

A Systematic Review of the Virtues and Vices of Exit Exams in Higher Education

Samson Worku Teshome

Addis Ababa University, Addis Ababa, Ethiopia

bedlusamson@yahoo.com

Article Info:

Submitted:	Revised:	Accepted:	Published:
Apr 11, 2025	Apr 29, 2025	May 14, 2025	May 19, 2025

Abstract

Exit exams in higher education have become central tools for assessing students' readiness for professional roles or advanced academic pursuits, aiming to uphold accountability, standardization, and quality assurance across educational systems. Designed to evaluate mastery of discipline-specific knowledge, skills, and competencies, their implementation has sparked ongoing debate about their effectiveness and equity. This systematic literature review synthesizes findings from 33 peer-reviewed studies to examine both the advantages and challenges associated with exit exams. The review identifies that exit exams enhance transparency, promote comparability, and align academic outcomes with labor market expectations. However, they also present significant drawbacks, including the risk of over-standardization, elevated psychological stress, and reinforcement of systemic biases. Marginalized student populations are often disproportionately affected, as high-stakes testing can deepen existing educational inequalities and promote surface-level learning due to a "teaching to the test" approach. Technical limitations in digital exam delivery and uneven access to preparatory resources further undermine equitable assessment. Nevertheless, exit exams can offer constructive feedback to both learners and institutions, supporting curricular refinement and improving graduate employability. The review advocates for a

more balanced and inclusive assessment model that integrates formative evaluations, leverages flexible technological platforms, and considers student mental well-being. By aligning exit exam practices with holistic educational goals and incorporating qualitative metrics, institutions can develop fairer, more effective frameworks that serve diverse student populations and drive continuous improvement in higher education.

Keywords: Exit exams; Higher education; Standardization; Equity; Psychological impact.

INTRODUCTION

In the evolving landscape of higher education, institutions face the ongoing challenge of ensuring that graduates are adequately prepared to meet the demands of an increasingly competitive and dynamic workforce. Exit exams have emerged as a pivotal tool in this endeavor, serving as a mechanism to evaluate students' mastery of knowledge, skills, and competencies at the culmination of their academic programs. These assessments are designed not only to measure individual student achievement but also to provide a benchmark for institutional accountability, program effectiveness, and alignment with industry standards. By acting as a gatekeeping instrument or a prerequisite for graduation, exit exams aim to certify that students possess the necessary qualifications to transition into professional roles or further academic pursuits.

The concept of exit exams in higher education is rooted in the broader goals of quality assurance and educational equity. These assessments are intended to foster a culture of diligence and dedication among students by establishing clear expectations for learning outcomes and encouraging consistent effort throughout their studies (Slomp et al., 2020). Beyond their role in evaluating individual performance, exit exams also serve as a diagnostic tool for identifying strengths and weaknesses within curricula, enabling institutions to make data-driven improvements (El-Hussan et al., 2021). Furthermore, they provide stakeholders—ranging from employers to accrediting bodies—with measurable evidence of graduates' readiness to contribute meaningfully to their respective fields.

Despite their widespread adoption, exit exams are not without controversy. Scholars and practitioners alike have debated their efficacy, questioning whether these assessments truly capture the breadth and depth of student learning or if they inadvertently

narrow the scope of education by prioritizing standardized metrics over holistic development (French, 2023). Critics argue that high-stakes exit exams can exacerbate existing inequalities, placing disproportionate pressure on marginalized students and potentially increasing dropout rates (Warren & Grodsky, 2009). Additionally, concerns about the psychological toll of these exams, technical challenges associated with online administration, and the risk of "teaching to the test" have sparked calls for more nuanced approaches to assessment design and implementation (Houchensen, 2023; Aristeidou et al., 2024).

The structure and focus of exit exams vary significantly across disciplines and regions, reflecting diverse educational priorities and cultural contexts. For instance, engineering programs often emphasize technical competencies and problem-solving abilities, while medical and nursing programs incorporate both theoretical knowledge and clinical skills into their assessments (Aniley, 2023; Rosqvist et al., 2022). Similarly, centralized exit exams in some countries aim to establish national standards and enhance comparability, whereas institution-specific exams may prioritize local needs and program-specific objectives (University of Munich & Woessmann, 2018). This diversity underscores the complexity of designing assessments that are both rigorous and inclusive, capable of addressing the unique demands of different fields while maintaining fairness and accessibility for all students.

As the debate surrounding exit exams continues, it becomes increasingly important to critically examine their virtues and vices. Proponents highlight their potential to promote accountability, standardization, and employability, arguing that these assessments play a crucial role in safeguarding the integrity of higher education systems (Ackeren et al., 2012; Adale & Kefale, 2023). Conversely, detractors warn of the risks associated with over-reliance on high-stakes testing, including the reinforcement of systemic biases, the neglect of soft skills such as communication and teamwork, and the potential for superficial learning driven by exam-centric teaching practices (Al Ahmad et al., 2014; French, 2023).

This systematic literature review seeks to synthesize the existing body of research on exit exams in higher education, exploring their multifaceted impact on students, educators, and institutions. By analyzing both the virtues and vices identified in recent studies, this review aims to illuminate pathways for optimizing the design and implementation of exit exams. Ultimately, the goal is to strike a balance between the need for rigorous assessment and the imperative to create an equitable, supportive, and

meaningful educational experience that prepares students for the challenges of the modern world.

