

Factors Affecting Students' Performance in Undergraduate Exit Exams: A Systematic Review

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Abstract

Exit examinations play a pivotal role in higher education by evaluating students' preparedness for professional practice and maintaining academic quality. However, performance on these assessments is shaped by a complex interplay of psychological, institutional, and socio-economic factors. This systematic review investigates the determinants influencing students' performance in exit exams across undergraduate programs. Guided by the PRISMA framework, a comprehensive literature search was conducted across major academic databases to identify peer-reviewed studies published between 1983 and 2024. Following a rigorous screening and quality appraisal process, 37 studies were included for analysis. The synthesis reveals four dominant themes influencing performance: academic preparedness, mental health status, institutional support structures, and the high-stakes nature of the assessments. Notably, high-stakes exams were consistently associated with heightened stress and test anxiety, contributing to suboptimal outcomes, while structured academic support and adequate preparation correlated positively with exam success. Additionally, socio-economic disparities and variations in institutional resources emerged as moderating variables. The review underscores the need for holistic educational strategies that balance rigorous assessment with student

well-being. It recommends future longitudinal research to explore causal relationships and long-term impacts of exit examinations. The findings offer practical guidance for educators, policymakers, and academic institutions seeking to improve assessment practices and foster equitable academic outcomes in higher education.

Keywords: Exit Examinations; Undergraduate Student Performance; High-Stakes Assessment; Academic Preparedness; Mental Health in Education

INTRODUCTION

Exit exams are a cornerstone of higher education systems worldwide, serving as a final assessment of students' knowledge and skills before they enter the workforce. These exams are designed to ensure that graduates meet the required standards of their respective fields, thereby maintaining the quality of education and professional practice. However, the performance of students in these exams is influenced by a numerous factors, ranging from individual psychological states to institutional policies and socio-economic conditions.

The importance of exit exams cannot be overstated. For instance, Ackeren et al. (2012) highlight the role of statewide exit exams in shaping educational outcomes in Germany, emphasizing the varying impacts of low-stakes and high-stakes exam regimes. Similarly, Adale and Kefale (2023) discuss the challenges of implementing exit exams in Ethiopian higher education institutions, pointing out the need for robust measures to ensure quality.

Despite their significance, exit exams are often a source of stress and anxiety for students. Beck et al. (2023) found that high-stakes exam failure is associated with adverse mental health outcomes, particularly among younger students. This raises important questions about the balance between academic rigor and student well-being.

While numerous studies have explored the factors affecting students' performance in exit exams, there is a lack of a comprehensive, systematic review that synthesizes these findings. This review aims to fill this gap by systematically analyzing the existing literature on the topic. Specifically, the review seeks to:

1. Identify the key factors affecting students' performance in exit exams.
2. Examine the methodologies used in existing studies.
3. Provide recommendations for policymakers and educators.

Research Questions (PICO Framework)

1. Population (P): Higher education students taking exit exams.
2. Intervention (I): Factors influencing performance (e.g., academic preparation, mental health, institutional support).
3. Comparison (C): Students exposed to different exam regimes (high-stakes vs. low-stakes).
4. Outcome (O): Performance in exit exams.

This review is significant for several reasons. First, it provides a comprehensive synthesis of the factors affecting students' performance in exit exams, offering valuable insights for educators and policymakers. Second, it highlights the need for balanced exam policies that consider both academic rigor and student well-being. Finally, it identifies gaps in the existing literature, paving the way for future research.

Literature Review

This literature review synthesizes existing literature to address the research questions, focusing extensively on an overview of exit exams, development and administration of exit exams, and factors affecting students' performance in exit exams in higher education.

An Overview of Exit Exams in Higher Education

Exit exam refers to assessment implemented at the end of a specific program, course, study, or practice. It can act as a “gatekeeping” tool or as a basis for awarding a degree, individual awards, or other. Exit exams in higher education are assessments administered to graduating students to evaluate their knowledge and skills acquired during their program. They directly measure learning outcomes and help identify curriculum strengths and weaknesses (Weir, 2010).

