

Factors Affecting Mathematics Performance Of Junior High School Students In The Akuapem-South Municipality Of Ghana

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Abstract:

Academic performance is affected by several factors including home-based factors and school-based factors. The study adopted a descriptive survey research design. Nine Junior high schools were randomly selected for the study. A total of ninety (90) respondents including headteachers, mathematics teachers, parents and students were selected from nine Junior high schools participated in the study. Data for the study was collected using questionnaires and interviews. The findings revealed that factors responsible for the student's poor performance in mathematics included mathematics teacher's inability to motivate students, teachers not given students enough home work in mathematics, not using teaching learning resources to teach, teachers not using the right method to teach mathematics. The following recommendations were made based on the findings; collaborative method of teaching involve more practical hands-on activities which is core to improving students' holistic understanding of mathematical concepts needs to be used by mathematics teachers. adequate textbooks as well as teaching and learning resources must be provided by stake holders to the Junior high schools. This will enhance students' conceptual understanding of mathematical concepts. The study also revealed that teachers, students' and parents also influence mathematics performance.

Keywords: Factors, Performance, Mathematics, Affecting, learning.

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I. Introduction

The issue of student's learning outcomes in schools has been a major concern since the advent of modern education. Many countries have realized that students are at the center of the educational process and that without good outcomes any educational innovation will fail (Akon-Yamga, Funkor, Tsey, Kingsford-Adaboh, Quaye, & Ntewusu, 2024; Nyarko, Obeng, & Arhinful, 2024). Mathematics is a subject included in all school curricula and is a mandatory subject at the pre-school level. A good foundation in mathematics is very important for children in life. This is emphasized in the new curriculum (National Council for Curriculum and Assessment (NaCCA), 2019). The purpose of secondary education is to teach students how to read, write, calculate and develop the quality of life of students so that they can serve society properly according to their proper roles and responsibilities. themselves as good citizens. The focus of the new program is for all learners to acquire skills in the 4Rs: reading, writing, numeracy and creativity. It is expected that at any stage of leaving formal education, all learners will be equipped with these basic life skills, which are also a prerequisite for Ghana to become a learning nation. Graduates of the school system are expected to become functional citizens within the 4R framework and lifelong learners (NaCCA, 2019). However, regular attendance and attention to school do not guarantee this outcome (Nunyonameh, Obinnim, & Adzivor, 2024).

Students' academic performance can be associated by a number of factors, including students' fear of mathematics. This assertion is supported by Regina & Lezorgia, (2017), who articulates that poor performance can cause 'mathophobia' which is "an irrational dread or anxiety that blocks people from learning and enjoying anything they recognize as mathematical." Academic achievement in general and achievement in mathematics in particular characterize key educational outcomes (Tella, 2017). Investigations into literacy levels in recent years have shown that students in developing countries had lower levels of literacy than students in high-income countries who had received similar amounts of schooling (Williams, 2000). Several studies have revealed that although basic skills and levels of formal education are related, the majority of those who had completed primary school failed to attain the minimum standard of competency in the four subject areas tested of which mathematics was no exception as well as underscoring the critical relationship between outcomes and the quality of environments, contents and processes. (Grotsky, Warren & Kalogrides, 2009; Jordan, Hanich &

Kaplan, 2003). In order for a student to succeed he needs to be armed with strategies and techniques that will supplement his desire to reach his goals.

Academic performance in mathematics can be improved if students engage in efficient and adaptive study habits. This phenomenon can be linked to multi-factors that affect their study habit. Such factors can be found in their environment, which includes the type of house they live in, the people around them, the level of support they give, the student and his family's daily routines, the availability of resources for studying and also the student's family's economic status. If students appear to have negative effects on academic performance, it may be prudent to find other ways of helping students improve on their academic performance levels, thereby reaping the long-term benefits of formal education.