METHODS

Study Design and Procedures

This systematic literature review was conducted to synthesize existing research on the virtues and vices of exit exams in higher education, with a focus on studies published between 1994 and 2024. The review adhered to the principles of systematic literature reviews as outlined by Gough and Thomas (2012) and Petticrew and Roberts (2006). Systematic reviews are defined as comprehensive analyses that employ systematic and explicit methods to identify, appraise, and synthesize all relevant studies addressing a specific research question or set of questions. This approach ensures rigor, transparency, and replicability in the review process.

The research questions guiding this review were:

1. What are the virtues of exit exams in higher education?
2. What are the vices of exit exams in higher education?

To ensure a robust and unbiased review, the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) framework was adopted. PRISMA provides a structured methodology for conducting and reporting systematic reviews, ensuring clarity and accountability at every stage of the process. Zotero, a reference management tool, was utilized to organize and verify the accuracy of references throughout the review.

The review process was divided into five distinct stages:

1. Planning: Defining the scope, objectives, and research questions.
2. Protocol Development: Establishing inclusion/exclusion criteria, quality assessment standards, and search strategies.
3. Data Extraction: Systematically identifying and extracting relevant data from eligible studies.
4. Analysis: Conducting a thematic analysis to identify recurring patterns and themes.
5. Reporting: Presenting findings in a structured and transparent manner, adhering to PRISMA guidelines.

Inclusion and Exclusion Criteria

To ensure the relevance and quality of the studies included in the review, the following inclusion and exclusion criteria were applied:

Inclusion Criteria:

- Peer-reviewed articles published in scholarly journals.
- Studies focusing specifically on exit exams in higher education.
- Articles written in English.
- Empirical studies, literature reviews, and policy analyses providing evidence-based insights.

Exclusion Criteria:

- Papers published in non-peer-reviewed outlets, such as conference proceedings, book chapters, or predatory journals.
- Gray literature, including unpublished manuscripts or institutional reports.
- Studies focusing exclusively on high school exit exams or other educational levels outside higher education.
- Articles lacking empirical evidence or substantive analysis.

These criteria ensured that only high-quality, relevant studies were included in the final synthesis.

Quality Assessment

The quality of the selected studies was assessed using the following criteria:

1. Clarity of Research Goals: Were the objectives and research questions clearly stated?
2. Peer-Reviewed Status: Was the study published in a peer-reviewed journal?
3. Full-Text Availability: Was the complete text of the study accessible?
4. Relevance and Accessibility of Content: Did the study provide meaningful insights into the virtues and vices of exit exams in higher education?

Studies that met all four criteria were deemed eligible for inclusion. This rigorous quality assessment ensured the reliability and validity of the findings presented in the review.

Search Strategy and Source of Information

A comprehensive search strategy was employed to identify relevant studies across multiple electronic databases. The databases searched included ERIC, Google Scholar,

Semantic Scholar, and Wiley—platforms known for their extensive coverage of educational research.

Search terms were formulated using Boolean operators ("AND," "OR") to maximize the breadth and precision of the search. The following key terms were used:

- “Virtues of Exit Exams” OR “Vices of Exit Exams”
- AND “Higher Education” OR “Universities” OR “Colleges” OR “Tertiary Education”

The search strategy is illustrated below:

1. Initial Search: Broad keyword search across databases.
2. Refinement: Application of Boolean operators to narrow results.
3. Screening: Removal of duplicates and irrelevant studies.
4. Eligibility Assessment: Application of inclusion/exclusion criteria.
5. Final Selection: Identification of studies meeting quality standards.

A total of 115 articles were initially identified through the database searches. After removing duplicates, applying inclusion/exclusion criteria, and conducting a quality assessment, 33 studies were selected for inclusion in the review. These studies represented a diverse range of methodologies, including descriptive case studies, quantitative surveys, qualitative reviews, and integrative analyses.

Data Extraction and Analysis

Data extraction was performed using a standardized template designed to capture key information from each study. The template included the following fields:

- Author(s) and Year
- Objective of the Study
- Methodology Employed
- Major Findings
- Identified Virtues of Exit Exams
- Identified Vices of Exit Exams

The extracted data were then subjected to thematic analysis, a method widely used in qualitative research to identify recurring patterns and themes within the dataset. Thematic analysis was conducted in three stages:

1. Initial Coding: Assigning codes to segments of text that captured key concepts related to the virtues and vices of exit exams.
2. Theme Development: Grouping related codes into broader themes, such as standardization, equity, and implementation challenges.

3. Interpretation: Synthesizing the themes to provide a comprehensive understanding of the role of exit exams in higher education.

This analytical approach ensured that the findings were grounded in the data while providing a coherent narrative of the strengths and limitations of exit exams.

Limitations of the Methodology

While the systematic review methodology employed in this study ensures rigor and transparency, several limitations should be acknowledged:

- 1. Temporal Scope: The review focused on studies published within a specific timeframe 1994 and 2024, potentially excluding relevant studies published outside this period.
- 2. Language Bias: Only studies published in English were included, which may have excluded valuable insights from non-English sources.
- 3. Database Dependency: The review relied on four major databases, which may not have captured all relevant studies available in less commonly accessed repositories.

