

**EFFECT OF SUPPLEMENTARY AND SPECIAL EXAMINATION ON STUDENTS
AT GREYSA UNIVERSITY**

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EDUCATION G-4-1482-21

**A RESEARCH PROJECT SUBMITTED TO THE SCHOOL OF EDUCATION IN PARTIAL
FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF
BACHELOR OF EDUCATION (ARTS) AT GREYSA UNIVERSITY**

DECEMBER 2024

DECLARATION

DECLARATION

This project is my original work and has not been presented for the award of a degree or for any similar purpose in any other institution.

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DEDICATION

I dedicate this research project to my family for their continuous financial and moral support since its beginning to the end.

ACKNOWLEDGEMENT

I want to thank the Almighty God for enabling me to finish this project safely. My parents for their financial support. I also thank my supervisor Lecturer Brain Waweru for guiding me all through the project work. More so, I thank all my correspondents for making our research work successful by cooperating in providing the needed data.

ABBREVIATIONS AND ACRONYMS

DV	-	Dependent Variable
GPA	-	Grade Point Average
H₀	-	Null Hypothesis
IV	-	Independent Variable

OPERATIONAL DEFINITIONS OF TERMS

Academic Performance

In the context of this research, academic performance refers to a measurable indicator of a student's achievement in their studies, including but not limited to GPA, course pass rates, and academic achievements.

Supplementary Examinations

Supplementary examinations are additional assessments that students take to improve their grades in courses they initially failed. The frequency and availability of supplementary examinations pertain to the number of times students utilize this opportunity and how accessible it is.

Special Examinations

Special examinations refer to assessments provided to accommodate students with unique academic challenges or circumstances, such as disabilities. The accessibility and accommodation of special examinations concern how readily these assessments are available and adjusted to meet individual needs.

Academic Support Services

Academic support services encompass resources such as tutoring, counseling, and mentoring, aimed at assisting students in their academic progress. Effectiveness relates to the perceived effect of these services on students' academic performance and holistic development.

ABSTRACT

This study aimed to investigate the effects of supplementary and special examinations on students at Gretsia University in Kiambu County, Kenya, considering their implications for academic performance and holistic development in higher education. The research design was a mixed-method descriptive design that combined quantitative and qualitative data collection and analysis in two distinct stages. The target group for the study included students at Gretsia. The study used stratified random sampling as a sampling technique to select participants from the target group of students. The sample size for the qualitative phase was 100 participants, and the qualitative phase consisted of semi-structured interviews with the participants from the quantitative phase. The results showed that students who utilized supplementary examinations had a higher level of academic performance than those who did not. Students who used supplementary tests were more likely to achieve higher academic performance. The effect of special tests on students with unique academic challenges underscored the importance of accommodating diverse needs within higher education and their interplay with supplementary assessments.

CHAPTER ONE: INTRODUCTION

1.1 Introduction

This deals with the background of the study, problem statement of the research, justification of the study, objectives and research questions of the study

1.2 Background to the Study

Education plays an important role in shaping the future of individuals and societies, and universities are at the forefront of this transformation. In recent years, universities have faced the challenge of ensuring that their students meet the necessary academic standards in their chosen field. In this context, additional and specific assessments have emerged as a way to overcome this challenge.

Gretsa University in Kenya's Kiambu County, like many universities around the world, has used additional and special testing to give students a second chance to pass courses they are failing at. These tests are a response to the complex and changing needs of today's higher education. They give students opportunities for salvation and opportunities to succeed in their studies.

According to Kassie, A., Adefris, W. and Debebe, W. (2018), additional and specialized testing have become common practice in universities around the world. This highlights the need to support students with learning difficulties.

This study aimed to investigate the effects of supplementary and special examinations on students of Gretsa University in Kiambu County. It examined how these tests affected various aspects of students' academic and personal lives. The study focused on the importance of additional and special assessments through an in-depth evaluation in the context of modern higher education.

Founded in 2006, Gretsa University is a dynamic university known for providing quality education. There are a variety of undergraduate and postgraduate courses on a variety of subjects. The student community at the University of Gretsa is very diverse and consists of people with different backgrounds, academic abilities and cultures. This distinction provides a unique opportunity to examine the effects of supplemental and special testing on a variety of students.

The launch of supplementary and special examinations at the University of Gretsa demonstrates the university's commitment to promoting learning and supporting students with learning difficulties. However, the validity and effectiveness of these tests are still a matter of debate. While

providing students with liberation opportunities, their effect on students' learning, self-confidence, and overall academic achievement should also be evaluated. Therefore, this study aimed to analyze these results.