Problem Statement

Several studies have indicated a wide dissatisfaction with the current situation of academic performance in Mathematics in many countries including Ghana (Mensah, Acheampong, Ansu, Junior, & Karadaar, 2024). This poor performance put up by students at the Basis Education Certificate Examination (BECE) in mathematics indicates that the teaching and learning of mathematics at the pre-tertiary level have been underestimated. The results of the trends in mathematics and science shows that Ghana's performance at the Junior High School level was among the lowest in Africa and the world (Mensah, et al., 2024). This downward trend in students' performance in mathematics has been of grave concern to chiefs and people, teachers and all stakeholders of education as most of the students cannot gain entry to the Senior High School (SHS) level as a result of low grades they obtained in mathematics. Amoah, Amoah & Wiredu-Mintah (2023), posits that over the past ten years observations made indicates that between 40% and 53% of the candidates who sat for the BECE obtained grades between six (6) and nine (9) whilst candidates who obtained grades ten (10) to thirty-six (36) were between 57% and 70%. This poor overall performance in mathematics is a terrible situation which needs to be addressed (Amoah, et al., 2023; Salifu, & Kala, 2024). However, the persistence of the problem means that there is the need for empirical research to identify the root cause to the factors affecting poor performance in mathematics in order to find remedial measures.

Objectives

The objectives of the study were to investigate the

1. factors responsible for JHS students' poor academic performance in mathematics?
2. extent to which home-based factors affects JHS students' academic performance.
3. state of infrastructure and Teaching Learning Material in instructional delivery of Mathematics.

II. Literature

Use of Technology

The use of technology to reduce the inequalities through such vehicles as Internet-based learning and educational television cannot be done due to poor infrastructure in our schools. In areas where electricity and telephone lines are available, such approaches to learning may contribute significantly to improve the quality of educational processes. Outside of areas with relatively developed infrastructure, there are some innovations that use technologies to support priority content and outcome goals such as basic literacy. These include the use of the use of CD-ROMs to disseminate Internet downloads where connectivity does not exist, and the use of handheld computers for tasks which were previously confined to desktop computers. Using Internet technologies to assign teachers where they are needed is an innovation that could be explored further in developing countries (Droste, 2000).

McCrowre, & Adivar, (2024), are of the view that there are two fundamental equalizers in life — the Internet and education. E-learning eliminates the barriers of time and distance, creating universal learning-on-demand opportunities for people, schools, companies and countries.

There is much to be learned about how technology can reduce rather than reinforce educational disparities, but there is certainty in the fact that technology can be only part of a learning process if students are able to master the basic skills. As the author of a study on educational television said, "The human factor is the most important element in matters related to educational innovation.

Peaceful, safe environments, especially for girls.

Once girls gain access to schools, however, they may experience both direct physical threats and more subtle assaults on their confidence, self-esteem and identity (Dagunduro, 2024). The journey to school may be unsafe, since many girls experience harassment and physical attacks either on public transportation in cities or remote paths in rural areas. At school, teachers often require girls to do maintenance work while boys study or play, and allow boys to bully girls. Girls must often sit at the back of the classroom, where teachers may call on them infrequently. In some cases, extreme physical assault, including rape, may be perpetuated against girls at

school. The threats that come in the form of unequal treatment, harassment, bullying and undervaluing girls harm them in profound and long-lasting ways.

School infrastructure

The Ministry of Education (1994) stated that material resources such as furniture, equipment and recreational facilities are vital to effective education. Wobo, & Chuku, (2024), stated that many schools are in agreement that availability of physical and material resources are very vital for the success of any worthwhile educational endeavor. The authors pointed out that availability of school buildings, classroom furniture and other instructional facilities are imperative for the attainment of educational objectives. Again, they identified attractive facilities such as buildings, libraries, recreational facilities and instructional materials as a major factor contributing to academic achievement in the school system. The quality of school buildings may be related to other school quality issues, such as the presence of adequate instructional materials and textbooks, working conditions for students and teachers, and the ability of teachers to undertake certain instructional approaches. Such factors as on-site availability of lavatories and a clean water supply, classroom maintenance, space and furniture availability all have an impact on the critical learning factor of time on task. When students have to leave school and walk significant distances for clean drinking water, for example, they may not always return to class (Dewey, 2024). Even when schools do have adequate infrastructure, parents may be reluctant to allow children especially girls to attend if they are located too far away from children's homes. In general, parents often consider the location and condition of learning environments when assessing school quality and this can influence school participation.

