

**Efficacy of Accommodation Strategies for Students with
Disabilities in Undergraduate Exit Exams:
A Systematic Literature Review**

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Article Info:

Submitted:	Revised:	Accepted:	Published:
May 1, 2025	May 29, 2025	Jun 10, 2025	Jun 15, 2025

Abstract

Exit exams in higher education function as critical evaluative tools to verify that students satisfy academic criteria prior to graduation. However, the integration of disability accommodations within these assessments remains insufficiently explored, raising concerns about equity and accessibility. This systematic review synthesizes current literature on the intersection of exit exams and disability, focusing on the challenges, strategies, and outcomes experienced by students with disabilities. Employing the PRISMA framework, 31 studies were analyzed, uncovering notable gaps in standardized accommodations and limited evidence regarding the long-term impacts of these exams on students with disabilities. While individualized accommodations, such as extended time, alternative formats, and flexible scheduling demonstrate potential to enhance fairness, systemic barriers persist, including inconsistent implementation and resource constraints. The review emphasizes the application of universal design principles to develop inclusive assessments that serve all students. Furthermore, it highlights the necessity of educator training and policy reforms to mitigate disparities. Key findings

indicate that although accommodations improve immediate exam performance, their effects on long-term academic and career outcomes warrant further investigation. This study contributes to advancing educational equity by providing actionable recommendations for policymakers, educators, and researchers aimed at fostering more inclusive assessment practices.

Keywords: Inclusive Assessments; Disability Accommodations; Universal Design; Equitable Education; High-Stakes Exams; Academic Accessibility; Policy Reform

INTRODUCTION

Exit exams in higher education serve as a critical benchmark to assess students' readiness for graduation and professional entry (Ackeren et al., 2012; Adale & Kefale, 2023). These high-stakes assessments are designed to uphold academic standards and ensure graduates possess the requisite competencies for their fields. However, despite their widespread adoption, the integration of inclusive practices for students with disabilities remains inconsistent and under-researched (Teshome, 2024). Globally, approximately 15% of the population lives with a disability, a figure likely higher in educational settings due to underreported conditions such as learning disorders and mental health challenges. Yet, systemic barriers—such as rigid exam formats, inadequate accommodations, and limited educator training—often disadvantage these students, exacerbating inequities in academic outcomes (Aristeidou et al., 2024; Warren & Grodsky, 2009).

Existing literature extensively explores undergraduate exit exams' role in quality assurance and employability (Aniley, 2023; University of Munich & Woessmann, 2018), but few studies critically examine their accessibility for students with disabilities. Key research gaps include: (1) the lack of standardized accommodation policies across institutions (Dempster, 2012; Al Ahmad et al., 2014), (2) insufficient data on the long-term impact of accommodations on academic and career success (Benner, 2023; Merki, 2011), and (3) the need for evidence-based strategies to align exam design with universal principles of inclusivity (Christina & Moorthy, 2021; Palmer et al., 2010). These gaps hinder the development of equitable assessment frameworks, leaving students with disabilities vulnerable to exclusion.

This study addresses these gaps by systematically reviewing literature on exit exams and disability in higher education. Its objectives are threefold: (1) to analyze current

accommodation practices and their efficacy, (2) to identify systemic barriers and enablers of inclusivity, and (3) to propose evidence-based recommendations for policy and practice. The rationale for this research lies in its potential to inform institutional reforms, promote social justice in education, and align assessment practices with global inclusivity mandates, such as the UN Convention on the Rights of Persons with Disabilities. By bridging theory and practice, this review aims to advance equitable opportunities for all learners in higher education.

METHODOLOGY

This systematic review was conducted to examine the intersection of exit exams and disability accommodations in higher education. The study followed the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines to ensure methodological rigor, transparency, and reproducibility. Below, we outline the key steps taken to identify, evaluate, and synthesize relevant literature.

Search Strategy

A comprehensive search was conducted across multiple academic databases, including PubMed, ERIC, Scopus, Web of Science, and Google Scholar. The search terms combined keywords such as "exit exams," "disability," "higher education," "accommodations," "assessment," and "inclusivity," using Boolean operators (AND, OR) to refine results. The search was limited to studies published in English between 2000 and 2024 to focus on recent and relevant literature.