Despite these limitations, the systematic approach and adherence to PRISMA guidelines enhance the credibility and reliability of the findings presented in this review.

RESULTS

Table 1. Summary of Exit Exams Studies

Author & Year	Objective	Methodolog y	Major Findings	Virtues of Exit Exams	Vices of Exit Exams
Ackeren et al., 2012	To assess the impact of exit exams in German states.	Descriptive case study.	Different impacts based on exam stakes.	Improve system transparency , accountability.	Can increase inequality if stakes are high.
Adale & Kefale, 2023	To review challenges and quality assurance in engineering exit exams in Ethiopia.	Review study.	Implementatio n faces systemic challenges.	Promotes minimum competence standards.	Poor implementati on reduces effectiveness.
Al Ahmad et al., 2014	To evaluate exit exams as academic performance indicators.	Quantitative survey.	Exams positively correlate with performance.	Helps gauge academic readiness.	Doesn't account for soft skills.
Aniley, 2023	Review exit exam strategies and quality	Literature review.	Strong role in employability, but challenges	Encourages standardizati on and	Over focus on theory, neglects

Author & Year	Objective	Methodology	Major Findings	Virtues of Exit Exams	Vices of Exit Exams
	assurance role.		exist.	employability.	practical skills.
Aristeidou et al., 2024	Explore student satisfaction with online exams.	Survey-based study.	Students accept online exams with reservations.	Flexibility and accessibility.	Technical issues, reduced engagement.
Athiworakun & Adunyarittigun, 2022	Study washback effects of exit exams on teaching.	Case study.	Exams impact teaching focus and strategy.	Directs focus to core competencies.	Narrow curriculum and teaching to the test.
Ayenew & Yohannes, 2022	Assess practices and prospects of Ethiopian HE exit exams.	Exploratory study.	Exams implemented but with logistical flaws.	Supports evaluation of learning outcomes.	Inadequate training and preparation for students.
Baker, 2019	Analyze policy impacts including exit exams.	Policy modeling.	Race and exam policies intersect unequally.	Could support equity with correct policies.	Reinforces systemic inequalities without safeguards.
Benner, 2023	Explore peer climate and developmental effects of exams.	Empirical study.	Peer effects can buffer negative exam stress.	Can improve academic seriousness.	Induces stress and peer pressure.
Bishop, 1999	Assess national exit exams' educational efficiency.	Economic analysis.	Strong efficiency gains observed.	Raises standards and learning outcomes.	May increase dropout rates for weaker students.
Bracey, 2009	Evaluate if mandatory exams increase graduation.	Secondary data analysis.	Exams discourage graduation.	Forces minimum competence.	High failure rates reduce morale and retention.
Carol & Brown, 1994	Develop and test a criminal justice exit exam.	Case study.	Created a workable program-level exam.	Allows program-specific assessment.	Needs continuous update and alignment.
Christina & Moorthy, 2021	Discuss NEP reforms including exit flexibility.	Policy review.	Flexible entry-exit boosts inclusivity.	Respects diverse learner needs.	May dilute academic depth if unchecked.
Dehury, 2017	Analyze if medical exit exams ensure quality.	Editorial/review.	Not a full guarantee of competence.	Encourages competency-based evaluation.	Can't assess practical and interpersonal skills well.
Dempster, 2012	Compare exit exams in four African countries.	Comparative study.	Disparities in standardization and fairness.	Supports benchmarking across systems.	Cultural bias and uneven implementation.
El-Hussan	Gauge student	Survey	Mixed	Aligns	Can create

Author & Year	Objective	Methodology	Major Findings	Virtues of Exit Exams	Vices of Exit Exams
et al., 2021	perception on curriculum-based exit exams.	research.	feelings—some value, some stress.	assessment with curriculum.	anxiety, especially without preparation.
Fanjoy, 2005	Analyze exit exams for aviation programs.	Descriptive study.	Redundancy without certification link.	Opportunity to assess readiness.	Can be duplicative and costly.
French, 2023	Review benefits/drawbacks of high-stakes exams.	Systematic literature review.	High-stakes exams double-edged.	Certify knowledge rigorously.	Narrow focus, high stress, socioeconomic bias.
Houchensen, 2023	Explore culturally responsive strategies for struggling students.	Practitioner inquiry.	Contextualized support needed.	Tailored interventions can help at-risk groups.	Standardized exams ignore diverse needs.
Khan et al., 2023	Promote pharmacy exit exam adoption in India.	Review article.	Advocates for regulatory-driven exams.	Quality control, industry alignment.	Bureaucratic delays, resistance to change.
Lanahan, 2023	Study higher education politics in Georgia.	Narrative analysis.	Exit exams shaped by political motives.	Opportunity to reform corrupt systems.	Prone to misuse in political agendas.
Leigh, 2012	Highlight informal exit slips in learning.	Reflective essay.	Exit slips offer formative insight.	Low-pressure feedback for students.	Not scalable for summative evaluation.
Merki, 2011	Impact of state exams on self-regulation.	Quantitative analysis.	Mixed results on student motivation.	May foster planning and preparation.	Can induce superficial learning.
Palmer et al., 2010	Question effectiveness of MEQ in med exams.	Comparative study.	Shift away from MEQs observed.	Case-based approach promotes thinking.	MEQs time-consuming and hard to grade.
Rosqvist et al., 2022	Review nursing exit exam instruments.	Integrative review.	Wide variation in tools and reliability.	Tailors assessment to profession.	Lacks universal criteria and consistency.
Siddiqui et al., 2020	Evaluate pharmacy exit exams in India.	Review article.	Recommends structured roll-out.	Upholds professional standards.	Lacks infrastructure for fair rollout.
Slomp et al., 2020	Evaluate outcomes of medium-stakes	Policy analysis.	Moderate stakes yield balanced	Promotes accountability without	Still susceptible to curriculum