Physical learning environments are places in which formal learning occurs, range from relatively modern and well-equipped buildings to open-air gathering places (Lasiewicz-Sych, 2024). The quality of school facilities seems to have an indirect effect on learning, an effect that is hard to measure. Some authors argue that "empirical evidence is inconclusive as to whether the condition of school buildings is related to higher student achievement after taking into account student's background" (Langensee, 2024). A study in India, however, sampled 59 schools and found that of these only forty-nine (49) had buildings and of these, twenty-five (25) had a toilet, twenty (20) had electricity, ten (10) had a school library and four had a television (Saha, 2024). In this case, the quality of the learning environment was strongly correlated with students' achievement in Hindi and mathematics (Saha, 2024). In Latin America, a study that included 50,000 students in grades three and four found that children whose schools lacked classroom materials and had an inadequate library facility were significantly more likely to show lower test scores and higher-grade repetition than those whose schools were well equipped. Other studies, carried out in Botswana, Nigeria and Papua New Guinea, concur with these latter findings (Nwando, 2024).

Home based factors

The home has both positive and negative influences on children. Eden, Chisom, & Adeniyi, (2024), purported that parents who see schooling as preparation for future life are most likely to encourage their children to attend school consistently. As such the home environment and the climate pervading in the home may precipitate the low performance of students. Parents who had negative school experience tends to share or transmit these negative attitudes towards their children and that Parents' supportiveness as these supports include the obligation of parents towards their children. According to Song, & Wu, (2024). parents who had negative school experience tend to share or transmit these negative attitudes towards their children. There should be the provision of food clothing and shelter, materials necessary for learning as well as parent's involvement in regular checks of what is being thought at school and provision of direct instruction to the student where necessary. Parental discipline affects academic output of students. if parent's behavior and conversation do not show that they believe learning and schooling are important students are likely to feel they are important (Clarke, 2024). Such situations are true in areas where most parents might- have attended school under harsh condition and in developable school which advert might have affected their academic performance. Parents support consistency may not necessarily depend on their socio-economic status, but their love and care, understanding of academic responsibility and investment in the direction of their children (Mintchev, Daher, Jallad, Zaher, Pietrostefani, Ghamrawi, & Moore, 2024).

Physically and psychosocially healthy children learn well. Healthy development in early childhood, especially during the first three years of life, plays an important role in providing the basis for a healthy life and a successful formal school experience (World Health Organization, 2003). Adequate nutrition is critical for normal brain development in the early years, and early detection and intervention for disabilities can give children the best chances for healthy development. Prevention of infection, disease and injury prior to school enrolment are also critical to the early development of a quality learner. Parent's in-ability to provide their wards with their essential needs may engender in security in them. Children whose fees are not paid on schedule and supplies are not met usually do not develop interest and love for the school and this can result in dropout.

Early childhood psychosocial development experiences

Positive early experiences and interactions are also vital to preparing a quality learner. A large study in twelve (12) Latin American countries found that attendance at day care coupled with higher levels of parental involvement that includes parents reading to young children is associated with higher test scores and lower rates of grade repetition in primary school (Marti, Merz, Repka, Landers, Noble, & Duch, 2018). Evidence from the Philippines, Sri Lanka and Turkey has shown that children who participate in early intervention programmes do better in primary school than those who do not benefit from formal early child programmes and studies from India, Morocco and Latin America demonstrate that disadvantaged children benefit the most from such programmes (Snilstveit, Stevenson, Menon, Phillips, Gallagher, Geleen,, ... & Jimenez, 2016). In addition to cognitive effects, the benefits of good early childhood programmes include better psychosocial development. Effective and appropriate stimulation in a child's early years influences the brain development necessary for emotional regulation, arousal, and behavioural management. A child who misses positive stimulation or is subject to chronic stress in the pre-school years may have difficulty with psychosocial development later in life (Carr, 2015). A high level of quality in early childhood development programmes can be achieved when health and nutrition components are combined with structured psychosocial development in the pre-school years.

