

KIBOGORA POLYTECHNIC

FACULTY OF EDUCATION

DEPARTMENT OF SCIENCES

IMPACT OF CLASSROOM MANAGEMENT ON STUDENTS' ACADEMIC PERFORMANCE IN PHYSICS IN RWAMAGANA DISTRICT.

Case study: G.S RUSISIRO

Period: 2020-2022

An undergraduate thesis submitted in the partial fulfillment for the requirement of a Bachelor's degree in Education with Mathematics and Physics.

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DECLARATION

DECLARATION BY THE CANDIDATE

We, UMURAZA Irene and NGARUKIYIMANA Alias Francois, hereby declare that this is our own original work and not a duplication of any similar academic work. It has therefore not been previously or concurrently submitted for any other degree, diploma or other qualification to Kibogora Polytechnic or any other institution. All materials cited in this paper which are not our own have been duly acknowledged.

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DECLARATION BY THE SUPERVISOR

I declare that this work has been submitted for examination with my approval as KP Supervisor

Supervisor's name: **Mr. NSANZIMANA Adrien**

Signed.....

Date.....

ABSTRACT

This study entitled “Impact of Classroom Management on Academic Performance in Physics in Rwamagana District” sought to achieve the following research objectives: to assess the influence of classroom discipline on students’ academic performance in physics at G.S Ruisiro; to investigate the influence of classroom motivation has on students’ academic performance in physics at G.S Ruisiro and to examine ways by which appropriate teaching methods influence classroom management and students’ academic performance in physics at G.S Ruisiro. The research used quantitative and qualitative approach and descriptive design to account and analyze the collected data. Furthermore, a sample from the total target population including 82 students, 4 teachers and 2 staff members of G.S Ruisiro was determined using probability and non-probability sampling methods respectively. This sample was used to collect needed data by using questionnaires and interview from respondents. The result found that among influences of classroom discipline on the academic performance in physics, there is a decrease of noise making in class (26.58%); decrease of lateness at school (29.11%); decrease of early school leaves (18.99%) and increased engagement in school activities (25.32%). Moreover, the study found that the influence classroom motivation has on students’ academic performance in physics include that classroom motivation has greater influence on students’ academic achievement (92.68%); Teachers who motivate students in the class achieve more during teaching and learning process (93.06%); Praise and recognition of students in the class enhance their academic achievement (73.17%); Motivated students are easy to control, organized, monitor and discipline in the classroom (85.43%) and that classroom well equipped motivate students to learn (96.36%). Finally, the study revealed that the appropriate teaching and learning methods in physics include class presentations (27.85%); group discussions (45.57%); lecture (26.46%) and practice exercises (10.13%) and that appropriate teaching and learning methods bring about arousal of interest and motivation (25.32%); promotion of active learning (21.52%); clarification of problem solving (20.25%); easy retention of learnt material (17.72%) and promotion of respect (15.19%). Based on research findings, it was recommended to ensure the effective discipline management as a tool to enhance teaching and learning and to increase the level of supervision during teaching and learning physics and ensure the efficient use of relevant instructional materials.

Key words: Classroom management, Academic performance, motivation

DEDICATION

We dedicate this work to:

- ✓ Our family members
- ✓ Our lecturers
- ✓ And colleagues
- ✓ Our friends

ACKNOWLEDGEMENT

We express our special thanks to everyone for her/his direct/ indirect contribution for the fulfillment of this work. From the deepest of our hearts, we offer special thanks to Mr. NSANZIMANA Adrien for his guidance while conducting of this research project report. Special thanks are also offered to our family members for their financial intervention and to all lecturers of Kibogora Polytechnic for their instructive content during our learning journey.

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TABLE OF CONTENTS

DECLARATION	ii
ABSTRACT.....	iii
DEDICATION.....	iv
ACKNOWLEDGEMENT	v
TABLE OF CONTENTS.....	vi
LIST OF TABLES.....	ix
LIST OF FIGURES	x
LIST OF APPENDICES.....	xi
ACRONYMS AND ABBREVIATIONS.....	xii
CHAPTER ONE: GENERAL INTRODUCTION.....	1
1.0 Introduction.....	1
1.1 Background of the study	1
1.2. Statement of the problem.....	3
1.3 Objectives of the study.....	3
1.3.1 General objective.....	3
1.3.2 Specific objectives.....	3
1.4. Research questions.....	4
1.5. Significance of the study.....	4
1.6. Limitations of the study.....	4
1.7. Scope of the study.....	5
1.7.1. Content scope.....	5
1.7.2. Time scope.....	5
1.7.3. Geographical scope.....	5
CHAPTER TWO: LITERATURE REVIEW.....	6

2.0. Introduction	6
2.1. Definition of key terms	6
2.1.1. Classroom management.....	6
2.1.3. Academic performance.....	6
2.2. Influence of classroom discipline on students’ academic performance.....	7
2.3. Influence of classroom motivation has on students’ academic performance.....	8
2.4 Ways by which appropriate teaching methods influence classroom management and students’ academic performance.	8
2.5 Theoretical framework	9
2.6 Conceptual framework	10
CHAPTER THREE: RESEARCH METHODOLOGY	11
3.0 Introduction	11
3.1. Research approaches and design	11
3.1.1 Research design	11
3.1.2 Research approaches.....	11
3.2. Target population	11
3.3. Sampling techniques	12
3.4. Sample size.....	12
3.5. Research instruments for data collection	13
3.5.1 Questionnaire.....	13
3.5.2 Interview guide.....	13
3.6 Reliability and validity measurement.....	13
3.6.1 Reliability	13
3.6.2 Validity	14
3.7. Data analysis	14

3.7.1 Editing	14
3.7.2 Coding	14
3.7.3 Tabulation.....	14
CHAPTER FOUR: DATA PRESENTATION, ANALYSIS AND INTERPRETATION	15
4.0 INTRODUCTION.....	15
4.1 PRESENTATION AND INTERPRETATION OF DATA	15
4.1.1 Demographic characteristics of respondents	15
4.1.2 Influence of classroom discipline on students’ academic performance in physics	18
4.1.3 Influence of classroom motivation has on students’ academic performance in physics	20
4.1.4 Ways by which appropriate teaching methods influence classroom management and students’ academic performance in physics	22
4.2 DISCUSSION OF FINDINGS	23
4.3 SUMMARY OF FINDINGS	25
CHAPTER FIVE: CONCLUSION AND RECOMMENDATIONS	27
5.0 INTRODUCTION.....	27
5.1 CONCLUSION	27
5.2 RECOMMENDATIONS	28
REFERENCES	30
APPENDICES	32

LIST OF TABLES

Table 1 Research population.....	12
Table 2: Calculation of sample size by category of target population.....	13
Table 3: Table indicating students' answers about the influence classroom motivation has on students' academic performance in physics.....	21

LIST OF FIGURES

Figure 1: Conceptual framework	10
Figure 2: Histogram indicating the age of respondents	15
Figure 3: Histogram indicating the Gender of respondents	16
Figure 4: Histogram indicating the Educational Qualification of teachers and staff members	16
Figure 5: Histogram showing the Teaching experience	17
Figure 6: Bar chat indicating students' views about the level of discipline at G.S Ruisiro	18
Figure 7: Bar chart showing respondents' views about disruptive behaviours while learning physics.....	19
Figure 8: Bar chart indicating students opinions about impact of discipline management academic performance	20
Figure 9: Bar chart showing teaching and learning methods in physics.....	22
Figure 10: Bar chart indicating students' opinions about ways by which teaching and learning methods influence classroom management and academic performance	23

LIST OF APPENDICES

Appendix 1: INFORMED CONSENT 32
Appendix 2: QUESTIONNAIRE DESIGNED FOR LEARNERS 33
APPENDIX 3: Interview guide for teachers and school leaders 35

ACRONYMS AND ABBREVIATIONS

EAC: East African Community

GS: Groupe scolaire

MINEDUC: Ministry of Education

REB: Rwanda Education Board

S1: Senior one

S2: Senior two

S3: Senior three

UNICEF: United Nations Children's Education Fund

CHAPTER ONE: GENERAL INTRODUCTION

1.0 Introduction

The general introduction of this study will be composed by statement of the problem, background of the study, purpose of the study, research questions, research objectives, and scope of the study, significance of the study and limitations as well as scope of the study.