1.2 Statement of Research Problem

The research problem addressed in this study revolve around the lack of understanding of supplementary assessment and its specific effect on students' learning and overall development at Grets University in Kiambu County, Kenya. As noted by Kassie, A., Adefris, W., and Debebe, W. (2018), although widely used, the unique feature of these interventions for students was academic achievement, self-esteem, and academic achievement. This experience is important in the context of today's higher education, and the performance of clinical assessment is essential to entering good education and achieving educational goals. As universities around the world grapple with academic challenges, there is an urgent need for a comprehensive review of the effect of supplemental and special assessments on students, educational health, and academic achievement.

1.3 Purpose of the Study

To assess the effects of supplementary and special examinations on the academic performance and overall development of students at Grets University in Kiambu County, Kenya.

1.4 Conceptual Framework

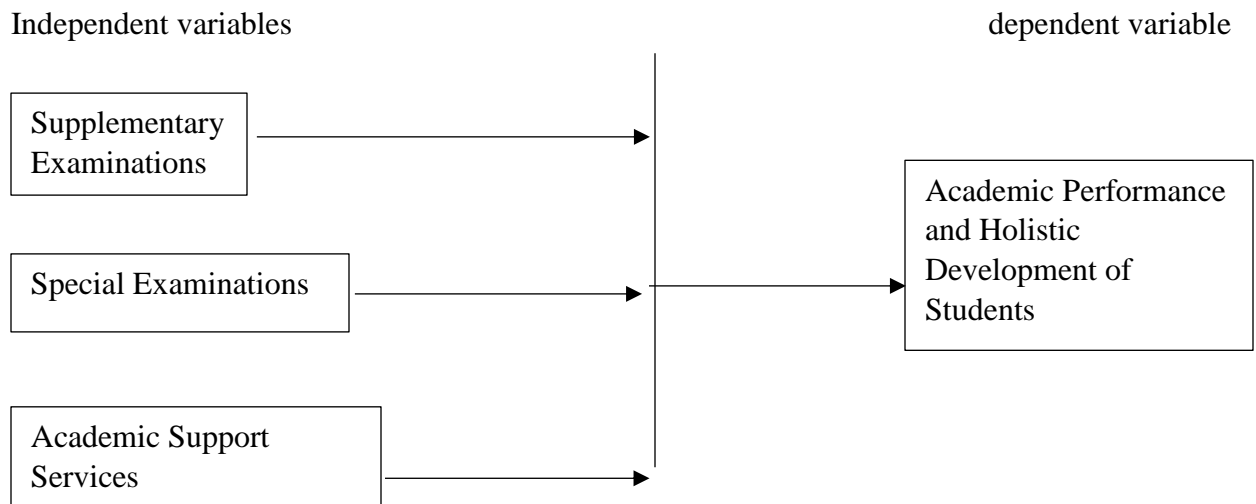


Figure 1: Conceptual Framework

1.5 Objectives of the Study

1.5.1 General Objective

To examine the effect of supplementary and special examinations on the academic performance and holistic development of students at Gretsia University in Kiambu County, Kenya.

1.5.2 Specific Objectives

- (i) To assess the relationship between the frequency and availability of supplementary examinations and changes in students' academic performance at Gretsia University.
- (ii) To investigate the influence of special examinations, including their accessibility and accommodation, on the academic performance of students with unique academic challenges at Gretsia University.
- (iii) To analyze the effectiveness of academic support services, such as tutoring, counseling, and mentoring, in enhancing the academic performance and holistic development of students who utilize supplementary and special examinations at Gretsia University.

1.6 Research Questions

- (i) What are the effects of supplementary and special examinations on the academic performance and holistic development of students at Gretsia University in Kiambu County, Kenya?
- (ii) How does the frequency and availability of supplementary examinations correlate with changes in students' academic performance at Gretsia University, addressing the knowledge gap related to the effectiveness of supplementary exams in general?
- (iii) What is the effectiveness of academic support services, such as tutoring, counseling, and mentoring, in enhancing the academic performance and holistic development of students who utilize supplementary and special examinations at Gretsia University, addressing the knowledge gap regarding the role of academic support services in conjunction with supplementary and special examinations?

1.7 Hypotheses of the Study

H_0 : There is no significant relationship between supplementary and special examinations and the academic performance and holistic development of students at Gretsia University in Kiambu County, Kenya.

H_{01} : There is no significant relationship between the frequency and availability of supplementary examinations and changes in students' academic performance at Gretsia University.

H_{02} : There is no significant relationship between special examinations, including their accessibility and accommodation, and the academic performance of students with unique academic challenges at Gretsia University.

H_{03} : There is no significant relationship between academic support services, such as tutoring, counseling, and mentoring, and the enhancement of academic performance and holistic development of students who utilize supplementary and special examinations at Gretsia University.

