UNIVERSITY OF CAPE COAST

INVESTIGATING FACTORS INFLUENCING PERFORMANCE IN WASSCE MUSIC AMONG SELECTED SENIOR HIGH SCHOOLS IN THE CAPE COAST METROPOLIS

ADUNKWAH EMMANUEL PRINCE OPOKU

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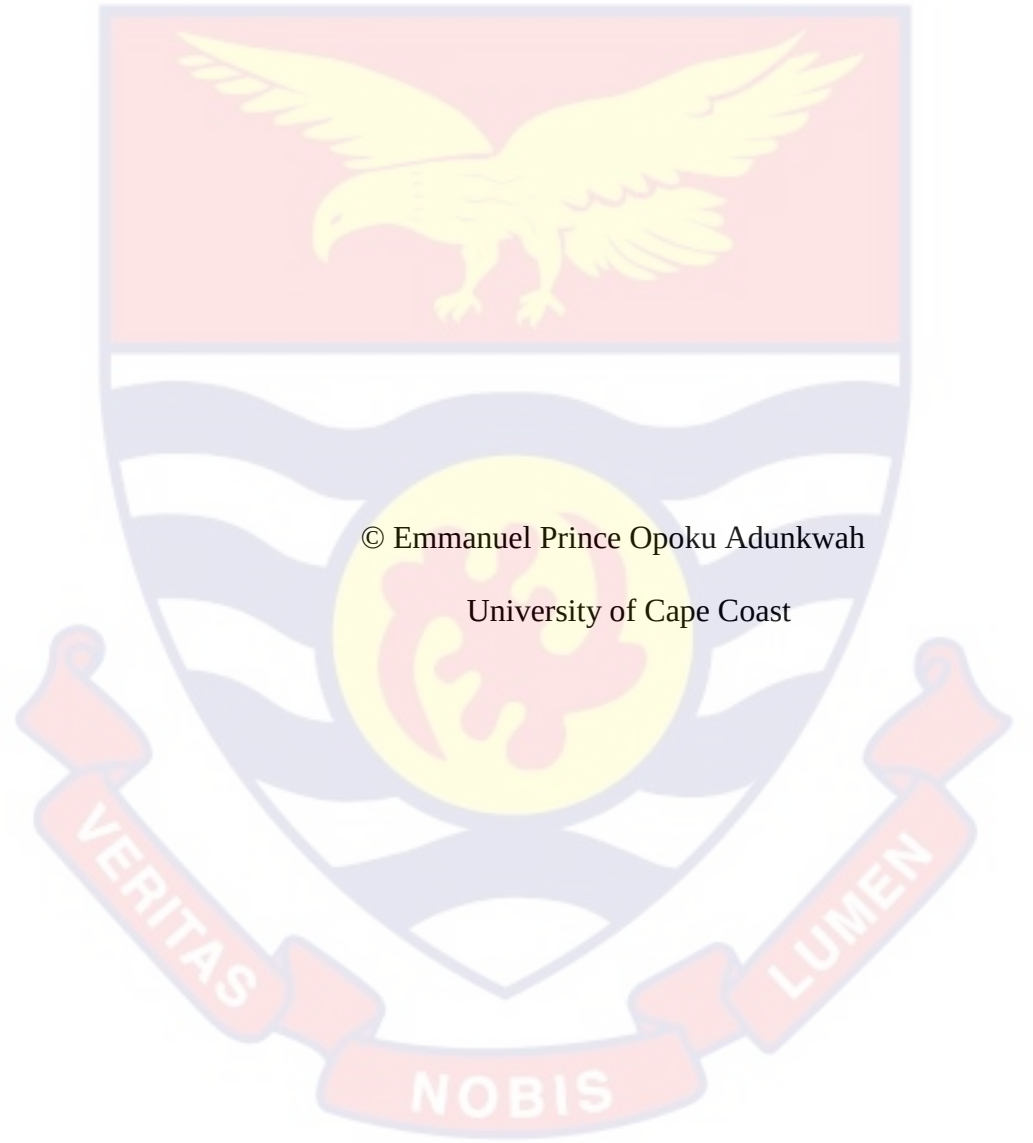

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INVESTIGATING FACTORS INFLUENCING PERFORMANCE IN WASSCE MUSIC AMONG SELECTED SENIOR HIGH SCHOOLS IN THE CAPE COAST METROPOLIS

BY

ADUNKWAH EMMANUEL PRINCE OPOKU

Thesis submitted to the Department of Music and Dance of the Faculty of Arts, College of Humanities and Legal Studies, University of Cape Coast, in partial fulfillment of the requirements for the award of Master of Philosophy in Music Education

OCTOBER 2021

DECLARATION

Candidate's Declaration

I hereby declare that this thesis is the result of my own original research and that on part of it has been presented for another degree in this university or elsewhere

Candidate's Signature: ..... Date.....

Name: .....

Supervisor's Declaration

I hereby declare that the preparation and presentation of the thesis were supervised in accordance with the guidelines on supervision of thesis laid down by the University of Cape Coast

Principal Supervisor's Signature..... Date.....

Name: .....

ABSTRACT

The study examined school factors influencing performance in WASSCE music among selected Senior High Schools in the Cape Coast Metropolis. Being a quantitative research, the study used the descriptive cross-sectional survey design. The study employed purposive sampling and the census survey technique with the help of questionnaire to collect data from 440 SHS 2 and SHS 3 music students in the selected Senior High Schools in the Cape Coast metropolis for the study. Data was processed using SPSS Statistics (version 29) and was analysed using descriptive (mean and standard deviation) and inferential (ANOVA) statistics. A Bonferroni Post-Host test was further performed to compare the mean differences among the selected schools. The results indicate that a range of both internal and external school factors exert significant impact on the performance of students in WASSCE music. Furthermore, the study revealed a statistically significant difference in the means of schools in relation to the internal factors influencing music performance, thus, internal factors that influence music performance differ with respect to each school. More so, the study found that there is a statistically significant difference in the means of schools in relation to external school factors influencing music performance, thus, external factors that influence music performance differ with respect to each school. The study, therefore, recommended that the government, appropriate school authorities as well as parents provide a conducive school environment that has good climate for effective teaching and learning. Further, it is recommended that government and educational policy makers ensure that resources are allocated more efficiently to address individual school specific needs.

KEY WORDS

Academic performance

Music education

External factors

Internal factors

ACKNOWLEDGEMENT

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DEDICATION

To my treasured parents, Rev. and Mrs. Adunkwah, my siblings and loved ones.

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CHAPTER ONE

INTRODUCTION

Background to the study

It seems to indicate that there is a lack of documented evidence regarding the precise dates of when formal music education commenced in Ghana; however, available evidence indicates that it encompassed the instruction of vocalization in a manner reminiscent of prevailing practices in Europe, specifically during the 19th century (Flolu, 1994; Kwami, 1994). History has it that the early European music instructors imparted the musical compositions they brought from Europe with the immediate intention of educating Africans so as to enable them to instruct basic hymns and songs to the different church choirs that had begun to emerge (Cole & Cole, 2001; De Beukelaer, 2015).

According to Flolu (1994), by 1970, in the era of post-independence, the nation was becoming more and more interested in music education. Subsequently, the National Academy of Music was established on the Winneba campus to expand further the scope of music teacher education. This institution became the Department of Music of the University College of Education, Winneba in 1992 as part of the Government's University Rationalisation programme.

By 1974, an increasingly important place was offered to African Music in the curriculum of schools; in that same year, the new structure and content of educational curriculum was published to include music not as an independent subject, but clustered with Dance, Drama and Religious Studies for Junior Secondary Schools. At the Senior High school lower level, (Forms

1-3) Religion, Music, Art and Physical Education were made optional subjects (Flolu, 1994).

In Ghana, at the basic level of education, music is not a stand-alone subject. In view of that, it is integrated into one unit as creative arts where music, drama, dance and fine art are supposed to be taught as one subject. In such a situation, for example, teachers who are inclined to fine art, teach only that to the neglect of music and other subjects. At the Junior High School (J.H.S.) level, music is studied as a stand-alone subject. Notwithstanding the content of the music aspect of the Creative Arts curriculum reflection on Ghanaian children musical attitude, research has revealed some challenges affecting its formal teaching and learning. Opoku-Asare, TachieMenson, and Ampeh, (2015) and Adjepong (2018) observed that the Creative Arts, including music, are taught by primary school teachers who lack adequate knowledge and skills about the implementation of the curriculum. In this research, the author aimed to assist pre-service teachers to teach the performing arts. Adjepong (2018) further identified expression of fear and lack of knowledge and skills by pre-service teachers in teaching music during their teaching practice in classroom settings.

Amuah and Adum-Attah (2016, 72) underscored a significant issue in music education by emphasizing the deficiency in teachers' requisite pedagogical skills to effectively impart syllabus materials. Additionally, the misalignment of pupils' innate curiosity for sound exploration with the imposition of adult musical values, as observed by Dzansi (2004) and Flolu (1994), poses another challenge. The overarching problem appears to be a pervasive lack of comprehensive knowledge, skills, and understanding in

music education, notably impeding the ability of a majority of primary school educators to provide enriching learning experiences for their students.

In contrast, the context of Senior High Schools presents a notable divergence. In the 1990s, the field of music education recorded a smaller number of 50 candidates across 10 schools nationwide. Presently, this academic discipline engages a substantially augmented cohort of 2,000 candidates, representing 105 schools, in the West African Senior High School Final Examinations. This confirms the recent increasing interest in music as well as an increasing number of schools ready to integrate the music program into their Senior High School curricula.

Educational institutions, encompassing schools, colleges, and universities, hinge upon their students as their most indispensable assets. The academic performance of students is inextricably linked to the social and economic development of a nation, as it contributes to the production of high-quality graduates who subsequently assume leadership roles and become a valuable workforce for the country. Consequently, student academic performance evaluation has garnered significant research attention, posing a challenging area within academic literature. The academic achievement of music students is notably affected by an array of factors, including social, psychological, economic, environmental, and personal influences, though these factors exhibit considerable variability among individuals and across different nations (Mushtaq & Khan, 2012).

Globally, educational assessment predominantly relies on examinations, serving as a pivotal component within the educational framework for evaluating students' competencies and facilitating their

progression in academia and professional opportunities. Nonetheless, a significant portion of students, including those in countries like Ghana, encounter low performance in national music examinations, prompting substantial concern and prompting investigations into the underlying determinants. Several factors contributing to students' underachievement in music education within schools have been identified, encompassing inadequate school facilities, a shortage of qualified educators, student misconduct, adverse home environments, limited cognitive abilities, anxiety, and the pursuit of achievement (Ndirangu, 2007).