1.1 Background of the study

Worldwide, education has become a gigantic industry that has been recognized not only as a tool for nation building but also as a source from which individual can realize their goals and aspirations. The vision of every society in modern times is that education be used as a tool for social change. In other words, if a country desires to bring about a new philosophy, a new orientation, a new social order or a new thinking pattern, the vehicle for such a change is education. To effect a desired change such a country must undertake modification of its curriculum as a first step, followed by classroom instruction, which is derived from the affected curriculum and implemented by the teacher in the classroom.

Classroom management according to Akubue (1991) is the process of creating favourable conditions to facilitate instructions as well as that of regulating social behaviour of students. He viewed classroom management and organization as a function of proper knowledge, dedication, skill and training for which they are called. The behaviours and the reaction of students are much related to the degree of teacher's proper management of the classroom. Teachers in the classroom are by the nature of their profession, managers of classroom activities. The class teacher's job unlike that of other professionals is concerned with maintaining order, allocating resources, regulating the sequence of events and directing his own attention towards achieving the educational goals.

Classroom management plays an important role in the teaching/learning process. It is a veritable tool in the process of passing instructions from the teacher to the students. The success of any educational system is a function of the effectiveness of classroom management. Classroom teachers are managers and so ought to be in control from the beginning of the lesson to the end so as to ensure that the students benefit from the interactive business that transpires in the classroom

situation. This, to a greater extent would enhance smooth coordination and responses on the part of both the teacher and the learner.

Today, classroom management according to Akpakwu (2003) is the most neglected area in our secondary schools, and the success or failure of any teaching/learning process depends to a large extent on the way classrooms are managed. Failure to effectively manage the classroom can have an overall negative influence on the entire school most especially in terms of sound academic performance of the school. When educators talk about classroom management, one of the first things that come to mind is maintenance of discipline, others are control, motivation, teaching methods, leadership style, use of instructional materials and communication.

Ada (2004) sees classroom discipline as a function of the interaction between teacher and students that brings about self-control and respect for authority. It entails creating and keeping rules based on reciprocal understanding and tolerance, and requires establishing limits that must not be transgressed. Classroom motivation is another management variable that according to Fadipe (2000) is the process of influencing or stimulating a student to take action that will accomplish desired goals. A teacher can reward the learners in order to increase the probability of reporting the desired behaviour. Good and appropriate teaching methods are important aspects of classroom management. Diane and Farrand (2000) explained that teachers do not necessarily modify their teaching strategies or methods when placed in a class to manage. They further said that teachers need to be trained in order to effectively apply a wide range of instructional methods that can cater for various forms of differences that exist in the class.

Recent happenings and occurrences at the level of secondary schools and even other levels of education leave many scholars in panic today and G.S RUSISIRO is not left out. The teacher finds himself in a class filled with students who are disposed to violence, not only to their fellow students but the teacher also. In a bid to control this tendency towards violence, indiscipline, and noise making, careful management of the classroom is therefore important.

Secondary School students' academic performance according to Fadipe (2000) takes into cognizance both quality and quantity of the internal and external results achieved. It implies that it is not just the number of graduates of the system that matters but how relevant and competent the graduates are in meeting the societal needs and aspirations. It is on the basis of the above that

the researcher is worried and decided to carry out this research to find out, the influence of classroom management on students' academic performance at G.S RUSISIRO.

1.2. Statement of the problem

It is regrettable to observe that classroom management which is the most important ingredient of good teaching seem to be greatly neglected in secondary schools especially the public schools. The managerial demands on the classroom teacher are by no means light. The keeping of records and reports, requisition of self-effort and provision of supplies and equipment as well as the necessary routines of classroom management, take much of the teachers' time. The teacher sometimes gets trained in different cultural backgrounds and later finds himself faced with students from varied cultural and socio economic backgrounds, different adjustment capabilities and social interaction abilities.

The problems today include inequality of opportunity in the classroom, improper upliftment of rights of students, improper school rules and inconsistency of the classroom teacher, and poor level of preparedness on the part of the teacher to adequately pass on instructions and so on. Today, the situation in our secondary schools seem worse, if one walks into any of these schools during lesson periods, many classes if not all, may not be organized, there may be no form of discipline in these classrooms, no form of motivation for these students to learn, no teacher to monitor and control the activities of the students in the classes to mention but a few which negate effective classroom management. Against this background, the major problem of this study is to determine the influence of classroom management on students' academic performance in physics at G.S RUSISIRO.

1.3 Objectives of the study

1.3.1 General objective

The general objective of this study was to find out the influence of classroom management on students' academic performance in Rwamagana district.

1.3.2 Specific objectives

The specific objectives of this study were highlighted as follows:

- i.To assess the influence of classroom discipline on students' academic performance in physics at G.S RUSISIRO.

- ii.To investigate the influence of classroom motivation on students' academic performance in physics at G.S Ruisiro.
- iii.To examine ways by which appropriate teaching methods influence classroom management and students' academic performance in physics at G.S Ruisiro.

1.4. Research questions

The following research questions were generated to guide the study:

- i.What is the influence of classroom discipline on students' academic performance in physics at G.S Ruisiro?
- ii.What influence does classroom motivation have on students' academic performance in physics at G.S Ruisiro?
- iii.In what ways do appropriate teaching methods influence classroom management and students' academic performance in physics at G.S Ruisiro?

1.5. Significance of the study

This study is significant because, it will help teachers and educational administrators identify classroom management as an indispensable behaviour and function for teachers in secondary schools and re-stress using the variables identified which are disciplines, motivation, use of appropriate teaching methods, and communication to induce behaviour change in learners.

The study will serve as literature to other researchers of Kibogora Polytechnic community in general, but especially it will help students who may be interested in the same or related areas in the field of education most especially in teaching physics as a subject.

This study will be significant to GS Ruisiro where the research will be conducted, more specifically, the selected classes for which the study will focus on. After investigating the problems, the school will plan how to overcome the challenges of poor performance in physics.

1.6. Limitations of the study

The pertinent limitation this study faced is that some respondents restrained from providing accurate information to researchers. To overcome this limitation, researchers guaranteed ethical consideration by attaching research clearance letter from Kibogora Polytechnic and the information to be provided will serve for only this purpose.

1.7. Scope of the study

This study focused on three types of scope being; content scope, geographical scope and time scope that are explained as follows:

1.7.1. Content scope

The content scope of this study was to examine the impact of classroom management on academic performance in physics.

1.7.2. Time scope

This study was conducted referring on three years of period meaning from 2019 to 2021 as a fixed period chosen for collecting the secondary data. This period of three years helped the researcher to get the true and accurate data.

1.7.3. Geographical scope

This research was conducted at GS Rusisiro which is located in Musha sector, Rwamagana district in the eastern part of the republic of Rwanda.

CHAPTER TWO: LITERATURE REVIEW

2.0. Introduction

Literature review is crucial because it enables the researcher to investigate for further information and to get references which were used in previous studies. This chapter will therefore portray the views of different authors and researchers. The researchers will focus on the research gaps based on the fact that the existing literatures do not show about the use of visual sources in the improvement of teaching Chemistry. It will also attempt to define key concepts of the study.

2.1. Definition of key terms

2.1.1. Classroom management

There are as several definitions of classroom management as there are writers on the subject matter. Each writer defines the concept as he views it. Classroom management has therefore been defined in various ways such as the orderly control of the students, the class environment and teaching materials in order to obtain the desired learning objectives which can enhance the academic performance of students.