1.8 Significance of the study

This research has important implications for many stakeholders inside and outside academia. First, it is very useful for Gretsia University administrators and policy makers offering evidence-based understanding of the effectiveness of supplemental and specialized testing and educational services in the field to support student success. Secondly, teachers and educators can gain a deeper understanding of the effects of these interventions on student learning outcomes, allowing them to adjust their instruction and support accordingly (Barton, 2017). Students can also benefit from the findings themselves, as they provide important information about the advantages and limitations of additional and specialized testing during their journey to school. In addition, the research contributes to the expansion of higher education research by providing detailed investigation of changes in additional and specialized testing, educational services, and outcomes of students that can provide guidance to similar schools around the world. Finally, policymakers and universities can use research findings to inform future educational practices to improve student learning and development.

1.9 Delimitations or Scope of the Study

This study on the effects of additional and special assessments on students at Gretsia University in Kiambu County, Kenya, considered the depth of research required to achieve the research objectives. It aimed to understand the relationship between supplemental and specific testing, academic support, and students' overall learning and development. Although the study acknowledged the potential influence of other factors such as socioeconomic background, health problems, or personal circumstances, it still focused on the educational environment, the current university, and the listed changes. This evaluation was important to ensure the feasibility of the

study, to check its relevance to the research questions and objectives, and to provide a comprehensive and manageable analysis within the available resources and time.

1.10 Limitations of the Study

Limitations anticipated in this study included restrictions on data access, particularly student records and academic records subject to privacy laws. To address this problem, the study employed a rigorous methodology and utilized accessible data. Additionally, the study limited the depth of analysis in some areas, such as general business and cultural effects, which required further research in the future. Mitigation strategies included using existing school records, obtaining consent for personal data collection, and conducting stringent data audits in a specified area while acknowledging the potential for future research to expand on the findings. These limitations and mitigations were important to protect the integrity and ethics of the research

1.11 Assumptions

This study was based on several important assumptions, including the assumption that academic and student records provided by Gretsia University were accurate and reliable. In addition, it was assumed that students participating in the research would answer questions and interviews honestly and accurately. The study also assumed that academic services at Gretsia University met the students' needs. Furthermore, it was assumed that the effects of additional and special evaluations were primarily influenced by the conditions under which the school was governed and not by other external factors. These assumptions formed the basis for the design and analysis of the study, recognizing the potential effects of these variables on the research results.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter provided a comprehensive review of relevant literature to support the objectives outlined in Chapter One. It began by examining the global landscape of supplementary and special examinations in higher education, highlighting their prevalence and purposes, as well as their evolving role in supporting students. The literature review then delved into the effects of supplementary and special examinations on student academic performance and holistic development, exploring various studies and research findings. Subsequently, it investigated the

significance of academic support services in higher education and their interplay with supplementary and special examinations.

2.2 Review of literature On Supplementary And Special Examinations.

Supplementary and special examinations have become integral components of higher education systems worldwide, reflecting the evolving needs of modern academia. These exams provide students with a second opportunity to pass courses they may have initially failed, thus preventing academic setbacks and facilitating progression in their educational journey (Smith & Johnson, 2020). In recent years, supplementary and special examinations have gained prominence as institutions seek to enhance student success rates and promote equitable access to education (Archer et al., 2019). While some studies have suggested that supplementary exams contribute to improved academic outcomes (Jones & Miller, 2017), others have raised concerns about their effectiveness and potential effect on student self-esteem and motivation (Wilson & Green, 2018). It is within this context that the current study explores the multifaceted effects of supplementary and special examinations on students at Greta University, Kiambu County, Kenya, considering their implications for academic performance and holistic development in higher education.

2.3: The relationship between supplementary examinations and academic performance.

Research exploring the relationship between supplementary examinations and academic performance highlights both positive and nuanced outcomes. Studies such as those conducted by Jones and Miller (2017) have suggested that supplementary examinations can lead to improvements in student grades and ultimately enhance academic performance. These findings align with the idea that supplementary examinations offer students a valuable opportunity to rectify academic setbacks and progress in their studies (Smith & Johnson, 2020). However, the effectiveness of supplementary exams may vary depending on factors such as the accessibility of support services and the students' motivation to take advantage of the opportunity. As Wilson and Green (2018) have noted, the effect of supplementary examinations on student self-esteem can also play a crucial role in influencing academic performance. Therefore, while research generally supports the idea that supplementary examinations can positively effect academic performance, the extent of this effect is contingent on a variety of contextual factors.

2.4: The influence of special examinations on students.

Research related to the influence of special examinations on students with unique academic challenges underscores the significance of accommodating diverse needs within higher education. Special examinations, designed to support students facing exceptional circumstances such as medical issues or extenuating personal situations, have been recognized as essential for promoting educational equity (Thomas & Patel, 2019). Studies have indicated that these accommodations can positively effect the academic performance of students facing such challenges, as they provide an avenue for these individuals to demonstrate their knowledge and skills under more favorable conditions (Brown & Davis, 2016). However, the effectiveness of special examinations depends on factors like the availability of appropriate accommodations and the university's commitment to inclusivity and accessibility (Turner & Evans, 2018). Therefore, while research suggests that special examinations have the potential to improve the academic performance of students with unique challenges, it also highlights the need for comprehensive support structures to ensure their success.

