

**INFLUENCE OF EXAMINATION MANAGEMENT PRACTICES ON STUDENTS'
ACADEMIC PERFORMANCE IN PUBLIC SECONDARY SCHOOLS IN
HARGEISA REGION, SOMALILAND**

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DECLARATION AND APPROVAL

I declare that this research thesis report is my original work and has been never been presented in any other university for any other award

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DEDICATION

I dedicate this thesis to my family and my loving parents. Your presence enabled me to work harder.

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LIST OF ABBREVIATIONS AND ACRONYMS

APEL	Assessment of Prior Experiential Learning
GSL	Government of Somaliland
PPMC	Pearson's Product Moment Correlation
SPSS	Statistical Package for Social Sciences
VET	Vocational Education Training

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ABSTRACT

In recent years, secondary school students have shown poor academic results in Mathematics, Languages, Sciences, and Humanities. Although many studies have tried to tackle this problem, the role of examination practices has often been overlooked. This study seeks to explore how examination management practices affect the academic performance of public secondary school students in Bardass, Hargeisa region, Somaliland. The study's objectives were to evaluate the impact of examination setting, distribution, invigilation, and marking practices on students' academic performance in public secondary schools in Hargeisa, Somaliland. The research was based on Self-Determination Theory (SDT) and utilised an explanatory sequential research design, incorporating both quantitative and qualitative methods. The target population was 412 individuals, with a sample size of 52, including 5 principals, 45 teachers, 1 Examination Officer, and 1 Sub-Region Director of Education, selected using a sampling theorem. Data was gathered through questionnaires and interviews with principals, teachers, the Examination Officer, and the Sub-Region Director of Education. The research tools were

tested in a pilot study at a school in Bardass, Hargeisa, using the test-retest method to assess reliability, with a Pearson moment correlation coefficient threshold of $r=0.7$ deemed acceptable. Content validity was evaluated by educational administration experts from Mount Kenya University's School of Education, while peers at the school assessed face validity. Qualitative data was analyzed thematically based on the study's objectives, and quantitative data analysis entailed descriptive statistics and correlation analysis in SPSS version 24. The findings revealed that examination setting practices, such as the design of exam formats and the selection of questions, impact academic performance in public secondary schools in Hargeisa, Somaliland, with a moderate positive correlation ($r=.622$). The study also found that examination distribution practices, including the dispatch and distribution of exams, affect academic performance. Additionally, invigilation practices, such as the recruitment and planning of invigilators per exam center, were shown to influence student performance. A moderate positive correlation ($r=.630$) was also observed between examination marking practices and students' academic performance. The study concluded that examination management practices significantly influence the academic performance of public secondary school students in Hargeisa, Somaliland, with varying effects across different aspects. These findings have potential implications for various stakeholders in education, including students, teachers, school administrators, and the Ministry of Education.

CHAPTER ONE

INTRODUCTION

1.1 Introduction

This particular chapter concentrates on providing a thorough examination of the historical context surrounding the study, as well as a clear and concise statement of the research problem. Additionally, the chapter outlines the purpose and objectives of the study, along with the research questions that was addressed. Rationale and significance are also discussed, as well as the limitations, delimitations, and scope of the research. Furthermore, this chapter introduces the various assumptions that underlie the study and provide operational definitions of key terms.

1.2 Background of the Study

Examinations are utilized as instruments or devices for measurement, employed by educators to precisely determine the extent of learning achieved by their students in relation to a particular attribute or variable. It is the responsibility of the teacher to select the most fitting measurement tool, which will accurately gauge the attribute or variable of interest. In this way, a wellconstructed examination will allow the teacher to accurately measure the attribute, which is often learning. In line with this, Anderman (2020) asserts that assessments have been a crucial component of educational systems all throughout the world since antiquity. Exams serve a number of purposes in the learning process, notwithstanding the effects they have on the curriculum and all other stakeholders in the educational system (Haughbrook, 2020). In other words, the impact on a school's organisational structure was assessed in terms of how the curriculum is implemented, which is influenced by how the schools are run and how exams (both internal and external) are conducted. This includes how these procedures affect how students perform in secondary schools, as well as how exams are set, given out, and marked.

Glaser and Silver (2004) emphasise that different nations around the world use different systems to gauge students' academic performance, attitudes, and the application of various learning

outcomes from their respective school systems in a longitudinal study carried out in the United States. The authors also noted that some countries have opted to abandon the common assessments and exams created by teachers that serve as both internal and external benchmarks for success and performance. Individuals' levels of attainment continue to serve as the foundation for examination management practises in light of these circumstances and in order to establish standards and acceptable criteria for adequate attainment for further education, placement, promotion, and job employment (Rode et al., 2016).

In the Netherlands, the conclusion of secondary education is traditionally marked by the administration of examinations which are composed of both national and school-based evaluations across various academic subjects (Beguin & Ehren, 2011). Of particular importance in these assessments is the need to maintain comparability of intra- and inter-year school results. To address this concern, Beguin & Ehren (2011) have noted that various standard examination setting methods are employed in the Netherlands. This observation is congruent with the findings of Bhatti's (2007) longitudinal study conducted in Pakistan, which advocates for greater flexibility in the conduct of examinations, including more options for exam dates to accommodate both schools and students, instead of the fixed dates currently imposed on all examinees.

Denmark's approach to final school evaluations emphasizes holistic assessment, balancing academic achievement with personal development. Unlike high-stakes testing models, Danish secondary schools, particularly in the Folkeskole (public primary and lower secondary education), prioritize continuous assessment and student well-being over single-exam outcomes. Final evaluations occur at the end of grade 9 or 10, marking the transition to upper secondary education or vocational training.

Students undergo written and oral examinations in core subjects like Danish, mathematics, and English, administered by the Ministry of Education. These exams, designed to assess critical thinking and creativity, are complemented by project-based assignments (Andreasen, 2018). Teachers' ongoing assessments—based on class participation, homework, and smaller tests—also contribute significantly, ensuring a comprehensive evaluation of students' abilities (OECD, 2019). This reduces pressure, as no single test determines a student's future.

Denmark's system values equity, providing accommodations for students with special needs to ensure fair evaluations (Rasmussen & Nielsen, 2020). Critics argue the lack of high-stakes exams may reduce academic rigor, but proponents highlight its alignment with fostering lifelong learning. Overall, Denmark's evaluation model promotes inclusivity and prepares students for diverse post-secondary pathways.

In their examination of the Dutch Examination Systems, Gilissen et al. (2019) expounded that a school examination is typically comprised of two or more assessments per subject, which may be in the form of oral, practical, or written evaluations. These assessments are generated by either the school or external testing institutions and are graded by the student's respective instructor. Certain subjects may also require the completion of practical assignments that are not graded but serve only as confirmation of the examinee's proficiency. Furthermore, Ehren et al. (2005) posited that school examinations must be finished and submitted to the Inspectorate prior to the commencement of national examinations. Conversely, the national examination involves tests featuring open or multiple-choice questions and occasionally incorporates a practical component (Sesli & Kara, 2012). Some subjects may only require a school examination. The national examination is offered three times during the school year, specifically in May, June, and August. All students take the examination in May, while the June and August sessions are designated for retakes or for those who were unable to sit for the

examination in May. Cito, under the auspices of the Dutch Ministry of Education, is responsible for designing and producing the national examinations (Ehren et al., 2005), which are then assessed by the student's instructor and a teacher from a different school.

In Sub-Saharan African nations, public or external examinations have been a significant factor in the history of modern education (Kellagham & Greaney, 2004). Typically, three major examinations are conducted in most countries, facilitated by an external agency rather than the school. These examinations in Africa perform a variety of crucial roles that mirror the social and educational contexts in which they are carried out (Gebrill & Brown, 2014). Primarily, they regulate the varied components of the education system, ensuring that all schools conform to uniform standards, which was particularly critical during colonial times when most schools were privately managed.

In Kenya, the quality of learners produced by the education system is considered an indicator of the system's effectiveness in providing the necessary competences for the nation's social, political, and economic development (Obanya, 2005). To evaluate the competences attained by secondary school students, termly and end-year examinations are administered by most schools. The end-year examination, commonly referred to as the KCSE, is highly regarded by the public due to its significance in the selection of students for higher classes. Therefore, the validity of scores attained in these exams is crucial to the quality of students joining higher learning institutions (Obanya, 2005). The management practices of examinations in Kenya, including setting, distribution, and marking of results, are centralized and derived from The Cambridge Examination Board (Ingolo, 2009). Teachers are responsible for marking the exams and participate in this practice to supplement their salaries. The payment they receive is determined by their speed in marking. Despite the importance of these examinations and the decisions made based on their results, their administration is not without challenges.

Obonyo (2010) assessed flaws in examination practices in Kenya, specifically in the Kisumu East District. In his report, he notes the possibility of regional markers and examiners rushing through allocated scripts and requesting more. While some contend that the scripts are regulated, it is important to note that just a sample is moderated. Additionally, there have been reported cases of students receiving results for exams they did not take (Obonyo, 2010). As a result, stakeholders like parents have started to doubt the validity of their children's results, which has caused some candidates to ask for an expensive re-marking of their scripts. Others, on the other hand, have chosen to be evaluated by international examination boards, including the Cambridge examination board, which has a respectable history of processing and marking extensive exams. Examiners' reports are generated for each topic following the marking process with the intention of assisting teachers (KNEC, 2012). The quality of the exam is evaluated, candidates' strengths and shortcomings are noted, and comments are made on the accuracy of the answers.

In Hargeisa region Somaliland, most secondary schools offer Continuous Assessment test (C.A.T) as the measure of competences attained by the secondary school students through the education system. Somaliland certificate of secondary education (SCSE) examination that is done at the end of the year as a determining factor to join next level of education depending on the results attained. The examination management, setting, the Somaliland national examination council does distribution. The examination council chooses specific teachers from different schools both public and private to set manage and mark the exams. The teachers involved in all these processes are paid a fixed and specific amount of money after the exercise.

After the marking exercise, the examiner's report is produced for every subject to highlight the strength and the weaknesses of the candidates who sat for the exam and also highlight the quality of the examination and the answers given by the students which helps the teachers.

Although examinations may not be an infallible method of ascertaining the level of knowledge and accomplishment, it is plagued by numerous complications, obstacles, and inadequacies. Against this backdrop, the present study aims to scrutinize the correlation between examination management policies and the academic performance of students in public secondary schools located in the Hargeisa region of Somaliland.

1.3 Statement of the Problem

Examination is a critical method for assessing and evaluating students' skills, knowledge, and attitudes in various areas of study. It serves as a vital tool for determining learners' mastery of specific knowledge domains. Examination management faces numerous challenges, such as cheating and malpractice, which are prevalent worldwide. Beguin and Ehren (2011) found that mismanagement of examination practices is apparent in both developed and developing countries; however, security regulations and implementation strategies are not universally provided and are often ineffective. Although Beguin and Ehren (2011) highlighted the issue of mismanagement in examination practices, they did not establish a connection between these practices and the academic performance of secondary school students. Their study did not address appropriate question types, optimal distribution practices, or grading systems that could enhance students' performance in termly and end-year examinations.

In the Hargeisa region, students' performance has been subpar, with low grades reported in national examinations. According to a report by the Somaliland Ministry of Education (2019), out of 8,787 students who took the National Form Four examination, 37% obtained low grades ranging from D+ to E. Furthermore, poor performance was evident in mathematics and science, with no region achieving an average of 35% in math for high school students. Despite these observations, there has been a lack of research examining the relationship between national examination management and students' academic performance. Specifically, the connection between examination setting, distribution, invigilation, marking, and students' performance in

end-year examinations remains unexplored. This research gap necessitates a comprehensive study investigating the influence of examination management on students' academic performance in public secondary schools in the Hargeisa region, Somaliland.

1.4 Purpose of the Study

The purpose of this study is to investigate the influence of examination management practices on the academic performance of public secondary school students in Hargeisa region, Somaliland.

1.5 Objectives of the Study

- i. To assess the influence of examination setting practices on the academic performance of public secondary school in Hargeisa region, Somaliland.
- ii. To examine the influence of examination distribution practices on the academic performance of public secondary school in Hargeisa region, Somaliland.
- iii. To determine the influence of examination invigilation practices on academic performance of public secondary school in Hargeisa, Somaliland.
- iv. To analyze the influence of examination marking practices on the academic performance of public secondary school in Hargeisa, Somaliland.

1.6 Research Questions

- i. What is the influence of examination setting practices on the academic performance of public secondary school in Hargeisa region, Somaliland?
- ii. How does the examination distribution practices influence the academic performance of public secondary school in Hargeisa region, Somaliland?
- iii. In what ways does the examination invigilation practices influence academic performance of public secondary school in Hargeisa, Somaliland?

- iv. What is the influence of examination marking practices on the academic performance of public secondary school in Hargeisa, Somaliland?

1.5 Rationale of the Study

Most education stakeholders, including parents, teachers, schools, and government officials, have invested significant effort into ensuring the seamless administration of examinations, ranging from internal tests to national examinations throughout the nation. Despite these concerted efforts, the academic performance of public secondary school students still falls below expectations. Reports from invigilators indicate that there is a cause for concern in the administration of both internal and national examinations. Challenges have arisen due to some officials' failure to adhere to examination management practices that align with the National Examination Policy Guidelines.

1.6 Significance of the Study

The potential implications of this study are manifold, extending to a variety of stakeholders in the educational sphere. For students, the findings may instill greater confidence in the fairness and integrity of examinations, consequently enhancing their trust in the outcomes of these assessments. This could lead to increased motivation and engagement in their academic endeavors, as they can be assured that their efforts were evaluated justly. For parents, this study could signify a positive shift towards improved quality in education. Their children's learning experience may be enhanced through fairer examination practices, which, in turn, could foster better academic outcomes. This improvement in quality education aligns with parents' vested interest in their children's academic success and overall educational journey.

The Ministry of Education and policy makers could also find value in this study. The insights gleaned could illuminate areas of examination conduct that require improvement or reform,

both within schools and across the country. By applying these findings to policy and practice, they could work towards fostering a more equitable and efficient examination system.

For academicians and researchers with interest in this area, this study may contribute to existing literature and offer a solid foundation for future research. It could stimulate further investigation into the dynamics of examination management and its impact on student performance, thereby enriching the academic discourse on this subject. In summary, the significance of this study extends beyond the immediate context of public secondary schools in the Hargeisa region, potentially informing broader educational practices and policies while stimulating further research in this crucial area of study.

1.7 Scope and Delimitations of the Study

This study was carried out in public secondary schools in Hargeisa region in Somaliland only. The study was narrowed down to the use of an explanatory sequential research design. Data was only collected from public secondary school principals, teachers, Examination Officer, Regional Director of Education and Form III Students. The study was also conducted for a period scheduled between the month of September and November 2023. The study was only focused on examination setting, distribution, invigilation, marking practices as the only examination management practices which impact of academic performance of students in public secondary schools and thus, any other variable, though significant, was out of scope.

1.8 Limitations of the Study

In this research, it was essential to acknowledge certain limitations that might have influenced the scope, interpretation, and generalizability of the findings. These limitations were inherent in the research design and context and were important to consider when drawing conclusions from the data. Despite the rigorous methodology applied, these constraints might have impacted

on the study's overall applicability and representativeness. The following section detail these limitations and the corresponding measures taken to mitigate their effects.

- i. The generalizability of the study's findings to other secondary schools may be limited due to potential variations in the administration of internal examinations, regulated by distinct examination practices. Consequently, the researcher intends to incorporate all conceivable categories of schools within the respective zones.
- ii. In certain instances, certain respondents exhibited behaviors that were challenging, antagonistic, and disinclined to provide factual data due to the possibility of retaliation. Under such circumstances, the researcher provided a comprehensive explanation to the respondents that the research study was geared towards supplementing their endeavors in enhancing examination administration.
- iii. The size of the sample might not have been indicative of the entire population, which could possibly restrict the generalizability of the study. To alleviate this issue, the researcher endeavored to incorporate as many varied respondents as feasible, utilizing purposive and random sampling methods to guarantee an equitable distribution of participants among diverse school types and locations. This technique aided in augmenting the representativeness of the sample and potentially enhance the relevance of the study findings to a wider context.

1.9 Assumptions of the Study

The study was based on the following assumptions that;

- i. There is a relationship between examination management and students' academic performance in National examinations.
- ii. The respondents would cooperate and provide correct information.
- iii. The respondents would provide honest responses.
- iv. The respondents would voluntarily participate in the study.

1.10 Operational Definitions of Terms

Academic performance This refers to the measure of students' proficiency and understanding in their coursework, typically demonstrated through grades or scores obtained in examinations. In this study, academic performance can be operationalized by the grades achieved by students in termly and end-year examinations.

Examination An examination is a formal test that gauges a student's knowledge or proficiency in a particular subject or area. In the context of this study, the term 'examination' refers to the termly and end-year examinations administered in public secondary schools in the Hargeisa region.

Examination distributions the process taking care of examinations after setting and supplying the scripts to different schools which act as examination centres. It involves packaging the examination scripts, dispatching them to different schools or centres and final opening of the envelopes.

Examination invigilation is the process of monitoring the students as they do their examination to reduce incidences of malpractice. It involves recruitment of supervisors and invigilators, planning for invigilation and designing of examination seating plan.

Examination management This encompasses all the processes involved in the creation, distribution, invigilation, and marking of examinations. In this study, examination management can be operationalized by the systems and procedures in place for these processes in the public secondary schools studied.

Examination markings the process of assigning scores to students answer sheets and ranking them based on the scores. It involves establishing the marking panel, setting grading systems, moderating the results and eventual release of the results.

Examination setting is the process of designing test items for students in secondary schools.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

In this particular chapter, the author proceeds to present the literature encompassing the prior studies that have been covered pertaining to the author's specific area of inquiry. This literature was rooted in the fundamental concept of academic performance, as well as the concepts of examination management, setting, distribution, and marking practices, all of which are inextricably linked to the academic performance of public secondary school students. The author makes an effort to provide a range of divergent perspectives, drawing from the critical analyses of various authors who have proffered differing versions of the issues currently under investigation. Furthermore, the author presented theoretical and conceptual frameworks, as well as a summary of the literature reviewed, highlighting any gaps that were identified.

2.2 The Concept of Academic Performance

Academic achievement is the culmination of the educational process, representing the degree to which a student, instructor, or institution has attained their educational objectives. The comprehensive understanding of learning outcomes is limited to a few select countries at both institutional and national levels. As noted by Prøitz et al. (2017), learning outcomes constitute a fundamental aspect of transparent higher education systems and qualifications. Despite being often perceived as dull and unremarkable, their basic underpinning function is what makes them significant. The use of academic performance and outcomes-based approaches has far-reaching implications for curriculum design, teaching, learning, assessment, and quality assurance. According to Smith et al. (2014), learning outcomes are expected to play a crucial role in the twenty-first century higher education landscape, prompting a re-evaluation of what, who, how, where, and when we teach and assess. In the face of unprecedented questioning of education's

nature and role, learning outcomes offer valuable tools for clarifying learning results for students, citizens, employers, and educators.

Academic performance in secondary schools is a critical indicator of educational quality and student preparedness for higher education or the workforce. It reflects students' ability to master curricula, develop critical thinking, and apply knowledge effectively. However, academic outcomes are influenced by a complex interplay of factors, including teaching quality, parental involvement, and socioeconomic conditions. Understanding these dynamics is essential for improving secondary education and addressing disparities in student achievement.

Effective teaching is a cornerstone of academic success. According to Marzano (2003), teachers who employ evidence-based instructional strategies, such as clear lesson objectives and formative assessments, significantly enhance student performance. In secondary schools, where subjects become more specialized, teachers' subject mastery and ability to engage students are vital. For instance, interactive methods like group discussions or project-based learning can foster deeper understanding, particularly in subjects like mathematics and sciences, which often challenge students.

Parental involvement also plays a pivotal role. Epstein (2001) highlights that parents who actively participate in their children's education—through attending school events, monitoring homework, or communicating with teachers—positively impact academic outcomes. In secondary schools, where students seek greater independence, parental guidance helps maintain motivation and discipline. However, in underserved communities, parents may lack the time or resources to engage fully, contributing to achievement gaps.

Socioeconomic factors further complicate academic performance. Students from low-income backgrounds often face barriers like inadequate access to learning materials, poor nutrition, or unstable home environments. Hanushek (2016) notes that schools in disadvantaged areas

frequently struggle with underfunding, leading to outdated resources and larger class sizes, which hinder personalized instruction. These challenges disproportionately affect marginalized groups, perpetuating cycles of inequality.

To address these issues, secondary schools must adopt holistic strategies. Interventions like teacher training programs, parental engagement workshops, and equitable resource allocation can mitigate disparities. Additionally, incorporating technology, such as online learning platforms, can enhance access to quality education, particularly in remote areas. By prioritizing these efforts, schools can foster environments where all students thrive academically.

Due to a multitude of comprehensible rationales, numerous scholars perceive education as detached intellectual exertion, as opposed to an enriching and advantageous process (Gruenewald et. al, 2014). To overcome this obstacle and make education more meaningful for these students, it is essential to instil in them a perception of education as an instrument for leading a more fulfilling and empowered lifestyle, rather than a responsibility undertaken solely for the purpose of gratifying others' demands. By explicitly constructing educational experiences centered on the practical application of acquired knowledge, the learning outcomes methodology facilitates the comprehension of the educational activity's objective by the academic community.

2.3 The Concept of Examination Management

The process of ascertaining a learner's level of proficiency in specific learning tasks is referred to as examination. This can be in the form of written or oral evaluations of knowledge acquisition. The use of examinations serves as a discriminatory tool to determine individual performance and assess the achievement of educational objectives. It is essential that the management and evaluation of examinations be conducted in an equitable and unbiased manner, devoid of any malpractices. Torrance (2017) posits that examinations are employed to select,

certify, and report progress to parents and policymakers. Additionally, public examination results are used to hold schools accountable and track the effectiveness of the educational system. By describing exams as a means for gauging and assessing the quality of education in any nation, Crooks (2008) supports this claim. Exams can be administered internally or externally and are thus a necessary part of the teaching-learning process. Internal exams, commonly referred to as school-based exams, are typically created and given by schools utilising tests created by teachers. These tests are given every week, every term, or at the conclusion of the academic year. On the other hand, public examination boards are responsible for creating and managing external exams.