Mgbodile (2004) sees classroom management and administration as the process of creating favourable conditions to facilitate instructions as well as that of regulating social behaviour of students. He viewed classroom management and organization as a function of proper knowledge, dedication, skill and training for which they are called. The behaviours and the reaction of students are much related to the degree of teacher's proper management of the classroom.

Akpakwu (2003) defines classroom management as the orderly control of the learners, teaching materials and teaching aids in order to obtain the desired learning objectives. Classroom management, considering the above mentioned views, could be conceptualized as the planning, management and execution of the school's programmes as it affects teaching and learning in the classroom. The teacher manages the physical as well as the psychological environment to create an atmosphere that is conducive for learning.

2.1.3. Academic performance

Academic performance refers to the rate at which educational objectives are being achieved by those within the school system. Therefore, students' academic performance may be seen as the extent to which students are achieving educational goals and objectives.

The Theory of Educational Productivity by Walberg (1981) determined three groups of nine factors based on affective, cognitive and behavioral skills for optimization of learning that affect the quality of academic performance: Aptitude (ability, development and motivation); instruction (amount and quality); environment (home, classroom, peers and television).

According to Rwanda Education Board (REB, 2018), in order to improve the learner's academic performance in Physics, there must be a complete coverage of the syllabus, involvement of learners in practical activities, acquisition and use of books, ensuring thorough mastery of the subject content and ensuring the use of accurate instructional materials.

2.2. Influence of classroom discipline on students' academic performance

The pre-requisite of effective classroom management does not depend only on classroom motivation, leadership, organization and so on by teachers. Chukwelu (1988) posited that apart from the above variables in the classroom, classroom discipline is equally important. Classroom discipline exposes the teacher to a good understanding of the reasons for student's misbehaviours in the classroom, applying preventive and corrective measures. Blair (2004) in the same vein maintained that it can not be denied that without order, learning cannot take place. Those teachers of high achieving students are of good classroom management. One characteristic that distinguishes effective classroom management from ineffective ones is the teacher's ability to minimize discipline problems and promptly control them when they do occur. Blair's observation underscores the need to give sufficient consideration in classroom management.

Ada (2004) sees classroom discipline as a function of the interaction between teacher and students that brings about self-control and respect for authority. Okon (2002) speaks of classroom discipline as the obedience to rules and values that are unquestionably recognized by a student in the classroom. Classroom discipline occurs where there aren't any big discrepancies between the systems of values represented by teachers and students. He goes on to say that the basis for introducing classroom discipline at school in the educational process is in treating children and youths as partners who share respect for others but also are given appropriate responsibilities.

2.3. Influence of classroom motivation has on students' academic performance

Acquiring knowledge and skills are some of the basic things that the teacher must assist the learners to attain. It is also necessary to encourage students to achieve these objectives through motivation. Motivation is a very important factor in promoting the goals and aspirations of any organization. Dugguh (2007) states that human motivation is a complex matter to understand. A person's motives may be clear to him but quit puzzling to others. On the other hand, a person under stress may well not understand his own motives even though these may be perfectly clear to a trained observer. It is important for people in management and supervisory positions to understand such motives and adopt their leadership styles accordingly.

Mallum and Haggai (2000) opined that motivation has greater influence on students' academic performance in the classroom. They maintained that the work of the teacher is made easier when his students are motivated. Motivated students are eager to learn, willing to undertake learning activities and attend lessons regularly and punctually. A classroom teacher will be challenged to plan adequate learning activities to maintain the zeal of the class. They further stressed that in the classroom students are aroused either by inner interest and needs or by external stimulus. There are for instance, students who undertake learning tasks on their own and resist disturbances or interruption by others around them. There are those whose interests are aroused only by rewards and incentives and there are those who are spurred by show of objects, demonstration, stories or the presence of a particular teacher or subject.

2.4 Ways by which appropriate teaching methods influence classroom management and students' academic performance.

According to Onwuegbu (1989) good methods of teaching are important aspects of class management. It is true that teachers are expected to start teaching their students before they actually get to know them individually. The fact that the teacher lacks this knowledge should not be a major problem in choosing appropriate methods of teaching. The knowledge of the learner is only one aspect of, or factor in preparing your lesson plans and choosing the appropriate method. For instance, the kind of lesson and instructional objectives are other factors the teacher takes into consideration when he chooses the method of instruction. Therefore, these factors should guide the teacher when he wants to choose the method of teaching so that every learner will benefit from the teaching. He further stressed that the first problem in any class activities starts whenever a

learner feels neglected and excluded from class activities. Hence, group and individual activities must be a part of a teacher method of teaching.

Maxwell (1993) in reaction to the appropriate use of teaching method, blames the poor performance of students and the falling standard of academic achievement in Nigeria on the attitude of teachers towards their work particularly as regards unplanned lessons and use of inappropriate methods of teaching in the classroom Akpakwu (2008), maintained that for good teaching to take place in order to achieve effective classroom management, the competent teacher should involve the students in evaluating their own work as well as your own instruction. These educators have agreed that the quality and method of instruction or teaching is a key factor influencing students' behaviour and academic achievement.

2.5 Theoretical framework

The theoretical framework was based on a theory of management that is considered relevant to the research topic. To this effect, the human relations theory was considered appropriate for this study.

Human Relations Theory

The proponents of human relations approach to administration and management share the view that developing and maintaining harmonious relations between employees and supervisors, teachers and students and among employees is quite fundamental to all organizations. Follet, Mayo, Owen in Akpakwu (2008) were the early advocates of this theory, and in their works, they emphasized the human side of administration. The underlying principle behind this theory is that a satisfied worker is an effective one and also a satisfied student is an effective student. The theory therefore emphasizes that an increase of employee or student's classroom discipline, motivation, use of appropriate teaching methods and morale will increase their productivity or performance. The human relations theory basically holds that financial remunerations though a significant motivator is not the only driving force behind workers effectiveness or student effectiveness (Focho 2001). Other non-economic factors such as the physical and psychological work or classroom atmosphere can be powerful motivators. (Usman 2005).

2.6 Conceptual framework

Independent variables

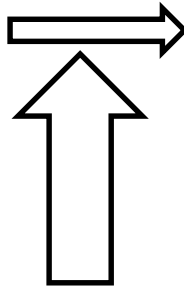
Classroom management

- 1) Discipline control
- 2) Classroom motivation
- 3) Effective teaching and learning methods
- 4) Relevant instructional materials

Dependent variable

Students' academic performance in physics

1. Active learning
2. Real life application of learnt concept
3. Retention and easy remembering
4. Enhanced understanding



Extraneous variables

- Teacher's qualifications and skills
- Teacher's attitudes
- Family background
- School location

Figure 1: Conceptual framework

CHAPTER THREE: RESEARCH METHODOLOGY

3.0 Introduction

This part concerns the methodology that was used. It describes the research design, research approach, population of the study and sample size, sampling techniques, research instruments and data analysis and interpretation method.

3.1. Research approaches and design

3.1.1 Research design

This research was descriptive research. The research describes the characteristics of the population or phenomenon being studied and attempts to collect quantifiable information for statistical analysis of the population sample. For this case, researcher described theories about visual materials and described also the criteria for interpreting the findings.

3.1.2 Research approaches

This research was quantitative and qualitative in nature. It was quantitative since the researchers gathered information using data or information that can be converted into numbers. It focused more in counting and classifying features and constructing statistical models and figures to explain what was observed. This made the research objective as it seeks to precise measurement. Its qualitative nature relies on gathering information that relates to the appreciation, feeling, ideas, attitudes and thereafter their meaning and interpretation was presented in narrative forms instead of using statistical form. This made the research subjective despite it provides complete and detailed description of the study topic.

3.2. Target population

A population is a collection of objects, events or individuals having some common characteristics that researchers are interested in studying. Population can be defined as a group of categories of human being, animals and other things that have one or more traits in common (Mouton, 1996).