While there has been a notable enhancement in school accessibility across developing nations since 1990, there remains a persistent disparity in learning outcomes, as elucidated by Perraton (2012). Consequently, a long-standing and central inquiry within academic research has revolved around the factors contributing to the consistent disparities in music examination performance between various Public Senior High Schools.

In the contemporary context marked by globalization and technological advancements, music education is recognized as an integral component of human endeavor. It holds a pivotal position in the cultivation of human potential and is intricately connected to individual welfare and prospects for an improved standard of living, as underscored by Battle and Lewis (2002). Music education not only facilitates the acquisition of knowledge and skills essential for enhancing personal productivity and quality of life but also fosters avenues for economic advancement, thereby contributing to a nation's overall economic growth, in accordance with the insights of Saxton (2000).

The existing body of literature highlights a multitude of factors influencing students' performance in music education, which are universally applicable, but research has yet to comprehensively address the specific factors pertinent to developing countries (Gillies & Quijada, 2008). Neglecting these factors has the potential to undermine educational investments in developing countries, often funded through foreign loans. Although several factors have been associated with improved academic performance, the precise mechanisms through which they impact a student's music education remain partially understood (Topor, Keane, Shelton, & Calkins, 2010). The contemporary concern revolves around a diminishing motivation among students to engage with music education (Gottfried, Marcoulides, Gottfried, & Oliver, 2009; Kiemer, Gröschner, Pehmer & Seidel, 2015; Vedder-Weiss & Fortus, 2011).

Moreover, investigating the determinants of academic performance in secondary school music assumes particular significance, as this life stage is pivotal for students in shaping their future paths (Gottfried et al., 2009; Singh, Granville & Dika, 2002). This paper seeks to delve into the factors influencing students' performance in music education, drawing upon relevant theories and empirical studies, with a special emphasis on research conducted in developing countries to elucidate the parameters affecting secondary school music performance.

Statement of the problem

The Ghanaian higher education admission criteria necessitate students to attain a minimum grade of C6 in their respective subjects. A review of educational data for the 2018/2019 academic year reveals that the majority of

schools registered poor performance in the WASSCE music examination, with only a limited number of public schools exceeding the average (Examiners Report, 2019). These public schools typically enroll more than 70% of students entering secondary schools annually. Examination of the academic performance of music students in selected Senior High Schools within the Cape Coast Metropolis (see Table 1) demonstrates a substantial disparity in school-level performance. Consequently, it is imperative to investigate the underlying factors contributing to the divergent outcomes among these schools.

Table 1: 2019 Music Performance Distribution

2019 performance Distribution			
Schools	**No. of Students Presented**	**Grade Percentage**	**Overall Performance**
Wesley Girls SHS	5	5 stu. = A1	100% Excellent
Ghana National College	29	26 stu. = A1	89% Excellent
		1 stu. = B2	Very good
		2 stu. = B3	Good
Christ The King SHS	26	8 stu. = B2	30% Very Good
		3 stu. = B3	10% Good
		15 stu. = D7, E8	60% Below Average
Efutu SHS, High/Tech. Sch,	62	12 stu. = B3	20% Good
		49 stu. = D7, E8, F9	80% Below Average

Source: WASSCE Music Examination, Examiners' Report (2019)

In Ghana, it appears that no academic year passes by without any call for concern in terms of students' performance in music. Usually, it becomes political football with blames here and there, either on teachers or students without recourse to what really caused such failures. Ajayi (2001) argued that a lot of factors can affect students' academic achievement generally, including performance in examinations because of differences in schools and individuals.

Despite having several empirical studies that have examined academic performance in different levels of education in Ghana and other African countries, there are still critical gaps in the current literature that requires further empirical evidence. For instance, the majority of the studies that examined academic performance focused primarily or on either parents or student characteristics (Amponsah, Milledzi, Ampofo, & Gyambrah, 2018), or teacher characteristics and teacher motivation (Costa, 2016) or curriculum characteristics (Hervie & Winful, 2018). These studies have examined these factors in isolation. While these factors studied could be said to influence students' academic performance, focusing on the elements in isolation may necessarily not provide in-sight into how these factors interact in complex ways to affect academic performance. These gaps have led to a limited understanding of what can predict students' academic performance in music education in low and middle-income countries such as Ghana.

Academic performance is obviously a result of a number of factors. It is, therefore, important to investigate the factors which are contributing to poor academic performance in some selected Senior High Schools in Cape Coast Metropolis. In light of this, the study sought to investigate whether

school-based factors such as; learning resources, administrative practices and teacher related factors such as; teachers' professional qualification, absenteeism, motivation and workload and students socio-economic background factors such as; socio-economic status of parents and family size are contributing factors to music students' poor performance in WASSCE.

Purpose of the study

The purpose of this study is to investigate factors influencing performance in WASSCE music among selected Senior High Schools in the Cape Coast Metropolis.

Objectives of the study

Specifically, the objectives of the study are:

1. To find out internal school factors influencing performance in WASSCE music among selected Senior High Schools in the Cape Coast Metropolis.
2. To examine external school factors influencing performance in WASSCE music among selected Senior High Schools in the Cape Coast Metropolis.

Research questions

1. What internal school factors impact the performance of Senior High School music students in the WASSCE among selected schools in the Cape Coast Metropolis?
2. What external school factors influence the performance of Senior High School music students in the WASSCE among selected schools in the Cape Coast Metropolis?

Research Hypotheses

1. *H0*: There is no statistically significant difference in internal school factors that affect music students' performance across SHS.

   H1: There is a statistically significant difference in internal school factors that affect music students' performance across SHS.

2. *H0*: There is no statistically significant difference in external school factors that affect music students' performance across SHS.

   H1: There is a statistically significant difference in external school factors that affect music students' performance across SHS.

Significance of the Study

The findings of the study could be used as a framework for improving academic performance in music education in all public Senior High Schools in Ghana. Principals may utilize the results of the study to establish ways and means of improving performance in their respective schools, including those that have been enjoying good academic standards. The factors that are responsible for poor academic performance are documented and can be used as a point of reference to carry out further research. Music students can use the results at their personal level to obtain information on the various factors that influence academic so that they can overcome such factors in the preparation of their WASSCE examination.

The findings of the study will help Senior High School administration to design and implement the policies to improve the students' performance and the quality of education by changing the attitude of students towards learning, facilitating students and improving the teaching procedures. Parents

can use the outcomes of the study to solve students' problems, especially those relating to resources allocation.

This study holds considerable academic and temporal significance as it addresses the substantial resource investments made by government, parents, and education stakeholders. It offers valuable insights into the determinants of academic performance, thereby facilitating informed resource allocation strategies to mitigate challenges associated with these factors. Low levels of performance in examinations leads to undesirable wastage and denies students entry into their preferred programmes at the tertiary institutions when trying to further their studies, hence, the outcome of this study will better help students pass their WASSCE examination and progress to the next level.

Delimitation of the Study

There are several Senior High Schools in the Cape Coast metropolis, however, the study is delimited to Senior High Schools in Cape Coast Metropolis that are specifically offering music as part of the Arts programme. Also, there are myriads of determinants of academic performance as espoused in literature, however, this study only examines the impact of internal and external factors that influence academic performance of SHS music students in their WASSCE examination.

Limitations of the Study

The adoption of close-ended Likert-type scale items in a survey questionnaire limits the amount of information collected from the respondents. Additionally, the conditions of the respondents during administration may affect the use of questionnaires, potentially leading to responses that do not

accurately reflect their opinions. The researcher asked the respondents to be honest in their responses to mitigate this potential impact.

Definition of terms

Music academic performance is the ability to study and remember musical facts and being able to communicate musical knowledge in writing internal and external examinations.

Learning resources refer to text books, videos, software and other materials that teachers use to assist students to meet the expectations for learning and physical facilities such as classrooms, computers and laboratories.

Organisation of the Study

This study comprises five chapters: Chapter One provides an introduction with a background to the study, problem statement, research purpose, objectives, questions, significance, delimitations, limitations, and organisation of the study. Chapter Two conducts a comprehensive literature review, specifically under theoretical and conceptual review. The chapter introduced a conceptual framework to help establish a pictorial representation of the relationship between the study variables. Chapter Three elucidates the research methods employed, encompassing research design, population, sample, sampling procedure, instrumentation, data collection, data processing, and analysis. Chapter Four considers the data analysis and discussion. Finally, Chapter Five summarises the research process, major findings, and presents conclusions and recommendations as well as some suggestions for further studies.

CHAPTER TWO

LITERATURE REVIEW

Introduction

This chapter reviews related literature of earlier studies conducted in relation to the research topic. The literature review captured the theoretical and conceptual, empirical review and then established the conceptual framework to show the relationship existing between the variable studied in this research.

Theoretical Review

Theory of Educational Productivity

The optimization of students' academic performance necessitates the comprehensive integration of sociological and psychological determinants, underscoring the imperative collaboration between educators and psychologists. Within the theory of educational productivity as propounded by Walberg (1984), a taxonomy of nine factors can be categorised into three domains, namely aptitude, instruction, and environment, all of which are instrumental in enhancing the learning process and, consequently, academic achievement. Aptitude encompasses elements such as cognitive ability, prior scholastic accomplishments, developmental stages in relation to chronological age, and the intrinsic motivation to acquire knowledge. The instructional domain pertains to the duration of educational engagement and the quality of pedagogical interactions. Environmental factors encompass the influence of domestic environments, social dynamics within the classroom, extracurricular peer group affiliations, and the utilization of after-school hours.

It is also noteworthy that a substantial consensus exists between these three domains and the internal school-related factors, external school-related

variables, and psychological constituents affecting student performance. Thus, the incorporation of this tripartite schema within a holistic framework designed to elucidate the multifaceted determinants of academic performance is both pertinent and judicious.

Theory of cognitive development

In the theory of cognitive development, Vygotsky (1978) posited an argument that adults in a society encourage children's cognitive development in different ways by providing them with challenging and meaningful tasks. According to Vygotsky (1978), a child's learning awakens only when he or she is having interactions with people in his environment. One critical concept of Vygotsky's theory includes the Zone of Proximal Development, "the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (Vygotsky, 1978, p. 86). Scaffolding is another important concept, which means the process of adjusting the amount of support as required by the child (Burkhalter, 1995). As per the theory of cognitive development, it is clear that parents at home and teachers at school play important roles in intervening in the relationship between students' intellectual ability and achievement. Therefore, Vygotsky's theory provides a strong theoretical basis for the inclusion of teacher quality as an internal school factor and parental interferences as an external school factor in an exploration of factors affecting academic performance.