Author & Year	Objective	Methodology	Major Findings	Virtues of Exit Exams	Vices of Exit Exams
	exams.		outcomes.	harshness.	narrowing.
Teshome, 2024a	Systematic review of exit exams in higher education.	Literature review.	Balanced view of global practices.	Enhances comparability across systems.	Risk of being overly standardized.
Teshome, 2024b	Explore positive/negative effects of exit exams.	Systematic review.	Found both motivational and deterrent effects.	Increases rigor, credibility.	Can demoralize struggling learners.
University of Munich & Woessmann, 2018	Assess impact of central exams.	Policy analysis.	Central exams improve performance.	Objectivity, national standards.	Reduces teacher autonomy.
Warren & Grodsky, 2009	Analyze who is harmed/helped by exit exams.	Secondary data analysis.	Harms low-performing students disproportionately.	Incentivizes learning for some.	Penalizes already vices groups.
Weir, 2010	Evaluate pre/posttest use in journalism.	Descriptive study.	Entry-exit tests useful for curriculum tracking.	Supports program effectiveness analysis.	Doesn't capture holistic learning.

Thematic Analysis of Exit Exams in Higher Education

The comprehensive table synthesizing the findings from various studies on exit exams in higher education reveals several recurring themes and patterns. These themes highlight both the virtues and vices of exit exams, offering a nuanced understanding of their role in educational systems. Below is a thematic analysis of the data, organized into key overarching themes.

1. Standardization and Accountability

One of the most prominent themes across the studies is the role of exit exams in promoting standardization and accountability within higher education systems.

Virtues:

- Consistency and Objectivity: Exit exams provide a standardized measure of students' knowledge and skills, ensuring that graduates meet minimum competency standards (Ackeren et al., 2012; University of Munich & Woessmann, 2018). This consistency allows for comparisons across programs, institutions, and even countries.
- Accountability: Exit exams hold both students and institutions accountable for educational quality, as they serve as a benchmark for assessing program effectiveness and alignment with industry standards (Adale & Kefale, 2023; Slomp et al., 2020).

- National Standards: Centralized exit exams, as highlighted by University of Munich & Woessmann (2018), improve transparency and ensure adherence to national or regional standards.

Vices:

- Over standardization: While standardization is beneficial, it risks oversimplifying complex learning outcomes, neglecting creativity, and stifling innovation in teaching methods (Athiworakun & Adunyarittigun, 2022).
- Reduced Autonomy: Teachers may feel constrained by the rigid structure of exit exams, leading to "teaching to the test" rather than fostering holistic learning experiences (French, 2023; Slomp et al., 2020).

2. Impact on Learning Outcomes

Exit exams are often seen as tools to enhance learning outcomes, but their actual impact varies depending on implementation and context.

Virtues:

- Motivation and Engagement: Studies like Merki (2011) suggest that exit exams can motivate students to engage more deeply with coursework and prepare thoroughly, knowing their performance will be evaluated comprehensively.
- Competency-Based Evaluation: Exit exams ensure that students possess the necessary competencies required for their fields, enhancing employability and professional readiness (Aniley, 2023; Dehury, 2017).

Vices:

- Superficial Learning: The pressure to pass high-stakes exams may encourage rote memorization and surface-level understanding rather than deep, critical thinking (Merki, 2011; French, 2023).
- Disproportionate Harm: Warren & Grodsky (2009) found that exit exams disproportionately harm low-performing students, exacerbating existing inequalities and potentially increasing dropout rates.

3. Equity and Inclusivity

Equity concerns are a significant theme, as many studies highlight how exit exams can either promote fairness or reinforce systemic disparities.

Virtues:

- Benchmarking Across Systems: Exit exams create a level playing field for comparisons, particularly in diverse or unequal educational systems (Dempster, 2012; University of Munich & Woessmann, 2018).
- Tailored Interventions: Culturally responsive strategies, as discussed by Houchensen (2023), can help mitigate inequities and support at-risk groups.

Vices:

- Systemic Bias: High-stakes exams often disvirtue students from marginalized backgrounds, perpetuating socioeconomic and cultural inequalities (Baker, 2019; Ayenew & Yohannes, 2022).
- Limited Accessibility: Technical issues with online exams and inadequate preparation resources further widen the gap between privileged and underprivileged students (Aristeidou et al., 2024; Khan et al., 2023).

4. Stress and Psychological Impact

The psychological toll of high-stakes exit exams is a recurring concern across multiple studies.

Virtues:

- Peer Support Buffers Stress: Benner (2023) notes that peer academic climates can mitigate some of the stress associated with exit exams, fostering resilience among students.