The target population for this research was composed by three categories of population. The research population comprises of 516 individuals including 500 students, 13 teachers and 3 school leaders. This population was chosen since they are the ones holding relevant information regarding the contribution of classroom management on academic performance in physics.

Table 1 Research population

SN	Category	Male	Female	Total
1.	S1	109	98	207
2.	S2	98	82	180
3.	S3	59	54	113
4.	Teachers	9	4	12
5.	School leaders	2	1	3
Total		277	239	516

Source: Secondary data: Archives-G.S Ruisiro, 2022

3.3. Sampling techniques

In this research, probability sampling was used to select students. Stratified Sampling as probability sampling was also used and involves splitting students into classes and then simple random sampling was used to choose members from each class. Purposive sampling method was used to select teachers and staff members.

3.4. Sample size

The sample size was gotten using Taro Yamane's formula. To obtain the adjusted sample size, the following formula was used:

$$n = \frac{N}{1 + N e^2}$$

Where n is the sample size; N is the population size and e is margin error of 10%.

$$n = \frac{516}{1 + 500(0.1)^2} = 83.76 \approx 84$$

The sample size for our research was 84 respondents from the target population.

To select respondents, stratification was done whereby the total number of each category was multiplied by the calculated sample size over the total population. The calculations are shown in the table below.

Table 2: Calculation of sample size by category of target population

SN	Category	Male	Female	Total
1.	S1	$109 \times 84 / 516 = 17$	$98 \times 84 / 516 = 16$	33
2.	S2	$98 \times 84 / 516 = 16$	$82 \times 84 / 516 = 13$	29
3.	S3	$59 \times 84 / 516 = 9$	$54 \times 84 / 516 = 8$	17
	Total	42	37	79
4.	Teachers	2	1	3
5.	School leaders	1	1	3
Total		45	39	84

3.5. Research instruments for data collection

Regardless of the specific research design chosen, the researcher should strive to collect quantitative and qualitative data using a combination of research instruments like questionnaires, interviews, observations or documentation.

3.5.1 Questionnaire

A questionnaire is a research instrument consisting of a set of questions (items) intended to capture responses from respondents in a standardized manner. In this research, researchers used questionnaire that was made of open and closed questions.

3.5.2 Interview guide

An interview guide is essentially a structured conversation where researchers ask open questions and respondents provide responses. An interview guide was elaborated to ensure the objectivity of this research.

3.6 Reliability and validity measurement

While researchers were amassing primary data, there was need to assess each item for its usefulness and in terms of its critical adequacy: the validity and reliability of the material. The internal validity was concerned by this study.

3.6.1 Reliability

To check the reliability of questionnaires, researcher delivered them to respondents at different times and detect whether the information provided at different intervals of time was almost similar; then researcher approved that the instrument was reliable.

3.6.2 Validity

Research instruments recall for findings that would match with the reality. Researcher elaborated questionnaires and handed them to the supervisor for a check-up of their validity and appropriateness. After supervisor's confirmation, they were delivered to respondents to collect data.

3.7. Data analysis

It comes up with results of the study after data collection, where by using Statistical Package for Social Sciences (SPSS) to deal with processes like editing, coding, classification and tabulation to convert the collected data into frequencies and percentages for ensuring clarification and interpretation.

3.7.1 Editing

This process involved deletion of unnecessary responses from respondents. It also involved the inspection and edition to remove inconsistency in responses and making necessary corrections of partial or vague answers. This was done to make sure that the data collected are complete and relevant.

3.7.2 Coding

Coding is converting data into numeric format. The information that was gathered was coded and regrouped according to their concepts to reach research objectives.

3.7.3 Tabulation

Tabulation is the process of summarizing raw numerical data and displaying the same in form of tables for further analysis. The edited and coded data was presented in tables for an easy interpretation.

CHAPTER FOUR: DATA PRESENTATION, ANALYSIS AND INTERPRETATION

4.0 INTRODUCTION

In this chapter, the collected data were presented, analyzed, interpreted and discussed according to the research questions and objectives with reference to the related literature. The key variables were highlighted and interpreted.

4.1 PRESENTATION AND INTERPRETATION OF DATA

4.1.1 Demographic characteristics of respondents

In order to know the age, gender, educational qualification and teaching experience of teachers, a question was asked about their demographic characteristics and the provided information is presented in the following diagrams.

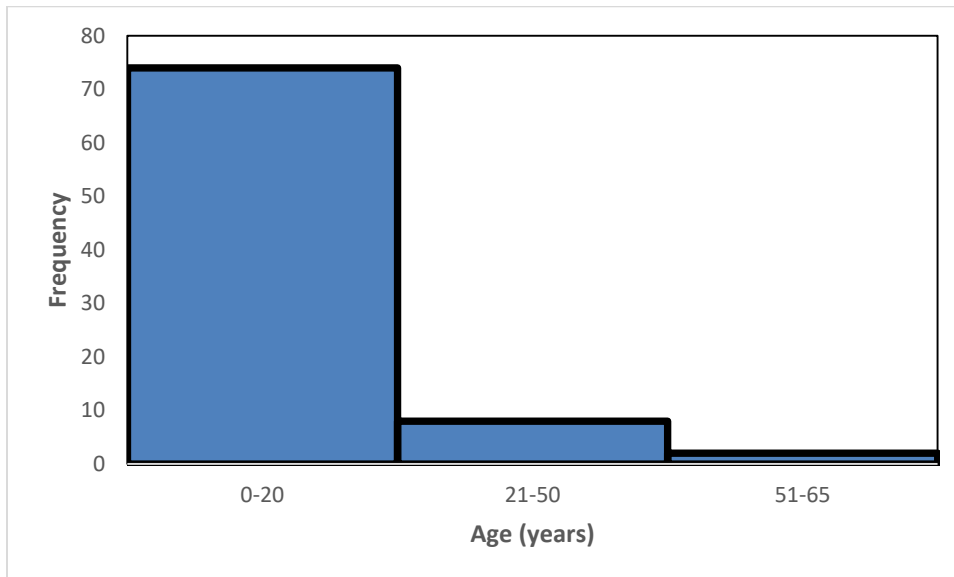


Figure 2: Histogram indicating the age of respondents

From the diagram above, it is clear that 74 respondents representing 88.1% of are aged below twenty years; 8 respondents representing 9.52% are aged of 21-50 years old while 2 respondents representing 2.38% were aged between 51-65 years old.

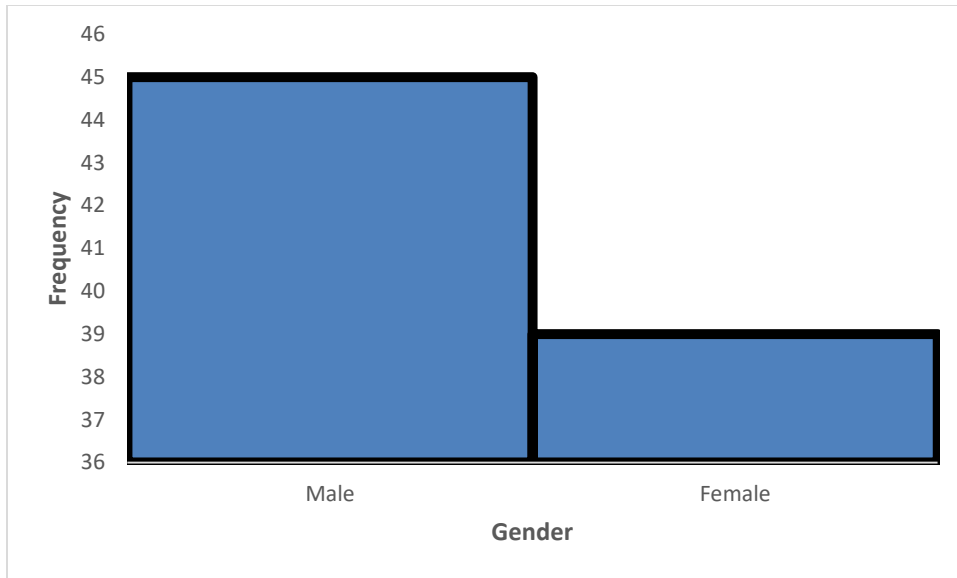


Figure 3: Histogram indicating the Gender of respondents

The diagram above reveals that 39 respondents representing 46.43% were female while 45 respondents representing 73.57% were male. This presentation reveals that the research was gender sensitive as both gender was included.