Some parents and most adults may not have much interest or have less knowledge in mathematics to direct instruction in mathematics to their wards. Others may show degree of interest in their wards without certainly knowing how to solve the given assignment. As such parent's mathematics illiteracy may or may not prevent them from supervising their wards work. Lack of interest and supervision by parents may inhibit motivation towards learning mathematics by students. These are issues that can be looked at in relation to performance of students in the BECE mathematics.

III. Methodology

The study was a descriptive study in which a survey research design was adopted. The instrument used for the study was a questionnaire and data obtained was analyzed using a descriptive statistic. The population for the study consisted of all Junior high schools in the eastern Region of Ghana.

Study Area

The Akuapem-North Municipality is in the eastern region was the study area. The municipality has nine circuits within its jurisdiction. The nine circuits within the Municipality are Mangoase, Amanfrom, Adukrom, Akropong, Larteh, Mampong, Adawso, Tinkong and Okorase. It stretches from Mampong- Akuapem to Okorase near Koforidua and Akropong through to Nyamebekyere. There were eighty-nine (89) registered Junior High Schools in the Municipality.

Study Population

Obilor, (2023), postulates that a population refers to any collection of specified groups of human beings or no human entities such as objects, educational Institutions, time, units and geographical area. For the purpose of the study, the targeted population will be:

- Students in JHS in the Akuapem-North Municipality
- Mathematics teachers in JHS in the Akuapem-North Municipality.
- Headteachers in the JHS in the Akuapem-North Municipality.
- Parents of students in JHS in the Akuapem-North Municipality.

Sample Size

In all, ninety (90) respondents were selected for the study. The breakdown is as follows; Nine (9) schools were selected from the 9 circuits within the Municipality. Six students, a Mathematics teacher and a head teacher were also selected from each of the schools within the circuits. Two (2) parents were also selected based on the students selected.

Sampling Procedures

The study collected data from nine selected schools in the Akuapem-North Municipality, using a random selection method. The researchers selected students, parents, headteachers, and mathematics teachers using convenience methods. The study involved nine schools, six students, a Mathematics teacher, and a headteacher, and two parents based on the selected students.

Data Collection Instruments

The research used questionnaires and semi-structured interviews to collect data from selected respondents in various schools. The questionnaires were developed with close-ended questions, allowing

respondents to express their opinions and views. The semi-structured interview guide allowed the researcher control over information collection, while allowing for free flow of ideas. Two sets of questionnaires were administered to teachers and students, validating the results. Secondary data was obtained from books, journals, and the internet, indicating a need to improve mathematics performance.

Reliability and Validity

The questionnaires validated on ten campus respondents, revealing a need for improved mathematics performance. Data from the West African Examinations Council (WAEC) and other literature sources supports this, indicating the need for further improvement in mathematics.

Data Collection Procedure

The researcher used a questionnaire and interview guide to identify factors affecting students' poor mathematics performance, coding responses and creating a database using Statistical Package for Social Science (SPSS).

Data Processing and Analysis

Data collected from the study was quantified and transformed into simple frequencies, percentages, tables, graphs after which they were given qualitative interpretation with the relevant literature.

Ethical Considerations

Permission, Consent and Assent

Permission letters were sent to the Municipal Director of Education and the two Junior High Schools whose students and mathematics teachers will be involved in the study. The interview sessions between the mathematics teachers and the students were conducted and recorded, transcribed and stored on a computer.