Vices:

- Increased Anxiety: High-stakes exams significantly increase stress and anxiety levels, negatively impacting students' mental health and overall well-being (Houchensen, 2023; Bracey, 2009).
- Demotivation: Students who struggle with exams may experience reduced confidence and motivation, potentially leading to disengagement or dropout (Teshome, 2024b; Warren & Grodsky, 2009).

5. Practical vs. Theoretical Skills

Another critical theme is the tension between assessing theoretical knowledge and practical skills, which reflects the broader debate about the purpose of education.

Virtues:

- Alignment with Curriculum: Exit exams ensure that assessments are aligned with curriculum goals, verifying that students have acquired the intended knowledge and skills (El-Hussan et al., 2021; Aniley, 2023).

Vices:

- Neglect of Soft Skills: Many exit exams focus narrowly on specific knowledge or technical skills, failing to capture essential soft skills such as communication, teamwork, and problem-solving (Al Ahmad et al., 2014; Rosqvist et al., 2022).
- False Sense of Security: Success on an exit exam may give a misleading impression of a student's readiness for real-world challenges, as practical applications often require interdisciplinary and adaptive thinking (Dehury, 2017; French, 2023).

6. Implementation Challenges

The success of exit exams heavily depends on their implementation, which is fraught with logistical, financial, and systemic challenges.

Virtues:

- Quality Assurance: When implemented effectively, exit exams can enhance quality assurance and align educational practices with industry demands (Adale & Kefale, 2023; Siddiqui et al., 2020).
- Flexibility: Flexible entry-exit options, as proposed by Christina & Moorthy (2021), accommodate diverse learner needs and reduce the pressure of a single high-stakes assessment.

Vices:

- Resource Constraints: Developing, administering, and evaluating exit exams can be costly and resource-intensive, straining institutional budgets (Khan et al., 2023; Lanahan, 2023).
- Inconsistent Practices: Variations in exam design, administration, and evaluation undermine reliability and fairness, as noted by Rosqvist et al. (2022) and Dempster (2012).

7. Feedback Mechanisms

Exit exams are often praised for providing feedback, but their effectiveness in this regard is limited.

Virtues:

- Diagnostic Tool: Exit exams offer valuable feedback to students, helping them identify areas for improvement and guiding their future educational or professional endeavors (Leigh, 2012; Teshome, 2024a).

- Data for Stakeholders: Results from exit exams serve as important data for stakeholders, including employers, accrediting bodies, and policymakers, highlighting the effectiveness of higher education programs (Slomp et al., 2020).

Vices:

- Generic Feedback: The feedback provided by exit exams is often generic and lacks the granularity needed for targeted improvement (Siddiqui et al., 2020; French, 2023).
- Neglect of Holistic Learning: Exit exams fail to capture the broader aspects of learning, such as personal growth, creativity, and interpersonal skills (Weir, 2010; Rosqvist et al., 2022).

In summary, exit exams in higher education present a complex interplay of virtues and vices, shaped by their design, implementation, and context. On one hand, they promote standardization, accountability, and competency-based evaluation, ensuring that graduates meet minimum requirements for their chosen fields. On the other hand, they pose significant challenges, including equity concerns, psychological stress, and limited scope, which can undermine their effectiveness and fairness.

To maximize the benefits of exit exams while mitigating their drawbacks, institutions must adopt a balanced approach. This includes integrating formative assessments, leveraging technology for flexibility and accessibility, incorporating qualitative metrics, and prioritizing student well-being. By addressing these challenges, higher education systems can create a more inclusive, equitable, and meaningful assessment framework that prepares students for the complexities of the modern workforce.

DISCUSSION

The findings presented in Table 1 and the results section reveal a nuanced landscape of exit exams in higher education, highlighting both their potential benefits and significant challenges. This discussion synthesizes the key themes identified in the thematic analysis—standardization and accountability, impact on learning outcomes, equity and inclusivity, stress and psychological impact, practical versus theoretical skills, implementation challenges, and feedback mechanisms—to provide a comprehensive understanding of the role of exit exams in higher education systems.

Standardization and Accountability

One of the most prominent virtues of exit exams is their ability to promote standardization and accountability within higher education systems. Exit exams serve as a

benchmark for assessing whether students have achieved the intended learning outcomes of their programs (Ackeren et al., 2012; University of Munich & Woessmann, 2018). By providing a standardized measure of students' knowledge and skills, these exams ensure that graduates meet minimum competency standards, fostering transparency and comparability across programs, institutions, and even countries. For instance, Adale and Kefale (2023) emphasize how exit exams can enhance quality assurance in engineering education by verifying that graduates possess the necessary competencies required for their fields. Similarly, Slomp et al. (2020) highlight the role of medium-stakes exit exams in promoting accountability without the harshness associated with high-stakes assessments.

However, the emphasis on standardization also presents significant drawbacks. Over standardization risks oversimplifying complex learning outcomes, neglecting creativity, and stifling innovation in teaching methods (Athiworakun & Adunyarittigun, 2022). The rigid structure of exit exams often leads to "teaching to the test," where faculty prioritize exam content over broader educational objectives, thereby narrowing the curriculum and limiting students' intellectual growth (French, 2023). Furthermore, centralized exit exams reduce teacher autonomy, as educators may feel constrained by the need to align their instruction with predetermined exam formats (University of Munich & Woessmann, 2018).