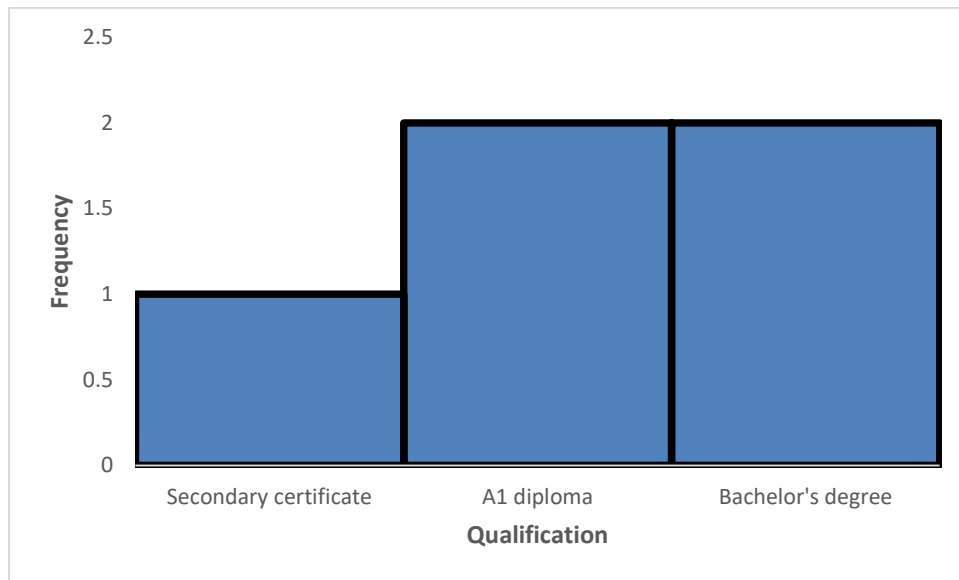


Figure 4: Histogram indicating the Educational Qualification of teachers and staff members

The education qualification of teachers at is that 1 respondents representing 20% hold secondary level certificate; 2 respondents representing 40% of teachers hold advanced diploma (A1) and 2 respondents representing 40% hold bachelor's degree. No one was found with master's degree.

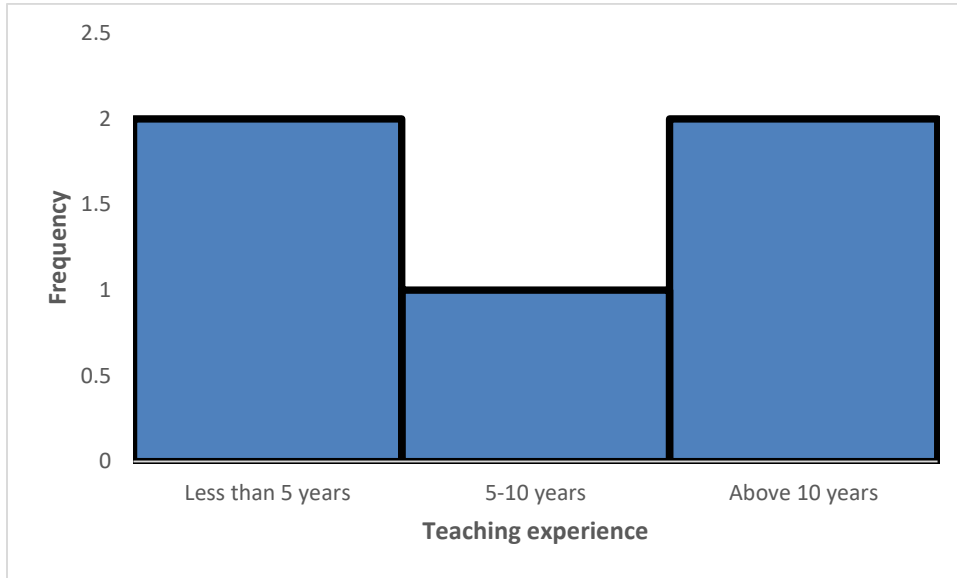


Figure 5: Histogram showing the Teaching experience

This presentation is about the teaching experience. From the presentation, it is clear that 2 respondents representing 40% of teachers hold an experience of less than 5 years in teaching career; 1 teachers corresponding to 20% had a teaching experience between 5-10 years while 2 respondents representing 40% of teachers are experienced in teaching career above 10 years. This experience implies a high teaching practice and this predicts a high academic performance.

In order to know the age and gender, a question was asked about their demographic characteristics and the provided information is presented in the following diagrams.

4.1.2 Influence of classroom discipline on students' academic performance in physics

To detect the influence of classroom discipline on students' academic performance in physics, first of all a question was asked about the level of discipline. The revealed information is presented as follows.

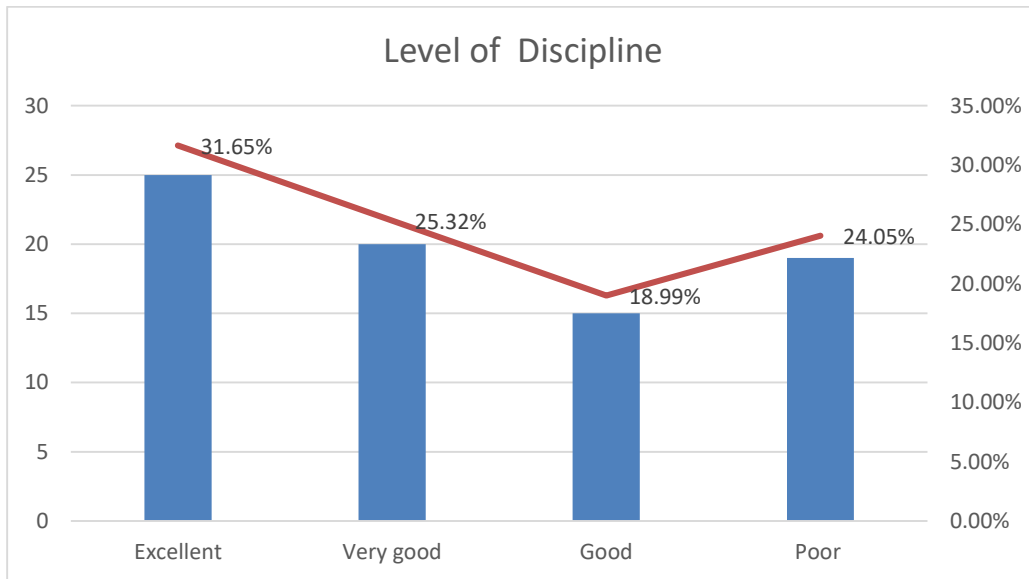


Figure 6: Bar chat indicating students' views about the level of discipline at G.S Ruisiro

From the above figure, it is clear that the level of discipline is excellent as indicated by 25 respondents corresponding to 31.65%; very good as pointed out by 20 respondents corresponding to 25.32%; good as revealed by 15 respondents corresponding to 18.99% and poor as claimed by 19 respondents representing 24.05%.

Secondly, a question was asked to all respondents in order to get a sight of disruptive behaviors that may occur during teaching and learning physics at G.S Ruisiro. The information gathered is presented in the bar chart below.