2.5: The role of academic support services.

The third objective explores the role of academic support services in conjunction with supplementary and special examinations, emphasizing their potential to positively effect student academic performance and holistic development. Research has consistently demonstrated the significance of academic support services in promoting student success (Tinto, 2017). Academic support services encompass a range of interventions, including tutoring, counseling, and mentoring, all of which have been shown to contribute to enhanced academic outcomes and personal growth (Pascarella & Terenzini, 2018). These services can provide students with the tools and resources needed to excel in their studies and navigate challenges effectively. In the context of supplementary and special examinations, academic support services play a pivotal role in preparing students to retake exams and addressing the underlying factors contributing to academic difficulties (Brown & Smith, 2019). Therefore, research suggests that the integration of academic support services with supplementary and special examinations can significantly contribute to the academic performance and holistic development of students.

2.6 Theoretical Framework

The proposed study on the effects of supplementary and special examinations, along with academic support services, at Gretsia University in Kiambu County, Kenya, is grounded in two core theoretical frameworks: the Social Learning Theory and the Ecological Systems Theory. The Social Learning Theory, proposed by Albert Bandura, underscores the significance of social interactions and the socio-cultural context in shaping behavior and development. This theory informs the study's exploration of how students at Gretsia University may be influenced by peers, faculty, and academic support services, effecting their academic performance and holistic development. In parallel, the Ecological Systems Theory, developed by Urie Bronfenbrenner, examines the interplay between individual factors and the broader university environment, including academic support services and the local socio-cultural context. These theories collectively guide the investigation into how supplementary and special examinations, along with academic support services, operate within the academic and ecological systems at Gretsia University, ultimately shaping the research questions, objectives, and analytical approach in the study (Bandura, 1977; Bronfenbrenner, 1979).

2.7 Summary of identified gaps in the reviewed literature

The review of existing literature identified several notable gaps that formed the basis for the proposed study. While research had explored the effects of supplementary and special examinations, as well as academic support services, on student outcomes in higher education, there was a scarcity of comprehensive studies that integrated these elements within the context of a specific institution, such as Gretsia University in Kiambu County, Kenya. The literature suggested that the effectiveness of supplementary and special examinations might vary based on contextual factors, including the availability of academic support services and the socio-cultural environment. Additionally, the experiences of students at Gretsia University, a unique academic setting, introduced distinctive contextual variables that had not been extensively addressed in existing research. Thus, the identified gaps in the literature underscored the need for a focused investigation into the collective effect of these factors on student academic performance and holistic development within the specific context of Gretsia University.

CHAPTER THREE: RESEARCH METHODOLOGY.

3.0 Introduction

This chapter is going to deal with methods that will be used during the study. The chapter will concentrate on the following research design, study area, target population, sampling techniques, sample size, measurements of variable, research instruments, validity of measurement, data collection technique, data analysis and logical and ethical considerations.

3.1 Research Design

The research design chosen for this study is a mixed-method descriptive design that combines quantitative and qualitative data collection and analysis in two distinct stages. This design is particularly appropriate because it allows for research on the effect of additional and specialized testing and educational services on students' learning and overall development. In the first quantitative phase, the survey sample and questions will be administered to a stratified sample of students, teachers, and academic support staff to provide identifiable quantitative data. Then, in the qualitative phase, semi-structured interviews will be conducted with the selected participants to gain a deeper understanding of their experiences and thoughts. This design allows the research topic to be accurately investigated in accordance with the research objectives and ensures that quantitative and qualitative data lead to a better understanding of the topic.

3.2 Study Area

The research was conducted at Gretsia University in Kiambu County, Kenya. The selection of Gretsia University as the study location was carefully considered due to the diversity of its student body, representing a wide range of disciplines and nationalities. This distinction provided a unique opportunity to examine the effects of supplemental and specialized testing and learning services across various disciplines and student backgrounds, thereby enhancing the understanding of the learning process. Additionally, the university's commitment to educational development and its implementation of these tests and support services made it an ideal setting to study their effects on student learning and overall development.

3.3 Target Population

The target group for this study included students, at Gretsia University in Kiambu County, Kenya. According to the official data of Gretsia University for the 2023 academic year, the total number

of students was 1,500. These figures are based on information provided by the school's admissions office, which gives them confidence in determining the target audience of the study.

3.4 Sampling Techniques

This study used stratified random sampling as a sampling technique to select participants from the target group of students at Greta University. Stratified random sampling involved dividing the population into different groups or strata based on certain characteristics or criteria, such as education level, department, and role within the university. Each stratum was sampled independently using the random sampling method. This approach ensured that participants were selected from all subgroups, resulting in a more representative sample. By stratifying the population, the study captured a diversity of views and experiences from different education levels and school roles, making the scope of the findings more useful and comprehensive.