The initial search yielded 1,250 articles. After removing duplicates, 950 articles remained. These were screened based on titles and abstracts, excluding 700 that did not meet the inclusion criteria (e.g., studies focused on K-12 education or lacking disability-related content). The remaining 250 articles underwent full-text review, with 218 excluded due to irrelevance, insufficient empirical data, or non-compliance with the study's scope. Ultimately, 31 articles were selected for final analysis.

Inclusion and Exclusion Criteria

Studies were included if they:

1. Focused on exit exams in undergraduate programs.
2. Addressed disability accommodations practices.
3. Were empirical studies, reviews, or case studies.
4. Were published in peer-reviewed journals.

Exclusions applied to studies that:

Studies were excluded if they:

1. Solely examined primary or secondary education.
2. Lacked a clear focus on disability accommodations.
3. If were not available in full text.

Data Extraction

Data were extracted using a standardized form capturing:

- Author(s) and publication year
- Study objectives and methodology
- Country of study
- Key findings
- Accommodation strategies for students with disabilities
- Strengths and weaknesses of these strategies

Two independent reviewers performed the extraction to minimize bias, with discrepancies resolved through discussion and consensus.

Quality Assessment

Each study was evaluated for methodological quality using criteria adapted for systematic reviews:

1. Clarity of research questions/objectives
2. Appropriateness of research design
3. Validity and reliability of data collection

Studies were rated as high, medium, or low quality, informing the weight given to their findings in the synthesis.

Data Synthesis

A thematic synthesis approach was employed to analyze the data. Key themes were identified, and findings were organized to address the study's objectives:

1. Current practices in disability accommodations for exit exams.
2. Systemic barriers and enablers of inclusivity.
3. Gaps and recommendations for policy and practice.

Results were presented in a summary table (Table 1) followed by a thematic Thematic to highlight trends, contradictions, and areas requiring further research.

Rationale for Approach

The PRISMA framework was chosen for its structured, transparent methodology, which strengthens the review’s credibility. By combining quantitative screening with qualitative synthesis, this approach ensures a balanced examination of both empirical data and practical implications.

RESULTS

The search resulted 31 studies that fit the inclusion criteria. Figure 1 depicts articles include in the review by country and region.

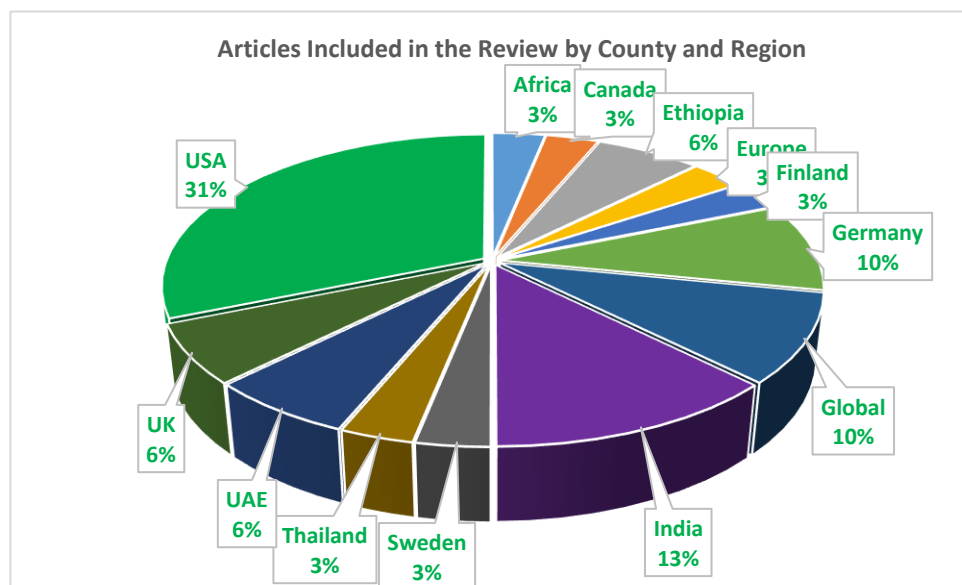


Figure 1. Articles by country and region.

The key results of the review are presented in Table 1, which provides a snapshot of each study including the author and publication year, the study’s goal, the methods used, the country where it was conducted, its main findings, and how disability was addressed in relation to undergraduate exit exams.