Human functioning is the result of the interaction between personal, behavioural, and environmental factors, as embodied in the Triadic Reciprocal

Determinism model (Bandura, 1989). Social Cognitive Theory (SCT) presented by Bandura emphasises the importance of parents and teachers as role models who nourish desired behaviour in children that leads to the development of better performance. Within the social-cognitive framework, each individual child is treated as possessing a self-regulating system, which affects his or her beliefs and supports the development of motivation that empowers behaviour cognitively and affectively (Pajares & Schunk, 2001). As the current study attempts to examine the effects of learning resources, administrative practices, teacher-related factors, students' socio-economic background, and parental involvement on music students' performance in WASSCE, it provides a strong theoretical basis to justify why and how those factors exert an impact on each individual in a different manner to influence their academic performance.

Conceptual framework

Lezotte (2010) developed the Effective Schools Model, which serves as the foundation for this study. The model posits that an effective educational institution is characterised by the simultaneous attainment of quality and equity, as gauged through quantifiable measures of student achievement. According to this framework, there are seven essential factors of effective schools: robust instructional leadership, a well-defined and concentrated institutional mission, the cultivation of a secure and organised learning environment, the fostering of a climate marked by high expectations for academic triumph, consistent monitoring of students' progress, the nurturing of positive relationships between the school and students' families, and the provision of ample learning opportunities and time devoted to academic tasks.

Notably, influential instructional leaders within these institutions exhibit proactive attributes, actively pursuing collaborative leadership development and establishing a conducive culture for learning and professional advancement. In an effective school, the principal and others act as instructional leaders and effectively and persistently communicate and model the mission of the school to staff, parents, and students.

The establishment of a clear and concentrated vision and mission holds paramount significance as it provides unequivocal direction and purpose to all stakeholders within an educational institution. This clarity in objectives proves instrumental in harmonising various programmes and activities designed for the enhancement of the school. The process of ascertaining this specific focus necessitates a collaborative approach, involving school leadership and engaged stakeholders in the deliberate selection of a few pivotal school goals, followed by the fostering of consensus around them. A safe and orderly educational environment is one characterised by a prevailing climate and culture that adheres to rational behavioural expectations, equitable enforcement of rules and regulations, and nurturing, responsive relationships among both educators and students.

In this context, we design classrooms to be inviting and nurturing spaces, and thoughtfully design learning activities to be purposeful, engaging, and educationally meaningful. Moreover, teachers thoughtfully cultivate personalized learning environments to foster positive relationships among students and between students and their teachers. This, in turn, engenders a sense of belonging among students, ensuring that they feel valued and

esteemed, with their cultural backgrounds celebrated as assets rather than perceived deficiencies.

Also, within an environment characterised by high academic standards and expectations, adherence to the guiding principle of "all students can learn" necessitates the implementation of instructional methodologies and teacher conduct that unequivocally convey teachers' unwavering faith in their students' potential, their own competence in imparting knowledge to students at elevated standards, and their unwavering commitment to the pedagogical process. The concurrent cultivation of advanced competencies and comprehensive comprehension, alongside foundational skills, emerges as an imperative prerequisite for ensuring that all students attain elevated levels of academic proficiency.

This model further holds significant relevance within the context of this study, as it underscores the imperative role of effective leadership on the part of school administrators in achieving the correlates of effective schools. This perspective aligns with Sullivan and Glanz's (2005) assertion, which emphasises that school leaders are tasked with the essential responsibility of exercising instructional leadership to foster a collective vision for the school's direction and to adeptly manage change in a manner that ensures the realisation of this vision. Within the scope of investigating the factors influencing academic performance, this study seeks to determine whether the factors of the model proposed by Lezotte (2010), namely, strong instructional leadership, exert a discernible influence on students' academic outcomes in music. This review also encompasses considerations of physical facilities,

learning resources, teacher-related factors, and the socio-economic backgrounds of learners.

As part of the section, the present study's conceptual framework, which relies on the objectives of the study, is introduced. According to Guntur (2019), the conceptual framework acts as the model for any research endeavour, providing structure and guidance to the variables presented in the study. Grant and Osanloo (2014) emphasised the importance of a conceptual framework, asserting that it serves as the foundation for all subsequent research. Figure 1 illustrates the conceptual framework for this study.

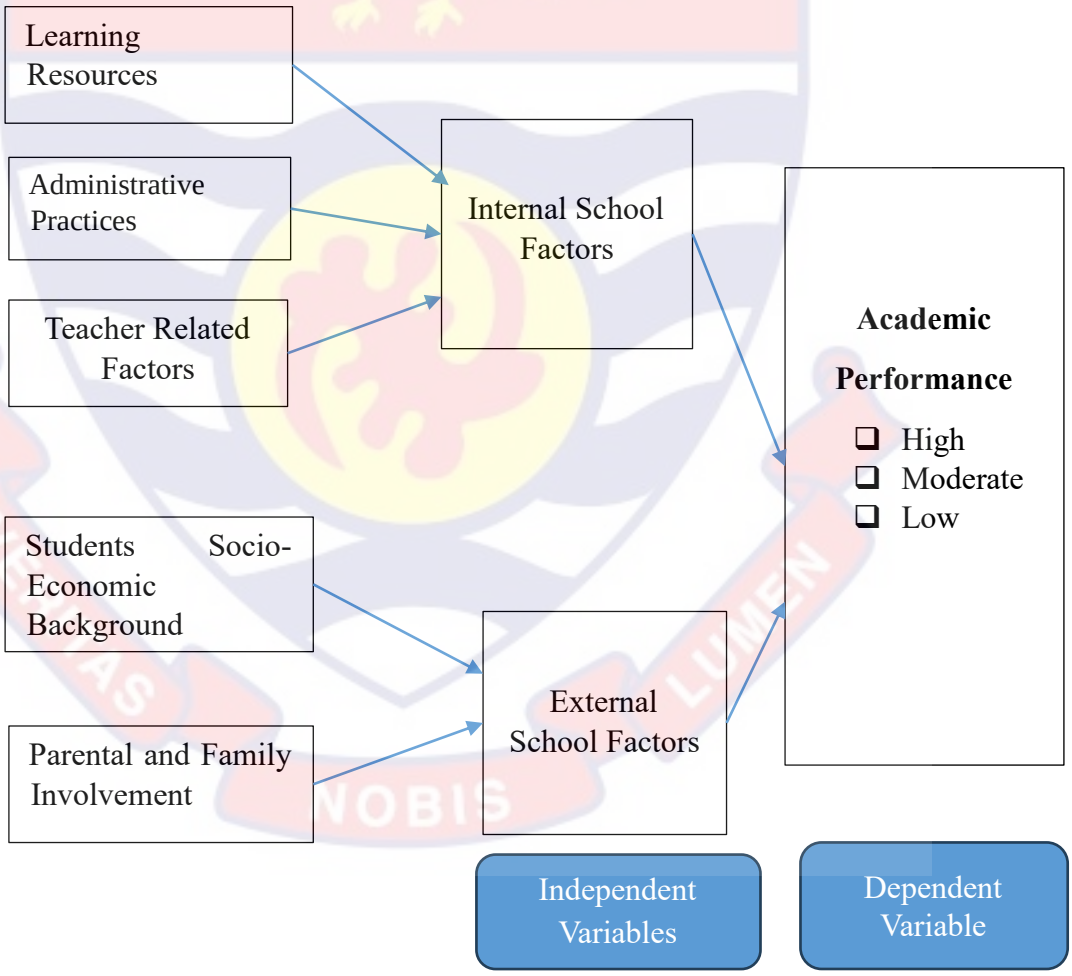

Figure 1: Conceptual framework

Source: Author's own construct (2023)

In the conceptual framework as illustrated in Figure 2, the independent variables encompass both internal and external factors that are believed to influence the dependent variable, which is the WASSCE music students' performance. The internal factors, comprising learning resources, administrative practices, and teacher-related factors, are elements that are typically within the control and influence of the school or educational institution. Learning resources, including textbooks, technology, and access to musical instruments, can enhance students' music education, directly impacting their performance. Administrative practices, such as effective leadership, curriculum design, and resource allocation, play a crucial role in shaping the overall educational environment and support for music students. Teacher-related factors, including the quality of instruction, teaching methods, and teacher professional development, are paramount in nurturing students' musical abilities and academic achievements.

On the other hand, the external factors, encompassing student socio-economic background, parent involvement, and family involvement, represent elements that lie beyond the direct control of the school but can significantly influence the academic performance of music students in WASSCE. Students' socio-economic backgrounds, which encompass economic status and access to educational resources outside the school, can impact their access to music lessons, practice opportunities, and extracurricular activities that may bolster their musical skills.

Parent and family involvement in a student's musical education can also vary widely and include aspects like encouragement, financial support for music lessons, and involvement in music-related extracurricular activities. The

conceptual framework also postulates that these external factors, in conjunction with the internal factors, collectively shape the performance of WASSCE music students, be it high, moderate, or low. By studying the interaction of these variables, researchers can gain insights into the multifaceted dynamics influencing students' achievement in the context of music education and potentially identify its impact on academic performance.

Empirical Review

Factors affection Students' Academic Performance

Previous research into science achievement has primarily centred on cognitive aspects like IQ and innate aptitude. However, recent studies have revealed that IQ accounts for only a fraction, approximately 25%, of the variability observed in academic performance (Jensen, 1998). Subsequently, extensive investigation has been dedicated to exploring the influence of students' backgrounds and family-related factors, with socioeconomic status, gender, and ethnicity emerging as prominent demographic variables. This underscores the pivotal role that student context and family dynamics play in comprehending the multifaceted determinants of scholastic accomplishment. In addition, contemporary research on science achievement has extended its focus to educational factors within the school environment (Duschl, Schweingruber & Shouse, 2007; Martin, Mullis, Foy & Stanco, 2012), acknowledging the critical role of schools in nurturing holistic child development.

More so, educational reform advocates contend that the key to enhancing student performance hinges on school improvements (Borg, Borg, & Stranahan, 2012; Meece, Anderman, & Anderman, 2006); hence,

conducting an investigation into internal school-related factors is imperative. Moreover, individual-level elements such as students' self-efficacy, motivation, and engagement exert both direct and mediating effects on the associations between other predictive factors and students' academic achievements, further enriching our understanding of this complex landscape (Farooq, Chaudhry, Shafiq, & Berhanu, 2011).