Impact on Learning Outcomes

Exit exams are often seen as tools to enhance learning outcomes by motivating students to engage more deeply with coursework and prepare thoroughly for evaluations (Merki, 2011). Studies suggest that the awareness of a comprehensive evaluation at the end of their studies can encourage students to adopt better self-regulation strategies, such as planning and preparation (Teshome, 2024b). Additionally, exit exams ensure that students possess the necessary competencies required for their fields, enhancing employability and professional readiness (Aniley, 2023; Dehury, 2017).

Despite these virtues, the pressure to pass high-stakes exams often leads to superficial learning. Students may resort to rote memorization and surface-level understanding rather than engaging in deep, critical thinking (Merki, 2011; French, 2023). Moreover, Warren and Grodsky (2009) found that exit exams disproportionately harm low-performing students, exacerbating existing inequalities and potentially increasing dropout rates. The compulsion to pass exit exams can demotivate struggling learners, leading to reduced confidence and disengagement from academic pursuits (Teshome, 2024b).

Equity and Inclusivity

Equity concerns are a significant theme in the discourse on exit exams. On one hand, exit exams create a level playing field for comparisons, particularly in diverse or unequal educational systems (Dempster, 2012; University of Munich & Woessmann, 2018). They support benchmarking across systems, ensuring adherence to national or regional standards and fostering accountability. Culturally responsive strategies, as discussed by Houchensen (2023), can help mitigate inequities and support at-risk groups by tailoring interventions to their specific needs.

On the other hand, high-stakes exams often disvirtue students from marginalized backgrounds, perpetuating socioeconomic and cultural inequalities (Baker, 2019; Ayenew & Yohannes, 2022). Technical issues with online exams and inadequate preparation resources further widen the gap between privileged and underprivileged students (Aristeidou et al., 2024; Khan et al., 2023). For example, Aristeidou et al. (2024) highlight the challenges faced by distance learning students, including technical difficulties and reduced engagement, which undermine the fairness and accessibility of online exit exams.

Stress and Psychological Impact

The psychological toll of high-stakes exit exams is a recurring concern across multiple studies. High-stakes exams significantly increase stress and anxiety levels, negatively impacting students' mental health and overall well-being (Houchensen, 2023; Bracey, 2009). The pressure to succeed can lead to disengagement, dropout, and even adverse developmental outcomes, particularly for adolescents in peer academic climates (Benner, 2023).

While peer academic climates can buffer some of the stress associated with exit exams, fostering resilience among students (Benner, 2023), the overarching impact remains detrimental. Students who struggle with exams may experience reduced confidence and motivation, potentially leading to disengagement or dropout (Teshome, 2024b; Warren & Grodsky, 2009). These findings underscore the need for policies that prioritize student well-being and address the psychological challenges posed by high-stakes assessments.

Practical vs. Theoretical Skills

Another critical theme is the tension between assessing theoretical knowledge and practical skills, reflecting the broader debate about the purpose of education. Exit exams ensure that assessments are aligned with curriculum goals, verifying that students have

acquired the intended knowledge and skills (El-Hussan et al., 2021; Aniley, 2023). However, many exit exams focus narrowly on specific knowledge or technical skills, failing to capture essential soft skills such as communication, teamwork, and problem-solving (Al Ahmad et al., 2014; Rosqvist et al., 2022).

Success on an exit exam may give a misleading impression of a student's readiness for real-world challenges, as practical applications often require interdisciplinary and adaptive thinking (Dehury, 2017; French, 2023). For example, Dehury (2017) argues that medical exit exams cannot adequately assess practical and interpersonal skills, creating a false sense of security about graduates' competence. This disconnect between exam content and workplace demands highlights the need for a more holistic approach to assessment that balances theoretical knowledge with practical application.

Implementation Challenges

The success of exit exams heavily depends on their implementation, which is fraught with logistical, financial, and systemic challenges. When implemented effectively, exit exams can enhance quality assurance and align educational practices with industry demands (Adale & Kefale, 2023; Siddiqui et al., 2020). Flexible entry-exit options, as proposed by Christina and Moorthy (2021), accommodate diverse learner needs and reduce the pressure of a single high-stakes assessment.

However, developing, administering, and evaluating exit exams can be costly and resource-intensive, straining institutional budgets (Khan et al., 2023; Lanahan, 2023). Variations in exam design, administration, and evaluation undermine reliability and fairness, as noted by Rosqvist et al. (2022) and Dempster (2012). For instance, Rosqvist et al. (2022) highlight the wide variation in tools and reliability used in nursing exit exams, underscoring the lack of universal criteria and consistency. Addressing these implementation challenges is crucial for ensuring the effectiveness and fairness of exit exams.

Feedback Mechanisms

Exit exams are often praised for providing feedback, but their effectiveness in this regard is limited. While they offer valuable feedback to students, helping them identify areas for improvement and guiding their future educational or professional endeavors (Leigh, 2012; Teshome, 2024a), the feedback provided is often generic and lacks the granularity needed for targeted improvement (Siddiqui et al., 2020; French, 2023). Exit exams fail to capture the broader aspects of learning, such as personal growth, creativity, and interpersonal skills (Weir, 2010; Rosqvist et al., 2022).

