating the real-world implementation of AI hiring systems.	Did not provide empirical or theoretical insights relevant to the topic of disability discrimination.

Analytical Methods

The study applies thematic synthesis to categorize findings into three key themes:

1. **AI’s Impact on Disability Inclusion in Hiring Practices:** Examines how AI hiring systems accommodate or exclude candidates with disabilities.
2. **Ethical and Legal Challenges in AI Hiring Systems:** Investigates ADA compliance, regulatory gaps, and ethical considerations.
3. **Bias Detection and Algorithmic Accountability in AI Hiring:** Identifies biases in datasets and algorithms, emphasizing transparency and fairness.

Each selected study undergoes critical appraisal for methodological rigour, reliability, and relevance to AI hiring, disability inclusion, and ADA compliance. The study then synthesizes findings to offer actionable insights for policymakers, employers, and AI developers, ensuring practical contributions to disability-inclusive hiring reforms.

Analysis and Results

Theme 1: AI’s Impact on Disability Inclusion in Hiring Practices

The analysis demonstrates AI hiring systems frequently fail to accommodate the diverse needs of disabled candidates, resulting in systemic exclusion. Many of these tools, such as facial-recognition-based

assessments and automated resume screeners, inadvertently penalize individuals with disabilities. Key patterns observed include:

- ***Speech and Facial Recognition Bias:*** AI-driven video interview platforms, such as HireVue, disproportionately disadvantage candidates with speech impairments, neurological conditions, or facial differences. The software interprets standard social cues, such as eye contact and voice modulation, which are not always applicable to individuals with disabilities (Ajunwa, 2021).
- ***Resume Screening Bias:*** AI algorithms penalize employment gaps without context, disproportionately impacting individuals who have taken medical leaves or needed extended recovery periods due to disability. The algorithms, trained on profiles of non-disabled workers or similar language, fail to consider alternative employment histories (Vogel et al., 2024).
- ***Lack of Adaptive Testing:*** AI hiring assessments often employ a one-size-fits-all approach, overlooking cognitive, motor, or sensory impairments that necessitate alternative assessment methods. Many candidates struggle to fully engage with these rigorous evaluations, which can lead to exclusion (Kelly-Lyth, 2021; Regina, 2023; Timmons, 2021).
- ***Underrepresentation in AI Training Data:*** AI hiring models often train on datasets that lack representation from individuals with disabilities, thereby reinforcing biased outcomes. The omission of disability-related employment experiences skews decision-making in ways that disadvantage these candidates (Burrell & McAndrew, 2023; Sánchez-Monedero et al., 2020).

Theme 2 - Ethical and Legal Challenges in AI Hiring Systems

AI hiring systems operate within an uncertain regulatory environment where ADA compliance is often an afterthought. Key findings:

- ***Opaque Decision-Making (“Black Box AI”):*** Many AI hiring tools lack transparency, which prevents candidates from understanding how hiring decisions occur. While human hiring processes can also be non-transparent, AI systems present distinct challenges due to their scale, complexity, and lack of human reasoning. Unlike human committees, whose decisions can often be contextualized through documentation or appeals, algorithmic outputs frequently lack interpretability, thereby limiting recourse for candidates and oversight by regulators (Hofeditz et al., 2022; Kammerer, 2022; Kaminski, 2023).
- ***Regulatory Gaps:*** Current legal frameworks, such as the ADA, prohibit hiring discrimination but lack explicit provisions addressing AI-driven hiring systems. The lack of proactive enforcement leaves room for biased algorithms to operate unchecked (Friedman, 2022).
- ***Growing Litigation Risks:*** Cases such as *Derek Mobley v. Workday Inc. (2024)* underscore how AI hiring tools disproportionately exclude individuals with disabilities. The legal scrutiny surrounding AI hiring underscores the urgent need for clearer compliance standards (Egger, 2021).

Theme 3: Bias Detection and Algorithmic Accountability

Addressing algorithmic bias requires proactive measures, yet current industry practices often fall short. Major concerns include:

- ***Historical Data Bias:*** AI models trained on historical hiring data inherit past biases, perpetuating exclusionary practices. If an organization has historically hired fewer disabled workers, the AI may deem disabled candidates as less qualified (Binns & Kirkham, 2021).
- ***Lack of Bias Audits:*** While some companies conduct bias audits, these are neither standardized nor required. Many audits fail to account for disability-specific biases, focusing instead on gender or racial fairness (Ajunwa, 2021).

- **Absence of Explainable AI (XAI):** Without interpretable AI models, employers struggle to identify why an AI system rejects certain candidates, making it difficult to detect and correct biased decision-making (Fuchs, 2023; Hocken & King, 2023).