The administration of examinations in Sub-Saharan African nations is commonly linked to a range of difficulties. Among these difficulties, as outlined by Agbo (2011), are examination malpractice, large class sizes, substandard teaching practices, faulty assessment methods, and a lack of quality teachers. In Nigeria, Wokocha (2004) has identified inflation and manipulation of test scores as issues related to the administration of exams. The challenges associated with the administration of examinations are numerous, encompassing factors such as large numbers of test-takers, inadequate funding, staffing shortages, substandard infrastructure, a lack of dedicated examination personnel, unreliable continuous assessment scores, and examination malpractice (Agbo, 2011). These challenges have a profound impact on the proper administration of exams, the dependability of the results, and the validity of the examinations.

In Somaliland, the utilization of media as a platform for the dissemination of examination results is a crucial determinant that significantly impacts the prevalence of examination malpractices. Conventionally, the stakeholders in the education sector, comprising of parents, Examination Officers, and opinion leaders, exert immense pressure on educators to ensure that their institutions are featured in print media as high-performing schools. Consequently, teachers and candidates alike, subjected to such pressure, are inclined towards employing unscrupulous

measures, including cheating, with the aim of improving their mean performance scores, thereby securing their position in the media.

2.4 Examination Setting Practices and Students' Academic Performance

A good examination must meet certain criteria, including objectivity that is free from scoring subjectivity or scoring biases. Beguin and Ehren (2011) assert that in order to achieve this, the exam tasks must be clearly defined so that both the teacher and student understand the reasons for awarding or withholding a mark. Test developers face varying levels of time and effort required to prepare a test (Rowentry, 2009). Similarly, test takers encounter varying levels of time and effort needed to achieve a desired grade or score on a given test. Examination setting practices profoundly influence students' academic performance, as highlighted by global research exploring question design, assessment formats, and testing conditions across diverse educational systems.

Well-crafted examinations enhance performance by aligning with curricula and ensuring clarity. Biggs (1996) argues that constructive alignment—where questions reflect intended learning outcomes—promotes deeper understanding. Studies from the United States show that precise, unambiguous questions reduce confusion, particularly for students with varying linguistic backgrounds. In contrast, research in South Africa reveals that poorly designed questions disadvantage non-native speakers, lowering scores despite content mastery (Naidoo & Lewin, 2011).

Examination setting practices play a critical role in shaping students' academic performance, particularly in developed countries where educational systems are often standardized and heavily reliant on assessments to gauge learning outcomes. This literature review examines the relationship between examination setting practices—such as the format, environment, timing, and policies surrounding exams—and students' academic performance in developed countries.

It synthesizes findings from various studies, identifies gaps, and highlights trends in this area. The review is structured around key themes: examination formats and their impact on performance, the role of the examination environment, the influence of timing and scheduling, the effect of policies like grading and feedback, and the challenges and gaps in the literature.

The format of examinations significantly influences students' academic performance. Studies in developed countries, such as the United States and the United Kingdom, have explored how different formats—multiple-choice, essay-based, or practical assessments—affect outcomes. A study by Marsh (2007) on student evaluation of teaching (SET) in the U.S. highlights that examination formats like multiple-choice questions often test recall and recognition, which may favor students with strong memorization skills but disadvantage those who excel in critical thinking [Web ID: 5]. Conversely, essay-based exams, which require higher-order thinking, tend to benefit students who can synthesize and articulate ideas effectively. However, these formats can introduce subjectivity in grading, potentially impacting fairness and consistency in performance evaluation.

In the UK, the cancellation of General Certificate of Secondary Education (GCSE) and A-level exams during the COVID-19 pandemic revealed the limitations of traditional examination formats. Pokhrel and Chhetri (2021) note that the shift to alternative assessments, such as teacher-assessed grades, led to variability in performance outcomes, with some students benefiting from less pressure while others struggled without structured exam conditions. This suggests that rigid examination formats may not always equitably assess student ability, particularly during disruptions. Furthermore, a literature review by Ching (2018) in Taiwan, though not a developed country, offers a comparative perspective, indicating that diverse formats tailored to course content can mitigate bias and better reflect student capabilities. This finding is relevant for developed countries seeking to diversify assessment methods.

The physical and psychological environment in which exams are conducted also impacts academic performance. Research in developed countries emphasizes the importance of a conducive testing environment. A study by Meredith and Bub (1977) in the U.S. found that students performed better in organized, distraction-free settings where instructors focused on creating a supportive atmosphere. This aligns with broader findings that classroom organization and instructor enthusiasm can positively influence student outcomes by reducing anxiety and enhancing focus.

During the COVID-19 pandemic, the shift to online examinations in developed countries like the UK and the U.S. highlighted environmental challenges. Pokhrel and Chhetri (2021) report that many students faced difficulties due to inadequate workspaces at home, lack of parental supervision, and increased screen time, all of which negatively affected performance. This was particularly pronounced for economically disadvantaged students who lacked access to reliable technology, underscoring inequities in examination settings. In contrast, innately motivated learners adapted better to these changes, suggesting that individual resilience plays a role in mitigating environmental challenges.

The timing and scheduling of examinations are critical factors influencing academic performance. In developed countries, where academic calendars are often rigid, poorly timed exams can lead to student burnout and underperformance. A systematic literature review by Pokhrel and Chhetri (2021) notes that the abrupt closure of schools during the COVID-19 pandemic forced many institutions to postpone or cancel exams, disrupting students' preparation and leading to a potential drop in performance. In the UK, the cancellation of statelevel board exams affected students' readiness for higher education, as they lacked the formal assessment experience needed to transition effectively.

Moreover, the scheduling of exams within a semester can impact performance. A study in the U.S. by Galiher (2006) found that students performed better when exams were spaced out, allowing time for preparation and reducing stress. Conversely, clustering exams at the end of a term often led to fatigue, particularly for students juggling multiple subjects. This suggests that examination scheduling in developed countries needs to balance academic rigor with student well-being to optimize performance.

Examination policies, including grading practices, feedback mechanisms, and academic integrity measures, also shape student performance. In developed countries, standardized grading systems are common, but their implementation varies. Marsh (2007) highlights that fair and transparent grading practices are essential for motivating students, while inconsistent grading can lead to disillusionment and reduced effort. For instance, in the U.S., some institutions use global measures for summative evaluations, which Ching (2018) argues may not accurately reflect individual student progress across diverse courses.

Feedback following examinations is another critical factor. A narrative review by Almazan (2019) on nursing students in developed countries like the U.S. found that timely and constructive feedback improved performance in licensure exams by helping students identify areas for improvement. However, the lack of standardized feedback mechanisms during remote assessments in the COVID-19 era, as noted by Pokhrel and Chhetri (2021), led to uncertainty among students about their progress, negatively impacting their motivation and subsequent performance.

Academic integrity policies also influence performance, particularly with the rise of online exams. Pokhrel and Chhetri (2021) report that in developed countries, the shift to remote assessments increased concerns about plagiarism and cheating, as institutions struggled to implement effective monitoring systems. This not only undermined the validity of exam results

but also created an uneven playing field, where students with more resources (e.g., parental support) performed better.

Despite the breadth of research, several gaps and challenges remain in understanding the relationship between examination setting practices and academic performance in developed countries. First, much of the literature focuses on traditional examination settings, with less attention to the long-term impacts of alternative formats like online or teacher-assessed evaluations. While Pokhrel and Chhetri (2021) address the immediate effects of the COVID-19 pandemic, there is a lack of longitudinal studies examining how these changes influence students' academic trajectories.

Second, the literature often overlooks the intersectionality of student demographics—such as socioeconomic status, gender, and ethnicity—in relation to examination practices. For example, while economically disadvantaged students faced greater challenges during remote exams, few studies explore targeted interventions to address these disparities. Ching (2018) suggests that separate SETs for different course types could help, but this approach is resource-intensive and not widely implemented.

Third, there is a lack of comparative studies across developed countries to identify best practices. While the U.S. and UK contexts are well-documented, countries like Canada, Australia, or Scandinavian nations are underrepresented in the literature. This limits the generalizability of findings and the ability to develop universal strategies for improving examination practices. Finally, the role of student resilience and psychological factors in navigating examination settings is underexplored. A study by Angeles (2024) highlights the significant correlation between resiliency and academic performance, but this is not specific to developed countries or examination practices. Future research could investigate how resilience training might mitigate the negative effects of challenging exam settings.

The choice of assessment format also shapes outcomes. Multiple-choice tests, widely used in Australia, enable efficient grading but may prioritize recall over critical thinking, as critiqued by Brookhart (2010). Conversely, open-ended questions, prevalent in European systems like Germany, foster analytical skills but can penalize students with weaker expression, particularly in time-constrained settings. Hybrid formats, as practiced in Singapore, balance these demands, correlating with higher performance by accommodating diverse cognitive strengths (OECD, 2019).

Testing conditions, including time and environment, significantly affect results. Research from the United Kingdom indicates that excessive time pressure exacerbates anxiety, disproportionately impacting vulnerable students (Bourdillon & Burgess, 2006). In sub-Saharan Africa, studies in Nigeria highlight how overcrowded or noisy exam venues disrupt focus, particularly for low-income students with limited study resources. These findings underscore the need for equitable testing environments to level the playing field.

Global literature also raises equity concerns. In India, high-stakes exams often favor urban students with access to private tutoring, widening rural-urban gaps (Naidoo & Lewin, 2011). Similarly, Latin American research points to socioeconomic barriers limiting preparation, while Middle Eastern studies note gender biases in question framing that can hinder female performance. Technological advancements, such as computer-based testing in Scandinavian countries, improve accessibility but risk excluding students with low digital literacy (OECD, 2019).

Emerging trends advocate for formative assessments, as seen in Finland, where continuous evaluation reduces exam stress and better captures student potential (Brookhart, 2010).

Globally, literature calls for inclusive, student-centered examination practices that prioritize fairness, clarity, and diverse assessment methods to optimize academic performance across contexts.

According to Zoeckler's (2007) theory, a test taker's preparation time depends on the frequency, the person who created the test, and the test's weight. The need for comprehensive preparation is minimal when non-standardized examinations are taken into account because they are brief, frequent, and make up a small portion of the test taker's final grade or score. On the other hand, non-standardized examinations that are time-consuming, uncommon, and account for a sizable portion of the test taker's final grade or score demand intensive preparation. For school administrators, teachers, parents, and/or students in a number of nations and regions, Hargreaves (2001) added background questions to the test questions. This practise is primarily connected to tests and exams conducted for monitoring purposes. The information acquired relates to the socioeconomic status of the students, their drive, available supports, or the learning environment (Frary, 2008). The questions for teachers include a variety of relevant subjects, including teaching experience, professional development activities, and teaching strategies. One can determine the variables that affect performance by examining the contextual data gathered, including the schools, teachers, students' backgrounds, and homes.

Thus, in order to cater to individual learning levels and needs, four countries have implemented varying approaches to adapt their tests. For instance, Nigeria's national examinations, which are based on ICT, are closely tailored to the individual levels of the students taking them, with personalized tests being provided to each pupil at every level (Agbo, 2011). Similarly, in Morocco, students sitting for the 'junior certificate' are given examination papers of different difficulty levels (higher level, ordinary, foundation) and are also offered a choice of questions within individual test papers.

In a study conducted by Waters, Hughes, Forbes, and Wilkinson (2006), the academic performance of medical students in rural and urban clinical settings was explored, with the aim of determining whether the location of clinical training had any impact on academic outcomes. The researchers assessed the students' academic performance using various measures, including examination scores and overall academic grades. Their findings indicated that there was no significant difference in the academic performance of students in rural and urban clinical settings. This suggests that the location of clinical training, whether rural or urban, does not have a substantial effect on medical students' academic outcomes.

In Botswana, a longitudinal study was conducted by Tabulawa (2012), in which it was posited that the national curriculum assessment at the age of 14 for mathematics consists of four distinct tiers, each assessing varying levels of attainment. The teacher determines the most appropriate tier for a child's abilities. Science, on the other hand, has two tiers, each assessing different levels, and the teacher similarly assesses the most appropriate tier for the child. Tests are also given in Kenya and Uganda at various levels (A to F), which correspond to defined attainment outcomes for the majority of students at various stages of schooling (Afolabi, 2010). The National Assessment Bank also offers many equal exams for each level, guaranteeing that students taking examinations at the same level in other schools are not always providing the same answers (Afolabi, 2010). With this setup, there is less chance that students from one school may share exam information with students from another school. The questions for national exams are occasionally changed for methodological reasons.

In the Hargeisa region, it is not mandatory for all students to answer identical questions, owing to the statistical techniques implemented. In the evaluation of schools in Somaliland, a matrix sampling approach is adopted, whereby a set of common questions is administered to all secondary school students, along with supplementary distinct questions. The distribution of

assignments among the sample is intended to prevent overtaxing or stressing any particular pupils while ensuring acceptable statistical coverage of an appropriate spectrum of knowledge and skills. As a result, different sets of questions are given to different pupils who take the "national studies of student attainment" test. The examinations are designed so that, within the same topic area, there is no difference in the degree of difficulty between them. The usefulness of examination settings and test preparation techniques in relation to the academic performance of secondary school pupils in termly and end-of-year examinations, however, has not yet been clearly verified by substantial empirical research investigations. Additionally, the studies have not identified the types of questions, such as multiple-choice or essays, which enhance students' academic performance. These are research and knowledge gaps that this study aims to address.

The literature review on examination setting practices in educational systems worldwide has revealed several key insights; however, it also presents some noticeable gaps. The literature effectively explores the general criteria for effective examination setting, including objectivity, appropriateness, and the variability of time and effort required for both test construction and preparation from the perspectives of test developers and test takers (Beguin & Ehren, 2011; Walsh & Betz, 2005; Rafique & Mišić, 2012; Zoeckler, 2007). Furthermore, the literature provides valuable insights into the practicalities of test construction, such as the use of test banks, and the factors influencing the time needed for test preparation.

However, the literature appears to be predominantly focused on developed countries such as the United States, Finland, and Ireland, leaving a gap in the understanding of examination setting practices in developing countries or regions like Hargeisa, Somaliland. The literature identifies variability in how different countries handle the uniformity of examination questions (Jennings & Bush, 2006; Vandeyar, 2005). While some countries ensure all students taking a particular test answer the same questions, others introduce variability to accommodate individual learning

differences and needs. This practice can be seen in countries like Nigeria and Morocco (Agbo, 2011). However, the literature does not adequately explore how this variability in examination setting might impact the academic performance of students, leaving a research gap.

The literature presents an interesting approach to examination setting, where different tests or questions are set for different learning levels and needs, as practiced in Botswana, Kenya, and Uganda (Tabulawa, 2012; Afolabi, 2010). This adaptive approach to examination setting is an area of interest; however, the literature does not sufficiently examine the influence of such practices on academic performance. Therefore, this study aimed to fill these research gaps by examining the influence of examination setting practices on the academic performance of public secondary school students in Hargeisa, Somaliland, a region currently underrepresented in the literature. It also explored the impact of variable and adaptive examination setting on student performance, areas which existing research has not sufficiently addressed.

2.5 Examination Distribution and Students' Academic Performance

Examinations serve as a means of discerning criteria for individuals and assessing the extent to which educational objectives are being met. In order to ensure fairness, Norcini (2003) asserts that impartial evaluation must be devoid of any malpractice. To effectively administer examinations, it is necessary to appoint individuals of integrity to oversee the packaging of scripts, the dispatching of examinations to exam centers or classrooms, and the secure storage of the examinations. In a study conducted in Oman, Al-Issa (2007) demonstrated that assessment within the educational process provides a mechanism for determining whether educational objectives are being achieved.

Al-Issa (2007) claims that various scholars have viewed evaluation in the field of education as serving a number of purposes, including offering essential information for decision makers, carrying out a methodical investigation of the value or merit of educational objects, and

gathering meticulous information on the nature and quality of educational objects. Therefore, it is crucial that the evaluation be carefully planned and carried out in order to guarantee fairness and impartiality in the process' results. However, in order to achieve such effective evaluation, the distribution procedure of examination scripts should be given careful consideration. As Wheeler (2007) suggests, in the United Kingdom and other Commonwealth Nations, the Ministry of Education is responsible for the distribution of national examinations, while the individual schools are exclusively responsible for managing internal examinations. Similarly, in most Sub-Saharan countries, the responsibility for such distribution lies with the schools, although under the directive of the Ministry of Education.

The scheduling and frequency of examinations in developing countries often determine students' ability to prepare and perform effectively. A study by Pokhrel and Chhetri (2021) on the impact of the COVID-19 pandemic in Nepal highlights how abrupt changes in exam schedules disrupted students' preparation, leading to increased stress and lower performance [Web ID: 24]. In many developing countries, exams are often clustered at the end of academic terms due to resource constraints, leaving little time for revision. For instance, research in Kenya by Mwangi and Otieno (2019) found that students in secondary schools performed better when exams were spaced out over the term, as this allowed for consistent study and reduced burnout. However, logistical challenges, such as limited school calendars and teacher availability, often prevent such practices, negatively affecting outcomes.

Equitable access to examination schedules and resources is a critical issue in developing countries, where disparities in infrastructure and socioeconomic conditions are pronounced. Pokhrel and Chhetri (2021) note that during the shift to online learning in developing nations like India and Nepal, uneven distribution of exam-related information—such as schedules and formats—disadvantaged rural students who lacked internet access [Web ID: 24]. This led to

lower performance compared to urban peers who had better access to updates and preparatory materials. Similarly, a study in the Philippines by Almazan (2019) on nursing students found that delayed dissemination of exam schedules in under-resourced schools created anxiety and hindered preparation, particularly for licensure exams [Web ID: 12]. These findings underscore how inequitable distribution exacerbates academic disparities.

Systemic challenges in developing countries, such as inadequate infrastructure and policy inconsistencies, further complicate examination distribution. In Nigeria, a study by Adebayo (2020) revealed that frequent power outages and transportation issues delayed the distribution of exam materials to rural schools, causing scheduling disruptions and impacting student performance. Additionally, the lack of standardized policies for exam scheduling often leads to last-minute changes, as seen in Nepal during the pandemic (Pokhrel & Chhetri, 2021) [Web ID: 24]. These disruptions disproportionately affect marginalized students, who may lack the resources to adapt quickly. Moreover, teacher training on effective exam scheduling is often insufficient, leading to poorly planned distributions that do not align with students' learning needs.

While the literature highlights the challenges of examination distribution, it lacks depth in exploring solutions tailored to developing countries. Few studies examine the role of technology in improving distribution equity, such as using SMS or radio for exam updates in low-connectivity areas. Additionally, there is limited research on the long-term effects of disrupted exam schedules on academic trajectories, particularly for vulnerable populations.

In Hargeisa, the entire examination management process is conducted and overseen by schools. This includes evaluating candidates, issuing mark sheets, and publishing results. Individually established rules and regulations ensure equivalent conditions for all examination takers, promoting fairness. The allocation of scarce opportunities within society is heavily influenced

by examination results, making them a key discriminatory criterion for both individuals and society (Yussufu, 2005).

The nature of examination malpractice has resulted in a high turnover of incompetent students advancing to higher academic levels who inevitably falter in institutions of higher learning (Aullo, 2004). In light of escalating concerns surrounding malpractice, the Ministry of Education has implemented measures aimed at curbing such misconduct by enforcing stricter regulations during the distribution of examinations (Abdi, 2017). Plan (2017) observes that the Somaliland National Examinations Council (SNEC) has implemented stringent measures in schools to regulate internal examinations, thereby rendering cheating arduous and culprits subject to severe punishment. The proliferation of cheating and exam leakages through technological means remains a pervasive phenomenon not only in national examinations, but also in internal examinations conducted under the auspices of individual secondary schools.

No systematic studies have been conducted in the Hargeisa region to document the effectiveness of the distribution procedure for examinations in curbing malpractices, which is the focus of this study. Examinations serve as discriminatory criteria for both individuals and society when allocating scarce opportunities. To ensure impartial assessment, malpractices must be eliminated from examinations. Despite examination management policies, Somaliland examinations have been plagued with malpractice cases over the years. However, scant literature exists on the impact of distribution practices on students' performance in termly and end-year examinations. The literature acknowledges the pivotal role of examinations in providing discriminatory criteria for individuals and evaluating educational goals, hence a fair and malpractice-free evaluation process is imperative (Norcini, 2003; Al-Issa, 2007). Additionally, the literature outlines how the Ministry of Education typically oversees the distribution of national examinations while individual schools manage internal examinations

(Wheeler, 2007). This practice is prevalent in numerous Commonwealth nations and Sub-Saharan countries.

However, the scholarly literature provides valuable insights into the processes and structures of examination distribution, yet it falls short in sufficiently addressing the impact of these practices on academic performance. A clear gap in the literature emerges, as limited research has been conducted on how varying procedures of examination distribution affect students' performance. Furthermore, the literature acknowledges the pervasive issue of examination malpractice within the education sector, which has become increasingly sophisticated and institutionalized in many secondary schools, including those in Hargeisa (Yussufu, 2005; Kithuka, 2004; Aullo, 2004; Abdi, 2017; Afolabi, 2010). Despite efforts to combat this trend, they have proven largely unsuccessful, resulting in a persistent high turnover of underprepared students advancing to higher classes. Although stricter rules have been implemented during examination distribution and severe punishments enforced for malpractice, examination irregularities continue to persist.