Also, while a large number of factors are affecting students' performance, there is no widely accepted classification of those factors in the existing literature. In association with scientific subjects, several researchers have paid attention to the effect of contextual variables as well as emotional and motivational factors on academic performance (Chang, Singh, & Mo, 2007). Contextual factors are subdivided into inside school factors and outside school factors (Farooq et al., 2011). Mushtaq and Khan (2012) present a similar categorization as internal and external classroom factors.

According to Seashore, Dretzke, and Wahlstrom (2010), school and classroom conditions, teacher quality, and student/family background conditions are directly responsible for the learning of students. These factors are also under the shade of classification put forward by Farooq et al. (2011). In line with these researchers, for the purpose of the current study, contextual factors at the school level will be split into two categories, namely school resources and teacher quality. Contextual factors at the pupil level, which include family background, will be grouped as socioeconomic status and parental involvement.

Motivation also stands out as a critical determinant for enhancing students' learning experiences. Williams and Williams (2011) underscore its

paramount significance in the context of learning, asserting that sustained motivation is virtually indispensable for effective learning. A substantial body of research has explored the intricate relationship between students' motivation and their achievements in the realm of science education, as evidenced by studies conducted by Atta and Jamil (2012), Glynn, Taasoobshirazi, and Brickman (2009), Lau and Roeser (2002), and Glynn, Taasoobshirazi, and Brickman (2007). Vansteenkiste et al. (2005) elucidated that motivation operates as a mediating variable in primary, secondary, and tertiary education settings.

Lau and Roeser's (2002) study underscores the crucial role of motivational factors in forecasting individual differences in students' scientific performance, proving that psychological processes have a greater predictive power than demographic variables. Therefore, an in-depth examination of motivation within the broader context of emotional and motivational factors, or, more broadly, psychological factors, is crucial to fostering a comprehensive understanding of students' academic performance in the domain of science.

Snow, Corno, and Jackson (1996) further underscore the paramount importance of encompassing a comprehensive range of sociological and psychological variables when delving into the multifaceted determinants of academic achievement. Extant research consistently affirms that students' academic performance is influenced by an intricate interplay of school-related factors, familial environmental influences, and individual attributes (Dudaitė, 2017). Therefore, the incorporation of socio-economic status, parental engagement, educational resources, teacher quality, and students' motivation

toward science education within a predictive model for academic performance engenders a holistic comprehension of this intricate phenomenon.

Internal School Factors Influencing Performance W in ASSCE Music

Influence of Learning Resources on Students' Academic Performance

Earthman (2002) explains that an efficacious educational institution thrives on the underpinning of a well-appointed physical infrastructure that is conducive to the learning process. In such an educational milieu, essential learning resources encompass not only the tangible amenities, such as well-maintained classrooms, a well-stocked library, computer facilities, and adequately equipped laboratories, but also a comprehensive array of instructional tools, including textbooks, projectors, videos, software, and supplementary educational materials, to facilitate optimal pedagogical experiences.

Research has underscored the pivotal role played by environmental factors, such as clean air, adequate lighting, and the provision of a small, serene, comfortable, and secure learning environment, in contributing to the overall academic success of students (Earthman, 1996). Furthermore, empirical studies have consistently demonstrated that smaller class sizes, reducing student-to-teacher ratios, engender superior academic performance and improve access to resources that are known to augment academic achievement (Crosnoe et al., 2004; Eamon, 2005). Conversely, a lacklustre and uninviting physical school infrastructure can exert a demoralising influence on students' academic motivation and performance.

According to Earthman (2002), the condition of school facilities significantly influences student academic achievement. Earthman contends

that various elements of school building design, including temperature, lighting, acoustics, and age, have demonstrable effects on student learning outcomes. Notably, he highlights that older school buildings often lack the key attributes associated with a modern learning environment conducive to student educational attainment. Numerous studies conducted by other researchers have similarly identified a detrimental impact on student performance in facilities where deficiencies in these critical attributes are evident. Earthman's research emphasises that many essential factors related to building structure that enhance the learning environment are conspicuously absent in older constructions, whereas new buildings incorporate and effectively utilise these factors. Consequently, the age of the building inversely correlates with the extent of student learning opportunities.

The geographical location of educational institutions constitutes another consequential factor that exhibits an association with students' educational achievements. Educational facilities situated in proximity to bustling thoroughfares subject students to emissions-induced air and auditory disturbances, potentially culminating in an array of deleterious health consequences for children (Amram et al., 2011). This phenomenon is primarily attributed to the substantial duration of time children spend within the school environment, where exposure to heightened levels of air pollution and noise emanating from their proximity to roads becomes pronounced. So, the location of schools is important because it is a major factor in how much pollution students are exposed to, which could have negative effects on their overall development and academic performance for a large group of students. Thus, the adequacy and availability of learning resources affect the

effectiveness of learning processes in a school setting. Teaching and learning resources enhance understanding of abstract ideas and improve performance. Schneider (2002) found that school facilities have a direct effect on teaching and learning.

Similarly, a study by Reche et al. (2012) found that textbooks act as a pedagogical tool that enhances students' understanding by following the instructional sequence teachers have designed. This empirical observation underscores the prevailing correlation between inadequate educational outcomes in underperforming schools and a paucity of financial investment in pedagogical resources. The absence of essential infrastructural amenities, notably well-equipped laboratories, poses a formidable impediment to the efficacious delivery of science-based curricula. Consequently, it is imperative that educational institutions prioritise the provision of amply stocked libraries and fully equipped laboratories, replete with the requisite apparatus and chemical materials, as a sine qua non for effective pedagogical facilitation.

A study by the World Bank (1987) investigated the impact of school and classroom characteristics on student learning outcomes in the educational context of Thailand and found that students enrolled in larger schools tend to achieve higher levels of academic attainment compared to their counterparts in smaller schools. However, a crucial nuance emerged from the research, indicating that students in educational institutions with higher student-teacher ratios demonstrated inferior learning outcomes when contrasted with students in schools boasting a lower student-teacher ratio. This study culminated in the proposition that larger schools may exhibit enhanced educational effectiveness, attributed to the realization of economies of scale, which

encompass a reduced student-teacher ratio, alleviated overcrowding, and, conversely, an amplification of teacher-student interaction, thus shaping the educational landscape in Thailand.

An empirical investigation undertaken in Nigeria by Ekundayo (2012) focused on the examination of the relationship between school facilities and students' achievements within the affective and psychomotor domains of learning. The results of the study disclosed a notable insufficiency in the availability of learning resources within the schools under scrutiny, which corresponded with suboptimal performance by students in these specific domains. Moreover, a statistically significant correlation was discerned between the quality of school facilities and students' attainment in both the affective and psychomotor dimensions of learning. This, in turn, led to the overarching recommendation that governmental authorities should prioritise the enhancement of educational resources within schools to bolster students' performance in these areas.

Wamulla's (2013) investigation into the factors influencing academic performance among students in private schools in Westland Division, Nairobi County, exemplifies the remarkably contradictory findings observed in studies conducted in Kenya. Top of Form The data collected underwent comprehensive analysis and interpretation utilising descriptive statistical methods. The investigation ultimately deduced that the presence of physical and teaching facilities exerts a favourable influence on academic performance, with the condition of learning resources, particularly their cleanliness and maintenance, also exhibiting a positive correlation with performance in the Kenyan Certificate of Secondary Education (K.C.S.E.). Reche et al. (2012)

conducted a study on factors contributing to high performance in the Kenya Certificate of Primary Education (KCPE) within public day primary schools in the Mwimbi division of Maara district, which confirmed that insufficient learning resources significantly hindered KCPE performance. These findings are in alignment with those of Schneider (2002), who established that school facilities have a direct impact on the teaching and learning process, consequently influencing academic achievements. This underscores the notion that certain determinants of inadequate performance in Matungulu sub-county are institution-specific, primarily associated with the accessibility and sufficiency of learning resources. Importantly, the researcher did not find any empirical studies conducted within the proposed study area regarding the extent of learning resources and their impact on students' academic outcomes. Therefore, we designed the present study to fill this critical research gap.

Influence of administrative practices on students' academic performance in musical achievement

Consistent with research conducted by Lezotte (2010), the prevailing discourse in contemporary educational reform underscores the paramount significance of proficient instructional leadership and school management. This stance is predicated on the premise that a structured and well-administered educational institution establishes the essential prerequisites for elevated student learning outcomes. Notably, the domain of effective instructional leadership is universally acknowledged as the principal hallmark of competent school administrators, as affirmed by scholarly authorities such as Hoy and Hoy (2009) as well as Lezotte (2010). Effective instructional leaders are anticipated to demonstrate proactivity in their roles and actively

engage in fostering collaborative team leadership and cultivating a scholastic environment conducive to both learning and professional development.

Scholarly investigations into effective instructional leadership underscore its pivotal role in school enhancement and efficacy, with reference to seminal works by Scheerens, Bosker, and Creemers (2001), Lezotte, Skaife, and Holstead (2002), and Lezotte (2010). The empirical terrain reveals that discernible indicators of effective instructional leadership in schools encompass facets such as teacher morale, organisational culture, instructional quality, time allocation, and academic achievement, as elucidated by Wilson (2005). Extensive research consistently underscores the centrality of both primary and secondary leadership in the spectrum of school effectiveness, as posited by Wamulla (2013). Gay (2007) accentuates the paramount role of the head teacher's leadership in the landscape of school effectiveness research, emphasising the conspicuous absence of effective schools characterised by weak leadership in the annals of effectiveness studies.

It is worth emphasising that leadership within educational institutions transcends individual leader quality and encompasses the roles leaders assume, their managerial styles, alignment with the school's vision, values, and objectives, and their adaptability in the face of change. Within educational contexts, leadership embodies a dynamic process wherein individuals shoulder not only the group's tasks but also actively seek the collective engagement and commitment of all group members in realising the overarching group objectives within a given contextual frame at a specific juncture, as elucidated by Cole and Cole (2000).

In the educational context, effective leadership is a multifaceted endeavour that extends beyond the mere delegation of tasks and the identification of responsible individuals; it encompasses a comprehensive approach that incorporates elements such as recognition, working conditions, morale cultivation, coercion, and remuneration (Balunywa, 2000). Maicibi (2003) asserts that without a well-suited leadership style, the attainment of optimal performance within schools remains an elusive goal. This suggests that even with ample instructional resources and financial support at a school's disposal, their effective utilization is contingent upon students being guided towards meaningful resource utilization and teachers being adequately prepared to facilitate their implementation. The body of research literature underscores the diversity of leadership styles and the myriad aspects associated with leadership roles in schools.