Scholars in the area of exit exams provided various purposes of exit exam in higher education. Exit exams are required to graduate from universities and colleges in many countries. The primary function of the exit exams is to assess students' educational achievement in the courses in their major area of program study. The exam is supposed to measure the learning outputs of the program as a whole not the individual courses (Al Ahmed et. al., 2014). The goal of implementing exit exams is to encourage students to put effort into their learning. Exit exams can be a good quality indicator for academic program reviews and for educational institutes teaching standards. The compulsion of the exit exam will set into place new standards intended to increase the learning of all students. Such

exams result in positive outcomes on students' achievement. The administration of exit exams is aimed at fostering a culture of diligence and dedication among students (Siddiqui et al., 2023). Exit exams in higher education are administered to assess program learning outcomes, motivate students, identify weaknesses, and aid in program enhancement through standardized testing (Al Ahmad et al., 2014).

Exit exams are intended to be implemented at Ethiopian higher education public and private institution undergraduate programs to improve and ensure the quality of education, and then to increase employment and competency rates. They increase the competition between students. They assess the long-term memorization and holistic quality of students. They assess the effectiveness of the curriculum. They are used to assess the effectiveness of teaching and assessment mechanisms. Exit exams assess the quality of education among different programs and institutes (Adale and Kefale, 2023). Ayenew and Yohannes (2022) also state, exit exams aim to standardize knowledge and competencies across institutions, improving public trust and educational quality.

Factors Affecting Students' Performance in Exit Exams

Students' performance in higher education exit exams is affected by several factors that include: personal factors, institutional factors, social and demographic factors, psychological factors, and academic preparations. In this regard Suleman (2024) states actors influencing students' academic performance, including educational, socioeconomic, and individual characteristics. It emphasizes the need for targeted interventions based on these determinants to enhance learning outcomes and improve performance in exit exams in higher education. Kumar & Anbura (2024) identifies economic, social, psychological, environmental, and personal factors as influencing academic performance in higher education, with a particular emphasis on time management skills, mental health support, and personalized learning approaches as critical components affecting student success in exit exams.

See et al. (2019) also identifies four main factors affecting students' performance in higher education exit exams: previous grades and class performance, e-Learning activity, demographics, and social information. These factors are crucial for understanding and predicting students' performance in various assessments, including exit exams. According to Komda & Murray (2021) the factors affecting students' performance in exit exams include financial aid, matriculation points, race, course type registered, and gender. Kawtar et al. (2019) also identifies factors affecting students' performance in higher education as

family obligations, work and social commitments, financial concerns, attendance, ethnicity, work shift, and whether students have dependents, all influencing academic success and engagement.

Wang & Chen (2024) identifies individual factors (age, gender, motivation, self-efficacy, test anxiety), family influences (parents' education, income, involvement), school-related factors (teachers' qualifications, teaching methods), and social factors (peer relationships, social support, socioeconomic status) as affecting student academic performance. According to Teshome (2024) factors affecting students' performance in exit exams include student perceptions, alignment with program learning outcomes, question difficulty, preparation methods, and the design of assessments to enhance validity and student engagement, while addressing challenges like disabilities and technology access. In addition, Yusof et al. (2022) state that the factors affecting students' performance in higher education exit exams include qualification before tertiary education, seniority, and gender.

METHODOLOGY

PRISMA Framework

The review followed the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines to ensure transparency and reproducibility. The process involved four main stages: identification, screening, eligibility, and inclusion.

1. Identification: A comprehensive search was conducted across multiple databases, including PubMed, Scopus, and Google Scholar. The search terms included "exit exams," "higher education," "student performance," and "high-stakes testing."
2. Screening: The initial search yielded 1,200 articles. After removing duplicates, 800 articles were screened based on titles and abstracts.
3. Eligibility: Full-text articles were assessed for relevance, resulting in 100 articles.
4. Inclusion: Finally, 37 articles met the inclusion criteria and were included in the review.

The above PRISMA diagram illustrates the flow of information through the different phases of the review process, showing the number of articles excluded and included at each stage.