However, the literature does not sufficiently examine the effectiveness of these measures in curbing examination malpractice, highlighting another research gap. The literature does not provide systematic studies documenting the effectiveness of examination distribution procedures in curbing examination malpractices, particularly in the context of Hargeisa. This study aims to fill these research gaps by investigating the relationship between various examination distribution procedures and academic performance of students in public secondary schools in Hargeisa, Somaliland. The study also evaluated the effectiveness of current measures in place to curb examination malpractice within the context of Hargeisa's examination distribution procedures.

2.6 Examination Invigilation and Students' Academic Performance

The primary objective of exam invigilation is to ensure that all examinees remain under constant observation for the entire duration of the examination. According to Moss (2001), this objective

can be achieved by creating a congenial and supportive environment for candidates. However, invigilators must also ensure that candidates do not engage in any form of communication, copying or whispering, or exchange of paper or objects. Moreover, candidates must not have access to books, papers, or any electronic media unless explicitly allowed for the duration of the examination. Thus, it is imperative to consider the recruitment process of invigilators, the planning of invigilation, and the design of seating arrangements.

In a longitudinal study undertaken in Australia, James and Pedder (2006) emphasized the importance of invigilators in ensuring the security of examination halls before, during, and after examinations. From the distribution of question papers until the collection of all responses, exam invigilators are required to vigilantly patrol the premises. It is particularly crucial to remain vigilant during multiple-choice and short-answer questions (James & Pedder, 2006).

The primary objective is to prevent potential candidate malpractice and administrative errors. Both teachers and officers from the Ministry of Education are involved in the invigilation of internal and external examinations in secondary schools, following a pre-arranged invigilation schedule.

Although acknowledging the significance of examination invigilation in improving the academic performance of secondary school students, Hargreaves (2001) argues that the planning and preparation of examination invigilation poses a daunting task due to the need for the invigilation schedule committee to consider various factors. According to a study done by Eckstein and Nvuh (2001) in Singapore, exam invigilators need to be thoroughly educated and trained to conduct invigilation in their respective sites before beginning their duties. Before entering the examination hall, it is essential that the exam invigilators familiarise themselves with the relevant examination policies and procedures.

Smith (2009) conducted a study in Venezuela to support these claims, and the results showed that exam invigilators must give the examination process their whole attention at all times. This requires that you stay focused, alert, and nimble throughout the exam and refrain from performing any other activities. Depending on the particulars of the exams, different types of exams require varied numbers of invigilators. In order to patrol and keep watch on the exam room during general written exams, there must be at least one invigilator present for every 30 pupils. According to Smith, during this period, exam invigilators must be prompt in responding to candidate queries and providing assistance as needed. If invigilators adhere to these regulations, they can be highly effective in delivering their services. However, when invigilation standards are compromised, and examination ethics are disregarded, invigilators inadvertently contribute to the proliferation of examination malpractice.

The training and demeanor of invigilators significantly affect students' academic performance in developing countries. A study by Adebayo (2020) in Nigeria found that well-trained invigilators who maintained a calm and supportive atmosphere during exams reduced student anxiety, leading to improved performance. Conversely, poorly trained invigilators who were overly strict or inconsistent in enforcing rules created stress, negatively impacting students' focus and results. Similarly, research in Kenya by Mwangi and Otieno (2019) showed that invigilators who actively engaged with students by providing clear instructions and addressing concerns fostered a conducive environment, enhancing performance, especially in high-stakes national exams like the Kenya Certificate of Secondary Education (KCSE). These findings suggest that invigilator preparedness and behavior are critical to creating a fair and stress-free testing environment.

Effective invigilation is essential for maintaining academic integrity, which directly influences the validity of students' performance. In developing countries, where cheating is a prevalent

concern due to high-stakes exams and limited resources, invigilation practices are crucial. Pokhrel and Chhetri (2021) highlight that during the COVID-19 pandemic in Nepal, the shift to online exams led to increased cheating due to inadequate invigilation mechanisms, undermining the credibility of results and disproportionately affecting honest students' performance [Web ID: 24]. In contrast, a study in the Philippines by Almazan (2019) on nursing licensure exams found that strict invigilation practices, such as random seating and active monitoring, reduced malpractice and ensured fairer outcomes, boosting overall performance by rewarding genuine effort [Web ID: 12]. However, overly punitive invigilation can heighten anxiety, as noted in Nigeria by Adebayo (2020), where students reported feeling intimidated by aggressive invigilators, leading to underperformance.

Resource constraints in developing countries often hinder effective invigilation, impacting academic performance. In rural India, Pokhrel and Chhetri (2021) report that a shortage of trained invigilators and overcrowded exam centers during board exams led to inconsistent monitoring, enabling cheating and skewing performance outcomes [Web ID: 24]. Similarly, in Nigeria, Adebayo (2020) notes that limited funding for invigilator training and inadequate facilities, such as poorly lit exam halls, compromised the invigilation process, creating opportunities for malpractice and undermining the validity of results. These systemic issues highlight the need for investment in training and infrastructure to ensure equitable assessment conditions.

The literature on examination invigilation in developing countries is limited, particularly in exploring the long-term effects of invigilation practices on student motivation and academic trajectories. Few studies investigate the role of technology, such as AI-based monitoring, in enhancing invigilation in resource-scarce settings. Additionally, there is a lack of research on how cultural attitudes toward authority and cheating influence invigilation effectiveness.

According to Argharwal's (2007) research, there are a number of requirements for appointment as an invigilator in India, including having at least three years of teaching experience, having a Teachers' Service Number, being honest, having a Grade A Certificate or Diploma in Education, being in good health, being dedicated to their jobs, and showing diligence in test centres. Additionally, after being chosen by directors of education, all invigilators must go through the verification process. However, the study findings suggest that vetting is not commonly practiced in most regions. Moreover, Argharwal (2007) discovered that the process of identifying potential invigilators is time-consuming. Directors of Education depend on Education Coordinators and Head Teachers for recommendations. As a result, they often have insufficient time to identify those who have previously failed to observe examination regulations. However, with the growing number of malpractice cases, it is necessary to scrutinize the recruitment practice for invigilators.

As noted by Agbo (2011), in Nigeria, there is a growing pressure on teachers who also serve as invigilators to demonstrate success, which can lead to cheating. This phenomenon is a worldwide trend rather than being specific to Nigeria. It is frequently believed that if pupils perform poorly on a test, the teacher has failed to uphold the standards set for him or her. The pressure on instructors, however, cannot be used as justification for weakening the validity of exams. Exam cheating literature emphasises the role of examiners in promoting such wrongdoing. Some teacher-invigilators in Nigeria cheat on exams in order to profit financially. This covers practises including reducing exam standards, skipping class due to personal commitments or strikes, and substituting selling their own textbooks to students for actual instruction (Agbo, 2011). Other forms of cheating include correcting answers and providing answers to students while marking. Furthermore, some teachers are implicated in examination malpractice by leaking examination papers.

Exam malpractice is defined as the act of a teacher or invigilator showing up late to an exam location or failing to show up for invigilation in the Hargeisa area of Somaliland. Such lateness or absence fosters a setting that encourages cheating. Invigilators may use electronic devices or have conversations that interfere with the "vigil," which is the core component of invigilation, even within the exam room. All of these elements combine to create a favourable climate for examination fraud, which ultimately weakens the entire examination management procedure. Unfortunately, it has been reported that a number of organisations responsible with maintaining the integrity of the examination process have compromised their duties by accepting bribes. Students regularly give money to these people in exchange for their national service and religious duty. As a result, examination venues are filled with a culture of cheating with impunity, impersonation of applicants is tolerated, parents or their hired help is permitted in the exam rooms, and serious examination violations follow. Despite these concerns, little has been done to scrutinize the recruitment process for invigilators, the planning of invigilation, or the design of the examination seating plan, and how these practices may impact students' performance in both continuous assessment tests and national examinations.

The literature review provides a detailed account of the role and responsibilities of exam invigilators in maintaining the integrity of examinations. The literature details the necessity of vigilance and preparation, the importance of setting up a supportive atmosphere for candidates, and the duties invigilators must fulfil both before and during the examination (Moss, 2001; James & Pedder, 2006; Eckstein & Nvah, 2001; Smith, 2009). Furthermore, the literature outlines the criteria for invigilator appointment in certain contexts (Arggarwal, 2007). However, the literature also highlights several challenges and concerns in the process of examination invigilation, such as the role of invigilators in examination malpractices, the difficulty in planning and preparing for examination invigilation, and the pressure on teacherinvigilators,

which may drive them to compromise examination standards (Hargreaves, 2001; Arggarwal, 2007; Agbo, 2011).

Yet, despite the breadth of the existing literature, there are clear research gaps. While the literature discusses the role and responsibilities of invigilators and their potential contribution to examination malpractices, there is limited research investigating the effectiveness of current invigilation practices in preventing these malpractices. While the literature outlines the criteria for invigilator appointment and the challenges in preparing for examination invigilation, it doesn't sufficiently explore the effectiveness of these criteria and processes in ensuring the quality of invigilation, or how they could be improved. The literature does not thoroughly examine the impact of invigilation practices on student performance and the fairness of examinations. This is a significant gap, as invigilation practices can directly influence the integrity and outcomes of examinations. Lastly, the literature does not provide comprehensive insights into the context of Hargeisa region in Somaliland. While it is acknowledged that lateness or absence of invigilators can create an enabling environment for examination malpractice, there is no systematic study investigating the extent of these issues in Hargeisa and their impact on examination outcomes. To fill these research gaps, this study aims to systematically evaluate the effectiveness of current invigilation practices in preventing malpractice and ensuring fair examinations in the Hargeisa region. It also examined the impact of these practices on student performance and the potential improvements that could be implemented in the process of invigilation.

2.7 Examination Marking in Relation to Students' Academic Performance

Schools have the capacity to assign grades to students by means of evaluating their examination scripts. The grades given are helpful in enabling learners to gain insight into their levels of achievement in the examinations. In order to realize the objectives of the subjects taught, it is

imperative that the process of marking be objective rather than subjective. To ensure that marking is fair and objective, schools must establish examination panels, devise grading systems, and moderate results. Cross, Robert, Frary, and Weber (2010) contend that the marking systems employed by teachers across different nations should not be viewed as isolated practices, but rather as integral components of the educational systems in which they operate.

It is crucial to take into account the context-specific educational systems in which these practises are applied, as well as the goal of the grading system in which such practises occur, in order to accommodate the multidimensionality and variety of teachers' marking practises. In fact, before choosing a grading system, teachers must decide what the grades was used for; as a result, grading should be based on a clear strategy. According to Crooks (2008), this grading scheme must simultaneously address the needs of the teacher and the student. According to MacMillan and Nash (2001), grading students' work is a complicated process that is influenced by a number of variables, such as assessment findings, teachers' attitudes and values, and broad learning objectives. Part of grading practices involves offering students feedback, and it is crucial to recognize that grades are an essential aspect of student assessment, with significant implications for individuals' or students' perceptions of themselves and their lives.

Grades possess ethical implications as they pertain to equity and students' rights. The validity of grades is contingent upon the grading methodologies adopted by instructors, which must be reliable, comparable, and equitable (Reynolds, Livingston & Willson, 2009). Dispensing feedback to students is a fundamental part of their education because it fosters learning and guarantees adherence to educational standards. According to Gibbs & Simpson (2004), feedback serves as a navigational system that steers students towards acquiring knowledge and proficiency in the subject matter. Regrettably, providing quality feedback to students is a challenging aspect of teaching, and teachers often tend to avoid it (Daniel & King, 2011).

To ensure the effectiveness of feedback, it is crucial that it is provided promptly, in close proximity to the event in question, and contains encouraging language. It should also be specific in its assessment of what was done well and what needs improvement, without overwhelming the recipient with too many different aspects to focus on simultaneously. Most importantly, feedback should be centered on the work produced by the student, rather than on the student themselves (Crooks, 2008; Gibbs & Simpson, 2004).

Through a framework that highlights the underlying moral difficulties within the grading process, Zoeckler (2007) intended to investigate the many grading practises, including issues of judgement, communication, and character development. Zoeckler also investigated the part that instructor expectations play in the grading process. In order to gather information, Zoeckler spoke with teachers at rural high schools in upstate New York. The study's findings showed that teachers still struggle with fairness issues related to assessing student work. The fundamental thrust of Zoeckler's theory was that teachers' evaluations of their students and comments to them are shaped by their own personal values and ideas. Although the moral dilemmas instructors face in their assessment practises frequently go unacknowledged, they still have a big impact on the evaluation strategies they use.

In their 2001 study, McMillan and Nash explored the justifications for instructors' grading and assessment practises as well as the variables that affect them. The study found that teachers' desire to employ grading procedures that promote student involvement, motivation, and comprehension had an impact on their decision-making processes regarding grading. According to the majority of teachers in the McMillan and Nash (2001) survey, grading is a crucial part of their teaching and learning philosophy and should take into account student variations. Teachers considered using non-achievement practises, such as effort, as a way to evaluate students'

motivation and engagement, whereas ability and improvement were compatible with more general beliefs about the importance of individual student variations.

Consistency and fairness in marking significantly affect students' academic performance. Marsh (2007) found that in the U.S., standardized marking rubrics reduced variability among graders, leading to more reliable assessments and motivating students to perform better due to perceived fairness [Web ID: 5]. In contrast, subjective marking, common in essay-based exams, can introduce bias, as noted by Ching (2018), who argued that inconsistent grading across courses undermined student confidence and effort in Taiwan, a finding applicable to developed contexts [Web ID: 5]. In the UK, the shift to teacher-assessed grades during the COVID-19 pandemic, as reported by Pokhrel and Chhetri (2021), highlighted disparities in marking rigor, with some students receiving inflated grades that did not reflect true ability, impacting their readiness for higher education [Web ID: 24]. These studies suggest that equitable and standardized marking practices enhance performance by ensuring trust in the assessment process.

Timely and constructive feedback following marking is a key driver of academic improvement. Almazan (2019) conducted a narrative review in the U.S. on nursing students preparing for licensure exams, finding that detailed feedback on marked assessments helped students identify weaknesses, leading to significant performance gains in subsequent tests [Web ID: 12]. Similarly, Galiher (2006) observed that in the U.S., students who received prompt feedback after exams adjusted their study strategies, resulting in better outcomes in later assessments [Web ID: 8]. However, Pokhrel and Chhetri (2021) noted that during remote learning in developed countries, delays in feedback due to online marking challenges left students uncertain about their progress, negatively affecting motivation and performance [Web ID: 24]. This underscores the importance of integrating effective feedback mechanisms into marking practices to support continuous learning.

The tension between standardized and subjective marking poses challenges for academic performance. Marsh (2007) highlighted that while standardized marking ensures consistency, it may not capture the nuances of student creativity or critical thinking, potentially disadvantaging high-ability students in the U.S. [Web ID: 5]. In contrast, subjective marking, though flexible, risks inconsistency, as seen in UK A-level grading during the pandemic (Pokhrel & Chhetri, 2021) [Web ID: 24]. Meredith and Bub (1977) added that instructor biases in marking can influence student perceptions of fairness, impacting their engagement and effort [Web ID: 5]. Balancing these approaches remains a challenge, with implications for equitable performance evaluation.

Research on examination marking lacks longitudinal studies on its long-term impact on student trajectories in developed countries. Few studies explore the role of technology, such as AI-assisted marking, in enhancing fairness and efficiency. Additionally, the intersection of marking practices with student demographics (e.g., socioeconomic status) is underexplored, limiting insights into equitable outcomes.

Pre-service teachers enrolling in education classes at the University of Botswana were the subject of a survey by Tabulawa (2012). The goal of the study was to investigate how students think about the connection between the grades they receive and the comments they receive from teachers. The students discussed how their work was evaluated and the kind of feedback they got from their teachers in their responses (Tabulawa, 2012). The study's conclusions showed that teachers did not give students enough feedback to help them understand their mistakes, that the marks they awarded did not correspond to the standards that were used to determine them,

that there was no correlation between the marks and the comments that accompanied them, and that teachers' assessments did not correspond to the marks they gave (Tabulawa, 2012). Ultimately, according to Tabulawa (2012), students struggle to enhance their learning outcomes when there is a disconnect between the comments they receive and the grades they obtain. Therefore, it is crucial that teachers receive proper assessment training to improve their grading procedures and give them the skills necessary to give their students useful, efficient, and effective feedback.

In his discourse on grading and providing feedback to students, Gullickson (2002) posits a narrative perspective that emphasizes the importance of assessment and feedback in promoting accountability in students' academic work and personal lives. He underscores the need for teachers to adopt grading and feedback practices that align with the interests of students. Among his recommendations is the need for teachers to clearly delineate what students did, what they were expected to do, and to facilitate a comparative analysis of both.

In South Africa, the Department of Education (2011) performed a study with the goal of documenting the differences in assessment and grading procedures used by teachers in the many disciplines they teach in a given class. The results showed that secondary school teachers grade students' work using a wide variety of characteristics. Academic achievement, academic enablers such as effort, ability, improvement, and involvement, use of external standards, usage of additional credit, and borderline situations were divided into four groups. The study determined that the most important factor in rating students' work was academic achievement. Additionally, according to two-thirds of the study's teachers, grading students' work should take academic facilitators like effort, ability, and improvement into account.

The selection of non-achievement factors, such as effort, as a means to determine grades has been defended by educators who view them as a borderline indicator. This approach is

considered to be a suitable proxy for measuring student achievement. In the context of secondary education, non-achievement factors have been observed in the grading process, particularly in cases where grades are raised or lowered, with the exception of borderline scenarios. In addition, some educators have been known to reward hard work by increasing borderline grades, whereas borderline grades may be lowered for lack of effort (Department of Education, 2011). However, not all educators support the use of non-achievement factors, instead placing greater emphasis on achievement-related factors (Mwandikwa & Ocharo, 2007). These educators argue that limiting grades to measured achievement at a specific point in time may lead to clearer interpretations of grades, whereas relying solely on non-achievement factors may prove difficult.

The literature indicates that schools play a critical role in shaping students' behavior and character formation. While several factors contribute to this, like the influence of school environment and teacher-student relationships, there is a need to examine the extent to which schools' policies and curriculum contribute to character formation. Furthermore, the impacts of school-initiated programs on students' character development require further exploration. The literature demonstrates that school environments significantly impact learning outcomes. This includes both physical and psychological aspects of the environment. Schools that foster a positive, nurturing, and stimulating environment tend to have better student performance. However, gaps persist in understanding the specific components of a school environment that most significantly impact learning and how these can be systematically integrated into school design and policy.

Existing literature underscores the importance of effective leadership in schools for enhancing academic performance. The leadership styles of principals and their influence on school culture, teacher motivation, and student outcomes are areas of interest. However, there is a need to

explore how different leadership styles and strategies work in diverse educational contexts and cultures. The literature indicates that grading systems and feedback are crucial components of student assessment. They can have significant impacts on students' academic progress, perceptions, and motivation. Although many factors influence grading practices, including teacher beliefs, educational systems, and non-academic factors, there are research gaps in understanding the long-term impacts of grading practices, the role of technology in grading, the effectiveness of teacher training in grading, and students' perspectives on grading practices.

2.8 Theoretical Framework

The study was guided by two theories; The systems theory and self-determination theory.

2.8.1 The Systems Theory

This research is anchored in Systems Theory, as articulated by Niklas Luhmann in 2004. The theory suggests that an organization operates as a coordinated system, transforming inputs like raw materials, staff, and resources into outputs, such as goods and services that represent its products. A central principle of this theory is that management must interact with the external environment to acquire inputs and distribute the outcomes of its processes. In this study, therefore, unethical examination management practices serve as inputs that interact with all elements of examination management, ultimately producing examination malpractice as the output. Examination management refers to the process of planning, organizing, and administering examinations, encompassing classroom instruction, question setting, exam administration, grading, and certificate issuance. This implies that teachers, examination administrators, students, and parents all play a part in examination management.

The management of examinations necessitates the marshalling and organization of both material and human resources to ensure their smooth execution. The quality of such management serves as the determinant of the occurrence or non-occurrence of malpractice or

cheating in a given examination. In cases of such unethical conduct, the standards of ethics are invariably compromised. Examination regulations, rules, standards, and best practices are often intentionally or unintentionally violated, undermining the core principles of proper examination management across all involved roles. Consequently, this study adopts this theory to highlight the essential role that effective examination management plays in influencing the academic success of secondary school students.

In the context of this research, the "system" under consideration is the educational system of public secondary schools in Hargeisa, Somaliland, with specific focus on examination management. Systems theory posits that understanding the whole system is more than merely understanding its individual components. In this study, examination management isn't isolated; it's interconnected with many other aspects of the educational system, including curriculum design, teaching methods, student engagement, and school administration. By applying systems theory, the research considered these interdependencies, providing a holistic understanding of how examination management influences academic performance. The different aspects of examination management; setting, distribution, invigilation, and marking, can be viewed as subsystems within the larger educational system. They are interrelated and their collective operation impacts the output of the system (i.e., students' academic performance). Systems theory allowed the study to explore how these subsystems interact with one another and how changes in one might affect the others and the system as a whole.

Strengths and Weaknesses of the systems Theory

Systems theory, a framework that views organizations and phenomena as interconnected systems of parts working together, offers valuable insights across disciplines like management, sociology, and biology. Its strengths lie in its holistic approach and adaptability, but it also faces criticism for its complexity and lack of specificity.

One major strength of systems theory is its emphasis on interconnectedness. By focusing on how components interact within a system, it provides a comprehensive understanding of complex phenomena. For instance, in organizational studies, systems theory helps managers analyze how departments like marketing and finance influence each other, improving coordination and efficiency (Von Bertalanffy, 1968). This holistic perspective is particularly useful in addressing multifaceted problems, such as environmental sustainability, where social, economic, and ecological systems intersect. Additionally, systems theory's adaptability allows it to be applied across diverse fields. Kast and Rosenzweig (1972) highlight its use in biology to study ecosystems and in management to design organizational structures, demonstrating its versatility in tackling varied challenges.