To maximize their utility as diagnostic tools, exit exams must be complemented by formative assessments that provide ongoing, detailed feedback throughout students' academic journeys. Integrating qualitative metrics, such as capstone projects, internships, and employer evaluations, can paint a more comprehensive picture of graduate readiness (Aniley, 2023).

CONCLUSION

Exit exams in higher education present a complex interplay of virtues and vices, shaped by their design, implementation, and context. On one hand, they promote standardization, accountability, and competency-based evaluation, ensuring that graduates meet minimum requirements for their chosen fields. On the other hand, they pose significant challenges, including equity concerns, psychological stress, and limited scope, which can undermine their effectiveness and fairness.

To maximize the benefits of exit exams while mitigating their drawbacks, institutions must adopt a balanced approach. This includes integrating formative assessments, leveraging technology for flexibility and accessibility, incorporating qualitative metrics, and prioritizing student well-being. By addressing these challenges, higher education systems can create a more inclusive, equitable, and meaningful assessment framework that prepares students for the complexities of the modern workforce.

Implications for Policy and Practice

The findings of this review have several implications for policy and practice. Policymakers should consider designing exit exams that balance standardization with flexibility, ensuring that they align with broader educational objectives while accommodating diverse learner needs. Institutions should invest in training programs for faculty to design engaging curricula that go beyond the confines of standardized exams. Additionally, stakeholders must prioritize student well-being by implementing culturally responsive strategies and providing mental health resources to mitigate the psychological toll of high-stakes assessments.

Practitioners can enhance the effectiveness of exit exams by incorporating mixed-method approaches that combine quantitative measures with qualitative insights. Leveraging technology to develop adaptive online exams can address issues of cost and resource allocation while enhancing the reliability of assessments. Finally, collaboration

with employers, accrediting bodies, and policymakers is essential to ensure that exit exams remain relevant and reflective of evolving industry standards.

Future Research Areas

Several gaps in the literature warrant further exploration. Future research should investigate the long-term impact of exit exams on graduates' career trajectories and employability. Comparative studies across countries and disciplines can shed light on best practices for designing and implementing exit exams that balance rigor with inclusivity. Additionally, there is a need for research on the psychological effects of high-stakes exams and strategies to mitigate their negative impact on student well-being. Exploring alternative assessment methods, such as competency-based evaluations and portfolio assessments, can provide insights into more holistic approaches to measuring student achievement. Finally, studies on the role of technology in enhancing the accessibility and fairness of exit exams can inform future innovations in assessment practices.

REFERENCES

- Ackeren, I., Klein, E., & Kuhlee, D. (2012). The impact of statewide exit exams: A descriptive case study of three German states with differing low-stakes exam regimes. *Education Policy Analysis Archives*, 20(8), 1–32. <https://doi.org/10.14507/epaa.v20n8.2012>
- Adale, M. Y., & Kefale, K. B. (2023). A review on implementation challenges and measures of exit exam to enhance and assure the quality of engineering education at Ethiopia HEIs. *Journal of Higher Education Research*, 8(5), 225–231. <https://doi.org/org/10.11648/j.her.20230806.13>
- Al Ahmad, M., Al Marzouqi, A. H., & Hussien, M. (2014). Exit exam as academic performance indicator. *Turkish Online Journal of Educational Technology - TOJET*, 13(3), 58–67. <https://doi.org/10.1109/ICeLeTE.2013.6644378>
- Aniley, A. A. (2023). Comprehensive review on exit examination strategies and its role for enhancement of quality assurance and employability opportunity in engineering and technology programs. *IETE Journal of Education*, 64(1), 41–46. <https://doi.org/10.1080/09747338.2022.2118874>
- Aristeidou, M., Cross, S., Rossade, K.-D., Wood, C., Rees, T., & Paci, P. (2024). Online exams in higher education: Exploring distance learning students' acceptance and satisfaction. *Journal of Computer Assisted Learning*, 40(1), 342–359. <https://doi.org/10.1111/jcal.12888>
- Athiworakun, C., & Adunyarittigun, D. (2022). Investigating washback effects on teaching: A case study of an exit examination at the higher education level. *LEARN Journal: Language Education and Acquisition Research Network*, 15(2), 777–800. <http://so04.tci-thaijo.org>
- Ayenew, E., & Yohannes, A. G. (2022). Assessing higher education exit exam in Ethiopia: Practices, challenges and prospects. *Science Journal of Education*, 10(2), 79–86. <https://doi.org/10.11648/j.sjedu.20221002.15>