As Bossert et al. (1982) aptly concluded, no single management style universally fits all schools, necessitating principals to tailor their approach and structures to align with the unique characteristics of their local context. Nonetheless, a review of the literature consistently identifies three key attributes linked to successful educational leadership: resolute determination, engagement of staff in decision-making processes, and a commanding professional authority in the realm of teaching and learning (Wamulla, 2013).

Effective leadership in the context of educational institutions is typically characterised by resolute determination and a clear sense of purpose. Lezotte's (1991) underscores the pivotal role of the head teacher within an effective school, asserting that this figure serves as the primary catalyst for transformative change across various elements influencing school efficacy. It

is important to note that an effective head teacher is not merely a high-ranking administrator or manager; instead, they embody a leadership role that bears the essence of a prominent education professional. This implies active engagement with classroom activities, including a profound understanding of the curriculum, pedagogical approaches, and rigorous monitoring of students' progress, as per the insights provided by Wamulla 2 (013). This multifaceted role necessitates the provision of diverse forms of support to educators, encompassing both motivation and practical assistance.

As Reche et al. (2012) posited, the head teacher's role can be likened to that of a chief executive officer in a corporate setting, responsible for orchestrating and overseeing all school operations, either directly or through judicious delegation. In either scenario, the physical presence of the head teacher within the school premises assumes paramount significance in facilitating comprehensive managerial oversight. According to Reche et al. (2012), the principal duties and responsibilities of a head teacher encompass convening staff meetings to enhance the harmonisation of school activities, scrutinising teachers' instructional plans and curricular objectives, and conducting internal supervision of curriculum execution through in-person classroom observations. All of these functions underscore the necessity for the head teacher's physical presence to maintain a cohesive and thriving educational environment.

The World Bank (2015) released a global monitoring report that highlights a significant concern regarding teacher absenteeism in Kenya, where approximately 20% of educators consistently fail to report to their duty posts. These statistics bear resemblance to parallel research outcomes

observed across the African continent, indicating a widespread issue within the realm of education in the region. The implications of such absenteeism on the quality and consistency of educational services provided, as well as the broader socio-economic development, warrant a thorough examination and potential remedial actions.

The Population and Health Research Centre (APHRC) (2011) conducted a study and revealed notable disparities in teacher absenteeism rates within the Kenyan educational landscape. The findings indicated an overall average teacher absenteeism rate of 13%, with a more alarming absenteeism rate of 17% observed among educators in public schools. Moreover, an investigation by Ngware (2015) within the context of Kenyan primary schools highlighted a substantial contrast in the presence of head teachers during researchers' visitations. Specifically, less than 40% of head teachers in academically underperforming schools were available for such visits, in stark contrast to a significantly higher presence of 75% among their counterparts in high-performing schools, underscoring an essential aspect of educational governance and leadership in the nation's school system.

In a study conducted by Reche et al. (2012), which scrutinized the determinants of suboptimal academic achievement within the context of the Kenya Certificate of Primary Education (KCPE) in public day primary schools located in the Mwimbi division of Maara district, discernible patterns emerged. It was ascertained that a dearth of staff meetings held by school principals, infrequent reviews of teachers' schemes of work and lesson plans by head teachers, and the conspicuous absence of classroom observations conducted by head teachers throughout a given academic term are prevailing

characteristics in this educational landscape. These findings underscore a marked insufficiency in the oversight and evaluation of school operations, thereby raising concerns about the fidelity of curriculum implementation during the course of an academic term, ultimately implicating these administrative practices as potential contributory factors to substandard performance in national examinations. The present study endeavours to ascertain the extent to which the administrative elements elucidated in the extant literature have repercussions on the scholastic attainments of students in Matungulu subcounty.

The educational institution assumes a pivotal role in the holistic development of children, as underscored by Meece, Anderman, and Anderman (2006). Within the realm of educational reform, there is a prevailing consensus that enhancing school quality is central to ameliorating student performance. Consequently, a prominent agenda of educational reforms involves the provisioning of physical resources, augmenting accessibility to educational materials, technology, and support tools, and the implementation of equitable financial distribution mechanisms. In alignment with this empirical evidence, Martin et al. (2012) reveal a substantial correlation between student science achievement and the sufficiency of general school resources, encompassing physical infrastructure and instructional materials, as well as resources tailored to fortify science education, including computers, educational software, library resources, and audio-visual aids, underscoring the pivotal role of well-resourced schools in promoting academic success.

In a comprehensive examination of research conducted in developing nations, Fuller (2009) scrutinized the influence of school-related factors on

students' academic performance and discerned a pronounced distinction when compared to the developed world. He observed that, in developing countries, school-related variables played a significant role in explaining the variability in academic achievement, even after accounting for the social class background of parents. Notably, these findings are primarily applicable to the domain of music education, owing to music's relatively greater autonomy from indigenous forms of language and local knowledge in many developing contexts. Among the studies reviewed, Fuller underscored the salience of instructional resources such as textbooks, library resources, and science laboratories as pivotal elements exerting substantial influence on students' academic accomplishments.

Musthaq and Khan (2012) also conducted a study into the influential factors affecting the academic performance of students in private colleges within Pakistan. Their study identified social responsibility (SR) as a noteworthy determinant that exhibited a positive influence on student performance, explaining 16% of the variance in academic outcomes. In a related context, Graddy and Stevens (2003) conducted an empirical analysis examining the impact of school inputs on the academic achievements of students in private (independent) schools in the United Kingdom. Their findings revealed an inverse relationship between the pupil-teacher ratio and examination results, with a 1% reduction in the ratio leading to a 0.12 increase in the percentage of A grades at A-level. Furthermore, the study noted that per pupil expenditure on infrastructure and equipment had a positive effect on academic achievement.

Atar and Atar (2012) conducted a comprehensive examination of the impact of the reform initiatives in Turkey on the academic performance of eighth-grade students in the domain of science. Employing survey data and science achievement scores from Turkish students, the researchers discerned noteworthy findings. Notably, their analysis revealed a favourable association between the provision of state-of-the-art technological resources and computer facilities within classrooms and the enhanced science achievement levels among the student cohort.

Influence of teacher related factors on students' academic performance in musical achievement

Kieti (2018) delineates teacher-related factors as those elements intrinsic to educators that can either impede or facilitate the scholastic achievements of students within their educational institutions. These factors encompass various dimensions, such as the commitment exhibited by teachers, the frequency of their absenteeism, their motivation levels, and the extent of their workloads. Teachers' commitment plays a pivotal role in shaping student performance, and absenteeism poses a significant obstacle, leaving students unattended and academically disadvantaged. Frequent teacher absences also curtail the available instructional time, resulting in incomplete coverage of the syllabus and ultimately diminishing students' productivity (Ubogu, 2020). Teacher satisfaction emerges as a key determinant of academic success, with contented educators better poised to channel their focus towards enhancing the academic progress of their students. Schneider (2002) elucidates the adverse consequences of high teacher turnover on students' educational outcomes,

highlighting the substantial diversion of institutional attention, time, and financial resources towards recruiting replacements following such turnover.

On the other hand, educators with heavy workloads face inadequate preparation time for their teaching duties, which negatively impacts students' academic performance. Okoye et al. (2008) corroborate that the calibre of the educational milieu within schools is intricately contingent upon the quality of the human resources reservoir at their disposal. Among these human resources, teachers hold paramount significance and serve as the foundational pillars underpinning the structural integrity of any educational system, as underscored by the United Nations Development Programme (UNDP) (2003). The calibre of educators within an educational framework significantly influences the overall quality of the system, a notion well-established by Okoye et al. (2008). An essential determinant of academic performance, including examination outcomes, rests on the presence and competence of instructors. The cultivation of proficient educators constitutes a noteworthy societal investment, making it imperative for policymakers to prioritise matters pertaining to their motivation and career dedication, as underscored by the UNDP (2003).

Adeyemo (2005) highlights a noteworthy observation concerning the deteriorating state of the teaching profession in Nigeria, noting a consequential decline in teacher commitment. This decline, as posited by Adeyemo, raises concerns about the resultant impact on the educational attainments of students, given that unmotivated educators may compromise the quality of instruction. Furthermore, it has been reported that instances occur where primary school pupils and secondary school students receive significantly fewer teaching

hours than the recommended standards of 250 and 300 hours per week, as stipulated by Adeyemo (2010). The calibre of teachers, as established by their qualifications, experience, and discipline, plays a pivotal role in determining their commitment levels. Ubogu (2004) underscores the critical role of teacher quality in influencing academic performance within a school context. Among the fundamental responsibilities of educators are organising the instructional environment, establishing a structured temporal framework, and executing the pedagogical process, as underscored by Wamulla (2013).

Wamulla (2013) emphasises that the dearth of educators engenders circumstances in which certain classes remain unattended, while existing instructors shoulder additional teaching responsibilities to compensate for teacher absenteeism. Consequently, this situation engenders pedagogical inconsistency and inefficacy, occasionally resulting in the squandering of valuable instructional time, thereby impeding students' comprehensive coverage of the curriculum and adequate preparation for national examinations. This predicament resonates with UNESCO's (1991) assessment, which identified the persistent scarcity of both suitably qualified and adequately trained teachers as a predominant challenge in African education. In the context of Kenya, it is pertinent to note that this predicament is not chiefly attributed to the shortage of qualified teachers in the labor market but is instead principally rooted in the government's incapacity to integrate qualified educators, a circumstance that has demonstrably adverse repercussions on the scholastic accomplishments of students.

The factors contributing to low academic performance in the Kenya Certificate of Primary Education (KCPE) within the north-eastern province of

Kenya were examined by Osman (2010). The author found a noteworthy correlation between inadequate academic outcomes and the unequal distribution of teachers, which resulted in a shortage of educators in numerous schools. This deficiency was further exacerbated by the infrequent attendance of teachers in in-service refresher courses. This sentiment aligns with the findings of Kathuri (1986), who, echoing Osman's perspective, emphasised the pivotal role that teacher quality plays in shaping the educational accomplishments of students. This assertion is substantiated by Kathuri's (1986), which established that teacher quality was instrumental in fostering academic performance among pupils. Kathuri (1986) further underlined the significance of employing effective teaching methods and establishing a robust administrative framework as manifestations of teacher quality and essential elements in students' examination performance.