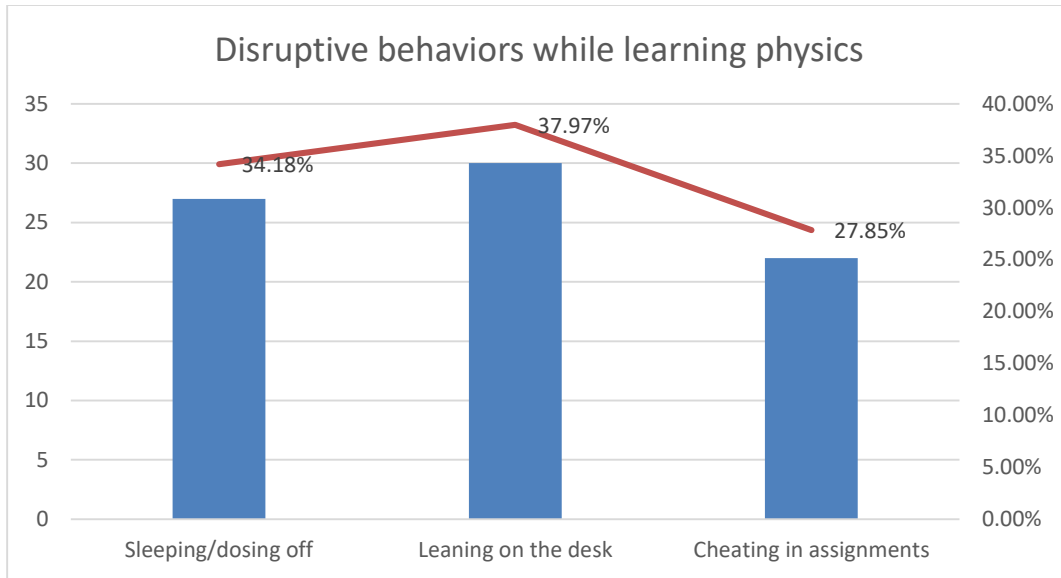


Figure 7: Bar chart showing respondents' views about disruptive behaviours while learning physics

The data presented above show that among disruptive behavior presented while learning physics, there is sleeping or dosing off as revealed by 27 respondents corresponding to 34.18%; leaning on the desk as pointed out by 30 respondents representing 37.97% and cheating in assignments as indicated by 22 respondents corresponding to 27.85%.

Finally, a question was asked to both students and teachers and school leaders about the influence of classroom discipline on the academic performance. The information gotten is presented in the following chart.

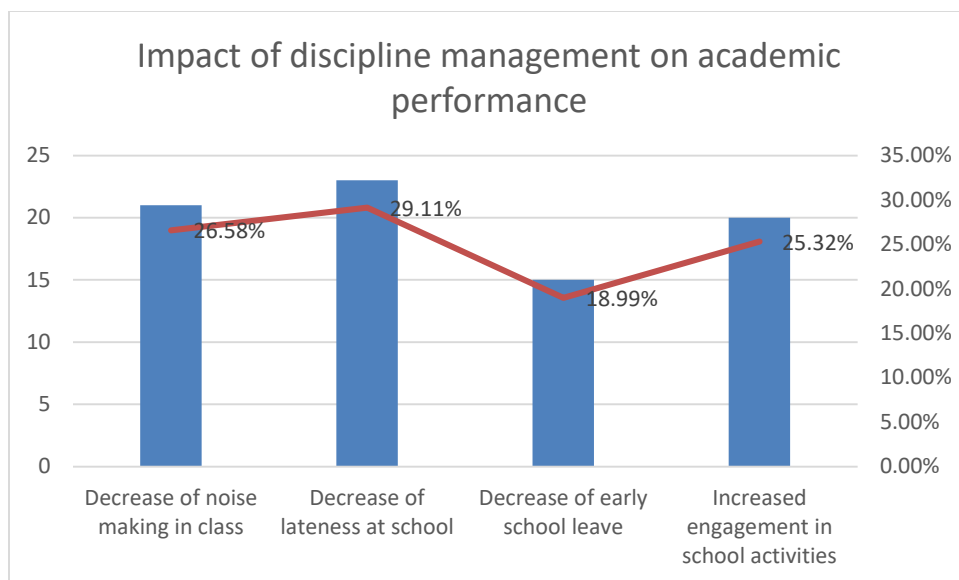


Figure 8: Bar chart indicating students opinions about impact of discipline management academic performance

The figure above shows that among influences of classroom discipline on the academic performance in physics include decrease of noise making in class as indicated by 21 students corresponding to 26.58%; decrease of lateness at school as indicated by 23 students corresponding to 29.11%; decrease of early school leaves as indicated by 11 students corresponding to 18.99% and increased engagement in school activities as indicated by 20 students corresponding to 25.32%.

In accordance with data gathered from interview with teachers and school leaders, it was found that classroom discipline is primordial if one wants to foster the academic performance.

4.1.3 Influence of classroom motivation has on students' academic performance in physics

In order to know the Influence of classroom motivation has on students' academic performance in physics, a question was asked to both students and teachers and school leaders. The data gathered from students are presented here below.

Table 3: Table indicating students’ answers about the influence classroom motivation has on students’ academic performance in physics

Statement		Strongly agree	Agree	Disagree	Strongly disagree
Classroom motivation has greater influence on students’ academic achievement.	Data	54	22	2	1
	%	68.35%	27.85%	2.53%	1.27%
Teachers who motivate students in the class achieve more during teaching and learning process.	Data	43	31	3	2
	%	54.43%	39.24%	3.80%	2.53%
Praise and recognition of students in the class enhance their academic achievement.	Data	42	18	14	5
	%	53.16%	22.78%	17.72%	6.33%
Motivated students are easy to control, organized, monitor and discipline in the classroom.	Data	59	11	5	4
	%	74.68%	13.92%	6.33%	5.06%
Classroom well equipped motivate students to learn.	Data	45	31	3	0
	%	56.96%	39.24%	3.80%	0.00%

From the table above, it is clear that classroom motivation has greater influence on students’ academic achievement as strongly agreed and agreed by 54 respondents corresponding to 68.35% and 22 respondents corresponding to 27.85% respectively. The level of disagreement with the statement is 2 respondents corresponding to 2.53% while only one respondent corresponding to 1.27% strongly disagreed with the statement.

Teachers who motivate students in the class achieve more during teaching and learning process as strongly agreed and agreed by 43 respondents corresponding to 54.43% and 31 respondents corresponding to 39.24% respectively. The level of disagreement with the statement is 3 respondents corresponding to 3.80% while only two respondents corresponding to 2.53% strongly disagreed with the statement.

Praise and recognition of students in the class enhance their academic achievement as strongly agreed and agreed by 42 respondents corresponding to 53.16% and 18 respondents corresponding

to 22.78% respectively. The level of disagreement with the statement is 14 respondents corresponding to 17.72% while 5 respondents corresponding to 6.33% strongly disagreed with the statement.

Motivated students are easy to control, organized, monitor and discipline in the classroom as strongly agreed and agreed by 59 respondents corresponding to 74.68% and 11 respondents corresponding to 13.92% respectively. The level of disagreement with the statement is 5 respondents corresponding to 6.33% while 4 respondents corresponding to 5.06% strongly disagreed with the statement.

Finally, the table shows that classroom well equipped motivate students to learn as strongly agreed and agreed by 45 respondents corresponding to 56.96% and 31 respondents corresponding to 39.24% respectively. The level of disagreement with the statement is 3 respondents corresponding to 3.80% while any respondent corresponding to 0.00% strongly disagreed with the statement.

4.1.4 Ways by which appropriate teaching methods influence classroom management and students’ academic performance in physics

For the aim of knowing how appropriate teaching methods influence classroom management and students’ academic performance in physics, a question was asked about the teaching and learning methods applied in physics. The provided information is presented in the figure below.