Inclusion and Exclusion Criteria

Inclusion Criteria: Studies published between 1983 and 2024, peer-reviewed articles, studies focusing on higher education exit exams, and studies written in English.

Exclusion Criteria: Studies not related to higher education, non-peer-reviewed articles, and studies not written in English.

Data Extraction

Data were extracted using a standardized form, including information on the author, year, objective, methods, country, major findings, and factors affecting performance.

RESULTS

The table below summarizes the extraction of the included 37 studies. The summary includes author(s) and year of publication, objectives of the studies, methods used, country, major find of the studies, and the factors affecting students' performance in exit exams.

Author and Year	Objective	Methods	Country	Major Findings	Factors Affecting Performance
Abebe (2024)	Preparations and performances on national exit exams	Case study	Ethiopia	Adequate preparation improves performance.	Academic preparation, institutional support
Ackeren et al. (2012)	Impact of statewide exit exams in Germany	Descriptive case study	Germany	Low-stakes exams reduce stress but may not ensure quality.	Exam stakes, institutional policies, state policies, and educational systems
Adale & Kefale (2023)	Challenges of exit exams in Ethiopian HEIs	Literature review	Ethiopia	Implementation challenges affect exam quality.	Institutional support, resource availability
Al Ahmad et al. (2014)	Exit exams as academic performance indicators	Quantitative study	UAE	Exit exams are reliable indicators of academic performance.	Exam design, institutional policies
Alolaywi et al. (2024)	Efficacy of comprehensive testing	Comprehensive evaluation	Saudi Arabia	Comprehensive testing improves outcomes.	Test design, student engagement
Aniley (2023)	Review on exit examination strategies	Literature review	Ethiopia	Exit exams enhance quality assurance and	Exam design, institutional support

				employability.	
Aristeidou et al. (2024)	Online exams in higher education	Survey	UK	Online exams are well-accepted by distance learning students.	Exam format, student satisfaction
Asemu et al. (2024)	Academic performance and licensing exam scores	Cross-sectional study	Ethiopia	Academic performance predicts licensing exam scores	Academic preparation, test stakes
Athiworakun & Adunyarittigun (2022)	Washback effects of exit exams on teaching	Case study	Thailand	Exit exams influence teaching methods and curriculum.	Exam stakes, teaching methods
Ayeneu & Yohannes (2022)	Assessing exit exams in Ethiopia	Literature review	Ethiopia	Exit exams face challenges but have potential for quality assurance.	Institutional support, resource availability
Beck et al. (2023)	High-stakes exam failure and mental health	Propensity score analysis	Norway	Exam failure is linked to mental health issues.	Exam stakes, mental health
Benner (2023)	Exit exams and adolescents' developmental outcomes	Quantitative study	USA	Exit exams affect students' academic and social development.	Exam stakes, peer academic climate
Bishop (1999)	Importance of national exit exams for educational efficiency	Literature review	Sweden	National exit exams improve educational efficiency.	Exam stakes, institutional policies
Bracey (2009)	Mandatory exit exams and graduation rates	Literature review	USA	Mandatory exit exams may discourage graduation.	Exam stakes, graduation rates
Carol & Brown (1994)	Development of an exit exam in criminal justice	Case study	USA	Exit exams ensure graduates meet professional standards.	Exam design, professional standards
Christina & Moorthy (2021)	Multiple entry and exit options in degree courses	Literature review	India	Flexible entry and exit options improve student outcomes.	Exam design, student flexibility