Simiyu (2002) demonstrated a significant positive correlation between teachers engaged in the assessment of Christian Religious Education (CRE) papers at the Kenya Certificate of Secondary Education (KCSE) level and enhanced student performance in the subject when compared to their non-participating counterparts. This involvement in the KCSE examination marking process was found to function as a form of professional development, facilitating a deeper comprehension of the subject matter and the cultivation of skills in the interpretation of examination questions. In support of this, Sokal and Sharma (2014). emphasised the critical role of in-service training in enhancing teachers' overall effectiveness, advocating for teacher training programmes to be refocused on elevating pedagogical proficiency and cultivating teachers' awareness of evolving curriculum paradigms. Pearson

further underscored that in-service training fostered the judicious utilisation of educational resources, thereby promoting a more efficient and effective teaching process.

Regarding teacher commitment, Wamulla (2013) posits that the inadequate remuneration provided to educators in Kenya has compelled them to seek additional sources of income, leading to a pronounced diversion of their focus towards personal entrepreneurial endeavors rather than dedicated teaching. This diversion, he contends, results in teachers frequently being absent from their classrooms and unprepared for their instructional duties, ultimately diminishing their ability to effectively groom students for examinations due to the suboptimal utilisation of their instructional time. Moreover, he asserts that a considerable proportion of trained teachers in Kenya chose the teaching profession as a secondary choice, following their inability to secure alternative educational pathways, consequently rendering them inherently unmotivated and uncommitted. As a result, students' academic performance in national examinations is adversely affected.

Reche et al. (2012) carried out an investigation into the determinants of suboptimal performance in the Kenya Certificate of Primary Education within the context of public day primary schools and revealed several salient factors. The study ascertained that a significant proportion of teachers were frequently absent, lacked motivation, experienced high rates of turnover, and bore an onerous workload. These observations align with the findings presented in the World Bank's (2015) report, which indicated alarmingly high teacher absenteeism rates in Kenya, reaching up to 20%. This corroborates with the study conducted by Ngware (2015), demonstrating an average teacher

absentee rate of 13%, with public school educators experiencing an even higher rate of 17%. The implications of these collective findings underscore a substantial loss of instructional time, highlighting critical challenges within the Kenyan educational system.

The majority of research efforts in this domain have predominantly focused on primary schools, as evidenced by the studies conducted by Reche et al. (2012), the World Bank (2015), and APHRC (2011), as cited by Ngware (2015). However, a notable exception is the investigation undertaken by Wamulla (2013), which centered on private schools in the Westland district. It is noteworthy that Wamulla's study, although it pertained to secondary schools, is not generalizable to the broader context of public secondary schools. While prior studies in Kenya have consistently reported that educators in public schools contend with excessive workloads, the findings from this particular study indicate that the subjects (i.e., teachers) do not perceive themselves as overburdened. This distinction can be attributed to the unique socioeconomic context of Westland district, which is characterized by affluence among its residents, in stark contrast to the impoverished peri-urban locale of Matungulu subcounty. Notably, academic performance in KCSE within Matungulu sub-county continues to languish, yet there exists a paucity of empirical investigations dedicated to discerning the role of teacher-based factors in this context. Consequently, this study aims to bridge this research gap.

Scholars and policymakers within the field of education concur on the substantial variability in teacher quality and its consequential impact on student academic achievement (Clotfelter, Ladd, & Vigdor, 2007). This

recognition underscores the teacher-centric nature of the educational enterprise, emphasising the pivotal role of teacher quality (TQ) as a critical tool for enhancing student performance. Notably, Rockoff (2004) asserts that elevating TQ stands as a central lever for ameliorating student outcomes. Focusing on the American educational landscape, Soldat (2009) posits that the quality of science education classrooms in the United States is fundamentally contingent upon the calibre of science educators.

Teacher quality (TQ) encompasses three critical dimensions: the teacher's classroom practices, the professional development designed to support these practices, and external characteristics of the teacher, including educational attainment, years of education, certification status, years of teaching experience, measures of academic ability, subject matter and teaching knowledge, and classroom teaching behaviors. Numerous studies have scrutinised these dimensions' impact on student performance, as highlighted by Darling-Hammond (2000). Notably, among these aspects of teacher quality, classroom practices, as revealed by Wenglinsky (2002), emerge as the most influential, with effect sizes totaling 0.56. In comparison, professional development topics yield effect sizes of 0.33, while teacher characteristics have a statistically significant but comparatively smaller impact of 0.09 on student performance.

Scholarly investigations on teacher preparation reveal a positive correlation between educators' level of subject matter preparation and students' academic performance in the science domain (Wilson, Floden, & Ferrini-Mundy, 2002). Additionally, Wenglinsky (2002) ascertained that an increased number of college-level science courses, or courses focused on science

pedagogy, attended by teachers corresponded with enhanced student performance on science assessments. This finding was reinforced by an exhaustive literature review conducted by Caprara et al. (2006), which established that instructors exhibiting a robust sense of efficacy are prone to exerting a positive impact on students' scholastic achievements. Furthermore, Darling-Hammond (2000) delved into the relationships between teacher qualifications, among other school-related factors, and student academic attainment, revealing substantial and constructive correlations between teacher characteristics such as certification status and possessing a degree in the field they instruct and student outcomes.

Goe (2007) originally articulated four distinct categories delineating teacher quality indicators, namely teacher qualifications, characteristics, practices, and effectiveness. Goe and Stickler (2008) conducted a study that revealed a more pronounced association between the academic performance of secondary school students and their instructors' subject-area expertise. Interestingly, their research also introduced a contrasting notion, suggesting that educators possessing advanced degrees, such as master's degrees, might exert an adverse influence on their students' achievements. Moreover, they found that professional development programmes that align with the curriculum and instructional methods yield positive outcomes in the context of science education. Nevertheless, their inquiry unearthed a multitude of studies that failed to discern significant disparities in the performance of more experienced and less experienced educators. Despite the keen interest of educational policymakers in ascertaining the key attributes of teachers capable of enhancing student outcomes, the scholarly community has yet to

definitively pinpoint such attributes. Some scholars have advanced the argument that prior research endeavours have grappled with formidable methodological challenges in their attempts to gauge the impact of teacher quality (Goe, 2007; Harris & Sass, 2011).

External School Factors Influencing Performance in WASSCE Music

Socio-economic Background and Students' Academic Performance

A study conducted in Australia by Ainley, Brian, Long, and Batten (1995) revealed that the socioeconomic status (SES) of a child is primarily determined by a combination of their parents' educational level, occupational status, and income level. Numerous studies have consistently demonstrated that SES significantly impacts students' academic outcomes, with those from low-SES backgrounds earning lower test scores and being more likely to drop out of school (Hochschild, 2003; Eamon, 2005). Additionally, SES has been found to override other educational influences, such as parental involvement. The negative effect of low SES on academic performance is widely acknowledged.

According to Ogunsola, Adelana, and Adewale (2021), high poverty levels lead to distractions and little opportunity for concentration, which can result in poorly done, incomplete, or never done homework, leading to conflicts at school and at home. Children from economically disadvantaged families may not work to their fullest potential because their parents cannot afford the cost of education at higher levels. Nguni (2019) found that family type is statistically and significantly correlated with child performance, with children from both parents performing better compared to their counterparts from different family types. Children from guardian and stepmother and real

father families performed averagely the same, with a difference from their counterparts in single family types. The lowest performing category was pupils from stepfathers and real-mother family types.

Alokan, Osanikinle, and Onijingin (2013) conducted a study in Nigeria that suggests the illiteracy of parents can negatively affect their children's academic performance. The researchers argue that children whose parents are illiterate lack home encouragement, as some illiterate parents refuse to provide their children with needed textbooks and discourage them from learning. David (2007) also stated that textbooks aid studies after normal school teaching because some students from illiterate families lack assistance due to their parents' illiteracy and ignorance. Scholars view parental involvement as a significant factor in students' learning and academic achievement.

Therefore, it is crucial to analyse the factors that contribute to early academic success and are susceptible to modification. Scholars have documented that interactions between parents and children, particularly stimulating and responsive parenting practices, exert significant influence on a child's academic development. The role of the home environment is of utmost importance in determining the academic performance of every child (Wamulla, 2013). The home environment has the potential to foster positive self-esteem, which in turn can enhance academic achievement (Smith et al., 1989). Therefore, it is essential for the home environment to be supportive and encouraging towards academic pursuits. According to Mworia (1993), in order for a child to effectively meet their educational needs at home, they should have easy access to resources such as books and newspapers and a conducive study environment with ample space, adequate lighting, and minimal

distractions. Social class is a pervasive aspect of all societies, whether ancient or modern. Socio-economic status is typically determined by one's wealth, power, and prestige. When evaluating and comparing individuals, the criteria used to assess their wealth include the type and size of their house, the location of their residence, the number of cars they own, and the quality of their clothing (Wamulla, 2013). It is worth noting that wealth is strongly correlated with education and occupation. Morakinyo (2003) asserts that there is a clear relationship between socio-economic status and academic achievement.

The academic performance of the students in their KCPE and KCSE examinations may be ascribed to their socioeconomic status (SES) or potentially linked to their inherent aptitude. While there are numerous comprehensive evaluations of the association between SES and educational outcomes, Mukherjee (1995) and Ainley et al. (1995) explicitly elucidate that children from disadvantaged SES backgrounds are more likely to manifest the subsequent trends in terms of educational outcomes in comparison to children from affluent SES backgrounds: lower levels of proficiency in reading, arithmetic, and comprehension; reduced rates of academic progression; and diminished rates of enrollment in higher education. However, intense deliberation centers on the extent to which genetic factors can account for individual variation in academic achievement (Sparkes, 1999).

Shonkoff & Phillips (2010) have firmly established the connection between socio-economic disadvantage and various factors such as the literacy environment at home, parental teaching styles, and investment in learning resources (such as quality child care, educational materials, and museum

visits). Families with low incomes face significant challenges in achieving effective parenting, which, in turn, often negatively affects their children's development and educational success (Berk, 1997). A high socio-economic background is associated with parents who have strong literacy skills, possibly due to being working professionals. These literate parents are highly engaged in their children's academic activities, both at school and at home. According to the Kenya Population and Housing Census Report (2009), the poverty level in Machakos County was 59.6%, compared to a national average of 47.2%. This placed the county in the 33rd position out of 47 counties. This indicates that more than half of the residents in Machakos County were experiencing poverty at that time and therefore had a low socio-economic status. Therefore, this study aimed to investigate whether the socio-economic background of students could be a contributing factor to their low academic performance in Matungulu sub-county.