However, systems theory has notable weaknesses. Its broad, abstract nature often lacks specificity, making practical implementation challenging. Critics argue that while it identifies system interactions, it provides little guidance on actionable solutions (Luhmann, 1995). For example, in education, applying systems theory to improve student outcomes may reveal interconnected factors like curriculum and teacher training, but it offers no clear steps to address them. Furthermore, the theory's complexity can overwhelm practitioners. The intricate web of relationships it seeks to map requires extensive data and analysis, which may be resourceintensive, particularly in smaller organizations or developing contexts (Kast & Rosenzweig, 1972).

2.8.2 Self-Determination Theory

The Self-Determination Theory (SDT), propounded by Deci and Ryan (1985), is a macro theory of human motivation that seeks to explain individuals' personality development and behavior based on their inherent growth tendencies and innate psychological needs. It operates on the premise that human beings possess inherent tendencies towards learning, growth, and

internalization of cultural practices and values. It also underscores the significance of the social context in either supporting or thwarting these tendencies.

At the heart of SDT are three fundamental psychological needs: competence, autonomy, and relatedness. These needs are universally crucial for promoting motivation and mental health.

They also contribute significantly to individuals' behavior, performance, and overall well-being.

Competence: Competence, according to SDT, refers to an individual's belief in his/her ability to control the outcome and performance effectively in different activities. In the educational context, it pertains to students' confidence in their ability to succeed in their studies. When students feel competent, they are likely to show improved engagement, persistence, and ultimately better academic performance.

Autonomy: Autonomy reflects the individual's perception of freedom and volition in their behavior. Within the education sector, autonomy may be linked to students' feeling of control over their learning process. It can manifest as students' ability to make choices about what, when, and how they learn. Higher levels of perceived autonomy can foster intrinsic motivation, leading to improved learning outcomes and academic performance.

Relatedness: Relatedness concerns the extent to which individuals feel connected to others in their social environment. In the realm of education, this refers to students' sense of belonging or connectedness with their peers, teachers, and the wider school community. The sense of relatedness can foster students' engagement and commitment to their studies, influencing academic performance positively.

In the context of this study, the Self-Determination Theory can provide a framework to investigate how examination management practices in public secondary schools in the Hargeisa region, Somaliland, affect students' perceived competence, autonomy, and relatedness, and consequently, their academic performance. This theory asserts that educational practices and

policies that support students' psychological needs can enhance self-motivated learning, leading to improved academic outcomes. Therefore, integrating SDT into this research illuminated how examination management practices align with or deviate from the principles of SDT, affecting students' academic performance.

Strengths and Weaknesses of Self-Determination Theory

Self-Determination Theory (SDT), developed by Deci and Ryan (1985), is a psychological framework that emphasizes the role of intrinsic motivation in human behavior, focusing on the needs for autonomy, competence, and relatedness. Its strengths lie in its applicability and empirical support, but it faces criticism for cultural biases and practical challenges.

One key strength of SDT is its broad applicability across domains such as education, healthcare, and workplace motivation. SDT posits that satisfying the three basic needs enhances intrinsic motivation, leading to better performance and well-being. For example, Ryan and Deci (2000) found that students who feel autonomous in their learning environment exhibit higher engagement and academic achievement. This has practical implications for educators designing student-centered curricula. Additionally, SDT is backed by extensive empirical research. Studies like Gagné and Deci (2005) demonstrate that workplaces fostering autonomy and relatedness see improved employee satisfaction and productivity, validating SDT's relevance in organizational settings.

However, SDT has notable weaknesses. One criticism is its potential cultural bias. SDT emphasizes autonomy as a universal need, but this may not align with collectivist cultures where interdependence is prioritized over individual choice. Chirkov et al. (2003) argue that in countries like China, relatedness often supersedes autonomy, suggesting SDT may not fully apply across cultural contexts. Another weakness is the challenge of implementation. While

SDT advocates for autonomy-supportive environments, practical constraints—such as rigid educational systems or hierarchical workplaces—can make this difficult. For instance, teachers may struggle to grant autonomy in standardized testing environments, limiting SDT’s effectiveness (Ryan & Deci, 2000).

In conclusion, Self-Determination Theory offers a robust, evidence-based framework for understanding motivation, with wide applicability in various fields. However, its cultural assumptions and implementation challenges highlight the need for contextual adaptations to maximize its utility in diverse settings.

2.9 Conceptual Framework

The conceptual framework was based on examination management practices reflected through examination setting, examination distribution, invigilation practices and marking which constituted the independent variables whereas academic performance constituted the dependent variables. Intervening variables which was government policy, trained teachers and infrastructure. These relate in a context described as a system where the working of one component triggers the working of the other. Regardless of the direction of the effect, the components work in harmony which also defines the self-determination theory. This is as shown in Figure 1.

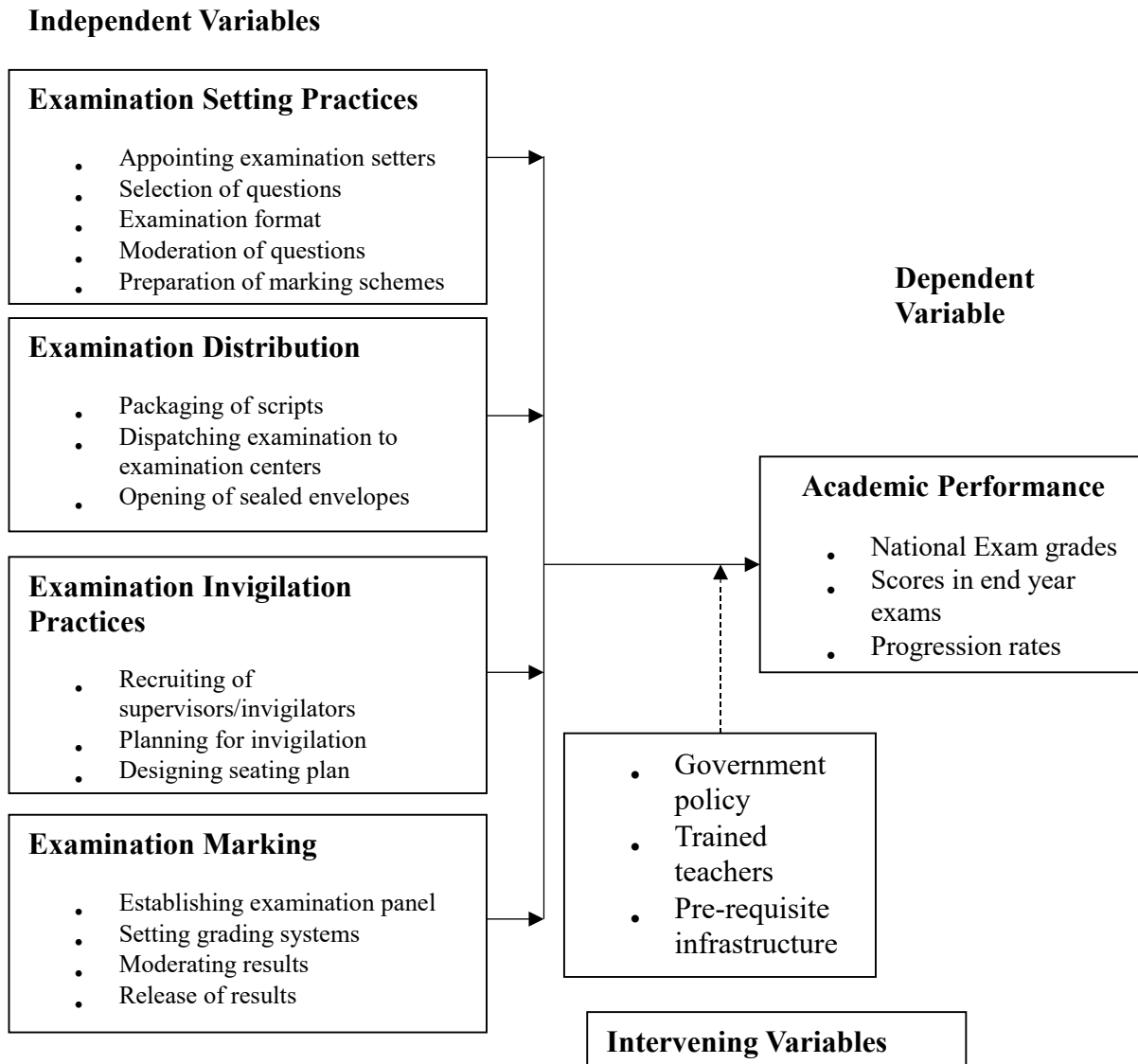


Figure 1 Conceptual Framework

Source: Researcher (2021)

2.10 Summary of Literature Review

The literature review across all objectives collectively presents a comprehensive understanding of various aspects of schooling, including the role of schools in students' behavior and character formation, the influence of the school environment on learning, the impact of school leadership on academic performance, and the importance of grading systems and feedback in student assessment. Schools play a pivotal role in shaping students' behavior and character. They significantly influence students through various factors such as the school environment,

teacher-student relationships, policies, and curriculum. However, the extent to which policies and curriculum contribute to character formation is less explored. Furthermore, the impacts of school-initiated programs on students' character development also warrant further research.

The school environment is seen as a vital factor impacting learning outcomes. This extends to both the physical and psychological aspects of the environment. Schools that foster a positive, nurturing, and stimulating environment often observe better student performance. Yet, there is a need to identify the specific components of the school environment that have the most significant impact on learning and how these can be systematically integrated into school design and policy. Leadership in schools is another aspect with a profound impact on academic performance. The leadership styles of principals, their influence on school culture, teacher motivation, and student outcomes are areas of significant interest. However, there is a gap in understanding how different leadership styles and strategies operate in diverse educational contexts and cultures.

Lastly, grading systems and feedback are integral to student assessment. These practices can significantly influence students' academic progress, perceptions, and motivation. Many factors shape grading practices, including teacher beliefs, educational systems, and non-academic factors such as effort and participation. Yet, there are research gaps in understanding the longterm impacts of grading practices, the role of technology in grading, the effectiveness of teacher training in grading, and students' perspectives on these practices. In sum, the literature provides substantial insights into the various factors affecting students' learning and character formation within the schooling system. However, several unexplored areas identified as research gaps, present opportunities for further research to provide a more comprehensive understanding of these complex dynamics.

2.11 Research Gaps

On examination setting practices, empirical research studies have not exhaustively indicated how examination setting and test preparation procedures are effective in determining secondary school students' academic performance in termly and end-year examinations. The studies have not indicated which kinds of questions, whether multiple choice or essays, are effective in enhance students' academic performance. On examination distribution, little has been done to indicate how each of the distribution practices impact on students' performance in termly and end-year examinations. On examination invigilation, little has been done to interrogate the recruitment process for invigilators, planning for invigilation and design of examination setting plan and how such practices enhance students' performance in termly and end-year examinations. On examination marking, empirical studies have not indicated how marking systems adopted by different schools for their internal and national examinations have a direct link with the performance of students in termly and end-year examinations. These are the research gaps which the study seeks to address.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter provides a detailed overview of the methodology used in the study. It explains the research design, study location, population, sample size, sampling methods and procedures, data collection tools, approaches to assessing the validity and reliability of these tools, the

research process undertaken, and the techniques applied for data management and analysis throughout the study.

3.2 Research Methodology

The present investigation employed a mixed method approach, encompassing both quantitative and qualitative methodologies. As per Kothari's (2005) elucidation, the quantitative method involves the researcher posing precise queries, amassing quantifiable data from a vast cohort of subjects; scrutinizing these figures via statistical analysis; and executing the investigation in an equitable and impartial manner. The quantitative data was procured via questionnaires. In contrast, the qualitative approach hinged upon the perceptions of the participants, with the researcher posing broad, general questions and accruing data consisting primarily of verbal expressions from the participants. The researcher expounded upon and scrutinized these verbal expressions on the basis of the study's objectives. In this instance, data was gathered via interview schedules.

3.3 Research Design

This study employed an explanatory sequential research design, a mixed methods approach that is particularly suitable for exploring multifaceted research problems. This design enables a comprehensive understanding of the research topic by combining both quantitative and qualitative research methods within a single study (Creswell, 2009). The research process commenced with the collection and analysis of quantitative data. The key variables under investigation in this phase include examination setting practices, examination distribution practices, examination invigilation practices, and examination marking practices. These were measured through structured questionnaires designed to capture numerical data that can be statistically analyzed to determine patterns, correlations, and potentially causal relationships with the dependent variable, academic performance.

Academic performance itself was measured quantitatively using metrics such as examination scores, grade point averages, and pass rates. This data was obtained from school records and other relevant sources, ensuring that it is both accurate and representative of the student population. Following the quantitative phase, the study progressed to the qualitative data collection and analysis phase. This phase is designed to build upon and elucidate the findings of the quantitative phase. The qualitative data delved into the lived experiences and perceptions of teachers, and administrators, and was collected through methods such as interviews and focus group discussions.

The emphasis on quantitative methods in the initial phase of the study does not diminish the value of the qualitative data collected in the second phase. The qualitative data provided rich, contextual insights that helped to interpret and make sense of the quantitative findings. The results from both data sets were integrated in the final interpretation, providing a more complete and nuanced understanding of the influence of examination management practices on academic performance in public secondary schools in Hargeisa, Somaliland.

3.4 Location of the study

Hargeisa, located in the Horn of Africa, serves as the capital city of Somaliland. The region is situated in the valley of Galgodon highlands, with an altitude of 1,334m (4,377ft). The area is renowned for its rock art from the Neolithic period and is considered a primary center for precious stone-cutting, retail services, and trading. According to estimations, Hargeisa has a population of approximately 1.2 million inhabitants. Both public and private secondary schools exist in Hargeisa, with the government regulating both sectors. Within Hargeisa, there are 18 public secondary schools. The research study selectively sampled secondary schools to participate in the investigation. As the capital and the largest city of Somaliland, Hargeisa showcases a substantial concentration of public secondary schools, creating an ideal locality for the examination of the influence of examination management on students' academic

performance. The diverse range of schools present in the region offer a variety of examination setting practices, distribution methods, invigilation processes, and marking systems. This diversity facilitates a comprehensive assessment of these crucial variables across different contexts within the same area.

Moreover, there have been reported issues with academic performance in Hargeisa, particularly in national examinations. The Ministry of Education in Somaliland reported low grades for a significant percentage of students taking the National Form Four examination. This situation underscores the relevance and urgency of understanding the factors contributing to these academic outcomes, such as examination management practices. By focusing on the Hargeisa region, the study is positioned to address a pressing local issue while also contributing to the broader understanding of the relationship between examination management and academic performance. The insights gleaned could help inform strategies for enhancing examination practices, ultimately leading to improvements in student performance in the region.

3.5 Target population

In the context of the current study, the primary focus is on the teachers in the 18 public secondary schools in Hargeisa, Somaliland (Director of Education, 2021). The office approximates the number of principals, teachers and the key education stakeholders as 412. Hargeisa, as the capital and largest city of Somaliland, hosts a multitude of students from diverse backgrounds, socio-economic statuses, and ethnicities, thereby offering a broad perspective for understanding the impact of examination management practices on academic performance.

Furthermore, the study also incorporates other key stakeholders in the education sector, such as school administrators, and officials from the Ministry of Education. These individuals, who directly influence or are influenced by examination management practices, enrich the study's

scope, providing a comprehensive view of the prevailing situation. The research additionally considers the various grades within the secondary school system, cognizant of the potential variability in examination management practices across different grades. This perspective could shed light on the diverse impacts of these practices on academic performance. Moreover, the study encompasses the examination management practices across different subject areas, such as Mathematics, Language, and Science. This inclusive approach offers a comprehensive understanding of the influence of varying practices among departments on student performance.

3.6 Sampling and Sampling Techniques

Sampling is a critical component of research methodology, as it determines the representativeness and reliability of study findings. Orodho (2004) defines a sample as a subset of a target population that mirrors the characteristics of the larger group, ensuring that conclusions drawn from the sample can be generalized to the population. In the context of this study, conducted in the Hargeisa region, the researcher employed a meticulous sampling strategy to investigate educational outcomes, specifically focusing on secondary schools with poor performance in joint end-year examinations. The sampling process integrated statistical principles and context-specific considerations, balancing representativeness with practicality.

The researcher selected 5 secondary schools, which constituted 12.5% of the total 40 schools in the Hargeisa region. This selection was informed by the Central Limit Theorem (CLT), a statistical principle that posits that for a sample size of $N \geq 30$, the distribution of sample means approximates a normal distribution, regardless of the underlying population's distribution (Rice, 2007). The CLT provides a robust foundation for ensuring that sample statistics are reliable and generalizable, even when the population is not normally distributed. By adhering to this theorem, the researcher ensured that the chosen schools could reasonably represent the broader educational landscape of the region, despite the relatively small sample size.

Applying the same 12.5% proportion, the researcher sampled 52 respondents from a total population of 412 individuals. This sample size exceeds the CLT's threshold of 30, further reinforcing the statistical validity of the findings. The respondents included principals, teachers, the regional Director of Education, and the Examination Officer, each selected through carefully chosen sampling techniques to address the study's objectives. The use of a consistent sampling proportion (12.5%) across schools and respondents reflects a deliberate effort to maintain proportionality and coherence in the sampling framework.

To account for regional diversity, the researcher employed stratified sampling, dividing the Hargeisa region into five strata based on geographic zones, each containing five secondary schools. Stratified sampling ensures that subgroups within a population are adequately represented, reducing sampling bias and enhancing the precision of estimates (Creswell, 2009). From each stratum, one principal was selected using purposive sampling, a non-probability method where participants are chosen based on specific criteria relevant to the research objectives (Kothari, 2005). In this case, the criterion was poor performance in the joint endyear examination, allowing the researcher to focus on schools facing academic challenges. This targeted approach ensured that the study captured insights from contexts most relevant to its aims.

Purposive sampling was also used to select the regional Director of Education and the Examination Officer. These individuals were chosen due to their pivotal roles in shaping and implementing education policies and their close interaction with learners, which positioned them to provide valuable perspectives on examination management and academic performance. Their inclusion enriched the study by incorporating high-level administrative insights, complementing the school-level data.

To ensure impartiality among teacher respondents, the researcher applied simple random sampling to select 11 teachers. Simple random sampling, where every individual has an equal chance of selection, minimizes bias and enhances representativeness (Orodho, 2004). This method was particularly suitable for teachers, as it avoided favoritism and ensured a diverse range of perspectives. However, the text notes that the final sample included 58 teachers (31 male, 27 female), suggesting a possible adjustment in the sampling process, perhaps to increase representation or account for additional strata. The final sample composition—5 principals (3 male, 2 female), 58 teachers, the regional Director of Education, and the Examination Officer—reflects a balanced and inclusive approach, capturing gender diversity and multiple stakeholder roles.

Overall, the sampling strategy demonstrates a thoughtful integration of statistical rigor and contextual relevance. By combining stratified, purposive, and simple random sampling, guided by the CLT, the researcher ensured that the sample was both representative and focused, enabling a comprehensive exploration of the factors affecting academic performance in Hargeisa’s secondary schools. The sampling grid is as shown in Table 1.

Table 1 Sample Size Grid

Respondents Categories	Target Population	Sample size	% of Population	Sampling Techniques
Principals				
Male	22	7	31.8	Purposive
Female	18	5		Purposive

Teachers				
Male	201	59	27.8	Simple Random
Female	169	50	29.4	Simple Random
Regional Director of Education	1	1	100	Purposive
Examination Officer	1	1	100	Purposive
Total	412	123	29.9	

Source: Researcher (2021)

3.7 Data Collection Instruments

The researcher applied a variety of data collection instruments to gather pre-requisite information for the study. These included;

3.7.1 Questionnaires for Principals and Teachers

A questionnaire is a vital research instrument designed to systematically gather data from respondents through structured questions and prompts. Creswell (2009) and Kothari (2005) define it as a tool that facilitates the collection of information by posing a series of inquiries, typically crafted to enable statistical analysis of responses. This structured approach ensures that data is quantifiable, reliable, and aligned with the study's objectives, making questionnaires particularly effective in educational research where diverse perspectives need to be captured efficiently.

In the context of this study, the researcher utilized a questionnaire to collect data from principals and teachers, key stakeholders in the educational system under investigation. The choice of a questionnaire was strategic, as it allowed for standardized data collection across multiple

respondents, ensuring consistency and comparability. By targeting principals and teachers, the researcher aimed to gather insights into administrative and instructional factors influencing the study's focus, likely related to academic performance or school management. Questionnaires are especially suited for such populations, as they can be administered with minimal disruption to respondents' schedules, a practical consideration in busy school environments.

The questionnaire was thoughtfully divided into two distinct sections, each serving a specific purpose. The first section focused on gathering demographic details about the respondents, such as age, gender, years of experience, and educational qualifications. This information is crucial for contextualizing the data, as demographic variables can influence perspectives and behaviors. For instance, a veteran principal might offer different insights on school leadership compared to a newer teacher. Including demographic data enables the researcher to analyze potential correlations between respondents' backgrounds and their responses, enhancing the depth of the findings (Kothari, 2005).

The second section comprised Likert-scale questions tailored to the research objectives. Likert scales, typically ranging from "strongly agree" to "strongly disagree," are widely used in educational research to measure attitudes, perceptions, or behaviors (Creswell, 2009). These questions were designed to elicit responses on specific issues, such as teaching practices, examination management, or resource availability, depending on the study's focus. The use of Likert scales ensures that responses are quantifiable, allowing the researcher to perform statistical analyses, such as calculating means or identifying trends. This structured format also minimizes ambiguity, as respondents select from predefined options, reducing the risk of misinterpretation.

By structuring the questionnaire in this manner, the researcher ensured a balance between contextual understanding (via demographics) and targeted inquiry (via Likert-scale questions).

This dual approach aligns with best practices in research design, as it provides both descriptive and analytical data. For example, demographic data might reveal that female teachers perceive resource constraints differently than their male counterparts, while Likert-scale responses could quantify the extent of agreement on policy effectiveness. Such insights are invaluable for addressing the research objectives comprehensively.