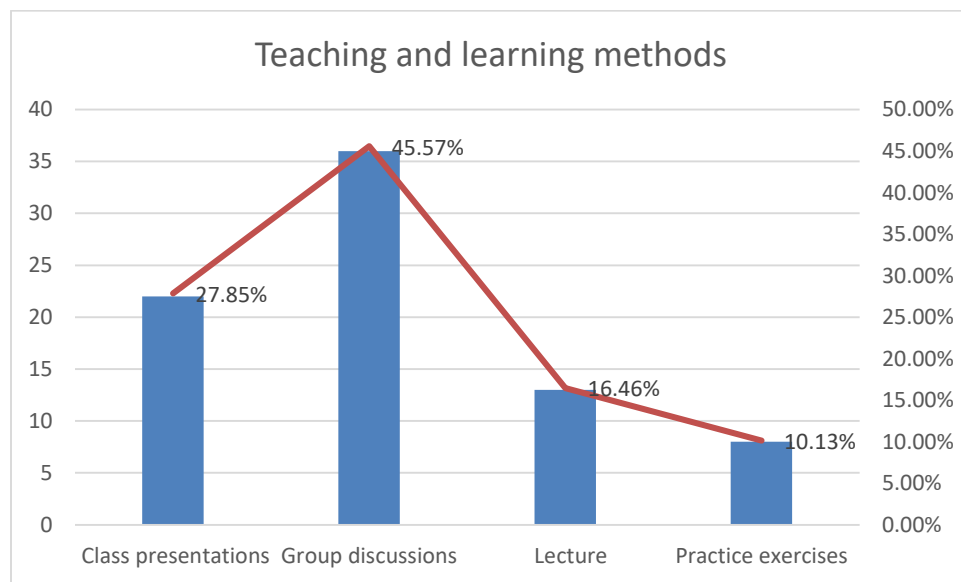


Figure 9: Bar chart showing teaching and learning methods in physics

The chart above shows that the teaching and learning methods in physics include class presentations as revealed by 22 respondents corresponding to 27.85%; group discussions as indicated by 36 respondents corresponding to 45.57%; lecture as indicated by 13 respondents corresponding to 26.46% and practice exercises as revealed by 8 respondents representing 10.13%.

Secondly, respondents were asked about how appropriate teaching and learning methods influence academic performance and classroom management in teaching and learning physics. The collected data is presented in the following chart.

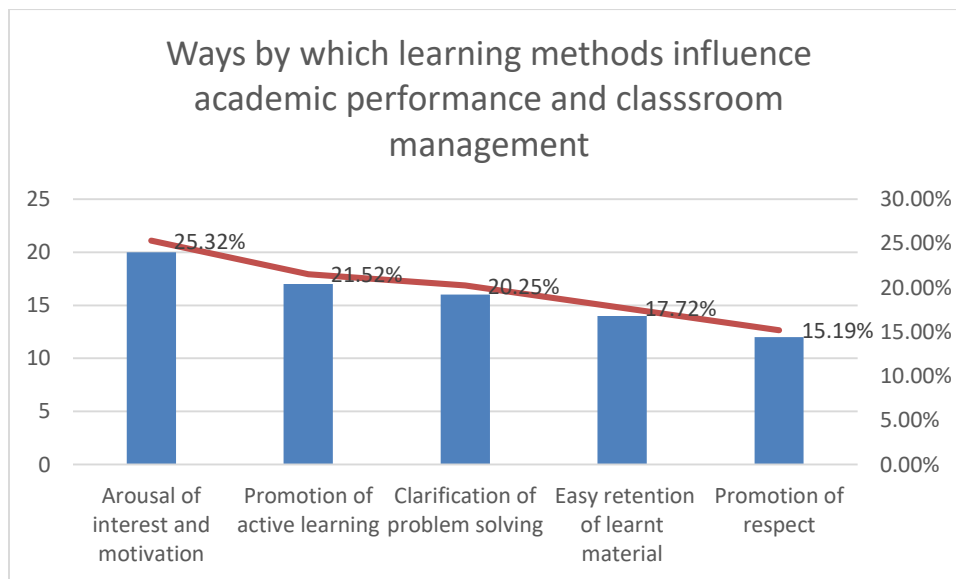


Figure 10: Bar chart indicating students’ opinions about ways by which teaching and learning methods influence classroom management and academic performance

The presentation above reveals that appropriate teaching and learning methods bring about arousal of interest and motivation as indicated by 20 students corresponding to 25.32%; promotion of active learning as indicated by 17 students corresponding to 21.52%; clarification of problem solving as indicated by 16 corresponding to 20.25%; easy retention of learnt material as indicated by 14 students corresponding to 17.72% and promotion of respect as revealed by 12 respondent corresponding to 15.19%.

4.2 DISCUSSION OF FINDINGS

From the data presented in figure 7, it was found that the level of discipline is excellent (31.65%); very good (25.32%); good (18.99%) and poor (24.05%). The data presented in figure 8 show that

among disruptive behavior presented while learning physics, there is sleeping or dosing off (34.18%); leaning on the desk (37.97%) and cheating in assignments (27.85%). The data in figure 9 shows that among influences of classroom discipline on the academic performance in physics include decrease of noise making in class (26.58%); decrease of lateness at school (29.11%); decrease of early school leaves (18.99%) and increased engagement in school activities (25.32%). In accordance with data gathered from teachers and school leaders, it was found that classroom discipline is primordial if one wants to foster the academic performance. The results correlate to those of Ada (2004) who sees classroom discipline as a function of the interaction between teacher and students that brings about self-control and respect for authority; and Okon (2002) who speaks of classroom discipline as the obedience to rules and values that are unquestionably recognized by a student in the classroom. Classroom discipline occurs where there aren't any big discrepancies between the systems of values represented by teachers and students.

The presentation in table 3 shows that the influence classroom motivation has on students' academic performance in physics include that classroom motivation has greater influence on students' academic achievement (92.68%); Teachers who motivate students in the class achieve more during teaching and learning process (93.06%); Praise and recognition of students in the class enhance their academic achievement (73.17%); Motivated students are easy to control, organized, monitor and discipline in the classroom (85.43%) and finally, the table shows that classroom well equipped motivate students to learn (96.36%). The results are in line with Dugguh (2007) who stated that human motivation is a complex matter to understand. A person's motives may be clear to him but quit puzzling to others. On the other hand, a person under stress may well not understand his own motives even though these may be perfectly clear to a trained observer. It is important for people in management and supervisory positions to understand such motives and adopt their leadership styles accordingly.

The data in figure 10 shows that the appropriate teaching and learning methods in physics include class presentations (30.49%); group discussions (43.90%); lecture (15.85%); practice exercises (9.76%) and that appropriate teaching and learning methods bring about arousal of interest and motivation (28.05%); promotion of active learning (20.73%); clarification of problem solving (19.51%); easy retention of learnt material (17.07%) and promotion of respect (14.63%). Appropriate teaching and learning method fosters free expression of ideas and opinions among

students and more cooperation, motivation and engagement are developed during the use of technology in teaching and learning physics. These results are similar with those of Dempsey & Van Eck, (2007) who reported that appropriate teaching and learning method allows for teachers to form their own learning communities that are not confined to the local school site. For example, science teachers may use a wiki or content delivery system to network and share information with teachers at other schools both within and beyond their local school district. Even more exciting, is the premise that teachers can not only receive information and training from a central authority, such as district or state personnel, but that teachers may develop content and share their information amongst their peers. This leads to situations of reciprocal teaching and mentorship that are part of a larger informal learning community. In terms of design, online learning communities allow for a multitude discussions and socialization that adhere to a constructivist learning principle, in which people effectively learn information when experiencing and defining knowledge through social contexts. Besides the visualization of content in which they have low prior knowledge, students can also benefit from distance learning, much like their counterparts in the teaching profession. Appropriate teaching and learning method can be used for classes to communicate with other school sites and/or allow multiple classes to attend hosted web conferences and seminars. For example, students studying other cultures may have the opportunity to directly speak with individuals of another nation.