IV. Results

Factors responsible for JHS student's low academic performance in mathematics

Table 1 shows the results of the analysis from students' responses to find out whether most students perform poorly in mathematics

Table 1 MOST STUDENTS PERFORM POORLY IN MATHEMATICS

	FREQUEN		
	CY	PERCENT	CUMULATIVE PERCENT
STRONGLY AGREE	23	42.6	42.6
AGREE	15	27.8	70.4
DISAGREE	7	13.0	83.4
STRONGLY DISAGREE	9	16.6	100.0
TOTAL	54	100.0	

The results of the analysis from students responses according to Table 1 indicated that seven (23) student's representing 42.6% strongly agreed that most students perform poorly in mathematics, fifteen (15) student's representing 27.8% agreed that most students perform poorly in mathematics whiles twenty-three (7) students representing 13.0% disagreed with the fact that most students perform poorly in mathematics, nine (9) student's representing 16.6% strongly disagreed that most students perform poorly in mathematics. As such the responses indicated that almost (70.4%) representing two-thirds of students perform poorly in mathematics.

Table 2 shows the results of the analysis from students' responses to find out causes of student's poor performance in mathematics

Table 2 Causes Of Students Poor Performance In Mathematics

	FREQUENC		
	Y	PERCENT	CUMULATIVE PERCENT
Inadequate use of TLRs	14	26.8	26.8
Lack of motivation	24	43.6	70.4
Inadequate textbooks	10	17.6	87.0

Lack of commitment	6	12.0	100.0
TOTAL	54	100.0	

The results of the analysis from students responses according to Table 2 indicated that fourteen (14) student’s representing 26.8% stated that most mathematics teachers do not use adequate TLRs when they are teaching, twenty-four (24) student’s representing 43.6% agreed that most students not motivated in studying mathematics whiles ten (10) students representing 17.6% stated that there re inadequate textbooks for studying mathematics, six (6) student’s representing 12.6% stated that there is lack of commitment on the part of mathematics teachers. As such the responses indicated that almost (70.4%) representing two-thirds of students perform poorly in mathematics.

The extent to which home based factors influence JHS student’s academic performance in mathematics

To find out the impact of home-based factors on JHS students’ academic performance in mathematics for the study, responses of students’ questionnaires were analyzed.

Table 3 shows that the results of the analysis from students’ responses as to whether they get enough time to do their homework.

Table 3 I GET ENOUGH TIME TO DO MY HOME WORK

	FREQUENCY	PERCENT	CUMULATIVE PERCENT
STRONGLY AGREE	7	13.0	13.0
AGREE	15	27.8	40.7
DISAGREE	23	42.6	83.3
STRONGLY DISAGREE	9	16.7	100.0
TOTAL	54	100.0	

The results of the analysis from students responses according to Table 1 indicated that seven (7) student’s representing 13.0% strongly agreed that they get enough time to do their homework, fifteen (15) student’s representing 27.8% agreed that they get enough time to do their homework whiles twenty-three (23) students representing 42.6% disagreed with the fact that they get enough time to do their homework, Nine (9) student’s representing 16.7% strongly disagreed that they get enough time to do their homework. As such the home environment and the climate pervading in the home may precipitate the low performance of students.

Table 4 MY PARENTS ALWAYS FIND OUT WHAT WAS LEARNT IN THE MATHEMATICS CLASS

	FREQUENCY	PERCENT	CUMULATIVE PERCENT
AGREE	24	44.4	44.4
DISAGREE	23	42.6	87.0
STRONGLY DISAGREE	7	13.0	100.0
TOTAL	54	100.0	

Students responses on the techniques and skills used when teaching mathematics indicated from Table 4 that twenty-three (23) students representing 42.6% disagreed with the fact that my parents always found out what was learnt in the mathematics class, seven (7) students representing 13.0% strongly disagreed with the fact that their parents always found out what was learnt in the mathematics class, also twenty-four (24) students representing 44.4% strongly agreed that their parents/guardian always find out what was learnt in the mathematics class.

Students’ responses on whether their parents/guardians provide all what students need for school indicated from Table 5 that twenty (20) students representing 37.0% strongly disagreed with the fact that their parents provide all they need for school, fourteen (14) students representing 25.9% students also disagreed with the fact that their parents/guardian provides all they need for school. Only eight (8) and twelve (12) students representing 22.2% and 14.9% respectively agreed or strongly disagreed with the fact that their parents provide all they need for school.