Case Studies: Real-World AI Hiring Challenges and Biases

The following case studies provide concrete examples of AI hiring systems failing to ensure fairness for disabled individuals:

- **Case Study 1 - Workday AI Hiring Bias Lawsuit:** Workday's AI hiring tool faced allegations of disproportionately filtering out candidates with disabilities (*Derek Mobley v. Workday Inc.*, 2024). The case highlighted a lack of transparency and accountability in AI hiring decisions, resulting in increased scrutiny of compliance requirements.
- **Case Study 2 - HireVue Video Interview Bias:** HireVue's AI video interviews relied on facial and speech analysis, disadvantaging candidates with autism, speech disorders, or other impairments (Ajunwa, 2021). Due to regulatory and public pressure, HireVue revised its system to reduce its reliance on facial analysis, instead emphasizing structured interviews.
- **Case Study 3 - Facebook's AI Hiring Discrimination:** Facebook's AI-driven job ad targeting algorithm excluded individuals with disabilities by inferring demographic traits from user data (Jan & Dwoskin, 2019). Civil rights complaints forced the company to revise its ad targeting system to ensure compliance with anti-discrimination laws.
- **Case Study 4 - Pymetrics' Bias-Free Algorithms:** Pymetrics, an AI-driven hiring platform, faced criticism for potential disability bias in its neuroscience-based candidate assessment tools (Sánchez-Monedero et al., 2020; Timmons, 2021). Concerns over algorithmic fairness led to external audits and increased transparency in bias testing. In response to public and regulatory scrutiny, Pymetrics refined its AI models to enhance fairness and mitigate risks of discrimination.

Discussion of Findings

The findings of this study underscore the substantial challenges AI-driven hiring systems pose for individuals with disabilities, with AI frequently replicating historical biases and failing to accommodate diverse needs. The analysis of AI hiring tools, including video interviews and resume screeners, reveals a consistent pattern of discrimination due to the limited adaptive measures and biased training data. These findings align with previous studies, such as Ajunwa (2021) and Kaminski (2023), which highlight how opaque AI decision-making processes disproportionately affect marginalized job seekers. Similarly, case studies such as *Derek Mobley v. Workday Inc.* (2024) and HireVue's AI interview modifications illustrate the tangible consequences of deploying biased hiring tools (Ajunwa, 2021). However, this study extends the discussion by integrating emerging policy interventions, such as New York City's Bias Audit Law, and global regulatory frameworks like the European Union's AI Act (2024).

A key implication of these results is the need for Explainable AI (XAI) technologies to ensure transparency in AI-driven hiring. Previous studies by Hickman et al. (2024) and Hofeditz et al. (2022) emphasize AI models must offer interpretability for both candidates and regulators to assess the rationale behind decisions. Additionally, bias audits, as recommended by Binns and Kirkham (2021), should become a standardized practice to mitigate discriminatory outcomes. Importantly, while AI presents risks of exclusion, it can also play a constructive role in enhancing compliance. For example, generative AI models can assist employers in drafting accessible job descriptions, simulate accommodation scenarios, or generate real-time ADA checklists to ensure procedural conformity. When implemented with proper safeguards, such

tools can complement legal frameworks by proactively identifying accessibility barriers and proposing inclusive interventions.

While this study primarily focuses on U.S. regulatory frameworks, emerging international models offer complementary perspectives. The European Union’s Artificial Intelligence Act (2024) adopts a risk-based framework that classifies AI systems used in employment as “high risk,” thereby mandating transparency, impact assessments, and human oversight. In contrast, the Americans with Disabilities Act (ADA) relies on general anti-discrimination provisions but lacks AI-specific obligations. Integrating EU-style risk-tiering with U.S. civil rights enforcement could enhance global regulatory convergence, especially for multinational firms operating across jurisdictions (AI Act, 2024; Americans with Disabilities Act of 1990).

Implications of Findings

The findings of this study underscore the critical need for a comprehensive policy framework that ensures ADA compliance and promotes the inclusion of people with disabilities within AI-driven hiring systems. This study proposes an implementation framework for AI hiring to tackle these challenges, offering a structured approach for policymakers, employers, and AI developers to enhance fairness, mitigate bias, and promote inclusive hiring practices. The framework advocates for adaptive assessment methods and enhanced transparency in AI decision-making to create equitable employment opportunities for individuals with disabilities. The table below outlines the framework, detailing key issues, recommended interventions, and their anticipated impact on fostering equitable hiring processes.

Table 2. AI-driven hiring compliance and fairness framework

Category	Key Issue	Recommendation	Expected Impact
Inclusive Design and Accessibility	AI hiring platforms lack features that support diverse candidate experiences.	Establish accessibility guidelines for different abilities and implement alternative candidate assessment methods.	Promotes equal application opportunities and decreases discrimination against candidates with disabilities.
Data Diversity, Bias Detection and Mitigation	Algorithms reinforce historical biases, contain insufficient disability data, and fail to account for multiple identity factors.	Broaden training data to include disability employment contexts and tackle multi-layered demographic discrimination.	Reduces algorithmic exclusion of disabled profiles and improves fairness for individuals with overlapping identities.
Behavioural & Contextual Data Integration	AI lacks nuanced evaluation methods.	Integrate contextual data into candidate evaluations.	Prevents misinterpretation of disability-related differences.
Transparency and Accountability	Opaque algorithmic decisions with no explanation.	Mandate AI systems provide candidate explanations through XAI and establish decision tracking mechanisms.	Enhances stakeholder trust, ensures applicant rights, and bolsters legal defence capabilities and review processes.
Regulatory Compliance and Standards	AI hiring lacks established legal frameworks and ethical certification requirements.	Establish legally binding ADA guidelines for AI hiring platforms and develop certification based on inclusive design metrics.	Outlines federal compliance requirements and fosters industry-wide ethical alignment.