4.3 SUMMARY OF FINDINGS

The result found that the level of discipline is excellent (31.65%); very good (25.32%); good (18.99%) and poor (24.05%). It was also found that among disruptive behavior presented while learning physics, there is sleeping or dosing off (34.18%); leaning on the desk (37.97%) and cheating in assignments (27.85%). Among influences of classroom discipline on the academic performance in physics, there is a decrease of noise making in class (26.58%); decrease of lateness at school (29.11%); decrease of early school leaves (18.99%) and increased engagement in school activities (25.32%). In accordance with data gathered from teachers and school leaders, it was found that classroom discipline is primordial if one wants to foster the academic performance.

Moreover, the study found that the influence classroom motivation has on students' academic performance in physics include that classroom motivation has greater influence on students' academic achievement (92.68%); Teachers who motivate students in the class achieve more during

teaching and learning process (93.06%); Praise and recognition of students in the class enhance their academic achievement (73.17%); Motivated students are easy to control, organized, monitor and discipline in the classroom (85.43%) and that classroom well equipped motivate students to learn (96.36%).

Finally, the study revealed that the appropriate teaching and learning methods in physics include class presentations (27.85%); group discussions (45.57%); lecture (26.46%) and practice exercises (10.13%) and that appropriate teaching and learning methods bring about arousal of interest and motivation (25.32%); promotion of active learning (21.52%); clarification of problem solving (20.25%); easy retention of learnt material (17.72%) and promotion of respect (15.19%).

CHAPTER FIVE: CONCLUSION AND RECOMMENDATIONS

5.0 INTRODUCTION

This chapter dealt with the conclusion of the 4 previous chapters of this study; the general introduction, the literature review, the research methodology and the data presentation, analysis and interpretation. Moreover, some recommendations have been formulated and addressed to whom the study may concern.

5.1 CONCLUSION

This study sought to investigate impact of classroom management on academic performance in physics in Rwamagana district. The research sought to answer the following research questions: (1) What is the influence of classroom discipline on students' academic performance in physics at G.S Rusisiro? (2) What influence does classroom motivation have on students' academic performance in physics at G.S Rusisiro? (3) In what ways do appropriate teaching methods influence classroom management and students' academic performance in physics at G.S Rusisiro?

The review of related literature revealed that discipline is highly associated with motivation and that both fosters remarkably the academic performance as opined by different author including Mallum and Haggai (2000) who stated that motivation has greater influence on students' academic performance in the classroom.

The research used quantitative and qualitative approach and descriptive design to account and analyze the collected data. Furthermore, a sample from the total target population including 82 students, 4 teachers and 2 staff members of G.S Rusisiro was determined using probability and non-probability sampling methods respectively. This sample was used to collect needed data by using questionnaires and interview from respondents.

The result found that the level of discipline is excellent (31.65%); very good (25.32%); good (18.99%) and poor (24.05%). It was also found that among disruptive behavior presented while learning physics, there is sleeping or dosing off (34.18%); leaning on the desk (37.97%) and cheating in assignments (27.85%). Among influences of classroom discipline on the academic performance in physics, there is a decrease of noise making in class (26.58%); decrease of lateness at school (29.11%); decrease of early school leaves (18.99%) and increased engagement in school

activities (25.32%). In accordance with data gathered from teachers and school leaders, it was found that classroom discipline is primordial if one wants to foster the academic performance.

Moreover, the study found that the influence classroom motivation has on students' academic performance in physics include that classroom motivation has greater influence on students' academic achievement (92.68%); Teachers who motivate students in the class achieve more during teaching and learning process (93.06%); Praise and recognition of students in the class enhance their academic achievement (73.17%); Motivated students are easy to control, organized, monitor and discipline in the classroom (85.43%) and that classroom well equipped motivate students to learn (96.36%).

Finally, the study revealed that the appropriate teaching and learning methods in physics include class presentations (27.85%); group discussions (45.57%); lecture (26.46%) and practice exercises (10.13%) and that appropriate teaching and learning methods bring about arousal of interest and motivation (25.32%); promotion of active learning (21.52%); clarification of problem solving (20.25%); easy retention of learnt material (17.72%) and promotion of respect (15.19%).

All research objectives were achieved and research questions answered. The research was successful despite challenges faced.

5.2 RECOMMENDATIONS

Having analyzed factors affecting performance, family background and the impact family background on performance as it was found out and presented in chapter four of the present research, the following recommendations were addressed to all education stakeholders:

- To education policymakers, to plan how all students may have access to learning materials regardless their location vs the school location and their socio-economic class.
- To the head teacher of G.S RUSISIRO, he was recommended to ensure the effective discipline management as a tool to enhance teaching and learning. He was also recommended to increase the level of supervision during teaching and learning physics and ensure the efficient use of relevant instructional materials.
- To all teachers, to be active while teaching physics so that learners might be interested in learning hence the performance will be enhanced through the use of active teaching and learning methods.

- To all parents, they are recommended to ensure that their homes are conducive for learners to learn even when they are at home. They must also make sure that their children attend school and make a follow up of their children learning and discipline.
- To all students, they are recommended to develop positive attitudes towards learning and working hard while learning sciences.

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APPENDICES

Appendix 1: INFORMED CONSENT

Dear respondents,

We are **UMURAZA Irene** and **NGARUKIYIMANA Alias Francois**, students of Kibogora Polytechnic, faculty of education. We are carrying out a study about **IMPACT OF CLASSROOM MANAGEMENT ON ACADEMIC PERFORMANCE IN PHYSICS IN RWAMAGANA DISTRICT. Case study: G.S RUSISIRO** for the sake of completing our bachelor's degree in education at Kibogora Polytechnic.

We hereby request you to fill this questionnaire in order to get relevant information for our research. Your responses will be kept confidential and will only be used for the purpose stated above.

Your cooperation is our promotion.

UMURAZA Irene

NGARUKIYIMANA Alias Francois

Appendix 2: QUESTIONNAIRE DESIGNED FOR LEARNERS

Personal identification

1. Age:

- a. Up to 15 years
- b. 16-20 years
- c. Above 20 years

2. Gender:

- a. Male
- b. Female

Study Related Questions

1. How is the discipline at your school?

- a. Excellent
- b. Very good
- c. Good
- d. Poor

2. Which disruptive behaviors do students show at your school?

- a. Sleeping/dosing off
- b. Leaning on the desk
- c. Cheating in assignments

3. How does discipline management team influence your academic performance?

- a. Decrease of noise making in class
- b. Decrease of lateness at school
- c. Decrease of early school leave
- d. Increased engagement in school activities

4. What would be the influence of classroom motivation on students' academic performance?

Statement	Strongly agree	Agree	Disagree	Strongly disagree
Classroom motivation has greater influence on students' academic achievement.				
Teachers who motivate students in the class achieve more during teaching and learning process.				
Praise and recognition of students in the class enhance their academic achievement.				
Motivated students are easy to control, organized, monitor and discipline in the classroom.				
Classroom well equipped motivate students to learn.				

5. Which teaching and learning methods do you use at your school?

- a. Class presentations
- b. Group discussions
- c. Lecture
- d. Practice exercises

6. How do teaching and learning methods influence classroom management and academic performance?

- a. Arousal of interest and motivation
- b. Promotion of active learning
- c. Clarification of problem solving
- d. Easy retention of learnt material
- e. Promotion of respect

Thank you!

APPENDIX 3: Interview guide for teachers and school leaders

1. How old are you?
2. What is your gender?
3. What is your educational level?
4. How long have you been in teaching career?
5. How is the discipline of learners?
6. How does discipline influence academic performance?
7. Which disruptive behaviour do students show?
8. How do you cope with disruptive behaviours?
9. Which teaching methods do you use to enhance classroom management and academic performance?

APPENDIX 4: Research letter

APPENDIX 5: Students results in physics in 2020-2021

APPENDIX 6: Students results in 2021-2022