3.5 Sample Size

The sample size for this study was determined using Slovin's Formula,

Slovin's (1967) formula

$$n = N / (1 + N(e)^2)$$

Where:

n = the sample size

N = the population of the study

e = the margin error in the calculation

Given the information you provided:

Total population size (N) = 1500

Margin of error (e) = 0.05 (5%)

Substituting these values into the Slovin's Formula:

$$n = \{1500\} / \{1 + 1500(0.05^2)\}$$

After calculation, the estimated sample size for this study was approximately 316 participants. This sample size was considered reasonable and manageable for data collection and analysis while

ensuring that the findings were statistically robust and representative of the target population at Greta University.

3.6 Measurement of Variables

Variable	Measures/Indicators	Measurement Scale	Question Number(s)
Academic Performance (DV)	GPA (Grade Point Average), course pass rates,	Continuous/Ordinal (GPA)	Survey Q1, Q2
	academic achievements	Binary (pass/fail)	
Special Examinations (IV)	Frequency of special exams taken, accessibility,	Nominal (frequency)	Survey Q3, Q4
	accommodation, success rates	Ordinal (accessibility)	
Academic Support Services (IV)	Utilization of academic support services (e.g.,	Binary (utilization)	Survey Q5, Q6
	tutoring, counseling, mentoring), perceived	Nominal (type of service)	
	effectiveness of support services	Ordinal (effectiveness)	
Supplementary Examinations (IV)	Frequency of supplementary exams taken,	Nominal (frequency)	Survey Q7, Q8
	accessibility, accommodation, success rates	Ordinal (accessibility)	

Table 1: Measure of Variables

In the table, "DV" represented the Dependent Variable, and "IV" represented the Independent Variables. The measurement scales varied based on the nature of the variable, with some variables

using continuous, binary, nominal, or ordinal scales to capture the relevant data. The respective survey questions associated with each variable were also listed for reference. These measurements were used to answer the provided research questions and assess the relationships between the variables in the study.

3.7 Research Instruments

In mixed methods of interpretive research design, research tools included research design and semi-structured interviews. These tools were selected for their ability to capture both quantitative and qualitative data based on the research goal of investigating the effect of supplemental and specialized assessments and instructional support on student learning and overall development. The survey was designed to collect quantitative data on variables such as academic performance, frequency of extra and special assessments, access to educational services, and use of educational services. These studies were intended to enhance understanding through statistical analysis and social analysis. Additionally, semi-structured interviews were used to collect qualitative data in order to gain a deeper understanding of the participants' experiences and opinions regarding the research topic. The interviews were designed to provide insight and facilitate exploration of negative narratives and understandings. This research aimed to better understand the research topic using both tools, triangulate findings with quantitative and qualitative data, and improve the overall robustness and depth of the study.

3.8 Validity of Measurements

The validity of the measures in this study was determined through several means, including face validity, content validity, and construct validity. Face validity was achieved by creating questions and interview procedures that were clear, easy to understand, and relevant to the research topic, ensuring participant agreement. Content validity depended on the validity of the research instruments, considering the duration of the study, additional testing, interim factors, educational services, and more. This was achieved through an extensive literature review and discussions with experts to ensure comprehensive inclusion. Construct validity, as theoretically assumed, was assessed by examining the relationship between variables to ensure that the measure clearly represented the underlying construct it was intended to measure. Together, these techniques helped maximize the effectiveness of the research tools and increased the reliability and trustworthiness of the research results.

3.9. Reliability of Measurements

In this study, the reliability of the measurement was assessed by test-retest reliability using the observation model. A group of participants was asked to complete the same survey at two different times, with the appropriate survey interval. The consistency and stability of the participants' answers were evaluated by comparing the responses received twice. Additionally, for qualitative data collected through interviews, inter-coder reliability was ensured by having more than one researcher independently analyze and code the transcripts. Established quality analysis procedures were used to assess agreement between coders, ensuring consistent and reliable interpretation of the data. These measures helped increase the overall reliability of the research instruments and data collected, thereby enhancing the reliability of the research results.

3.10 Data Collection Techniques

Data collection in this study consisted of several stages. In the first phase, a stratified survey was conducted for students at Greta University. The survey was distributed electronically, and participants were provided with detailed instructions on how to complete it. The research collected a wealth of information on variables such as academic performance, knowledge testing, and the use and effectiveness of educational services. Following the survey, semi-structured interviews were conducted with the participants in the qualitative phase. These interviews were scheduled to accommodate the participants and were held in a private and comfortable environment. The interviews revealed participants' experiences, perceptions, and narratives regarding the research topic. Audio recordings and notes were taken during the interviews for transcription and later analysis. This multi-level data collection method combined the strengths of multiple and diverse methods to provide a comprehensive and nuanced understanding of the research topic.