Table 5 MY PARENTS/GUARDIANS PROVIDE ALL THAT I NEED FOR SCHOOL

	FREQUENCY	PERCENT	CUMULATIVE PERCENT
STRONGLY AGREE	12	22.2	22.2
AGREE	8	14.9	37.1
DISAGREE	14	25.9	63.0
STRONGLY DISAGREE	20	37.0	100.0
TOTAL	54	100.0	

The state of infrastructure and other resources in instructional delivery of Mathematics

The second research question raised for the study was to find out the state of infrastructure, TLRs and other resources on instructional delivery of Mathematics. In order to achieve this, the responses to the students and teachers' and headteachers' questionnaires were examined and analyzed using descriptive statistics.

From Table 4, two (2) teachers representing 22.2% strongly agreed that their schools had different mathematics textbooks, one (1) teacher representing 11.1% agreed that their schools has different mathematics textbooks also four (4) teachers representing 44.5% disagreed that their schools had different mathematics textbooks and two (2) teachers representing 22.2% strongly disagreed that their schools had different mathematics textbooks.

Table 6 MY SCHOOL HAS DIFFERENT MATHEMATICS TEXTBOOKS

	FREQUENCY	PERCENT	CUMULATIVE PERCENT
STRONGLY AGREE	2	22.2	22.2
AGREE	1	11.1	33.3
DISAGREE	4	44.5	77.8
STRONGLY DISAGREE	2	22.2	100.0
TOTAL	9	100.0	

Teachers' responses from table 4.4.2 indicated that five (5) teachers representing 22.2% strongly agreed that their schools had different mathematics textbooks while four (4) teachers representing 44.5% disagreed that their schools had different mathematics textbooks.

Discussions on the causal factors of students' poor academic performance

The study identified factors that were responsible for the low academic achievement of JHS students. The factors causing poor performance of the students were attributed to teachers, school environmental, parents and the students. The factors were further classified into home-based factors and environmental factors. of the students. The school environmental factors identified include limited number of teachers with high academic qualification, inadequate teaching and learning materials, and misuse of contact hours with students. The teacher factors that were found to contribute to the low academic performance were incidences of lateness to school and absenteeism, inability to complete the syllabi and inadequate homework assigned to students. The student characteristics found significant were incidences of lateness to school and absenteeism, lack of assistance with studies at home and use of local language in the classroom. Home-based factors or parental support variables causing students to perform poorly academically were their inability to provide textbooks and supplementary readers, low level of interaction between students and teachers. The study identified factors affecting the low academic performance of students in Junior High School and for improving their academic performance. It is worth stating that there is the need to improve parent's attitudes, recognize individual differences in education intensify supervision of teachers, institute incentive packages, sensitize, counsel and motivate students.

Discussions on the Impact of home-based factors on students' academic performance

In order to find out the impact of home-based factors on students' academic performance, an interview was conducted for some of the parents. The parent's responses from the interview revealed that most of them are not educated hence finds it difficult to assist the students in any mathematical problem. Again, some felt that, due to financial problems, they are not able to provide the children with everything they need for their math class, while a small percentage commented that they try to provide the children as much as possible. guys all of which you require, however I have been missing you. Some parents attributed the components causing the children's poor performance in mathematics to their inability to motivate them, to not being able to learn from the students what they learned at school, and also to laziness because of the students.

As to whether motivation, given students time to do their homework and supervising them could improve students' performance in mathematics, the number of parents who responded in the affirmative were far greater than the number of parents who responded that could not improve their performance in mathematics.

For instance Parent M said *"I think because I don't supervise students to do their mathematics homework they don't also perform well in mathematics."*

Parent N was also of the view that *"providing the students with all they need in mathematics will improve their academic performance in mathematics."*

Parent O also explained that *"if parents will motivate and ensure that their children get enough time to do their homework it will improve their performance in mathematics"*

Parent P also stated that *"if teachers will give students daily assignment the saying that practice makes a man perfect will bring maximum benefit to students which will improve our performance in Mathematics"*.