The use of a questionnaire also reflects methodological rigor, as it allows for scalability and replicability. Unlike interviews, which are time-intensive, questionnaires can be distributed to a larger sample, increasing the study's representativeness. However, the researcher likely took steps to ensure the instrument's validity and reliability, such as piloting the questionnaire to refine unclear questions or using established scales to measure constructs accurately (Creswell, 2009). These considerations are critical to ensuring that the data collected is robust and trustworthy.

In conclusion, the questionnaire employed in this study exemplifies a strategic approach to data collection, leveraging the strengths of structured instruments to gather meaningful insights from principals and teachers. By incorporating demographic and Likert-scale sections, the researcher balanced context with precision, paving the way for robust statistical analysis and informed conclusions.

3.7.2 Interview Schedules for Regional Director of Education and Examination Officer

As stated by Orodho (2004), the act of conducting an interview grants access to the inner workings of an individual's mind, allowing for the measurement of their knowledge, preferences, values, attitudes, and beliefs. In this study, the researcher utilized structured interviews with the Regional Director of Education and Examination Officer, employing an interview guide composed of questions pertaining to the research objectives. The significance of conducting interviews in this study lies in its capacity to facilitate in-depth exploration

through probing and supplementary questions, as well as facilitate rapport-building between the interviewer and respondents. Ultimately, interviews in this study serve as a goal-oriented approach to obtaining reliable and valid measures in the form of verbal responses from one or more interviewees.

3.8 Piloting of Research Instruments

Conducting a pilot study is a critical step in ensuring the quality and effectiveness of research instruments. In this study, the researcher executed a pilot test prior to the main investigation, involving 2 secondary school principals and 8 secondary school teachers. This preliminary exercise was designed to rigorously evaluate the research tools—likely questionnaires or interview protocols—before their widespread use, thereby enhancing the study’s overall reliability and validity.

The pilot study had several specific objectives. First, it assessed the suitability and clarity of the questions to ensure they were easily understood by respondents. Ambiguous or complex questions could lead to misinterpretation, compromising data quality (Creswell, 2009). Second, it evaluated the relevance of the information being collected, ensuring alignment with the research objectives, such as examining academic performance or school management practices. Third, the appropriateness of the language was scrutinized to confirm it matched the respondents’ educational and cultural context, avoiding jargon or overly technical terms (Kothari, 2005). Finally, the pilot tested the reliability and validity of the tools, checking whether they consistently measured the intended constructs and accurately captured the phenomena under study.

By selecting a small but representative group—principals and teachers—the researcher ensured diverse perspectives on the tools’ effectiveness. Excluding pilot participants from the main

study prevented bias, as prior exposure could influence their responses, ensuring the integrity of the final data collection process.

3.8.1 Validity of the Instruments

Validity, defined by Bland (2000) as the extent to which a test accurately measures the intended concept, is fundamental to producing credible research outcomes. In this study, the researcher took deliberate steps to ensure the validity and reliability of the research instruments, recognizing their importance in generating trustworthy data. A pilot study was conducted to establish face validity, which assesses whether the instruments appear to measure the intended constructs from the respondents' perspective (Creswell, 2009). By testing the tools with a small group, the researcher could confirm that the questions were perceived as relevant and appropriate.

To further strengthen content validity—ensuring the instruments comprehensively covered the research objectives—the researcher sought expert opinions. These consultations helped refine the tools, ensuring they captured all relevant aspects of the study's focus, such as educational practices or performance metrics. Additionally, the researcher collaborated with supervisors to analyze the consistency of responses from the pilot questionnaires, a key step in determining reliability, which reflects the instruments' ability to produce stable and repeatable results (Kothari, 2005). During this process, each item was scrutinized for clarity and appropriateness. Ambiguous or confusing questions were identified and rephrased to enhance comprehension, ensuring respondents could provide accurate and meaningful answers.

3.8.2 Reliability of the Instruments

Reliability, as defined by Kothari (2005), is the degree to which a research instrument yields consistent results across multiple trials, ensuring stability and dependability in data collection. In this study, the researcher prioritized reliability to guarantee that the research tools—likely

questionnaires or surveys—produced trustworthy and repeatable outcomes, a cornerstone of rigorous research methodology. To assess this, a pilot study was conducted, providing a controlled setting to test the instruments before their use in the main study.

The reliability of the instruments was quantitatively evaluated using the Pearson's Product Moment Correlation Method, a statistical technique that measures the strength of the relationship between two sets of responses to determine consistency (Creswell, 2009). By analyzing pilot study results, the researcher calculated a reliability coefficient, which quantifies the instrument's internal consistency. A threshold of $r > 0.75$ was established as the benchmark for high internal reliability, aligning with standard research practices where coefficients above 0.7 indicate strong consistency (Kothari, 2005). Achieving a coefficient above this value would confirm that the instrument reliably measures the intended constructs, such as attitudes or behaviors, without significant variation due to errors or ambiguities. This rigorous approach underscores the study's commitment to producing credible and dependable findings.

3.8.3 Credibility of Qualitative Data

The establishment of the believability of research findings is closely associated with the concept of credibility. This fundamental tenet highlights the importance of quality over quantity.

Specifically, the richness of information obtained is prioritized over the quantity of data collected. For the present investigation, assessing the credibility of qualitative data entailed the utilization of data triangulation through the involvement of multiple analysts or experts.

3.8.4 Dependability of Qualitative Data

Dependability is a crucial element in research that warrants consistency and reproducibility of findings. Its measurement is contingent upon the rigor with which the research is conducted, analyzed and presented. In the current investigation, an assurance of dependability was upheld

through comprehensive reporting of each qualitative data collection process. The meticulous documentation enabled the researcher to replicate the inquiry and attain parallel results.

3.9 Data Collection Procedure

The researcher procured an introductory letter from The School of Postgraduate Studies at Mount Kenya University, alongside an authorization letter and Research Permit from the Ministry of Education in Somaliland. Additionally, the researcher solicited an authorization letter from sampled secondary school principals. These aforementioned letters served as an introduction for the researcher to the different sampled secondary schools within the Hargeisa region. Upon reception of the research permits and letters of authorization, the researcher proceeded to schedule appointments with respondents by means of their administrators and the endorsement of their respective principals. This facilitated the administration of questionnaires and interviews to collect prerequisite data for the study.

The administration of questionnaires to respondents constitutes a pivotal aspect of data collection in quantitative research. A trained research assistant, having undergone a rigorous three-day training program, facilitated this process and ensured that the objectives of the study are met. Furthermore, the filled questionnaires were meticulously collected and securely stored to facilitate subsequent data analysis. Additionally, interviews were conducted in person at a time that is convenient for the interviewees, thereby ensuring the collection of qualitative data.

3.10 Data Analysis and Presentation

The data analysis process is a pivotal phase in research, transforming raw data into meaningful insights. In this study, the researcher adopted a systematic approach to analyze data collected from participants, employing a mixed-methods framework that integrated quantitative and qualitative techniques to address the study's objectives comprehensively. This dual approach

ensured a robust examination of participants' experiences, balancing numerical trends with nuanced, thematic insights.

The analysis began with the collection and evaluation of quantitative data, typically derived from structured instruments like questionnaires with close-ended questions. These responses were coded and labeled to facilitate statistical processing, a method that standardizes data for analysis (Creswell, 2009). The researcher calculated frequency counts to summarize the prevalence of specific responses, providing a clear picture of participant demographics and general trends across variables, such as attitudes toward educational practices or performance metrics. This quantitative phase laid the groundwork by identifying patterns and relationships, which were further explored through statistical techniques.

Descriptive statistics, including measures like means, medians, and percentages, were used to summarize the quantitative data, offering a snapshot of central tendencies and variability (Kothari, 2005). Additionally, correlation analysis was conducted to examine relationships between variables, such as the link between resource availability and academic outcomes. These analyses were performed using SPSS version 24, a widely used software that enhances precision in handling large datasets. The results were presented in tables, a format that organizes complex data clearly, enabling readers to grasp key findings at a glance.

Following the quantitative phase, the researcher collected and analyzed qualitative data, likely from open-ended questions, interviews, or focus groups. This phase was deliberately structured to build upon the quantitative findings, allowing for a deeper exploration of trends identified earlier. Qualitative data was broken down into phrases or sentences, each representing a distinct idea, a process known as unitizing (Bazeley, 2013). This granular approach ensured that no significant perspective was overlooked. The data was then thematically analyzed, a method that involves identifying recurring themes or patterns aligned with the study's objectives, such as

challenges in examination management or teacher perceptions of policy effectiveness (Braun & Clarke, 2006). Thematic analysis provided rich, contextual insights that complemented the numerical data, offering a fuller understanding of participants’ experiences.

By sequencing the analysis—quantitative followed by qualitative—the researcher ensured that the qualitative phase could probe deeper into statistical trends, addressing “why” and “how” questions that numbers alone cannot answer. The use of tables to display results further enhanced clarity, making the findings accessible to both academic and practitioner audiences.

This is summarised in Table 2.

Table 2 Data Analysis Methods

Objective	Data analysis methods	Presentations
i. To assess the influence of examination setting practices on the academic performance of public secondary school in Hargeisa region, Somaliland.	Descriptive Correlation Thematic	Tables Figures Verbatims
ii. To examine the influence of examination distribution practices on the academic performance of public secondary school in Hargeisa region, Somaliland.	Descriptive Correlation Thematic	Tables Figures Verbatims
iv. To determine the influence of examination invigilation practices on academic performance of public secondary school in Hargeisa, Somaliland.	Descriptive Correlation Thematic	Tables Figures Verbatims
v. To analyze the influence of examination marking practices academic on the academic performance of public secondary school in Hargeisa, Somaliland.	Descriptive	Tables
	Correlation Thematic	Figures Verbatims

3.11 Logistical and Ethical Considerations

Ethical and logistical considerations are foundational to conducting credible and responsible research, ensuring participant trust and data integrity. In this study, the researcher adhered to rigorous ethical standards and logistical protocols, as outlined in section 3.11, to safeguard participants' rights and manage data effectively. These measures encompassed defining the study's scope, setting clear participant expectations, obtaining informed consent, protecting confidentiality, ensuring anonymity, and implementing secure data storage practices. Each aspect reflects a commitment to ethical research principles, aligning with established guidelines in social science methodology (Creswell, 2009).

3.11.1 Confidentiality and Privacy

Confidentiality and privacy are paramount in research involving human participants, particularly in educational settings where sensitive information may be shared. The researcher prioritized safeguarding participants' personal data, assuring them that no sensitive or private details would be disclosed to third parties. This assurance was critical to building trust, encouraging honest responses from participants, such as principals or teachers, who might otherwise hesitate to share candid insights (Kothari, 2005). To uphold confidentiality, the researcher guaranteed that no personal identifiable information would appear in any written reports, presentations, or other communications. Participants were explicitly informed that their data would be used exclusively for the study's intended purpose, such as analyzing academic performance or school management practices, and would not be shared externally. These measures align with ethical standards that prioritize participant protection, ensuring compliance with data privacy norms (Bryman, 2016).

3.11.2 Anonymity

Anonymity complements confidentiality by ensuring that participants' identities remain undisclosed, further reducing the risk of unintended exposure. The researcher took significant

steps to confirm to participants that neither their names nor any identifying details about themselves or their organizations (e.g., specific schools) would be revealed in any form of communication, including research publications or presentations. This was particularly important in a study likely involving a small, localized sample, such as secondary schools in a specific region, where identifiable information could inadvertently link responses to individuals or institutions. By anonymizing data, the researcher mitigated potential risks, such as professional repercussions for participants who might critique administrative practices, fostering an environment where they could respond freely and truthfully (Creswell, 2009).

3.11.3 Informed Consent

Informed consent is a cornerstone of ethical research, ensuring that participation is voluntary and based on a clear understanding of the study's purpose. The researcher provided participants with a comprehensive explanation of the study's objectives, likely related to educational outcomes or policy implementation, and detailed the data collection methodology, such as questionnaires or interviews. This transparency enabled participants to make informed decisions about their involvement, free from coercion or misunderstanding. By outlining what participation entailed—e.g., the types of questions asked or the time required—the researcher empowered participants to consent knowingly, adhering to ethical guidelines that prioritize autonomy and respect (Kothari, 2005). This process was particularly crucial in an educational context, where participants might include busy professionals like principals or teachers.

3.11.4 Storage of Data Collected

Effective data management is both an ethical and logistical necessity, ensuring that collected information is secure and accessible for analysis. The researcher cataloged unprocessed data systematically to facilitate easy reference during analysis. Hard copies of the data, such as completed questionnaires, were organized chronologically, likely by date or respondent group, to streamline retrieval. Electronic versions were securely stored on portable devices, including

compact discs and flash drives, to protect against data loss and unauthorized access. These measures reflect a proactive approach to data security, minimizing risks like breaches or corruption while ensuring compliance with ethical standards for data handling (Bryman, 2016). Post-analysis, the organized storage system likely aided in verifying findings or addressing queries, enhancing the study's credibility.

CHAPTER FOUR

RESEARCH FINDINGS

4.1 Introduction

This chapter presents the study findings derived from the analysis of the collected data from the field. The section is presented systematically based on the study objectives. However, it starts with the response rate from the field, presents the demographics of the study participants and

gives the description of the dependent variable, students' academic performance in public secondary schools in in Hargeisa region, Somaliland.

4.2 Response rate

From the study findings, a total of 111 research participants were involved. This was from the sample of 123 participants. This made up a response rate of 90%.

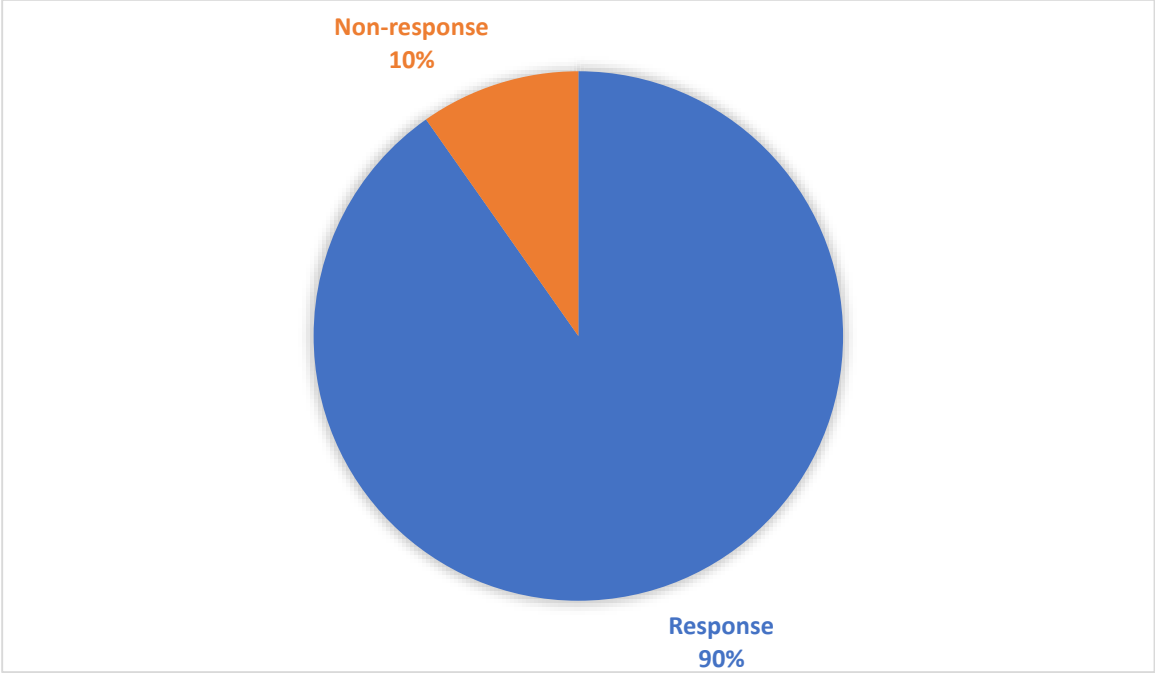


Figure 2 Response Rate

Figure 2 shows the response rate of the study at 90%. From the administered 123 questionnaires, the researcher was able to gather 111 fully filled questionnaires. The achieved response rate of 90% was deemed sufficient to use the data for analysis in relation to the research objectives.

4.3 Demographics

The demographics of the research participants were analyzed and presented in Figures 3, 4, and 5.

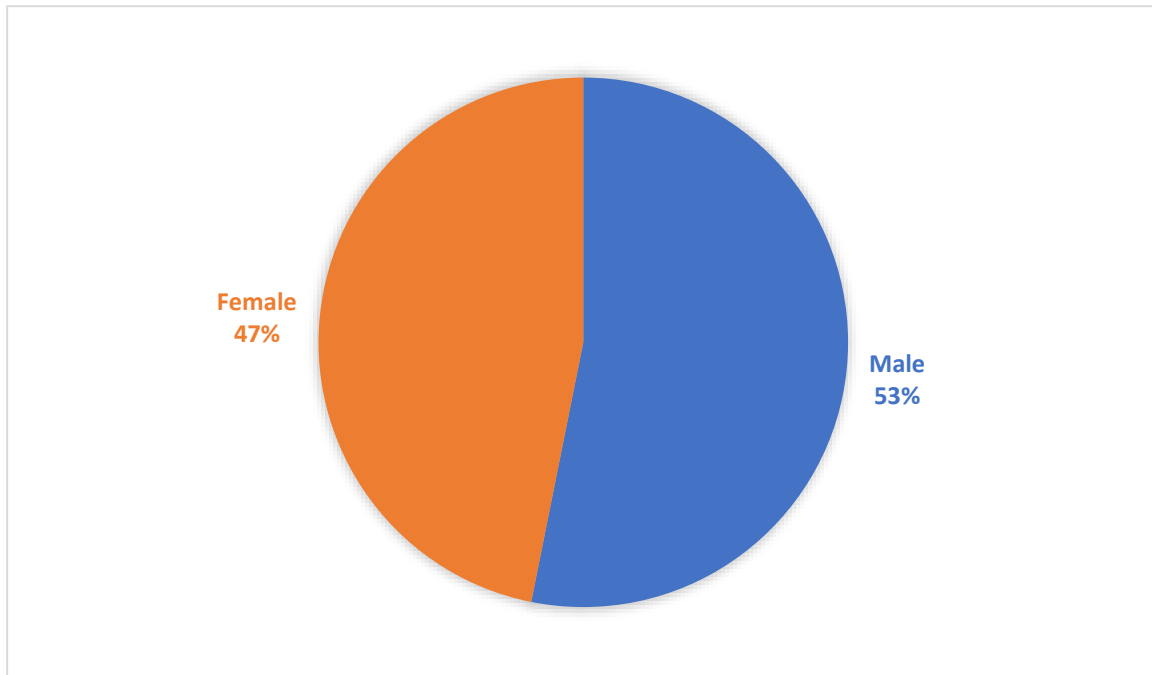


Figure 3 Gender of the Research Participants

Figure 3 shows that the majority of the participants were males 59(53%) with fewer being females 52(47%). This was an indication that the analysis of the data collected contained the views of both genders to reflect the validity of the study findings.

Based on the highest qualifications of the research participants, the results were presented in figure 4.

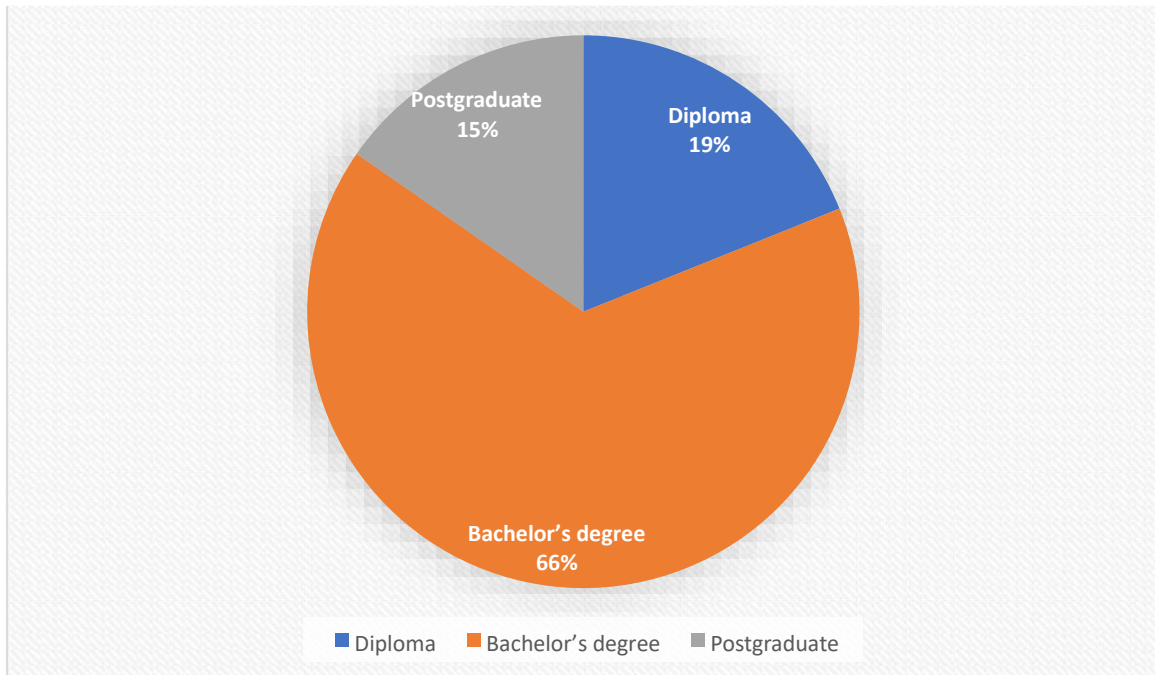


Figure 4 Highest qualifications

Figure 4 shows that the majority of the research participants were bachelor's degree holders (66%). The figure also shows that there were some postgraduate participants (15%) and some diploma holders (19%). This reflects the diversity among the research participants based on educational levels. This was important as it defined the level of critical thinking as well as expertise among the research participants.