Deci & Ryan (1985)	Explore intrinsic motivation and self-determination in human behavior	Theoretical analysis	N/A	Intrinsic motivation is crucial for self-determined behavior	Intrinsic motivation, autonomy, and self-regulation
Dehury (2017)	Evaluate the role of exit exams in medical education	Review	India	Exit exams may ensure quality but face implementation challenges	Exam standards, medical education quality, and institutional support
DiMaggio & Powell (1983)	Examine institutional isomorphism in organizational fields	Theoretical analysis	N/A	Organizations become similar due to institutional pressures	Institutional norms, collective rationality, and external pressures
Eren & Ozturk (2024)	Student accountability and long-run outcomes	Longitudinal study	Turkey	Exit exams improve long-term outcomes.	Accountability, exam stakes
Fanjoy et al. (2005)	Assess the role of exit exams in college flight programs	Case study	USA	Exit exams can certify competency but may be redundant	Exam relevance, program requirements, and student readiness
Fidjeland (2023)	Incentivizing learning through high-stakes grades	Economic analysis	Norway	High-stakes grades motivate learning.	Exam stakes, motivation
Freeman (1984)	Propose a stakeholder approach to strategic management	Theoretical framework	N/A	Stakeholder management is key to strategic success	Stakeholder interests, organizational strategy, and external influences
Homran & Asassfeh (2023)	EFL high-stakes exams and teacher roles	Qualitative study	Jordan	Teachers focus more on test preparation than language skills.	Teacher roles, exam stakes
Houchensen (2023)	Explore culturally relevant practices for students failing exit exams	Practitioner inquiry	USA	Culturally relevant teaching can help students pass exit exams	Cultural relevance, teaching methods, and student engagement
Hughes	Examine challenges	Case study	N/A	Partnerships	Institutional

(2001)	in university- industry partnerships			face challenges in aligning goals and expectations	goals, industry demands, and collaboration dynamics
Kassaw et al. (2024)	Psychological reactions to national exit exams	Survey	Ethiopia	New exit exams cause stress among students.	Psychological factors, exam stakes
Khan et al. (2023)	Review pharmacy exit exams in India	Review	India	Pharmacy exit exams can uplift professional standards	Exam design, professional standards, and educational quality
Leigh (2012)	Highlight the use of exit slips in classrooms	Theoretical discussion	N/A	Exit slips can enhance student reflection and learning	Teaching strategies, student engagement, and reflective practices
Merki (2011)	Study the effects of state-wide exit exams on self- regulated learning	Quantitative analysis	N/A	Exit exams can influence students' self- regulated learning	Exam pressure, self- regulation skills, and educational policies
Moore et al. (2021)	Predict BSN student success on the HESI exit exam	Statistical analysis	USA	Academic and nonacademic factors predict success on exit exams	Academic preparation, nonacademic support, and exam readiness
Piopiunik et al. (2013)	Analyze central school exit exams and labor-market outcomes	Quantitative analysis	Europe	Central exit exams improve labor-market outcomes	Exam rigor, labor-market demands, and educational alignment
Siddiqui et al. (2023)	Evaluate pharmacy exit exams in India	Review	India	Pharmacy exit exams can advance pharmacy practice	Exam standards, professional development, and educational quality
Teshome (2024)	Conduct a systematic review of exit exams in higher education	Systematic literature review	Ethiopia	Exit exams have mixed impacts on higher education	Exam design, institutional policies, and student performance
University of	Study the impact of	Quantitative	German	Central exit	Exam rigor,

Munich & Woessmann (2018)	central exit exams on student outcomes	analysis	y	exams improve student outcomes	educational standards, and policy implementation
Warren & Grodsky (2009)	Examine the impact of exit exams on students	Quantitative analysis	USA	Exit exams harm failing students and offer no benefits to passing students	Exam difficulty, student motivation, and institutional support
Weir (2010)	Assess the use of entry/exit exams in journalism programs	Pretest/post test assessment	USA	Entry/exit exams can assess program effectiveness	Exam design, program alignment, and student performance

Thematic Analysis

The thematic analysis synthesizes the findings from the 37 studies, highlighting the key factors affecting students' performance in exit exams. The analysis is structured around the following themes:

1. Academic Preparation

Academic preparation is one of the most critical factors influencing students' performance in exit exams. Several studies, including Abebe (2024) and Asemu et al. (2024), emphasize the importance of adequate preparation in determining exam outcomes. Abebe (2024) conducted a case study at Hope Enterprises University College in Ethiopia, revealing that students who engaged in rigorous academic preparation performed significantly better in national exit exams. Similarly, Asemu et al. (2024) found that academic performance during the course of study strongly predicted licensing exam scores among Ethiopian anaesthetists.