Category	Key Issue	Recommendation	Expected Impact
Human Oversight	Over-reliance on automated decisions.	Require human review in final hiring determinations.	Balances efficiency with ethical accountability.
Stakeholder Participation	Lack of user input in AI tool development.	Engage disability advocacy groups in design processes.	Ensures hiring tools reflect diverse perspectives.
Candidate Feedback and Redress	No mechanism for reporting bias or appeal	Create clear complaint and resolution pathways	Improves procedural fairness for rejected candidates
Legal Recourse & Compensation	No systems exist for bias complaints or appeals, leaving victims without remedies for discriminatory AI.	Establish a victim support fund for AI bias cases and supply ADA-based redress assistance and tools.	Provides responsibility enforcement and compensation while strengthening candidates' capacity to combat AI bias.
Continuous Improvement	AI biases adapt with technological development, but the industry lacks collaborative ethical standards.	Fund advanced equitable AI model creation and enable the sharing of successful ethical AI practices.	Ensures hiring platforms remain flexible and inclusive while helping employers and regulators implement optimal AI practices.
Education and Training	Developers are uninformed about AI discrimination potential, while employers ignore ethical recruitment system risks.	Provide developer education on discrimination mitigation and accessibility standards, plus ethical responsibility training.	Fosters responsible AI system creation and improves organizational preparedness and regulatory compliance.
Privacy and Oversight	Hiring algorithms collect disproportionate amounts of candidate data.	Safeguard applicant privacy rights via secure data management practices.	Prevents inappropriate access and misapplication of recruitment data.

Conclusion, Limitations of the Study, and Recommendations for Future Research

This study underscores the urgent need to align AI-driven hiring practices with ADA compliance by addressing systemic biases and promoting inclusive design (Paterick, 2023). The research reveals how AI hiring tools disproportionately disadvantage individuals with disabilities due to algorithmic bias, opaque decision-making processes, and inadequate accessibility measures. Through the analysis of existing literature, case studies, and regulatory frameworks, this study underscores the necessity for stronger policy interventions, including mandatory bias audits, Explainable AI (XAI), and human oversight in AI hiring processes. The findings underscore the significance of ethical AI development in employment, drawing on existing literature (e.g., Kaminski, 2023; Marshall et al., 2024; Vogel et al., 2023). The study reveals the legal risks and ethical challenges organizations encounter when deploying AI without sufficient safeguards. It connects legal frameworks, technological advancements, and disability rights advocacy to propose strategies for reducing bias, promoting fair hiring practices, and emphasizing the need for regulatory oversight in AI hiring systems.

While this study provides valuable insights into AI hiring systems and disability discrimination, it has limitations. It relies on publicly available data and case studies, restricting direct analysis of proprietary AI algorithms. Access to confidential hiring software would enable a more precise understanding of bias. Additionally, the focus on U.S. regulations, particularly the ADA, limits its geographical relevance.

Although it compares findings with the EU's AI Act (2024), more research is needed to assess AI hiring biases in different legal and cultural contexts. The rapid evolution of AI technology also poses challenges for maintaining current findings, as new tools may introduce unforeseen biases or require new mitigation strategies.

Future research should address the following key areas to strengthen the field of AI in hiring:

1. **Comparative Cross-Cultural Analysis:** Expanding research beyond the U.S. to examine AI hiring regulations and biases in various global regions can provide valuable insights into best practices for mitigating discrimination.
2. **Longitudinal Studies on AI Hiring:** Investigating the long-term effects of AI-driven hiring on the career mobility and workplace integration of individuals with disabilities as job seekers can provide a deeper understanding of AI's impact on employment equity.
3. **Intersectionality in AI Bias Mitigation:** Future research should explore how AI hiring tools affect individuals with multiple marginalized identities (e.g., disabled women of color) to develop more comprehensive fairness models.

Additionally, future research should examine how similar compliance risks emerge in public-sector hiring. Federal and state agencies increasingly rely on algorithmic tools to evaluate applicants, particularly in large-scale civil service examinations. These systems are equally subject to ADA requirements, yet are often exempt from private-sector regulatory initiatives such as city-level audit laws. Understanding how automated decision-making intersects with public accountability and procurement processes represents a vital next step for ensuring equitable government hiring. By addressing these areas, future studies can help bridge existing research gaps and contribute to the development of fairer, more inclusive AI hiring systems.

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