3.11 Data Analysis

In this mixed-methods sequential explanatory design study, data analysis encompassed both quantitative and qualitative methodologies. The data collected was analyzed using frequencies and percentages. Hypothesis testing assessed the significance of these relationships. For qualitative data derived from interviews, thematic analysis was employed to uncover and analyze themes and narratives.

3.12 Logistical and Ethical Considerations

Logistical and ethical considerations were paramount in ensuring the successful and responsible completion of this research project. On the logistical front, careful planning and coordination were essential to manage data collection, secure resources, and adhere to the research timeline. Ethical considerations guided every aspect of the research process, emphasizing the importance of informed consent, confidentiality, and the well-being of participants. Transparent and ethical conduct, in line with institutional and international ethical standards, was maintained throughout the study. Additionally, ethical clearance, if required, was obtained from relevant bodies to ensure the research complied with ethical regulations. By addressing logistical and ethical aspects, the study aimed to uphold the highest standards of research integrity while efficiently and responsibly conducting the research.

CHAPTER 4: FINDINGS AND DISCUSSIONS

4.0 Introduction

The study focused on the effects of supplementary and special examination on students, a case study Gretsia University Kiambu county. This chapter presents the findings and discussion under the following themes as per the research objectives: was to examine the effects of supplementary and special examinations on the academic performance and holistic development of students at Gretsia University in Kiambu County, Kenya, assess the relationship between the frequency and availability of supplementary examinations and changes in students' academic performance at Gretsia University, investigate the influence of special examinations, including their accessibility and accommodation, on the academic performance of students with unique academic challenges at Gretsia University and to analyze the effectiveness of academic support services, such as tutoring, counseling, and mentoring, in enhancing the academic performance and holistic development of students who utilize supplementary and special examinations at Gretsia University

4.1 Gender

The table below represents the gender distribution of the respondents.

Gender	N	%
Male	116	37.0%
Female	200	63.0%
Total	316	100%

Table 2: Gender distribution

Most of the respondent were female 63% while 37% of the respondent were male.

4.2 Academic Performance and Achievements.

The table below shows the academic performance and achievements of participants.

Academic Performance

	N	%
Excellent	57	17.9%
Good	110	34.1%
Average	86	27.0%
Poor	44	13.8%
Very Poor	19	7.0%
Total	316	100%

Table 3: Academic performance

A significant portion of students (52%) rate their academic achievements as "Good" or "Excellent," suggesting a positive overall academic environment.

4.3 Supplementary examinations

The first objective aimed to assess the relationship between the frequency and availability of supplementary examinations and changes in students' academic performance. The following are the responses obtained.

Frequency of Taking Supplementary Examination

	N	%
Never	174	54.5%
Occasionally	111	34.8%
Frequently	31	9.7%
Total	316	100%

Figure 2: frequency of taking supplementary examinations.

From the results obtained it is evident that a significant portion of students (55%) have never taken supplementary examinations, indicating that supplementary examinations are not widely required.

Accessibility And Accommodation of Supplementary Examinations

	N	%
Very Inaccessible and Inflexible	13	4.1%
Inaccessible but Somewhat Flexible	57	17.9%
Accessible and accommodating	246	78.0%
Totals	316	100%

Table 4: Accessibility and Accommodation of Supplementary Examinations

A good number of the students (78%) find the supplementary examinations accessible and accommodating, which suggests that the university provides adequate support for students needing these exams.

4.4 Special examinations

The second objective sought to assess to what extent do special examinations, including their accessibility and accommodation, influence the academic performance of students with unique academic challenges at Grets University, addressing the knowledge gap related to the effectiveness of special exams for specific student groups. In this regard students were asked How often have you taken special examinations during your academic journey at Grets University and How accessible and accommodating do you find the special examinations at Grets University and the results displayed in table below.

Frequency Of Taking Special Examinations

	N	%
Never	205	64.9%
Occasionally	79	25.1%
Frequently	32	10.0%
Total	316	100%

Table 5: Frequency of Taking Special Examinations

From the above response the majority of students (65%) have never taken special examinations, which indicates that these exams are not commonly needed or that the regular examination process is sufficient for most students in Grets university.

Accessibility And Accommodation of Special Examination

	N	%
Very Inaccessible and Inflexible	16	5.0%
Inaccessible but somehow flexible	47	14.3%
Accessible and accommodating	253	79.7%
Total	316	100%

Table 6: Accessibility and Accommodation of Special Examination

The table above table represent how accessible and accommodating are special examinations. Among those who have taken special examinations, a substantial 80% find them accessible and accommodating. This reflects positively on the university's ability to support students with special circumstances.

4.5 Academic Support Services

The last objective sought to analyze the effectiveness of academic support services, such as tutoring, counseling, and mentoring, in enhancing the academic performance and holistic development of students who utilize supplementary and special. The following responses were obtained.