On the other hand, the age of the research participants was presented using figure 5.

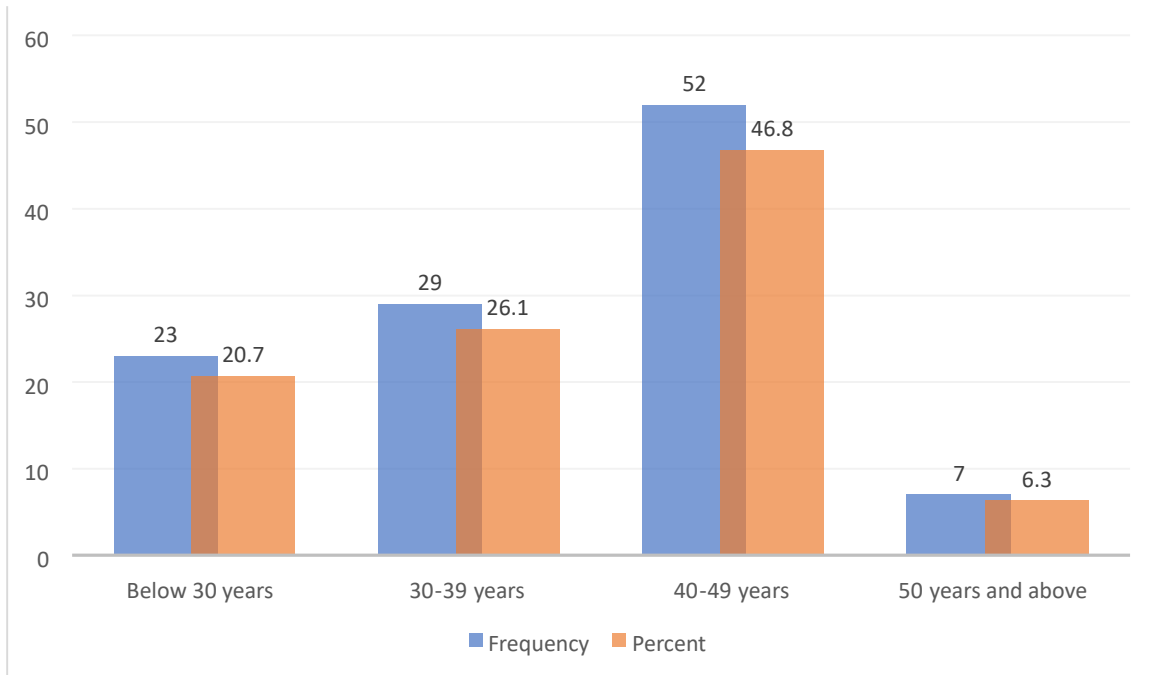


Figure 5 Age of the Respondents

Figure 5 shows that the largest portion of the research participants were aged between 40 and 49 years old 52(46.8%). This was followed by the portion of the participants aged between 30-39 years old. The fewest were aged 50 years and above 7(6.3%). It is notable that there were also the youngest (below 30 years old) who made up 20.7% of the participants. This also illustrated the age diversity among the respondents which was key in delineating the different views based on age. The age mostly dictates the way of looking at issues while drawing on the experiences that the participants might have had. The older folks are expected to be more experienced compared to the younger teachers.

Lastly, demographics considered the position held by the research participants. The findings were presented using Figure 6.

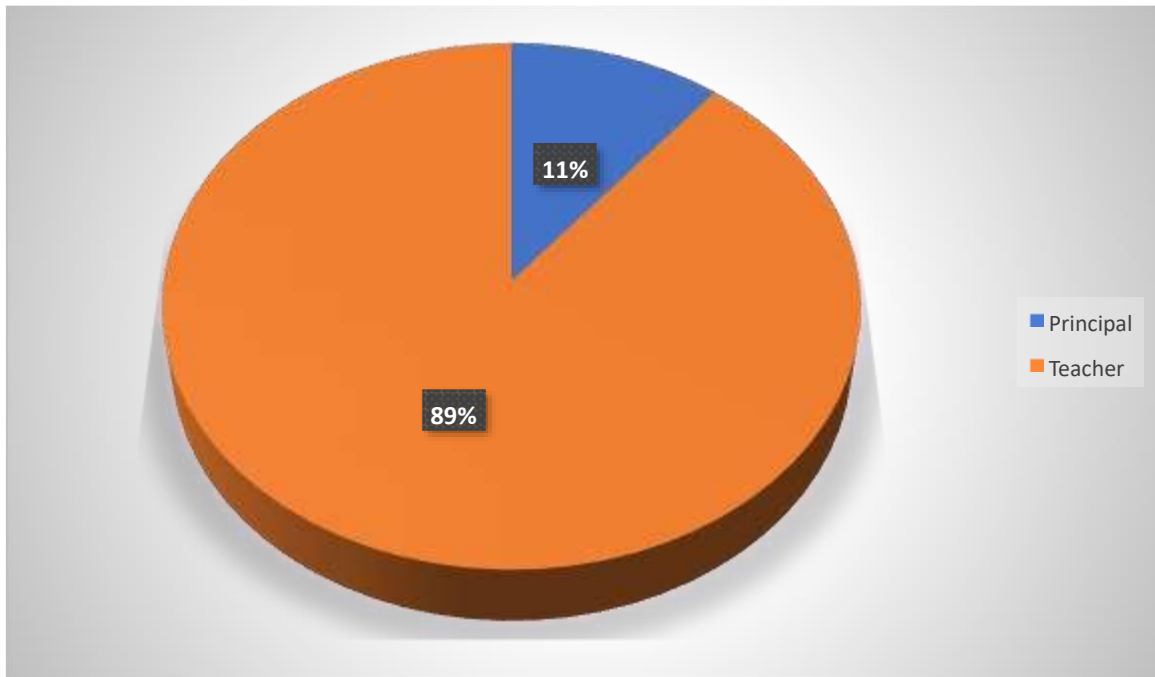


Figure 6 Position of the respondents

Figure 6 shows that the majority of the respondents were teachers 99(89%) while few were principals of the sampled schools (11%). This reflects the triangulation of the views from both the teachers and the principals in the study to increase appropriateness of the results.

4.4 Students' Academic Performance in Public Secondary Schools

The study collected data on the students' academic performance in public secondary schools in Hargeisa Region, Somaliland. The data was collected through a questionnaire where the study participants were required to rate the level of agreement on students' academic performance in public secondary schools on identified statements. The data was analysed using descriptive statistics including frequencies and percentages and presented using Table 3.

Table 3 Students' Academic Performance in Public Secondary Schools in Hargeisa

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total
There has been improvement on National Exam grades in the past 3 years	F	29	27	37	17	1	111
	%	26.1	24.3	33.3	15.3	0.9	100
There has been increase in Scores in end year exams in the past 3 years	F	14	31	42	20	4	111
	%	12.6	27.9	37.8	18	3.6	100
We have witnesses Progression rates in the past 3 years	F	22	25	39	21	4	111
	%	19.8	22.5	35.1	18.9	3.6	100

Table 3 shows that the largest portion of the research participants 37(33.3%) were neutral about the statement “There has been improvement on National Exam grades in the past 3 years”. The table shows that only 1 of the participants (0.9%) strongly agreed that there was improvement on national exam grades in the past three years. Apparently, this was contrary to a relatively large number of the participants 29(26.1%) who strongly disagreed with the statement. This implies that while there were varying opinions on the improvement in national exam grades in the past three years, more schools had not reported any improvement.

Table 3 shows similar trends in level of agreement among the research participants on “There has been increase in Scores in end year exams in the past 3 years”. Largest portion of the respondents 42(37.8%) were neutral about the statement while only fewest 4(3.6%) strongly agreed that there was increase in scores in end year exams in the past three years. A relatively higher portion of the respondents 14(12.6%) strongly disagreed with the statement. The table also shows that approximately 27.9% and 18% of the respondents disagreed and agreed respectively that there had been improvement in scores in end year exams in the past three years.

Table 3 shows that 35% of the research respondents were neutral about witnessing progression rates in the past 3 years in their schools. Fewest (3.6%) strongly agreed that they had witnessed progression rates in the past three years in their schools. A relatively higher proportion of respondents (19.8%) strongly disagreed having witnessed progression rates in the past three years in their schools. This implies that there was hardly reported improvement in students' academic performance in Hargeisa region of Somali.

4.5 Influence of examination setting practices on the academic performance of public secondary school in Hargeisa region, Somaliland

The study examined the influence of examination setting practices on the academic performance of public schools. Using the questionnaire, the respondents were asked to checklist the areas of examination practices that they were most involved in. The findings were presented using Table 4.

Table 4 Most involved examination practice

	Frequency	Percent
Appointment of setters	11	9.9
Selection of questions	28	25.2
Designing examination format	50	45
Moderation of questions	19	17.1
Preparation of marking schemes	3	2.7
Total	111	100

Table 4 shows that the largest portion of the respondents 50(45%) were involved in design of examination formats. This was followed by a few 28(25.2%) who were involved in selection of examination questions. The table also shows various portions of the study participants being involved in other practices of the examination process in the public secondary schools in

Somaliland. The involvement in appointment of setters was at 11(9.9%), moderation at 19(17.1%), and preparation of marking schemes lowest at 3(2.7%). The findings reflect the need for involvement in examination practices among the teachers as opined by Rowentry (2009) that test developers face varying levels of time and effort required to prepare a test. Similarly, other authors like Rafique and Mii (2012) posit that test creators develop some experience as students and can therefore adapt or modify test questions from previous exams. On the other hand, Jennings and Bush (2006) stated that the inclusion of identical questions in national examinations varies among countries, as seen in Finland where the extent of this practice differs.

Through the interviews with the headteachers, it was noted that teacher involvement in examination practices was key and, in some cases, came as a package of responsibilities for them. One school administrator posited.

It is the work of the individual teacher to ensure that their learners have quality examinations. This covers from the setting, to moderation, to selection of questions and even making the marking schemes. The teachers understand about this assignment from their contract letters as a scope of their responsibilities [KI 03, Male head teacher].

Form the above findings, it is noted that teachers have a great responsibility in involvement in examination practices. This is almost an unavoidable task for the teachers as examination process is embedded in teaching and learning as an assessment stage.

In a different question, the teachers were asked to rate the extent of agreement with statements on the relationship between examination setting practices and academic performance of students in secondary schools. The collected data was analyzed descriptively using frequencies and percentages and the results presented using Table 5.

Table 5 relationship between examination setting practices and academic performance

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total
The selection of examination questions significantly contributes to the enhancement of students' performance in end-of-year examinations	F	28	23	40	16	4	111
	%	25.2	20.7	36	14.4	3.6	100
Questions are selected to enhance the performance of students in end-year examinations	F	18	31	37	16	9	111
	%	16.2	27.9	33.3	14.4	8.1	100
The design of the examination format plays a crucial role in enhancing students' performance in end-of-year examinations	F	32	20	36	17	6	111
	%	28.8	18	32.4	15.3	5.4	100
Moderating examinations effectively enhances students' performance in end-of-year examinations	F	22	26	29	15	19	111
	%	19.8	23.4	26.1	13.5	17.1	100
The preparation of marking schemes enables students to perform better in end-of-year examinations	F	19	23	38	24	7	111
	%	17.1	20.7	34.2	21.6	6.3	100
The design and format of the examination papers limits the understanding and answering of the questions	F	26	21	33	17	14	111
	%	23.4	18.9	29.7	15.3	12.6	100

Table 5 shows that the largest proportion of the respondents rated the first statement, “The selection of examination questions significantly contributes to the enhancement of students' performance in end-of-year examinations” highest at neutral 40(36%). There was a portion of 28(25.2%) who strongly disagreed with the statement with another 23(20.7%) disagreeing. This implies that despite different rating of levels of agreement with the statement, most of the respondents did not support that the questions selection contributed to enhancement of students,

academic performance. This was, however, thought and rated as a contribution by a few of the respondents 4(3.6%) who strongly agreed and 16(14.4%) who agreed with the statement.

Through the interview findings with the school heads, it was noted that the selection of questions did not count in academic performance. One head teacher posited;

We don't care who played the role in selection of the questions. And that is why, in our school, we randomize the task of question pooling and selection. By this, we ensure that there is no biasness or any loose way of examination quality degradation. Any question should be by chance reaching the learners to be attempted [KI 01, Female head teacher].

The findings depict the case in literature pointing out the criteria set by different schools and institutions in examination handling. For instance, Beguin and Ehren (2011) and Rafique and Mišić (2012) talk about the exploration of the general criteria for effective examination setting, including objectivity, appropriateness, and the variability of time and effort required for both test construction and preparation from the perspectives of test developers and test takers.

Table 5 also shows that the largest portion of the study respondents were neutral with the statement “Questions are selected to enhance the performance of students in end-year examinations” at 33% with another relatively large portion 27.9% rating it at disagrees. However, there were fewest of the respondents who rated the agreed and strongly agreed that questions are selected to enhance the performance of students in end-year examinations at 9(8%) and 10(8.1%). This implied that there were differences in level of agreement on whether the questions that were selected enhanced the performance of students in end-year examinations in public secondary schools in Somaliland.

The table also shows that the statements on the design of the examination format plays a crucial role in enhancing students' performance in end-of-year examinations and moderating examinations effectively enhances students' performance in end-of-year examinations were rated by the largest percentage of the teachers 20(18%) and 36(32.4%) at neutral.

The trend persists for statements on “the preparation of marking schemes enables students to perform better in end-of-year examinations” and “the design and format of the examination papers limits the understanding and answering of the questions” rated highest at neutral at 38(34.2%) and 33(29.7%) respectively.

The findings imply that the emphasis on checking the examination setting procedures were falling below the expectations. However, there are differentiated ratings that reflect emphasis on the procedures in some schools. For instance, there was 12% of the teachers who strongly agreed that the design and format of the examination papers limits the understanding and answering of the questions. The findings show that there were varied views about the influence of the examination setting practices on academic performance. The differences can be related to existing literature in Sub-Saharan Africa where the questions in national examinations are regularly similar but differ among students taking the test (Vandeyar, 2005). This are attributed to various reasons such as the need to consider individual learning differences and needs, methodological considerations regarding test analysis and evaluation, or the desire to prevent cheating by both pupils and teachers (Vandeyar, 2005).

4.5.1 Correlation analysis between examination setting practices and academic performance

The collected data was used to conduct a correlation analysis and the findings presented using Table 6.

Table

6 Correlation analysis between examination setting practices and academic performance

		Average of examination setting practices scores	Average of academic performance scores
Average of examination setting practices scores	Pearson Correlation	1	.622
	Sig. (2-tailed)		.819
	N	111	111
Average of academic performance scores	Pearson Correlation	.622	1
	Sig. (2-tailed)	.819	
	N	111	111

Table 6 shows a Pearson correlation coefficient = .622 which is a moderate positive level of relationship between examination setting practices and academic performance. This implies that a change in examination setting practices would change academic performance of the public secondary schools in Hargeisa region, Somaliland. However, the significance level =.819 which is greater than the critical p-value =0.05. thus, the change in the academic performance of the schools would not be statistically significant.

4.6 Influence of examination distribution practices on the academic performance of public secondary school in Hargeisa region, Somaliland

Objective 2 was to examine the influence of examination distribution practices on the academic performance of public secondary schools in the Hargeisa region, Somaliland. The study employed questionnaires for teachers to collect quantitative data on the examination distribution practices and academic performance. The first item required the teachers to indicate the common examinations practices adopted by schools and during national examinations. The data was analyzed and presented using Table 7.

Table performance

Table 7 Common examination distribution practices adopted by school and during national examinations

	Frequency	Percent
Packaging of scripts	24	21.6
Dispatching of examinations to different centers	46	41.4
Opening sealed envelopes	41	36.9
Total	111	100

Tbale7 shows that the largest portion of the teacher 46(41.4%) were involved in dispatching of examinations to different centers. A close 36.9% of the teachers were involved in opening the sealed envelopes. Another 21% was in involved in packaging of scripts. This implies that among the teacher respondents, all were involved in examinations distribution in one way or another.

In a different dimension, the teachers were asked to rate the extent of agreement with statements on the relationship between examination distribution in relation students' academic performance. The questionnaire item was measured on a 5-point scale between 1 strongly disagree and 5-strongly agree. Data analysis entailed descriptive statistics including frequencies and percentages. The results were presented using Table 8.

8 Relationship between examination distribution in relation students' academic

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total
Examination scripts are well packed to enhance to students' performance in end-year examinations	F	20	20	44	21	6	111
	%	18	18	39.6	18.9	5.4	100
Examinations are dispatched in advance to different destinations to ensure that all students start exam on the same day and time	F	26	19	40	22	4	111
	%	23.4	17.1	36	19.8	3.6	100
The distribution of examination is undertaken with on specified staff	F	23	19	35	26	8	111
	%	20.7	17.1	31.5	23.4	7.2	100
Opening of sealed examination envelopes is only done in class in-front of all the students	F	31	15	34	19	12	111
	%	27.9	13.5	30.6	17.1	10.8	100
Distribution of examinations to is done in a well coordination manner in order enhances my students' performance in endyear examinations	F	24	20	31	18	18	111
	%	21.6	18	27.9	16.2	16.2	100

Table 8 shows that the statements were highly rated at the neutral level of the relationship between examination distribution in relation students' academic performance. Examination scripts are well packed to enhance to students' performance in end-year examinations was rated at neutral by 44(39%) of the teachers. Examinations are dispatched in advance to different destinations to ensure that all students start exam on the same day and time was rated neutral by 36(35%) of the teachers. On the other hand, the distribution of examination is undertaken with on specified staff was rated neutral by 35(31%) of the teachers. Opening of sealed examination envelopes is only done in class in-front of all the students was rated neutral by 34(30%) of the teachers. Lastly, distribution of examinations to is done in a well coordination manner in order enhances my students' performance in end-year examinations was rated neutral by 31(27%) of the teachers.

Table performance

The ratings were triangulated by qualitative data from the interviews with the school principals.

One of the principals posited;

We take the examination distribution so keenly and strictly. This is actually to improve and maintain the authenticity and ethical issues surrounding the examinations administration. This has so little of ensuring that the learners pass the examinations. Of course, we know that it is a practice that we build up for future or external of national examinations, we do especially for professional reason rather than passing it [KII 02].

The findings are also in consistency with the existing literature. Al-Issa (2007) found that it is crucial that the evaluation be carefully planned and carried out in order to guarantee fairness and impartiality in the process' results. However, in order to achieve such effective evaluation, the distribution procedure of examination scripts should be given careful consideration. Similarly, in the UK, Wheeler (2007) suggests that the Ministry of Education is responsible for the distribution of national examinations, while the individual schools are exclusively responsible for managing internal examinations. The purpose of taking control of examination distribution is thus rooted in the purpose of ensuring authenticity rather than improving the performance.

4.6.1 Correlation between examination distribution in relation to students' academic performance

Using the collected data on examination distribution in relation students' academic performance, a correlation analysis was conducted, and the results presented in Table 9.

9 *Correlation analysis between examination distribution and students' academic*

		Average of examination distribution scores	Average of students' academic performance scores
Average of examination distribution scores	Pearson Correlation	1	0.575
	Sig. (2-tailed)		.433
	N	111	111
Average of students' academic performance scores	Pearson Correlation	.575	1
	Sig. (2-tailed)	.433	
	N	111	111

Table 9 shows a moderate positive correlation between examination distribution and students' academic performance, $r=0.575$. This implies that there was a relationship between examination distribution and students' academic performance in public secondary schools in Hargeisa, Somaliland. However, the statistics show that the correlation was insignificant at 0.433 twotailed. This implies that a change in examination distribution would change students' academic performance, but the change would not be statistically significant.

4.7 Influence of examination invigilation practices on academic performance of public secondary school in Hargeisa, Somaliland

The third research objective was to determine the influence of examination invigilation practices on academic performance of public secondary schools in Hargeisa, Somaliland. The questionnaire collected data on this variable by asking the teachers to checklist the examination invigilation practices often adopted in their schools and during national examinations. Data analysis entailed descriptive statistics involving frequencies and percentages. The findings were presented using Table 10.

Table

10 Examination invigilation practices often adopted in school and during national examinations

	Frequency	Percent
Recruitment of supervisors and invigilators	42	37.8
Planning for invigilation	33	29.7
Designing seating plan	36	32.4
Total	111	100

Table 10 shows that the largest portion of the teachers 42(37.8%) indicated their schools adopted examination practices around recruitment of supervisors and invigilators. Another portion of the teachers rated that their schools practiced designing of seating plans 36(32.4%). Planning of invigilation was common among 33(29.7%) of the teachers. The findings corroborate the various areas of concern for examinations handling. In Australia, James and Pedder (2006) emphasized the importance of invigilators in ensuring the security of examination halls. For Hargreaves (2001), the planning and preparation of examination invigilation poses a daunting task due to the need for the invigilation schedule. On the other hand, Eckstein and Nvah (2001) recommended that exam invigilators report to the examination hall an hour before the test.

Using another questionnaire item, the study investigated the extent of agreement with statements on the link between invigilation of examinations and performance among learners performance in public secondary schools in Hargeisa, Somaliland. The item composed of a list of statements to be rated by the teachers. The items were rated on a 5-point Likert scale from 1-strongly disagree to 5- strongly agree. Data analysis entailed descriptive statistics including frequencies and percentages. The findings were presented using Table 11.