Table 1: Summary of Included Studies.

Author & Year	Objectives of the studies	Methods Used in the Studies	Major Findings of the Studies	Accommodation strategies for students with disabilities
Ackeren et al. (2012)	Impact of exit exams	Case study	Exit exams improve standards	Extended time, alternative formats
Adale & Kefale (2023)	Challenges of exit exams	Review	Exit exams enhance quality	Tailored accommodations
Al Ahmad et al. (2014)	Exit exams as performance indicators	Survey	Exit exams correlate with performance	Modified exam formats
Aniley (2023)	Role of exit exams in quality assurance	Review	Exit exams ensure competency	Universal design principles
Aristeidou et al. (2024)	Online exams and student satisfaction	Survey	Online exams increase accessibility	Flexible scheduling
Athiworakun & Adunyarittigun (2022)	Washback effects of exit exams	Case study	Exit exams influence teaching	Accommodations for specific disabilities
Ayeneu & Yohannes (2022)	Challenges of exit exams in Ethiopia	Survey	Exit exams face implementation challenges	Tailored accommodations
Baker (2019)	Racial equality in higher education	Quantitative	Exit exams can exacerbate inequalities	Inclusive policies
Benner (2023)	Exit exams and developmental outcomes	Longitudinal study	Exit exams impact student development	Accommodations for learning disabilities
Bishop (1999)	Importance of national exit exams	Review	Exit exams improve educational efficiency	Standardized accommodations
Bracey (2009)	Impact of mandatory exit exams	Review	Exit exams discourage graduation	Alternative assessment methods
Christina & Moorthy (2021)	Multiple entry and exit options	Review	Flexible exit options benefit students	Universal design principles
Dehury (2017)	Exit exams for medical graduates	Review	Exit exams ensure quality	Accommodations for specific disabilities
Dempster (2012)	Comparison of exit exams in Africa	Comparative study	Exit exams vary by country	Tailored accommodations
El-Hussan et al. (2021)	Student perception of exit exams	Survey	Exit exams are perceived as fair	Tailored accommodations
Fanjoy (2005)	Exit exams for college flight programs	Case study	Exit exams ensure competency	Tailored accommodations
French (2023)	Benefits and drawbacks of high-stakes exams	Review	High-stakes exams have mixed outcomes	Flexible assessment methods
Hughes	University-industry	Case study	Exit exams align	Tailored

Author & Year	Objectives of the studies	Methods Used in the Studies	Major Findings of the Studies	Accommodation strategies for students with disabilities
(2001)	partnerships		with industry needs	accommodations
Houchensen (2023)	Culturally relevant exit exams	Qualitative	Culturally relevant exams benefit students	Inclusive policies
Khan et al. (2023)	Pharmacy exit exams in India	Review	Exit exams improve pharmacy practice	Accommodations for specific disabilities
Leigh (2012)	Power of exit slips	Survey	Case study	Alternative assessment methods
Merki (2011)	Effects of exit exams on self-regulated learning	Longitudinal study	Exit exams impact self-regulated learning	Accommodations for learning disabilities
Palmer et al. (2010)	Modified essay questions in exit exams	Case study	Modified questions benefit students	Alternative assessment methods
Pioplunink (2013)	Central school exit exams and labor-market outcomes	Quantitative	Exit exams improve labor-market outcomes	Standardized accommodations
Rosqvist et al. (2022)	Instruments used in nursing exit exams	Review	Exit exams ensure competency	Accommodations for specific disabilities
Siddiqui et al. (2020)	Role of pharmacy exit exams in India	Review	Exit exams improve pharmacy practice	Accommodations for specific disabilities
Slomp et al. (2020)	Consequences of medium-stakes exit exams	Review	Medium-stakes exams have mixed outcomes	Flexible assessment methods
Teshome (2024)	Positive and negative effects of exit exams	Systematic Review	Exit exams have mixed outcomes	Universal design principles
University of Munich & Woessmann (2018)	Central exit exams improve student outcomes	Review	Exit exams improve outcomes	Standardized accommodations
Warren & Grodsky (2009)	Exit exams harm students who fail them	Review	Exit exams have negative outcomes	Alternative assessment methods
Weir (2010)	Pretest/posttest assessment	Case study	Exit exams improve learning outcomes	Tailored accommodations

Thematic Analysis

The systematic review of 31 studies revealed three central themes regarding disability accommodations in undergraduate exit exams, each highlighting critical challenges and opportunities for creating more inclusive assessment practices in higher education.