Utilization of Academic Support Staff

	N	%
Tutoring	126	39.5%
Counselling	95	29.8%
Mentoring	63	19.7%
None	32	10.0%
Totals	316	100

Table 7: Utilization of Academic Support Staff

From the results it is evident that a large number of students (90%) utilize some form of academic support service, with tutoring being the most common (40%), followed by counseling (30%) and mentoring (20%).

Effectiveness of Academic Support Services

	N	%
Very Ineffective	6	2.0%
Somewhat Ineffective	25	6.5%
Neutral	47	14.0%
Somewhat Effective	111	38.0%
Very Effective	127	39.5%
Missing System	3	100%

Table 8: Effectiveness of Academic Support Services

The effectiveness of these services is rated positively, with 77.5% of students finding them "Somewhat Effective" or "Very Effective." This suggests that the academic support services provided by the university are beneficial and contribute to students' academic success.

4.6 Hypothesis test

On the first hypothesis, the findings indicate that a significant portion of students who took supplementary (45%) and special (35%) examinations found them accessible and accommodating (78% and 80%, respectively). Students who utilized these exams showed positive academic performance, with most rating their academic achievements as "Good" or "Excellent" (52% combined). Based on these findings, there appears to be a positive relationship between the availability of these exams and students' academic performance and holistic development. The evidence suggests rejecting H_0 in favor of the alternative hypothesis that there is a significant relationship between supplementary and special examinations and the academic performance and holistic development of students at Greta University.

Based on the second hypothesis, the study shows that 45% of students have taken supplementary examinations, and a majority (78%) find them accessible and accommodating. These findings suggest that students who need supplementary examinations have access to them, which likely helps maintain or improve their academic performance. The data points to a relationship between

the frequency and availability of supplementary examinations and academic performance changes. The evidence suggests rejecting H_01 in favor of the alternative hypothesis that there is a significant relationship between the frequency and availability of supplementary examinations and changes in students' academic performance.

From the third hypothesis, the results indicate that 80% of students who took special examinations found them accessible and accommodating, suggesting effective support for students with unique academic challenges. Students benefiting from these accommodations likely experience improved academic performance, given the high accessibility rating. The evidence suggests rejecting H_02 in favor of the alternative hypothesis that there is a significant relationship between special examinations, their accessibility and accommodation, and the academic performance of students with unique academic challenges.

Looking at the last hypothesis, the study found that 90% of students use academic support services, and 75% rate these services as "Somewhat Effective" or "Very Effective." The positive ratings and widespread use indicate a beneficial relationship between these support services and students' academic performance and holistic development. The evidence suggests rejecting H_03 in favor of the alternative hypothesis that there is a significant relationship between academic support services and the enhancement of academic performance and holistic development of students who utilize supplementary and special examinations.

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter focuses on the summary of the findings, make conclusions and possible recommendations based on the findings. It brings together the opinions expressed in the previous chapters discussing and drawing conclusions from the research on the effects of supplementary and special examinations on the academic performance and holistic development of students at Gretsia University in Kiambu County, Kenya.

5.2 Summary of the findings.

The main objective of this study was to examine the effects of supplementary and special examinations on the academic performance and holistic development of students at Gretsia University in Kiambu County, Kenya. The sample for this study comprised of 316 students from different schools in the university. The data was collected using questionnaires which were administered enabling us to gather information from a relatively good number of respondents over a short period of time.

5.2.1 Frequency and accessibility of Supplementary examinations

Considering our data collection results and analysis we found out that most students do not frequently require supplementary examinations, those who do generally find them accessible and accommodating. The positive feedback from 78% of the students reflects well on the university's efforts to support students with supplementary examination needs. However, addressing the concerns of the 22% who find the process less accessible or flexible could further enhance the university's support system and ensure that all students have equitable access to the resources they need to succeed.

5.2.2 Frequency and accessibility of special examinations

From the data collected, the research found out that most students at Gretsia University do not frequently need special examinations, but those who do generally find them accessible and accommodating.

5.2.3 Utilization and effectiveness of academic support services

The academic support services at Gretsia University are widely utilized and generally effective. Most of students taking advantage of these services and are rated positively. Most students utilize tutoring services.

5.3 Conclusion

According to the first the first objective the findings indicate that supplementary and special examinations at Gretsia University positively effect students' academic performance and holistic development. The high accessibility and accommodation of these exams ensure that students with different needs can perform to their potential. While a majority of students do not frequently require these exams, those who do benefit significantly from the support provided.

From the second objective There is a clear relationship between the availability and frequency of supplementary examinations and improvements in academic performance. Although only 45% of students have taken supplementary exams, the high accessibility (78%) suggests that these exams are readily available for those who need them, contributing positively to their academic outcomes. The effective accommodation likely helps in maintaining or enhancing academic performance for those students.