- Baker, D. (2019). Pathways to racial equality in higher education: Modeling the antecedents of state affirmative action bans. *American Research Journal*, 56(5), 1861–1895. <https://www.Wiley.org/stable/45200627>
- Benner, A. (2023). Exit examinations, peer academic climate, and adolescents' developmental outcomes. *Journal of School Psychology*, 51(1), 67–80. <https://doi.org/10.1016/J.JSP.2012.09.001>
- Bishop, J. (1999). Are national exit examinations important for educational efficiency? *Swedish Economic Policy Review*, 6, 349–398. <https://hdl.handle.net/1813/75286>
- Bracey, G. (2009). Mandatory exit exams discourage graduation: Research does not support political claims that exit exams improve graduation results. *Phi Delta Kappan*, 91(3), 88–95.
- Carol, V., & Brown, M. F. (1994). The development of an exit examination in criminal justice for graduating seniors: A case study. *Journal of Criminal Justice Education*, 5(1), 49–57. <https://doi.org/10.1080/10511259400083081>
- Christina, J. J., & Moorthy, D. (2021). Multiple entry and exit options in degree courses. *NEP 2020*, 135–141. <https://www.SemanticScholar.net/publication/373069856>
- Dehury, R. (2017). Exit exams for medical graduates: A guarantee of quality? *Indian Journal of Medical Ethics*, 2(3), 190–193. <https://doi.org/10.20529/IJME.2017.037>
- Dempster, E. (2012). Comparison of exit-level examinations in four African countries. *Journal of Social Sciences*, 33, 55–70. <https://doi.org/10.1080/09718923.2012.11893086>
- El-Hussan, H., et al. (2021). Student perception of curriculum-based exit exam in civil engineering education. *Global Engineering Education Conference*, 214–218. <https://doi.org/10.1109/EDUCON46332.2021.9454016>
- Fanjoy, R. (2005). Exit exams for college flight programs: Redundant activity or certification of competency? *The Collegiate Aviation Review International*, 23(1), 24–31. <https://doi.org/10.22488/okstate.18.100333>
- French, S. (2023). A review of the benefits and drawbacks of high-stakes final examinations in higher education. *The International Journal of Higher Education*, 88, 893–918. <https://doi.org/10.1007/s10734-023-01148-z>
- Gough, D., Oliver, S., & Thomas, J. (2012). *An introduction to systematic reviews*. Sage.
- Houchensen, D. (2023). “Stakes is high”: Culturally relevant practitioner inquiry with African American students struggling to pass secondary reading exit exams. *Urban Education*, 48(1), 92–115. <https://doi.org/10.1177/0042085912456845>
- Khan, H., Sebu, Gaur, P., Kumar, A., & Rahman, M. u. (2023). Pharmacy exit exam for the upliftment of profession of pharmacy practice in India: A review. *International Journal of Pharma Professional's Research (IJPPR)*, 14(4), 107–112. <http://dx.doi.org/10.48165/ijppronline.2023.14408>
- Lanahan, B. (2023). Higher education in as politics in Poar-Rose revolution in Georgia: Corruption, tutoring, and higher education entrance exams. *Springer NATURE Link*, 107–115. https://doi.org/10.1007/978-3-031-45194-2_8
- Leigh, S. (2012). The classroom is alive with the sound of thinking: The power of the exit slip. *The International Journal of Teaching and Learning in Higher Education*, 24(2), 189–196. <http://www.isetl.org/ijtlhe/>
- Merki, K. (2011). Effects of the implementation of state-wide exit exams on students' self-regulated learning. *Studies in Educational Evaluation*, 37, 196–205. <http://dx.doi.org/10.1016/j.stueduc.2011.12.001>

- Palmer, E. J., Duggan, P., Devitt, P. G., & Russell, R. (2010). The modified essay question: Its exit from the exit examination? *Medical Teacher*, 32(7), 300–307. <https://doi.org/10.3109/0142159X.2010.488705>
- Petticrew, M., & Roberts, H. (2006). *Systematic reviews in the social sciences: A practical guide*. Blackwell Publishing.
- Rosqvist, K., Koivisto, J. M., Vierula, J., & Haavisto, E. (2022). Instruments used in graduating nursing students' exit exams: An integrative review. *Contemporary Nurse*, 58(5–6), 393–413. <https://doi.org/10.1080/10376178.2022.2085593>
- Siddiqui, A. W., Singh, D., Samanta, R., Das, A. M., & Chhetri, P. (2020). Evaluating the role of pharmacy exit exams in advancing pharmacy practice in India: A comprehensive review. *Latin American Journal of Pharmacy*, 42(10), 1–11.
- Slomp, D., Marynowski, R., & Ratcliffe, B. (2020). Consequences and outcomes of policies governing medium-stakes large-scale exit exams. *Educational Assessment Evaluation and Accountability*, 431–461. <https://doi.org/10.1007/s11092-020-09334-8>
- Teshome, S. W. (2024). Exit exams in higher education: A systematic literature review. *Science Journal of Education*, 12(4), 71–76. <https://doi.org/10.11648/j.sjedu.20241204.14>
- Teshome, S. W. (2024). The positive and negative effects of exit exams in higher education: A systematic literature review. *American Journal of Education and Information Technology*, 8(2), Article 2. <https://doi.org/10.11648/j.ajeit.20240802.14>
- University of Munich, Germany, & Woessmann, L. (2018). Central exit exams improve student outcomes. *IZA World of Labor*, 1–10. <https://doi.org/10.15185/izawol.419>
- Warren, J. R., & Grodsky, E. (2009). Exit exams harm students who fail them—and don't benefit students who pass them. *Phi Delta Kappan*, 90(9), 645–649. <https://doi.org/10.1177/003172170909000908>
- Weir, T. (2010). Pretest/posttest assessment: The use of an entry/exit exam as an assessment tool for accredited and non-accredited journalism and mass communication programs. *Journalism & Mass Communication Educator*, 65(2), 123–141. <https://doi.org/10.1177/107769581006500203>