Discussion on the state of infrastructure and Teaching learning resources in instructional delivery of Mathematics

Majority of the schools strongly agreed that their schools had different mathematics textbooks most of which were out of date and could not meet the current educational trends disagreed that their schools had different mathematics textbooks. A textbook is a book designed to provide a solid academic version of an area of knowledge or study. Textbooks play an important role in mathematics education because of their close relation to classroom instruction. They identify the topics and order them in a way student should explore them. They also attempt to specify how classroom lessons can be structured with suitable exercises and activities (Johansson, 2003). In some sense, they provide an interpretation of mathematics to teachers, students and their parents. Moreover, textbooks have a prominent position in curriculum reforms and are considered as the most important tool for the implementation of a new curriculum in many countries.

Problems in textbooks can be classified into two general categories. Text/worked example problems, which are contained in the text part and exercise problems which are located in the exercises of all kinds in the textbooks. However, most mathematics textbooks simply instruct students to evaluate a task. When doing so, however, students have difficulty in solving the mathematical problem because they do not understand the problem. Therefore, if there are different textbooks in schools some of which are out of date, then the teaching learning process will be affected.

It is manifestly basic that most of the schools do not have manipulatives and Teaching learning resources. In addition to that most teachers cannot spend their salary on buying teaching learning resources and therefore there is the need for the school to purchase some teaching learning resources. Despite the fact that teachers use Teaching learning resources, they do not use it as often as it's supposed to be used for students to benefit fully from the various lessons. This was confirmed by both the headteachers and teachers' responses on teachers' use of teaching learning resources in teaching mathematics.

Teachers' frequency on the use of teaching learning resources in teaching mathematics indicated that teachers do not always use teaching learning resources to teach. The use of teaching learning resources in teaching mathematics can also be termed as "manipulatives". These "manipulatives" refers to physical objects that connect to mathematical symbols and ideas. Manipulatives present a kinesthetic, hands-on approach that allows students to discover mathematics concepts in a new light. Some examples of manipulatives or teaching learning resources are base 10 blocks, geometric blocks, algebra tiles, spinners and fraction circles. The resources and manipulatives work particularly well when broaching a new topic or engaging special needs learners. Students must be engaged in the learning process through practical applications of mathematics. If teachers would use manipulatives, it will serve as hands-on learning approach which will engage students' minds as they use the manipulatives to generate models and representations to answer mathematics problems.

On the state of their classrooms confirmed that most of their classroom blocks were in bad states and that the complete physical and substantial structure of the school buildings were unpleasant, unattractive which de-motivates learners to achieve very low rationally and un-inspires them to accomplish their dreams and aspirations.

On supervision of mathematics teaching, it must be stated that the head teachers supervise mathematics teaching either once or twice in a term. It was however understandable that the head teachers spent more time

supervising newly trained teachers who taught mathematics than teachers who have been teaching for more than two years and therefore could not tell the frequency at which teachers used teaching and learning materials. It is worth noting that the state of infrastructural materials in instructional delivery in mathematics in the schools must be changed or improved.

The observations of this study collaborate earlier findings by Olufemi, Adediran, & Oyediran, (2018). who also observed that there were several factors responsible for students' poor academic performance. These included the teacher factors, school environmental factors as well as home-based factors. This was further emphasised by Baidoo-Anu, (2017).

V. Conclusion

The study examined the perceived factors that were responsible for the low academic achievement of students. Factors related to school environment, teachers, home conditions and students' characteristics were found to be contributing to poor academic performance of the students. These factors included students and teacher absenteeism, students and teacher's lateness to school, inadequate teaching and learning resources, parents not providing students with subject text book and breakfast. These factors attributed to teachers, students, parents and the school environments were primarily responsible for the low academic performance of students.

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