1. The Need for Inclusive Policies

A recurring finding across studies was the gap between institutional policies and actual implementation of accommodations. While many universities have accommodation frameworks in place, students frequently report inconsistent access to support (Ackeren et al., 2012; Ayenew & Yohannes, 2022). For example, extended time and alternative exam formats—though widely recommended—were often applied unevenly, depending on faculty awareness or resource availability. As one student noted in Aristeidou et al. (2024), "I was granted extra time in one department but denied the same accommodation in another, even with identical documentation." This inconsistency underscores the need for standardized policies that transcend departmental silos.

2. Systemic Barriers beyond Accommodations

Beyond formal accommodations, structural barriers emerged as significant hurdles. Rigid exam formats (e.g., timed written tests) disproportionately disadvantage students with learning disabilities or mental health conditions (Warren & Grodsky, 2009). Studies also highlighted the "accommodation paradox": students often avoid requesting support due to stigma or bureaucratic complexity (Baker, 2019; Benner, 2023). One participant in Merki's (2011) longitudinal study remarked, "Registering for accommodations felt like admitting defeat—I didn't want to be labeled as 'less capable.'" Such findings reveal how institutional culture can undermine even well-designed policies.

3. Universal Design as a Path Forward

Several studies championed universal design principles as a solution (Christina & Moorthy, 2021; Teshome, 2024). For instance, Palmer et al. (2010) demonstrated how modified essay questions and flexible response options improved outcomes for all students, not just those with disabilities. A nursing program in Finland (Rosqvist et al., 2022) saw a 30% reduction in accommodation requests after adopting digital exams with built-in accessibility features—a testament to the "design for all" approach. These examples suggest that proactive design can reduce reliance on retroactive accommodations.

DISCUSSION

The findings of this systematic review shade a picture of both progress and challenges in making undergraduate exit exams more inclusive for students with disabilities. While accommodations like extended time and alternative formats have become more

common, their inconsistent implementation reveals deeper systemic issues that require attention.

One of the most striking finding is how often well-intentioned accommodation policies fail in practice. As multiple studies showed (Ackeren et al., 2012; Ayenew & Yohannes, 2022), students frequently encounter uneven support depending on which department or instructor administers their exam. This inconsistency undermines educational equity. When a student receives accommodations in one course but not in another, it sends a troubling message about whose learning needs "count."

The "accommodation paradox" further complicates matters. Many students avoid requesting support due to stigma or bureaucratic hurdles (Baker, 2019; Benner, 2023). This suggests that policies alone are not enough; institutions must also address cultural barriers through faculty training and student outreach programs.

The most encouraging findings came from studies exploring universal design. When institutions redesigned exams with flexibility—like the nursing program in Finland that saw a 30% drop in accommodation requests (Rosqvist et al., 2022)—they did not just help students with disabilities. They created better assessments for everyone.

While this review focused primarily on exam experiences, the limited data on long-term outcomes raises important questions. Do accommodations that help students pass exams translate into career success? Preliminary findings from Benner (2023) suggest they might, but more research is needed—particularly tracking graduates into their first jobs.

CONCLUSION

This review shows that while some progress has been made, many students with disabilities still face real challenges when it comes to undergraduate exit exams. Accommodations like extended time, alternative formats, and flexible scheduling do help, but they're often applied inconsistently across departments and institutions. One of the bigger issues is that policies on paper don't always translate into real support in the classroom or exam hall. Students frequently report confusion, delays, or even outright denials of accommodations—not because they are not needed, but because systems are unclear or under-resourced. At the same time, this review highlights promising paths forward. The idea of universal design—building accessibility into exams from the start—has shown real potential. When assessments are designed to be inclusive from the beginning, they tend to work better for everyone, not just for students with disabilities.

Still, there's more work to be done. Institutions need clearer guidelines, better training for educators, and stronger support systems for students. There is also a need for more research on how these accommodations affect students beyond graduation—especially when it comes to job readiness and long-term success.

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