Besides other factors, SES has become one of the most investigated and argued factors that contribute to students' academic performance (Farooq et al., 2011). The SES of a child is most commonly determined by combining parents' educational level, occupational status, and income level (Jeynes, 2002). In Turkey, Atar and Atar (2012) examined the eighth grade students' survey data and science achievement scores on the Trends in International Mathematics and Science Study (TIMSS) 2007. As they reported, socioeconomic status was a statistically and practically significant factor affecting science achievement. A research study carried out in Nigeria also provided evidence that parents' SES significantly influenced students' academic performance (Ushie, Emeka, Ononga, & Owolabi, 2012). They

reported that 26% of the variance in the students' performance was described by the variables, namely the father's occupation and the parents' income. Udida, Ukwayi, and Ogodo (2012) conducted another study in Nigeria to find out the effect of parental socioeconomic background on student performance in biology and found only a father's education to be significant. In relation to a group of Nigerians, Ogunshola and Adewale (2012) also found that the mean score of students with high socioeconomic status and high educational attainments was high in contrast to the students of parents with low socioeconomic status and poor educational attainments. A study on secondary school students' academic performance in Pakistan showed that parents' education has a significant effect on students' overall academic achievement (Farooq et al., 2011).

Parental Involvement and Students' Performance

The contribution of parents in furnishing supplementary instruction and indispensable resources, encouraging students to engage in academics, and underscoring the practicality of scientific concepts in everyday existence can augment students' performance in the field of science.

Alrehaly (2011) underscores the notion that parental influence is a crucial determinant of their children's learning and academic success. Despite educators' acknowledgement of the significance of parental involvement for children's academic performance, researchers have yet to ascertain the full extent to which parental involvement impacts students' achievement and the specific type of involvement that is most crucial (Hong & Ho, 2005; Jeynes, 2002). An important finding from a meta-analysis conducted by Hill and

Tyson (2009) is that the effects of different forms of parental involvement on student achievement vary.

Moreover, the impact of a particular form of involvement also varies depending on the child's age level. Parental involvement in the school setting has been associated with both positive and negative influences on academic achievement (Domina, 2005; McNeal, 2001). Topor et al. (2010) demonstrated that increased parental involvement was significantly correlated with improved academic performance, as measured by both standardized achievement tests and teacher evaluations of the child's academic performance in the classroom. Ak and Sayil (2006) also identified perceived family support as a significant predictor of Turkish students' academic performance. Olatoye and Ogunkola (2008) investigated the relative and combined influences of parental involvement on the academic achievement of junior secondary students in Nigeria. The findings revealed that parental involvement alone accounted for 4.1% of the total variance in achievement. Despite its relatively low percentage, this result is statistically significant. Atta and Jamil (2012) examined the effects of parental involvement on educational attainment in Pakistan. They reported a positive correlation between parental involvement and achievement, as evidenced by a correlation coefficient of 0.89.

Shute et al. (2011) conducted an examination of the existing body of research literature regarding the correlation between parental involvement (PI) and academic accomplishment, with a specific emphasis on the intermediate and secondary school levels. They unveiled that a parenting style characterised by high responsiveness and high demands, commonly known as authoritative parenting, displayed a positive association with positive academic outcomes.

Additionally, the study revealed that parental aspirations and expectations for their children, as well as conversations about school activities between parents and their children, were also linked to positive academic outcomes. Conversely, parenting styles characterized by high demands and low responsiveness, referred to as authoritarian parenting, and parenting styles characterized by low demands and high responsiveness, referred to as permissive parenting, were found to have a detrimental impact on academic achievement. Porumbu and Necşoi (2013) have also documented similar findings in their research.

In the study conducted by Nyarko (2011), an examination was conducted to explore the correlation between parental involvement in school and the academic performance of students ranging from 15 to 20 years old in Ghana. The findings of the study revealed a significant and positive association between the level of school involvement exhibited by mothers and the achievement of the students. Similarly, Wei (2012) conducted a study that focused on investigating the parental practices utilised to enhance the educational outcomes of children within Chinese families, adopting a social capital perspective. The researcher reported that a higher degree of support, a lower level of pressure, and a greater frequency of communication between parents and children were closely linked to elevated levels of achievement. Shah and Anwar (2014) further corroborated these findings within the Pakistani context, thus establishing a similar relationship between parental involvement and academic achievement.

Motivation and Students' Performance in Music

Motivation is an internal state that stimulates, guides, and maintains individuals' behaviour aimed at achieving goals (Bandura, 2006). Specifically, in the context of science, the SCT defines motivation to learn science as "an internal state that stimulates, guides, and maintains behavior related to science learning" (Glynn et al., 2009). It is likely to be highly complex and cannot be easily measured in terms of a limited number of presumed factors (Glynn & Koballa, 2006; Mubeen & Reid, 2014). Intrinsic motivation, extrinsic motivation, personal goal relevance, self-efficacy, self-determination, and anxiety related to tests or assessments are considered important elements within the self-regulatory system that enhance a child's overall motivation to learn and, subsequently, their achievement (Bandura, 2006). These elements have been regarded in research studies as the fundamental aspects of students' overall motivation to learn science (Chow & Yong, 2013; Glynn & Koballa, 2006; Glynn et al., 2009). To understand the impact of students' motivation to learn science on performance in relation to the six key aspects, the literature evidence extracted from empirical studies is examined below.

Walker, Greene, and Mansell (2006) have documented that students who possess intrinsic motivation exhibit enhanced academic performance. It has been widely observed by various authors that the presence of intrinsic motivation in students showcases a favourable correlation with their scientific achievements (Gottfried, 2009; Lin, McKeachie, & Kim, 2003). By establishing a connection between motivational dimensions and scientific performance, Garcia (1993) unveiled that both intrinsic and extrinsic motivations share a positive relationship with students' achievements. A study

(Chow & Yong, 2013) on a group of secondary school students in Brunei found that the correlation coefficients between intrinsic motivation and extrinsic motivation were 0.35 and 0.23, respectively, in relation to their science achievements. However, certain researchers (Hayenga & Corpus, 2010; Vansteenkiste et al., 2009) have reported a positive correlation between high intrinsic motivation and low extrinsic motivation and students' grade point average (GPA).

Students discover the significance of acquiring knowledge in science through three aspects: the importance of science in society, personal interest in learning science, and the relevance of science in their chosen field of study (LIbao et al., 2016). Holbrook et al. (2010) observed that when the content of science was comprehensible, relevant, and engaging, students exhibited motivation to learn science. Chow and Yong (2013) documented a positive association between personal relevance and academic performance in the field of science, with a correlation coefficient of 0.21 for a cohort of Bruneian secondary school students.

As per the principles of self-determination theory, individuals who possess a greater level of autonomous or self-determined motivation exhibit enhanced academic performance (Soenens & Vansteenkiste, 2000). Kusurkar et al. (2013) developed a theoretical framework to ascertain the impact of motivation on student performance, taking into account the utilisation of effective study strategies and increased study effort. Their findings indicated that students with high levels of self-determined motivation displayed a positive correlation with the adoption of effective study strategies, which in turn positively influenced their grade point average (GPA). Lavigne,

Vallerand, and Miquelon (2007) provided support for the notion that self-determination plays a crucial role in fostering children's motivation to learn science. Chow and Yong (2013) reported that the level of self-determination was significantly higher among high-achieving students as compared to their lower-achieving counterparts. Furthermore, they determined the correlation coefficient between self-determination and achievement in science to be 0.28. However, Obrentz (2012) emphasised that the direct relationship between self-determination and science achievement lacks conclusive evidence when compared to other motivational dimensions.

Self-efficacy demonstrates a link to the academic success of students in the field of science across all educational levels (Britner & Pajares, 2006). Bryan, Glynn, and Kittleson (2011) conducted a study that determined that self-efficacy had the most substantial influence on achievement when compared to self-determination and intrinsic motivation. In a separate investigation, Glynn et al. (2009) observed a correlation coefficient of 0.58 between self-efficacy and GPA among a cohort of college students. In the context of Brunei Darussalam, Chow and Yong (2013) discovered a noteworthy and positive correlation between self-efficacy and the academic performance of secondary school students in the science course. The correlation coefficient recorded for this relationship amounted to 0.37.

In contrast to the previously mentioned dimensions of motivation, it is widely reported that test anxiety has a detrimental impact on academic performance. For instance, in a study conducted by Cassady and Johnson (2002), the relationship between test anxiety and student performance was investigated, revealing that higher levels of test anxiety were associated with

significantly lower test scores on both course examinations and achievement and aptitude test scores. Similarly, studies involving a large number of science undergraduate students demonstrated a negative correlation between test anxiety and GPA (Rana & Mahmood, 2010). Another study conducted by Olatoye (2009) examined the influence of test anxiety on science achievement among junior secondary school students in Nigeria and identified test anxiety as a significant predictor with a negative relationship to science achievement. Additionally, the study found that test anxiety alone accounted for 5.2% of the total variance in students' achievement. Furthermore, Chow and Yong (2013) reported that test anxiety was the highest among the dimensions of motivation for a group of Bruneian students and determined the correlation coefficient between test anxiety and achievement in science to be 0.14.

Internal and External School Factors and Students' Motivation

Gardner (2007) conducted a study concerning the factors that influence students' motivation to learn. The results of the study indicated that parental involvement (PI) is a notable factor that impacts students' motivation. Guay, Ratelle, and Chanal (2008) carried out a meta-analysis in order to investigate the role played by teachers and parents in the development of students' motivation. The meta-analysis revealed that various forms of parental involvement, such as parenting, attending meetings, and volunteering for school activities, have a positive effect on students' motivation. These forms of parental involvement, which include the provision of resources, maintaining communication about the child's education, participating in meetings, and volunteering at the school, were found to enhance students' motivation. Furthermore, the study highlighted that teachers' involvement can also have a

significant impact on students' motivation. Key aspects of teachers' involvement that affect motivation include the provision of resources, facilitating student learning in a meaningful manner, and supporting students' autonomy and engagement.

In a study conducted by Gottfried et al. (2009), a specific aspect of parental involvement in students' academic intrinsic motivation was examined. The researchers discovered that parents' engagement in task intrinsic practices was positively associated with their children's initial academic intrinsic motivation. Conversely, the utilisation of task-extrinsic practices by parents exhibited a negative correlation with the initial levels of their children's academic intrinsic motivation. Furthermore, the study revealed that parents' task-intrinsic motivational practices during childhood had a durable positive impact on their children's academic intrinsic motivation throughout their educational journey. Notably, these practices functioned as a protective measure against the global decline in motivation observed in both mathematics and science.