11 Link between invigilation of examinations and performance among learners

		Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total
The recruitment of supervisors and invigilators is crucial for enhancing students' performance in end-of-year examinations	F	32	16	32	22	9	111
	%	28.8	14.4	28.8	19.8	8.1	100
Planning the number of invigilators per examination center or classroom significantly influences students' performance in end-of-year examinations	F	16	32	37	16	10	111
	%	14.4	28.8	33.3	14.4	9	100
The invigilation guidelines have weaknesses that make gaps for examination malpractices	F	17	27	41	24	2	111
	%	15.3	24.3	36.9	21.6	1.8	100
Designing an effective examination seating plan plays a key role in determining students' performance in end-of-year examinations	F	20	18	36	28	9	111
	%	18	16.2	32.4	25.2	8.1	100

Table 11 shows that the largest portion of the teachers 32(28%) strongly disagreed that the recruitment of supervisors and invigilators is crucial for enhancing students' performance in end-of-year examinations. Another equal portion of the teacher were also neutral about the statement. Only a few 9(8.1%) strongly agreed with the statement. These results were compared to the interview findings among the principal which showed inconsistencies. One of the principals noted;

The issues of recruitment of supervisors and invigilators is crucial for enhancing students' performance in end-of-year examinations is very critical for us. For you to allow the candidates ample and free space for excelling in examinations, we need a through process of invigilator recruitment [KII, 04].

The qualitative findings were consistent with the existing literature where Eckstein and Nvah (2001) in Singapore found that exam invigilators need to be thoroughly educated and trained to

Table performance

conduct invigilation in their respective sites. In a different study, Smith (2009) conducted a study in Venezuela to support these claims, and the results showed that exam invigilators must give the examination process their whole attention at all times.

The table also shows that the largest proportion of the teacher were neutral 37(33.3%) and other disagreed 32(28.8%) that planning the number of invigilators per examination center or classroom significantly influences students' performance in end-of-year examinations. Similar trends are shown in rating of the invigilation guidelines having weaknesses that make gaps for examination malpractices at neutral 41(36.9%) and disagree 27(24.3%) respectively. The finding corroborates the existing literature. Argharwal's (2007) found that there are a number of requirements for appointment as an invigilator in India, including having at least three years of teaching experience. For Agbo (2011), in Nigeria, there is a growing pressure on teachers who also serve as invigilators to demonstrate success, which can lead to cheating. Others like Argharwal (2007) point at the literature outlining the criteria for invigilator appointment in certain contexts.

Table 11 further shows that the largest proportion of the teachers 36(32.4%) were neutral with the statement “Designing an effective examination seating plan plays a key role in determining students' performance in end-of-year examinations”. However, a relatively large portion of the teachers agreed with the statement that designing an effective examination seating plan plays a key role in determining students' performance in end-of-year examinations. The findings were corroborated with the interview findings that pointed at the role of seating plan for examinations in schools, one principal posited;

Allow enough space and distance between students to prevent cheating and ensure comfort and safety. Seat students in a way that minimizes distractions and noise, such as facing the same direction and avoiding windows or doors. Assign seats to students based on their test taker number, exam level, or other criteria to facilitate attendance and identification. [KII 01].

In comparison, another principal supported the idea by stating different items and aspects that are of concern in a seating plan for examination as follows;

Examination seating plan is an important factor for students' performance. There are different methods and tools to create and print exam seating plans, depending on the number of students, the size and layout of the test room, and the exam format. Use a software or a spreadsheet to generate and print seating plans automatically or draw a seating plan manually and label each seat with the student's name and number. Display the seating plan clearly at the entrance of the test room and instruct students to find their seats before the exam starts [KII 02]

The findings showed a little contradiction between the quantitative and qualitative aspects. However, this was filling of the existing gap. While the existing literature discussed the role and responsibilities of invigilators and their potential contribution to examination malpractices, there was limited research investigating the effectiveness of current invigilation practices in preventing these malpractices. Thus, the current study revealed that effectiveness of current invigilation practices in preventing these malpractices were important. However, the findings do not associate the practices with academic performance.

4.7.1 Correlation between examination invigilation and students' academic performance

Using the collected data on examination invigilation and students' academic performance, the researcher conducted a correlation analysis between the two variables. The findings are presented in Table 12.

Table 12 Correlation between examination invigilation and students' academic performance

		Average of examination invigilation scores	Average of students' academic performance scores
Average of examination invigilation scores	Pearson Correlation	1	.608
	Sig. (2-tailed)		.937
	N	111	111
Average of students' academic performance scores	Pearson Correlation	.608	1
	Sig. (2-tailed)	.937	

Table 12 shows a moderate positive correlation between examination invigilation and students' academic performance ($r=0.608$) in public secondary schools in Hargeisa, Somaliland. This implied that a change in examination invigilation practices would change the students' academic performance in the same direction. However, the table shows that the significance level was .937 which implies that the change would not be statistically significant.

4.8 Influence of examination marking practices on the academic performance of public secondary school in Hargeisa, Somaliland

The fourth objective was to analyze the influence of examination marking practices on the academic performance of public secondary school in Hargeisa, Somaliland. The study used both the quantitative and qualitative data to analyze the influence. From the questionnaires for the teachers, the respondents were asked to tick in a checklist on some of the Common examination marking practices adopted by their schools. Data analysis entailed descriptive statistics employing frequencies and percentages and presented using Table 13. *Table 13 Common examination marking practices adopted by schools*

	Frequency	Percent
Duration of marking	23	20.7
Establishing marking panel	28	25.2
Designing grading systems	31	27.9
Moderation of results	18	16.2
Release of results	11	9.9
Total	111	100

Table 13 shows that the largest portion of the teachers 31(27.9%) were involved in designing grading systems. The table shows that another 28(25.2%) and 23(20.7%) were involved in establishing marking panel and establishing duration of marking respectively. Moderation of results were for about 16% of the respondents while release of the results had the fewest of the

teachers at 9.9%. The findings reflect the findings through interviews with some principals that specific tasks and duties were allocated to specific teachers with limits and terms to be adhered to. One principal posited;

Here, we assign teachers different tasks related to examinations. While it is a long process from setting to administration running all the way to release of results, one staff cannot achieve it. We thus spread the responsibilities among the teachers. The process of designing grading seem to be one complicate area and thus gets ore of teacher involved. It needs consultations across various departments and putting a single staff may not work as teachers have differentiated areas [KII 03].

The findings confirm that various examinations tasks are distributed across various teachers. However, the existing literature state that the divisions or involvements may not mutually exclusive. One teacher can be involved in multiple areas. This is also consistent with test banks some literature that pint at how university instructors use their published books for a variety of courses in several nations, such as the United States (Zoeckler, 2007). By this division of tasks related to examination and working in harmony, it forms the concept of the systems theory by Luhmann Nklas (2004). The management of examinations necessitates the marshalling and organization of both material and human resources to ensure their smooth execution. The quality of such management serves as the determinant of the occurrence or non-occurrence of malpractice or cheating in a given examination.

In another dimension, the questionnaire respodnets were asked to rate the extent of agreement with statements on the relationship between examination marking in relation to students' academic performance. The measures were rated on a 5-point scale between 1-stringly disagree and 5-strongly agree. The collected data was analyzed descriptively and presented using table 14.

Table 14 Relationship between examination marking in relation to students' academic performance

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Total
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The time spent marking examination results significantly impacts my academic performance of learners in national examinations	F	38	22	33	12	6	111
	%	34.2	19.8	29.7	10.8	5.4	100
The establishment of a marking panel plays a crucial role in determining my academic performance of learners in national examinations	F	13	30	40	21	7	111
	%	11.7	27	36	18.9	6.3	100
Designing grading and scoring systems is a determinant of my academic performance of learners in national examinations	F	23	20	40	22	6	111
	%	20.7	18	36	19.8	5.4	100
The moderation of results enhances my academic performance of learners in national examinations	F	19	15	42	26	9	111
	%	17.1	13.5	37.8	23.4	8.1	100
Ensuring a timely release of results positively influences my students' performance in end-of-year examinations	F	18	29	36	26	2	111
	%	16.2	26.1	32.4	23.4	1.8	100

Table 14 shows that the largest portion of the questionnaire respondents 38(34.2%) rated the statement “The time spent marking examination results significantly impacts my academic performance of learners in national examinations” as strongly disagree. Similarly, a relatively large portion of the respondents 33(29.7%) were neutral about the statement. This implied that despite variations in rating the extent of time spent marking examination results significantly impacts my academic performance of learners in national examinations, it was not true for most of the schools and learners in public secondary schools in Hargeisa region, Somaliland.

The table also shows that about 36%(n=40) were neutral about the establishment of a marking panel playing a crucial role in determining their academic performance of learners in national examinations. It was followed by another 30(27%) who disagreed with the statement.

Similarly, the respondents were mostly neutral 40(36%) on whether designing grading and scoring systems is a determinant of their academic performance of learners in national examinations. However, about 22(19.8%) of the respondents agreed that indeed, it was a determinant.

Table 14 also shows that the largest portions of the respondents 42(37%) and 26(23%) were neutral and agreed that the moderation of results enhances their academic performance of learners in national examinations, respectively.

Lastly, the table shows that the largest portions of the teachers 36(26%) and 29(32.4%) were neutral and disagreed with ensuring a timely release of results positively influences their students' performance in end-of-year examinations.

4.8.1 Correlation between examination marking and students' academic performance

The study used the collected data on examination marking and students; academic performance to conduct a correlation analysis between the two variables. The Study adopted the Pearson correlation analysis, and the results presented in Table 15.

Table 15 Correlation between examination marking and students' academic performance

	Average of examination marking in relation scores	Average of students' academic <u>performance scores</u>
Average of examination marking in relation scores	1	.630
Pearson Correlation		.175
Sig. (2-tailed)		
N	111	111

Average of students' academic performance scores	Pearson Correlation	.630	1
	Sig. (2-tailed)	.175	
	N	111	111

Table 15 shows a Pearson correlation coefficient of .63 between Average of examination marking in relation scores and the average of students' academic performance scores. This was a moderate positive correlation between the Average of examination marking in relation scores and the average of students' academic performance scores ($r=.630$). This implies that any change in the Average of examination marking in relation scores would influence the average of students' academic performance scores. From the significant value $=.175$, the correlation was insignificant. This implies that as much as there would be change in the average of students' academic performance scores following change in the Average of examination marking in relation scores, the change would be statistically insignificant.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This section presents the summary of the study findings as presented and discussed in chapter four. The section is organized in subsections starting with the summary of findings, conclusion and recommendations.

5.2 Summary of Findings 5.2.1 Influence of examination setting practices on the academic performance of public

secondary school in Hargeisa region, Somaliland

The study found that the largest portion of the respondents 50(45%) were involved in design of examination formats. This was followed by a few 28 (25.2%) who were involved in selection of examination questions. Qualitative findings shows that teacher involvement in examination practices was key and, in some cases, came as a package of responsibilities for them. Despite different ratings of levels of agreement with the statement, most of the respondents did not support that the questions selection contributed to enhancement of students' academic performance. The findings supported the case in literature pointing out the criteria set by different schools and institutions in examination handling. There were differences in level of agreement on whether the questions that were selected enhanced the performance of students in end-of-year examinations in public secondary schools in Somaliland. The study also showed emphasis on checking the examination setting procedures were falling below expectations. However, there are differentiated ratings that reflect emphasis on the procedures in some schools. The study found a moderate positive level of relationship between examination setting practices and academic performance ($r=.622$).

5.2.2 Influence of examination distribution practices on the academic performance of public secondary schools in Hargeisa region, Somaliland

The study found that the largest portion of the teachers, 46(41.4%) were involved in dispatching examinations to different centers. Close 36.9% of the teachers were involved in opening the sealed envelopes. Another 21% was involved in packaging of scripts. This implies that among the teacher respondents, all were involved in examinations distribution in one way or another. Examination scripts are well packed to enhance students' performance in end-year examinations was rated at neutral by 44(39%) of the teachers. Examinations are dispatched in advance to different destinations to ensure that all students start exams on the same day and time was rated neutral by 36(35%) of the teachers.

The study showed that the distribution of examinations to is done in a well-coordinated manner in order to enhance my students' performance in end-year examinations was rated neutral by 31(27%) of the teachers. The results also show that it is crucial that the evaluation be carefully planned and carried out in order to guarantee fairness and impartiality in the processing of the results. The study reported a moderate positive correlation between examination distribution and students' academic performance, $r=0.575$. This implies that there was a relationship between examination distribution and students' academic performance in public secondary schools in Hargeisa, Somaliland.

5.2.3 Influence of examination invigilation practices on academic performance of public secondary school in Hargeisa, Somaliland

The study found that the largest portion of the teachers 42(37.8%) indicated their schools adopted examination practices around recruitment of supervisors and invigilators. Another portion of the teachers rated that their schools practiced designing of seating plans 36(32.4%). Planning of invigilation was common among 33(29.7%) of the teachers. The findings corroborate the various areas of concern for examinations handling. The study reported that the

largest portion of the teachers 32(28%) strongly disagreed that the recruitment of supervisors and invigilators is crucial for enhancing students' performance in end-of-year examinations. Another equal portion of the teachers were also neutral about the statement. Only a few 9(8.1%) strongly agreed with the statement.

The study also found that exam invigilators need to be thoroughly educated and trained to conduct invigilation in their respective sites. The largest proportion of the teachers were neutral 37(33.3%) and others disagreed 32(28.8%) that planning the number of invigilators per examination center or classroom significantly influences students' performance in end-of-year examinations. Similar trends are shown in rating of the invigilation guidelines having weaknesses that make gaps for examination malpractices at neutral 41(36.9%) and disagree 27(24.3%) respectively.

The study illustrated the role of seating plan for examinations in schools for the best examination environment for the candidates. The qualitative findings showed that by stating different items and aspects that are of concern in a seating plan for examination. The study found that examination seating plan was an important factor for students' performance. There are different methods and tools to create and print exam seating plans, depending on the number of students, the size and layout of the test room, and the exam format. Finally, the study found a moderate positive correlation between examination invigilation and students' academic performance ($r=0.608$) in public secondary schools in Hargeisa, Somaliland.

5.2.4 Influence of examination marking practices on the academic performance of public secondary school in Hargeisa, Somaliland

The study found that the largest portion of the teachers 31(27.9%) were involved in designing grading systems. The table shows that another 28(25.2%) and 23(20.7%) were involved in establishing marking panel and establishing duration of marking respectively. Through

interviews with some principals, the study revealed that specific tasks and duties were allocated to specific teachers with limits and terms to be adhered to. The largest portion of the questionnaire respondents 38(34.2%) rated the statement “The time spent marking examination results significantly impacts my academic performance of learners in national examinations” as strongly disagree.

The study showed that about 36%(n=40) were neutral about the establishment of a marking panel playing a crucial role in determining their academic performance of learners in national examinations. The respondents were mostly neutral 40(36%) on whether designing grading and scoring systems is a determinant of their academic performance of learners in national examinations. The study also showed that the largest portions of the respondents 42(37%) and 26(23%) were neutral and agreed that the moderation of results enhances their academic performance of learners in national examinations, respectively.

The study showed that the largest portions of the teachers, 36(26%) and 29(32.4%) were neutral and disagreed with ensuring a timely release of results positively influences their students’ performance in end-of-year examinations. The study reported a moderate positive correlation between the Average of examination marking in relation scores and the average of students’ academic performance scores (.630). This implies that any change in the Average of examination marking in relation scores would influence the average of students’ academic performance scores.

5.3 Conclusion

The study demonstrated how several elements of the test environment, including as the structure and question choices, affect the academic achievement of public secondary schools in Somaliland's Hargeisa district. Exam-setting strategies and academic achievement were shown to be moderately positively correlated by the study ($r=.622$). According to the study, the way exams are distributed has an impact on the academic achievement of public secondary schools in Somaliland's Hargeisa region. This was accomplished by sending out and distributing exams. The distribution of exams and students' academic achievement were shown to be moderately positively correlated ($r=0.575$).

The study found that there were various ways through which the examination invigilation practices influence academic performance of public secondary school in Hargeisa, Somaliland. These included recruitment of supervisors and invigilators and planning the number of invigilators per examination center. The study found a moderate positive correlation between examination invigilation and students' academic performance ($r=0.608$). The study also showed that there was a moderate positive correlation between the average of examination marking in relation scores and the average of students' academic performance scores ($r=.630$).

The study concluded that examination management practices influence the academic performance of public secondary school students in Hargeisa region, Somaliland. This was revealed to be in different aspects with different magnitudes.

5.4 Recommendations

Based on study findings, the following recommendations were made;

5.3.1 Recommendations for Practice

The study recommends that school principals in public secondary schools in Hargeisa, Somaliland;

- i. Employ positive examination setting practices to motivate the candidates towards academic performance.
- ii. Utilize the teachers in examinations dispatch and distribution of examinations to enrich schools' academic performance.

5.3.2 Recommendations for Policy

The study recommends that;

- i. The Ministry of Education through KNEC reviews the examination invigilation practices that seek to weed out the negative ones and employ the motivating ones like

the recruitment of supervisors and invigilator and planning the number of invigilators per examination center ii. The Ministry of Education works with other education stakeholders to draft better examination marking practices that motivate not only teachers but also students towards academic performance.

5.3.3 Recommendations for Future Research

The study recommends future research in the following areas;

- i. Influence of examination management strategies on academic performance in other localities for comparison purposes.
- ii. Effectiveness of examination supervisory strategies on academic performance in public secondary schools in public secondary schools in Hargeisa, Somaliland.

REFERENCES

- Abdi, M. K. (2017). Institutional factors and student performance: A survey on public secondary schools in Hargeisa City, Somaliland. *International Journal of Education and research*, 5(3), 45-54.
- Adebayo, O. (2020). Impact of infrastructure challenges on examination scheduling in Nigerian secondary schools. *African Journal of Educational Research*, 15(4), 112–120.
- Almazan, J. U. (2019). A narrative review of the factors affecting the academic performance of nursing students in licensure examinations. *Journal of Nursing Education and Practice*, 9(5), 87–94. [Web ID: 12]
- Mwangi, J., & Otieno, D. (2019). The effect of exam scheduling on student performance in Kenyan secondary schools. *East African Journal of Education Studies*, 3(2), 45–58.
- Pokhrel, S., & Chhetri, R. (2021). A literature review on the impact of COVID-19 pandemic on teaching and learning. *Higher Education for the Future*, 8(1), 133–141. [Web ID: 24]

Kast, F. E., & Rosenzweig, J. E. (1972). General systems theory: Applications for organization and management. *Academy of Management Journal*, 15(4), 447–465.

Luhmann, N. (1995). *Social systems*. Stanford University Press.

Von Bertalanffy, L. (1968). *General system theory: Foundations, development, applications*. George Braziller.

Afolabi, E.R.I. (2010). *Validity of Public Examinations, the Environment and Sustainable National Development*. Nairobi: Cardinal Crest Ltd.

Epstein, J. L. (2001). *School, family, and community partnerships: Preparing educators and improving schools*. Boulder, CO: Westview Press.

Hanushek, E. A. (2016). What matters for student achievement. *Educational Leadership*, 73(6), 10–15.

Adebayo, O. (2020). Impact of infrastructure challenges on examination scheduling in Nigerian secondary schools. *African Journal of Educational Research*, 15(4), 112–120.

Almazan, J. U. (2019). A narrative review of the factors affecting the academic performance of nursing students in licensure examinations. *Journal of Nursing Education and Practice*, 9(5), 87–94. [Web ID: 12]

Mwangi, J., & Otieno, D. (2019). The effect of exam scheduling on student performance in Kenyan secondary schools. *East African Journal of Education Studies*, 3(2), 45–58.

Pokhrel, S., & Chhetri, R. (2021). A literature review on the impact of COVID-19 pandemic on teaching and learning. *Higher Education for the Future*, 8(1), 133–141. [Web ID: 24]

- Almazan, J. U. (2019). A narrative review of the factors affecting the academic performance of nursing students in licensure examinations. *Journal of Nursing Education and Practice*, 9(5), 87–94. [Web ID: 12]
- Angeles, M. R. (2024). Resilience and academic performance: A correlational study among college students. *International Journal of Educational Research*, 12(3), 45–53. [Web ID: 22]
- Ching, G. S. (2018). A literature review on the student evaluation of teaching: An examination of the search, experience, and credence qualities of SET. *Higher Education Evaluation and Development*, 12(2), 63–84. [Web ID: 5]
- Galiher, R. V. (2006). The impact of exam scheduling on student performance in higher education. *Journal of Educational Psychology*, 98(4), 789–797. [Web ID: 8]
- Marsh, H. W. (2007). Students' evaluations of university teaching: Dimensionality, reliability, validity, potential biases, and usefulness. In R. P. Perry & J. C. Smart (Eds.), *The scholarship of teaching and learning in higher education: An evidence-based perspective* (pp. 319–383). Springer. [Web ID: 5]
- Meredith, G. M., & Bub, D. N. (1977). Classroom environment and student performance: The role of instructor enthusiasm and organization. *Educational Research Quarterly*, 2(3), 15–22. [Web ID: 5]
- Pokhrel, S., & Chhetri, R. (2021). A literature review on the impact of COVID-19 pandemic on teaching and learning. *Higher Education for the Future*, 8(1), 133–141. [Web ID: 24]
- Biggs, J. B. (1996). Enhancing teaching through constructive alignment. *Higher Education*, 32(3), 347–364.
- Bourdillon, P., & Burgess, T. (2006). *Assessment and examination stress in secondary schools*. London: National Foundation for Educational Research.
- Brookhart, S. M. (2010). *How to assess higher-order thinking skills in your classroom*. Alexandria, VA: ASCD.