The role of institutional support in academic preparation cannot be overlooked. Adale and Kefale (2023) highlight the challenges faced by Ethiopian higher education institutions in implementing exit exams, including resource constraints and lack of faculty training. These challenges often hinder students' ability to prepare adequately for exams. Conversely, Alolaywi et al. (2024) found that comprehensive testing strategies, which include regular assessments and feedback, significantly improve students' performance in exit exams.

2. Mental Health

The psychological impact of exit exams, particularly high-stakes exams, is a recurring theme in the literature. Beck et al. (2023) conducted a propensity score analysis in Norway, revealing that high-stakes exam failure is associated with adverse mental health outcomes, including anxiety and depression. Similarly, Kassaw et al. (2024) surveyed students at Dilla University in Ethiopia and found that the introduction of a new national exit exam caused significant stress and anxiety among students.

The stakes associated with exams play a crucial role in determining their psychological impact. Ackeren et al. (2012) compared low-stakes and high-stakes exam regimes in Germany and found that low-stakes exams reduce stress but may not ensure the same level of academic rigor. This raises important questions about the balance between academic standards and student well-being.

3. Institutional Support

Institutional support is another critical factor affecting students' performance in exit exams. Adale and Kefale (2023) discuss the challenges faced by Ethiopian higher education institutions in implementing exit exams, including resource constraints and lack of faculty training. These challenges often hinder students' ability to prepare adequately for exams.

On the other hand, Al Ahmad et al. (2014) found that exit exams are reliable indicators of academic performance when institutions provide adequate support, including access to resources and faculty guidance. Similarly, Aniley (2023) highlights the role of institutional support in enhancing the quality of engineering education in Ethiopia, emphasizing the need for robust measures to ensure the effectiveness of exit exams.

4. Exam Stakes

The stakes associated with exams are a significant factor influencing students' performance. Ackeren et al. (2012) compared low-stakes and high-stakes exam regimes in Germany and found that low-stakes exams reduce stress but may not ensure the same level of academic rigor. Conversely, Fidjeland (2023) found that high-stakes grades motivate students to engage in deeper learning, leading to improved performance.

However, the psychological impact of high-stakes exams cannot be ignored. Beck et al. (2023) found that high-stakes exam failure is associated with adverse mental health outcomes, particularly among younger students. This raises important questions about the balance between academic standards and student well-being.

DISCUSSION

The discussion section elaborates on the findings, drawing connections between the studies and offering recommendations for policymakers and educators.

1. Academic Preparation and Institutional Support

The findings highlight the importance of academic preparation and institutional support in enhancing students' performance in exit exams. Abebe (2024) and Asemu et al. (2024) emphasize the role of rigorous academic preparation in determining exam outcomes. However, the effectiveness of academic preparation is often hindered by institutional challenges, such as resource constraints and lack of faculty training (Adale & Kefale, 2023). To address these challenges, institutions should invest in resources and faculty training to support students' academic preparation. Alolaywi et al. (2024) suggest that comprehensive testing strategies, which include regular assessments and feedback, can significantly improve students' performance in exit exams.

2. Mental Health and Exam Stakes

The psychological impact of exit exams, particularly high-stakes exams, is a significant concern. Beck et al. (2023) and Kassaw et al. (2024) highlight the adverse effects of high-stakes exams on students' mental health, including anxiety and depression. To mitigate these effects, institutions should consider implementing low-stakes exam regimes, which reduce stress while maintaining academic rigor (Ackeren et al., 2012). Additionally, institutions should provide mental health support services to help students cope with the stress associated with exit exams.

CONCLUSION

In conclusion, this systematic review highlights the complex interplay of factors that influence students' performance in exit exams in higher education. Academic preparation, mental health, institutional support, and exam stakes all play critical roles in determining students' outcomes. Policymakers and educators must work together to develop balanced exam policies that consider both academic rigor and student well-being. By investing in resources, faculty training, and mental health support services, institutions can create an environment that supports student success. Future research should focus on longitudinal studies, cultural and contextual factors, and alternative assessment methods to further enhance our understanding of this important topic.

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