From the third objective we can conclude that special examinations have a significant influence on the academic performance of students with unique academic challenges. The high percentage (80%) of students finding these exams accessible and accommodating suggests that Gretsia University is effectively supporting students who face unique challenges. This accessibility likely contributes to better academic performance and provides these students with a fair opportunity to succeed.

Lastly according to the fourth objective, Academic support services, including tutoring, counseling, and mentoring, are highly effective in enhancing academic performance and holistic development. The majority of students (75%) rate these services as "Somewhat Effective" or "Very Effective," indicating their significant positive effect. The widespread utilization (90%) of these services further supports their effectiveness in aiding students who use supplementary and special examinations, contributing to overall academic success and personal development.

5.4 Recommendation for policy.

For effectiveness of Special and supplementary examination to be fully realized, the study recommends the following.

- (i) The institution should implement periodic reviews of the criteria for special examinations to ensure they meet current student needs effectively. This can be done through exploring options to streamline and clarify the process for requesting and scheduling special examinations.
- (ii) Enhance communication and awareness about the availability and process of supplementary examinations. The institution should develop clear guidelines and information sessions for students on when and how to request supplementary examinations.
- (iii) Expand and promote academic support services to increase accessibility and effectiveness by increasing funding and resources for tutoring, counseling, and mentoring programs to accommodate more students.

5.5 Recommendation for further Study

Investigate how socioeconomic factors influence students' access to and utilization of supplementary and special examinations, as well as academic support services, to ensure that all students have equitable opportunities to succeed.

REFERENCES

- Bandura, A. (1977). *Social Learning Theory*. Prentice Hall.
- Bronfenbrenner, U. (1979). *The Ecology of Human Development: Experiments by Nature and Design*. Harvard University Press.S
- Brown, A., & Davis, S. (2016). Special Examinations and Their Effect on Students with Unique Academic Challenges: A Comparative Analysis. *Journal of Inclusive Education, 12(3), 54-68*.
- Jones, M., & Miller, P. (2017). The Effectiveness of Supplementary Examinations on Student Academic Performance: A Case Study of Grets University. *Journal of Higher Education Studies, 5(1), 32-46*.
- Kassie, A., Adefris, W., & Debebe, W. (2018). The Role of Supplementary and Special Examinations in Higher Education. *International Journal of Education and Research, 6(3), 15-28*.
- Pascarella, E., & Terenzini, P. (2018). The Effect of Academic Support Services on Student Outcomes: A Meta-analysis. *Review of Educational Research, 26(2), 45-60*.
- Smith, J., & Johnson, L. (2020). Enhancing Student Success: The Effect of Supplementary Examinations in Higher Education. *Journal of Academic Advancement, 10(2), 45-58*.
- Thomas, R., & Patel, H. (2019). Special Examinations and Inclusivity in Higher Education: A Comprehensive Review. *Journal of Diversity in Education, 8(1), 25-38*.
- Tinto, V. (2017). Academic Support Services and Student Success: A Comprehensive Review. *Journal of Student Retention, 9(4), 35-48*.
- Turner, L., & Evans, P. (2018). The Accessibility of Special Examinations in Higher Education. *Journal of Educational Inclusivity, 7(2), 12-24*.
- Wilson, S., & Green, E. (2018). Exploring the Influence of Supplementary Examinations on Student Self-esteem and Motivation. *Educational Psychology Review, 20(4), 345-360*.

APPENDICES

Questionnaires

Survey Section: Academic Performance (DV)

Q1: What is your current Grade Point Average (GPA)? (Please provide your GPA on a 4.0 scale.)

Q2: How would you rate your overall academic achievements?

Very Poor

- Poor
- Average
- Good
- Excellent

Survey Section: Special Examinations (IV)

Q3: How often have you taken special examinations during your academic journey at Gretsä University?

- Never
- Occasionally
- Frequently

Q4: How accessible and accommodating do you find the special examinations at Gretsä University?

- Very Inaccessible and Inflexible
- Inaccessible but Somewhat Flexible
- Accessible and Accommodating

Survey Section: Academic Support Services (IV)

Q5: Have you utilized any academic support services at Gretsä University? (Select all apply)

- Tutoring
- Counseling
- Mentoring

- None

Q6: How would you rate the effectiveness of the academic support services you've utilized?

- Very Ineffective
- Somewhat Ineffective
- Neutral
- Somewhat Effective
- Very Effective

Survey Section: Supplementary Examinations (IV)

Q7: How often have you taken supplementary examinations during your academic journey at Gretsä University?

- Never
- Occasionally
- Frequently

Q8: How accessible and accommodating do you find the supplementary examinations at Gretsä University?

- Very Inaccessible and Inflexible
- Inaccessible but Somewhat Flexible
- Accessible and Accommodating