- Naidoo, P., & Lewin, K. M. (2011). *Access, equity, and examination performance in South Africa*. Cape Town: University of Cape Town Press.
- OECD. (2019). *PISA 2018 results: What students know and can do*. Paris: OECD Publishing.
- Marzano, R. J. (2003). *What works in schools: Translating research into action*. Alexandria, VA: ASCD.
- Agbo, F.O (2011). An Investigation into the forces behind examination malpractice. A challenge for secondary school education in the 21st Century. *Journal of the Curriculum Organization of Nigeria* 1 (2) 344 – 347.
- Al-Issa, A. (2007). *An ideological Discussion of the place and Role of Exams in the Omani ELT System*. [http:// Conference.nie.edu.sg/paper/ \(16/11/10\)](http://Conference.nie.edu.sg/paper/(16/11/10))
- Anderman, E. M. (2020). Achievement motivation theory: Balancing precision and utility. *Contemporary Educational Psychology*, 61, 101864.
- Arggarwal J.C. (2007). *Essential of Examination system: Evaluations, Tests and Measurement*. New Delhi. Vikas Publishing house.
- Aullo, P. A. (2004). *An Investigation into Factors Contributing to Examination Irregularities in Kenya Certificate of Secondary Education (SCSE) in Eastern Province*
- Bhatti, M. A. (2007). *Secondary Education in Pakistan: Perspective Planning*, Islamabad: National Education Council.
- Bland, M. (2000). *An Introduction to Medical Statistics*. 3rd edition. Oxford: University Press
- Bush, M. (2000). *Alternative marking schemes for online multiple-choice tests*. 7th Annual Conference on the Teaching of Computing, Belfast.
- Creswell, J. W. (2009). *Research design: qualitative, quantitative and mixed methods approach*. Thousand Oaks, California: Sage Publications.
- Crooks, T. J. (2008). The impact of classroom evaluation practices on students. *Review of Educational Research*, 58, 438-481.

- Cross, L. H., Robert B. Frary, R. B., & Weber, L. J. (2010). College grading: Achievement, attitudes, and effort. *College Teaching*, 41,143-148.
- Daniel, L., G., & King, D., A. (2011). Knowledge and use of testing and measurement literacy of elementary and secondary teachers. *Journal of Educational Research*, 331-344.
- Department of Education (2011). *Revised National Curriculum Statement R-9 (Schools)*. Pretoria: Department of Education.
- Eckstein, M. & Nvah, D. D. (2001). *Issues in Educational Assessment, Standards and Standard setting*. Singapore Printing Press
- Ehren, M., Leeuw, F. L., & Scheerens, J. (2005). On the impact of the Dutch educational supervision act. *American Journal of Evaluation*, 26(1), 60-76.
- Frary, R. B. (2008). Formula scoring of multiple-choice tests (Correction for guessing). *Educational Measurement: Issues and Practice*, 7(2), 33-38.
- Garfalo, B. T., & L'Huillier, B. (2015). Demystifying Assessment: The Road to Accreditation. *Journal of College Teaching & Learning*, 12(3), 151-170.
- Gebril, A., & Brown, G. T. (2014). The effect of high-stakes examination systems on teacher beliefs: Egyptian teachers' conceptions of assessment. *Assessment in Education: Principles, Policy & Practice*, 21(1), 16-33.
- Gibbs, G., & Simpson, C. (2004). Conditions under which assessment supports students' learning. *Learning and Teaching in Higher Education*, 1, 3-31.
- Gilissen, M. G., Knippels, M. C. P., Verhoeff, R. P., & van Joolingen, W. R. (2019). Teachers' and educators' perspectives on systems thinking and its implementation in Dutch biology education. *Journal of Biological Education*.
- Glaser, R., & Silver, E. (2004). *Assessment, testing and instruction: Retrospect and prospect*.
- Gruenewald, D. A., & Smith, G. A. (Eds.). (2014). *Place-based education in the global age: Local diversity*. Routledge.
- Gullickson, A. R. (2002). *The practice of testing in elementary and secondary schools*. Paper presented at the 1982 Rural Education Conference, Kansas State University, Manhattan, KS.

- Hargreaves, E. (2001). Assessment for learning in the multigrade classroom', *International Journal of Educational Development* 21 (2001) 553-560.
- Haughbrook, R. D. (2020). Exploring Racial Bias in Standardized Assessments and Teacher Reports of Student Achievement with Differential Item and Test Functioning Analyses (Doctoral dissertation, The Florida State University).
- Ingolo, K. (2009). *Maintenance of Standards in KNEC Examination Irregularities*. A Paper Presented to Heads of Secondary Schools during the KESSHA Annual National Conference, Mombasa.
- James, M., & Pedder, D. (2006). Beyond method: assessment and learning practices and values. *The Curriculum Journal* 17,109 – 138.
- Jennings, S. & Bush, M. (2006). A comparison of conventional and liberal (free choice) multiple-choice tests. *Practical Assessment, Research & Evaluation*, 11(8).
- Kithuka, M. K. (2004). *Examination Malpractices in Kenyan Educational System: Causes, Effects and the Way Out*. Unpublished Med Thesis, Kenyatta University
- KNEC (2012). *Examination Rules and Regularities*. Nairobi: KNEC.
- Kothari, C. R. (2005). *Research Methodology*. New International Publishers, New Delhi.
- Luhmann, N. (2004). *Systems Theory*. Suhrkamp.
- McMillan, J. M. (2001). Secondary teachers' classroom assessment and grading practices. *Educational Measurement: Issues and Practice*, 20,20-32.
- Moss, E. (2001). Multiple-choice questions: their value as an assessment tool. *Current Opinion in Anaesthesiology*, 14, 661–666.
- Mwandikwa, J., & Ocharo, J. B. (2007). Tough Measures; Exam Cheats Put on Notice. *Elimu News*, 2, 12-13
- Norcini, J. J. (2003). Setting standards on educational tests. *Medical Education*, 37, 464
- Obanya, P. (2010). *Teaching Methods across the curriculum*. Worcester; Billing and Sons Ltd, UK.
- Obonyo, T.D. (2010). *Effect of examination malpractice on academic achievement of secondary school students in Kisumu*. Unpublished Med project, Maseno University

- Orodho, A. (2004). *Elements of Education and Social Science Research Methods*, Masola Publishers: Nairobi
- Prøitz, T. S., Havnes, A., Briggs, M., & Scott, I. (2017). Learning outcomes in professional contexts in higher education. *European Journal of Education*, 52(1), 31-43.
- Rafique, Y., & Mišić, V. B. (2012). The effects of test-driven development on external quality and productivity: A meta-analysis. *IEEE Transactions on Software Engineering*, 39(6), 835-856.
- Reynolds, C., R., Livingston, R. B., & Willson, V. (2009). *Measurement and assessment in education (2nd. ed.)*. Ohio: Pearson.
- Rode, J. C., Huang, X., & Flynn, B. (2016). A cross-cultural examination of the relationships among human resource management practices and organisational commitment: an institutional collectivism perspective. *Human Resource Management Journal*, 26(4), 471-489.
- Rowentry, D. (2009). *Assessing Students: How shall we know them?* London: Kogan Page.
- Sesli, E., & Kara, Y. (2012). Development and application of a two-tier multiple-choice diagnostic test for high school students' understanding of cell division and reproduction. *Journal of Biological Education*, 46(4), 214-225.
- Smith, C., & Worsfold, K. (2014). WIL curriculum design and student learning: a structural model of their effects on student satisfaction. *Studies in Higher Education*, 39(6), 10701084.
- Smith, G.A. (2009). *IMB experience of the moderation of internal assessments*. Venezuela, Joint Matriculation Board.
- Stamatopoulou, D. (2019). The course of development of learning outcomes in the Bologna Process: the current situation in Greece in terms of legislation. *Academia*, (15), 115137.
- Tabulawa, R. (2012). Teachers' perspectives on classroom practice in Botswana: implications for pedagogical change. *International Journal of Qualitative Studies in Education*,

- Torrance, H. (2017). Blaming the victim: Assessment, examinations, and the responsabilisation of students and teachers in neo-liberal governance. *Discourse: Studies in the Cultural politics of Education*, 38(1), 83-96.
- Vandeyar, S. (2005). Conflicting Demands: Assessment Practices in Three South African Primary Schools Undergoing Desegregation. *Curriculum Inquiry*, 35,461-481.
- Walsh, W. B. & Betz N. E. (2005). *Tests and Assessment*, New Jersey: Printice Hall, Eaglewood Cliffs.
- Waters, B., Hughes, J., Forbes, K., & Wilkinson, D. (2006). Comparative academic performance of medical students in rural and urban clinical settings. *Medical Education*, 40(2), 117-120.
- Wheeler, D. K. (2007). *Curriculum Process*. London: Hodder and Stoughton.
- Wokocho, A.M. (2004) Examination Malpractice: A Reflection of the Social-Political Malaise in Nigeria” in *Journal of Pedagogy and Development*, College of education, Port Harcourt. Vol. 3, Nos. 1 & 2.
- Yussufu, A. (2005). *Financing and Security of National Examination*. A Paper Presented at the Meeting of Institutions Responsible for Educational Assessment in East and Central Africa. Lilongwe, Malawi
- Zoeckler, L. G. (2007). Moral aspects of grading: A study of high school English teachers’ perceptions. *American Secondary Education*, 35, 83-102.

APPENDIX I: LETTER OF INTRODUCTION

June 2021

Dear Sir/Madam,

RE: PERMISSION TO CARRY OUT RESEARCH

I am currently enrolled at Mount Kenya University's Master of Education in Administration, Leadership, and Management degree, and one of my academic obligations is to deliver a research thesis. The impact of examination management strategies on the academic achievement of secondary school pupils in Somaliland's Hargeisa region is the specific subject of the study. Your participation has been chosen to be included in the study in order to accomplish this goal. Since the information obtained was used only for academic purposes and no names were revealed in the final report, I sincerely ask the responders to participate completely in the study. The study's results were accessible upon request.

Your assistance and cooperation was highly appreciated.

Thank you in advance.

Yours faithfully

Renson Evayo

APPENDIX II: RESEARCH PARTICIPATION CONSENT FORM

INFLUENCE OF EXAMINATION MANAGEMENT PRACTICES ON STUDENTS'

ACADEMIC PERFORMANCE IN PUBLIC SECONDARY SCHOOLS IN HARGEISA

REGION, SOMALILAND

Dear Participant,

I invite you to participate in a research study entitled INFLUENCE OF EXAMINATION MANAGEMENT PRACTICES ON STUDENTS' ACADEMIC PERFORMANCE IN PUBLIC SECONDARY SCHOOLS IN HARGEISA REGION, SOMALILAND. I am currently enrolled in the Master of Education at Mount Kenya University and am in the process of writing my master's thesis. The purpose of the research is to determine the influence of school managerial strategies on performance of teachers in secondary school in Hargeisa Region, Somaliland.

The enclosed questionnaire has been designed to collect information on: examination setting practices, examination distribution practices, examination invigilation practices, examination marking practices and academic performance.

Participation in this study is entirely voluntary. You have the option to opt out completely or skip any questions you prefer not to answer. There are no anticipated risks associated with participating beyond those typical of daily life. Your responses will be kept confidential and anonymous, with data stored securely and reported only in aggregate form. Only the researchers will have access to your individual answers. While there are no direct benefits to you for taking part, you might find it engaging to discuss the topics covered, and your participation could contribute to the field and benefit future individuals facing similar issues.

If you choose to participate, please respond to the questionnaire to the best of your ability. It should take about 30 minutes to complete. Kindly return the questionnaire at your earliest convenience to help me finalize the project thesis.

If you have any questions about this project, feel free to contact *the INVESTIGATOR*, Evayo Renson. If you have questions about your rights as a research participant, please be in touch with the Chairman, Mount Kenya University, Ethical Review Committee, P.O Box 342-01000, Thika.

Thank you for your assistance in this important endeavor.

CONSENT

I've had a chance to ask questions and have read and comprehended the material supplied. I am aware that participation is completely optional and that I can stop at any moment, for any reason, and without incurring any fees. I am aware that a copy of this permission form was provided to me. I willingly consent to participate in this research.

Participant's signature _____ Date _____

Investigator's signature _____ Date _____

Selection of questions []

Designing examination format []

Moderation of questions []

Preparation of marking schemes []

2. Rate to what extent you agree with the following statements on the relationship between examination setting practices and academic performance of students in secondary schools

Key: SA--Strongly Agree A--Agree U--Undecided D--Disagree SD--Strongly Disagree

Test Items	SA	A	U	D	SD
	5	4	3	2	1
The selection of examination questions significantly contributes to the enhancement of students' performance in end-of-year examinations					
Questions are selected to enhance the performance of students in end-year examinations					
The design of the examination format plays a crucial role in enhancing students' performance in end-of-year examinations					
Moderating examinations effectively enhances students' performance in end-of-year examinations					
The preparation of marking schemes enables students to perform better in end-of-year examinations					
The design and format of the examination papers limits the understanding and answering of the questions					

Section C: Examination Distribution in Relation to Students' Academic

Performance

1. Mark common examination distribution practices adopted by your school and during national examinations

Packaging of scripts []

Dispatching of examinations to different centers []

Opening sealed envelopes []

2. Rate to what extent you agree with the following statements on the relationship between examination distribution in relation students' academic performance.

Key: SA--Strongly Agree A--Agree U--Undecided D--Disagree SD--Strongly Disagree

Test Items	SA	A	U	D	SD
	5	4	3	2	1
Examination scripts are well packed to enhance to students' performance in end-year examinations					
Examinations are dispatched in advance to different destinations to ensure that all students start exam on the same day and time					
The distribution of examination is undertaken with on specified staff					
Opening of sealed examination envelopes is only done in class in-front of all the students					
Distribution of examinations is done in a well coordination manner in order to enhance my students' performance in end-year examinations					

Section D: Examination Invigilation Practices and Students' Academic Performance

1. Mark examination invigilation practices often adopted in your school and during national examinations

Recruitment of supervisors and invigilators []

Planning for invigilation []

Designing seating plan []

2. Rate to what extent you agree with the following statements on the link between invigilation of examinations and performance among learners performance.

Key: **SA**--Strongly Agree **A**--Agree **U**--Undecided **D**--Disagree **SD**--Strongly Disagree

Test Items	SA	A	U	D	SD
	5	4	3	2	1
The recruitment of supervisors and invigilators is crucial for enhancing students' performance in end-of-year examinations					
Planning the number of invigilators per examination center or classroom significantly influences students' performance in end-of-year examinations					
The invigilation guidelines have weaknesses that make gaps for examination malpractices					
Designing an effective examination seating plan plays a key role in determining students' performance in end-of-year examinations					

Section E: Examination Marking in Relation to Students' Academic Performance

1. Tick the common examination marking practices adopted by your school.

Duration of marking []

- Establishing a marking panel []
- Designing grading systems []
- Moderation of results []
- Release of results []

2. Rate to what extent you agree with the following statements on the relationship between examination marking about students' academic performance.

Key: **SA**--Strongly Agree **A**--Agree **U**--Undecided **D**--Disagree **SD**--Strongly Disagree

Test Items	SA	A	U	D	SD
	5	4	3	2	1
The time spent marking examination results significantly impacts my academic performance of learners in national examinations					
The establishment of a marking panel plays a crucial role in determining my academic performance of learners in national examinations					
Designing grading and scoring systems is a determinant of my academic performance of learners in national examinations					
The moderation of results enhances my academic performance of learners in national examinations					
Ensuring a timely release of results positively influences my students' performance in end-of-year examinations					

Academic performance

To what extent do you agree with the improvement in the following areas in your school in the past 3 years?

Test Items	SA	A	U	D	SD
	5	4	3	2	1
National Exam grades					
Scores in end-of-year exams					
Progression rates					

Thank you

Renson Evayo

APPENDIX IV: INTERVIEW GUIDE FOR SUB-REGION DIRECTOR OF EDUCATION AND EXAMINATION OFFICER

Dear respondent,

This study is being carried out by a scholar pursuing a Master of Education in Administration, Leadership, and Management at Mount Kenya University. The research focuses on exploring the relationship between examination management practices and the academic performance of secondary school students in the Hargeisa region of Somaliland. It should be emphasised that all information provided was handled with strict confidentiality and will be used exclusively for this study.

Section A: General Information

- 1. Gender:
- 2. State your highest level of education.....
- 3. State your position.....

Section B: Examination Setting Practices and Students' Academic Performance

- 1. State the most common examination setting practices
.....
.....
.....
.....

- 2. Explain how the following examination setting practices enhance the academic performance of learners in national examinations

Appointment of examination setters.....
.....

Selection of questions

.....
.....
.....

Examination format

.....
.....
.....

Moderation of examination questions

.....
.....

Preparation of marking schemes

.....
.....
.....

Section C: Examination Distribution in Relation to Students' Academic Performance

1. State some of the examination distribution practices your schools always adopt

.....
.....
.....
.....
.....
.....

2. Explain how examination distribution practices enhance students' performance in
endyear examinations Packaging of scripts

.....
.....
.....

Dispatching of examinations

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.....
.....

.....

Opening sealed examination envelopes

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.....
.....

Section D: Examination Invigilation Practices and Students' Academic Performance

1. State some of the examination invigilation practices which your schools usually adopt during administration of examinations

.....
.....

2. Explain how examination invigilation practices enhance students' performance in endyear examinations

Recruitment of supervisors and invigilators

.....
.....

Planning for invigilation

.....
.....

Designing examination seating plan

.....
.....

Section E: Examination Marking about Students' Academic Performance

1. State examination marking practices adopted by your schools

.....
.....
.....

2. Explain how marking of examination practices enhances students' performance in end-of-year examinations

Designing the marking period

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.....
.....

Establishing a marking panel

.....
.....

Designing marking systems

.....
.....
.....

Moderating results


.....
.....
.....

Release of results

.....
.....

Thank you
Renson Evayo

APPENDIX V: ETHICAL REVIEW CLEARANCE LETTER



Mount Kenya University

REF: MKU/ISERC/3200
TO: EVAYO RENSON

Date: 02 October 2023

REG: MED/2018/21593

Dear Sir/Madam,

RE: INFLUENCE OF EXAMINATION MANAGEMENT PRACTICES ON STUDENTS' ACADEMIC PERFORMANCE IN PUBLIC SECONDARY SCHOOLS IN HARGEISA REGION, SOMALILAND

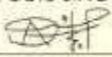
This is to inform you that **Mount Kenya University** has reviewed and approved your above research proposal. Your application approval number is **2244**. The approval period is **02/10/2023 - 01/10/2024**.

This approval is subject to compliance with the following requirements:

- i. Only approved documents including informed consents, study instruments, MTA will be used
- ii. All changes including amendments, deviations and violations are submitted for review and approval by **Mount Kenya University**
- iii. Death and life threatening problems and serious adverse events or unexpected adverse events whether related or unrelated to the study must be reported to **Mount Kenya University** within 72 hours of notification
- iv. Any changes, anticipated or otherwise that may increase the risks or affect the safety or welfare of study participants and others or affect the integrity of the research must be reported to **Mount Kenya University** within 72 hours
- v. Clearance for export of biological specimens must be obtained from relevant institutions
- vi. Submission of a request for renewal of approval at least 60 days prior to expiry of the approval period. Attach a comprehensive progress report to support the renewal
- vii. Submission of an executive summary report within 90 days upon completion of the study to **Mount Kenya University**

Prior to commencing your study, you will be expected to comply with any additional requirements from the relevant authorities in the country where this study will be conducted.

Yours sincerely,


Dr. Alfred Owino, PhD
Chairman, Mount Kenya University ISERC

Main Campus, General Kago Road, P.O. Box 342-01000 Thika.
Tel: 020-2878 000, Cell: +254 709 153 000
Email: info@mku.ac.ke, Web: www.mku.ac.ke
Chartered and ISO 9001 : 2015 Certified Institution.
Unlocking Infinite Possibilities

APPENDIX VI: POSTGRADUATE INTRODUCTION LETTER


Mount Kenya University

DIRECTORATE OF GRADUATE STUDIES

MED/2018/21593

3rd October, 2023

TO WHOM IT MAY CONCERN

Dear Sir/Madam,

RE: EVAYO RENSON – REGISTRATION NO. MED/2018/21593

The purpose of this letter is to introduce the above named student who is pursuing **Master of Education** in the Department of **Educational Management and Curriculum Studies** in the **School of Education**.

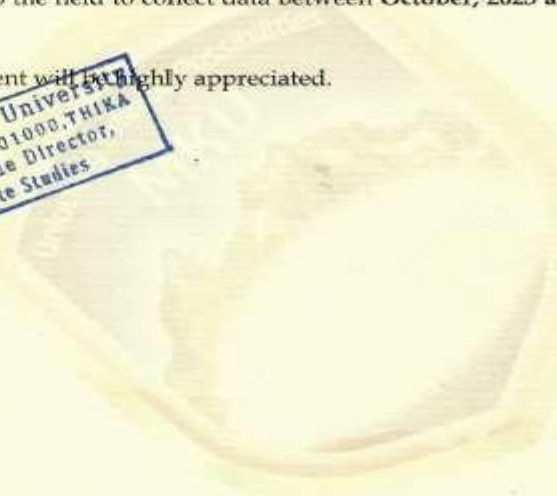
The title of the research is **“Influence of Examination Management Practices on Student’s Academic Performance in Public Secondary Schools in Hargeisa Region, Somaliland.”** It has been cleared by the University’s Ethics Review Committee (Certificate attached) and now has to proceed to the field to collect data between **October, 2023 and December, 2023**.

Any assistance accorded to the student will be highly appreciated.

Thank you.


Dr. Samuel M. Karenga, Ph.D.
Director, Graduate Studies

Enc.



Main Campus, General Kago Road, P.O. Box 342-01000 Thika.
Tel: 020-2878 000, Cell: +254 709 153 000
Email: info@mku.ac.ke, Web: www.mku.ac.ke
Chartered and ISO 9001 : 2015 Certified Institution.
Ushirikiano Inafiniba Dawaibidha

APPENDIX VII: DATA COLLECTION AUTHORIZATION LETTER



ELM SCHOOLS
PASSION FOR KNOWLEDGE

October 10, 2023

TO: EVAYO RENSON

RE: DATA COLLECTION FOR STUDY OF A MASTERS DEGREE PROGRAM

I would like to respond to the subject above. Your request to use our school as a center of collection of data for the purpose of pursuance of your Master's degree has been accepted

Please note that our school is built on a strong faith of Islam. I strongly advise to take time to acquaint yourself with our values so that your process does not conflict with the school culture

I would like to wish you good encounter with our school members at all levels.

Thank you.

Yusuf Luttah.
headteachersecondary@elmischools.com

PRINCIPAL
ELM SECONDARY SCHOOL
HARGEISA



10/16/2023

APPENDIX IX: TURNITIN REPORT