Williams and Williams (2011) propose that there are five crucial components that influence students' motivation: the student, the teacher, the content, the method or process, and the environment. The student's motivation is influenced by various factors, including their peer group, income level, the adequacy of the classroom environment, the suitability of the learning materials, and the presence of siblings. The teacher, as one of the key factors affecting students' motivation, is influenced by their skills, subject knowledge, qualifications, and internal factors such as motivation and self-efficacy. The teacher also plays a role in determining the way in which the content is

presented, which is referred to as the method or process. Moreover, the physical environment, which encompasses the resources and conditions at school and home, also has an impact on motivation. In summary, these five components of students' motivation are strongly linked to their socioeconomic status, parental involvement, teacher quality, and school resources.

Wen-Jin, Chia-ju, and Shi-an (2012) conducted an investigation to explore the influence of hands-on activities on the motivation of female students in their pursuit of scientific knowledge. They concluded that hands-on activities had a positive impact on the motivation of female students to learn science. Additionally, they observed that hands-on activities related to real-life issues were more effective in motivating female students compared to the other two types of activities. The utilization of hands-on activities was found to be closely linked to the quality of teaching. Therefore, this research provides supporting evidence for the significance of teacher quality in promoting students' motivation to learn science.

This segment of the literature review presents empirical substantiation for the impact of parental engagement, socioeconomic condition, educator competence, and educational institution provisions on students' drive. Nonetheless, it is crucial to acknowledge that investigations specifically concentrating on science are infrequent.

Summary of the reviewed Literature

The literature that has been examined has concluded that various factors have an impact on the academic performance of students. Regarding learning resources, the review has discovered that the insufficiency and substandard conditions of these resources have a negative effect on students'

academic performance. Additionally, the review has established a connection between administrative practices and students' academic performance. It was found that strong leadership practices are a crucial element in enhancing students' academic performance, while weak leadership practices can contribute to poor academic performance among students. As for teacher-related factors, professional qualifications, absenteeism, motivation, and workload were examined as factors originating from the teacher that influence students' academic performance.

Quality educators were found to be a significant factor in enhancing the academic achievement of students, and conversely, improved academic performance was found to contribute to the presence of quality teachers. Other factors, such as absenteeism, motivation, and workload, were identified as negatively influencing academic performance. Additionally, the review revealed that the socio-economic background of students has a notable impact on their academic performance. Furthermore, it was determined that family size and family structure exhibit a weak positive correlation with students' academic performance. Notably, there is a lack of empirical studies conducted in this current research area that explore the factors contributing to low academic performance among music students, despite the overall underperformance of schools in the entire country. Therefore, the purpose of the present study was to address this research gap.

CHAPTER THREE

RESEARCH METHODS

Introduction

This chapter precisely describes the research methods used by clarifying how the research problem has been solved. The chapter described the research philosophy, research approach, research design, study area, population, sample and sampling procedure, data collection instrument, data collection procedure, ethical considerations, and data processing and analysis.

Research Design

Research design is a researcher's overall plan for obtaining answers to the research questions or for testing the research hypothesis (Amedahe & Asamoah-Gyimah, 2016). Burns and Grove (2003, p. 27) define a research design as "a blueprint for conducting a study with maximum control over factors that may interfere with the validity of the findings." In other words, the research design articulates what data is required, what methods are going to be used to collect and analyse the data, and how all of this is going to answer the research question.

Based on the research philosophy, the study was guided by a descriptive cross-sectional survey design. The descriptive cross-sectional survey design was appropriate for this study because the objectives of the study were basically to find out internal and external school factors influencing performance in WASSCE music among selected senior high schools in the Cape Coast Metropolis.

The purpose of descriptive research is to observe, describe, and document aspects of a thing as they naturally occur. The reason for employing

a cross-sectional survey in this study was because cross-sectional surveys are studies aimed at determining the frequency (or level) of a particular attribute, such as a specific exposure, as well as factors influencing performance in WASSCE music. In this type of study, respondents were contacted at a fixed point in time, and relevant information was obtained from them. On the basis of this information, they were then classified as having or not having the attribute of interest.

Additionally, a descriptive survey is a non-experimental design that measures the characteristics of a sample at one point in time (Muijs, 2010). Surveys are traditional ways of conducting research. They are particularly useful for descriptive designs that seek to describe reality. Cross-sectional surveys are surveys that are carried out over a specific period of time. They provide a snapshot of what is happening in that group at that particular time.

Survey research involves acquiring information about one or more groups of people, perhaps about their opinions, characteristics, attitudes, or previous experiences, by asking questions and tabulating the answers. The ultimate goal is to learn about a large population by surveying a sample of it (Leedy & Ormrod, 2005). In other instances, a survey is viewed as the research method used to structure the collection and analysis of standardised information from a defined population using a representative sample of that population. In addition, the term survey refers to a study that has used a representative sample (Creswell, 2009).

The survey research design was adopted for the study because it gave the researcher the opportunity to generate data from students through their objective opinions obtained through the administration of a questionnaire. The

use of this type of design helped generalise information as well as develop specific predictions from general principles regarding the factors influencing performance in WASSCE music among selected senior high schools in the Cape Coast Metropolis.

According to Connelly (2016), data collection techniques in descriptive surveys present several advantages as they provide a multifaceted approach to data collection. Some of the advantages may include: First, surveys have internal and external validity. A survey that is based on some form of random sampling technique will produce a sample that is representative of the particular population under study and will produce findings that may be generalised to the wider population. Second, surveys are efficient because they can use a random sampling technique to recruit participants, and relatively small sample sizes can be used to generate findings that can be used to draw conclusions about the whole population. They are thus a very cost-effective way of finding out what people do, think, and want (Connelly, 2016).

Again, surveys can cover geographically spread samples. Surveys can be undertaken using a wide range of techniques, including postal questionnaires and telephone interviews (Connelly, 2016). This means that participants who are widely dispersed can be accessed and included in the sample. Also, surveys have ethical advantages. Since most surveys do not expose individuals to possibly invasive techniques or withhold treatment, they may be considered more ethical since the individuals included in a study will merely be exposed to events that occur in the real world and would have taken

place anyway. Furthermore, surveys are flexible and can easily be combined with other methods to produce richer data (Connelly, 2016).

Study Area

The study was conducted in Cape Coast Metropolitan, in the Central Region of Ghana. The Cape Coast Metropolis, located in the Central Region of Ghana, is an intriguing study area with a rich historical and educational background. This coastal city is not only known for its cultural heritage but also for its significant contributions to the educational landscape of Ghana. In terms of socio-economic activities, Cape Coast serves as a centre for trade, tourism, and fishing. It boasts a vibrant market where various goods are bought and sold, and the fishing industry thrives, providing livelihoods for many in the region. The city's historical sites, including Cape Coast Castle and Elmina Castle, draw tourists from around the world, contributing to its economy. Additionally, the area is known for its traditional festivals and cultural events that promote socio-economic growth.

In terms of academic facilities, Cape Coast Metropolis is home to several notable senior high schools and higher education institutions. The city is renowned for the University of Cape Coast (UCC), one of Ghana's prominent universities. UCC offers a wide range of academic programmes and has contributed significantly to the region's educational landscape. Moreover, there are various well-established senior high schools in Cape Coast, including Adisadel College, Mfantsipim School, Holy Child School, Ghana National College, Efutu SHS, St. Augustine College, Wesley Girls Senior High, and many more. These institutions have played a crucial role in shaping the academic and intellectual development of the region's youth.

Geographically, Cape Coast Metropolis is strategically positioned in the Central Region of Ghana. It is the capital of the Central Region and serves as an educational, administrative, and cultural hub. The city is situated along the coast of the Atlantic Ocean, making it accessible for trade and tourism activities. Its location within the Central Region allows for easy connectivity to other parts of the region and the country, contributing to its economic significance. Overall, the Cape Coast Metropolis is a unique and historically rich study area with a thriving socio-economic landscape and a robust educational environment, making it an appealing choice for researchers and scholars interested in various aspects of Ghanaian culture, history, and education.

Population

The research population is the entire set of individuals of interest to a researcher (Gravetter & Forzano, 2009). Population means all the people or subjects about whom the study is meant to generalise (Kothari, 2004). The population for this study includes students who offer music in the arts programme. In all, there are 440 students. Table 2 shows the various populations in each selected senior high school.

Table 2: Population of Students

SCHOOLS	YEAR 2	YEAR 3
Ghana National	15	18
Efutu	40	33
Adisadel	17	18
St Augustine	40	36
UPSS	25	16
Academy of Christ the King	43	28
Mfantsipim	43	48
Wesley Girls	11	9
Total	**234**	**206**

Source: Field survey (2021)

Sample and Sampling Procedure

According to Sekaran and Bougie (2016), a sample is a representative portion of the population selected for the study. Saunders et al. (2016) advanced that the rationale behind the use of sample surveys instead of population surveys by scholars is that a complete coverage of the entire population is difficult when dealing with large respondents. This means that sample surveys help researchers conduct studies in the most efficient and effective manner when a large population is involved. Creswell (2009) defines a sample as a proportion of a large population.

Sekaran and Bougie (2016) advanced that sampling can be broadly categorised into two main designs: probability sampling and non-probability sampling. They explain that probability sampling design permits each element of the population to have a non-zero chance of being selected to be included in the sample. A non-probability sampling design does not allow each of the elements of the population to have a chance of being selected. In addition, rigorous quantitative studies usually utilise probability sampling designs because of their unbiasedness in the selection of the sample for the study and their ability to grant the researcher the generalisation opportunity of the study results. In contrast, in qualitative studies, non-probability sampling designs are normally utilized because of the subjectivity associated with the selection of the sampling units for a study (Saunders et al., 2016).

In this present study, purposive sampling techniques and census/total enumeration techniques were used to select participants for the study.

Purposive sampling ensures the selection of respondents for a study based on the respondents' personal characteristics (Tongco, 2007). Simply put,

the researcher selects what information is necessary to have and then searches for individuals who can and are willing to provide it due to their knowledge or experience. In the view of Bernard (2017), key respondents in purposive sampling are perceptive, self-reflective, and knowledgeable individuals of a community of interest who are able and willing to contribute their knowledge of an occurrence, as in the case of the senior high schools offering music as part of their General Arts programme.

Thereafter, a census survey approach to data collection, which permit researchers to garner information on all members of the population, was adopted. Due to the limited number of senior high schools offering music as a course in the General Arts programme, it was prudent for the researcher to collect data on all students in these selected schools to form the study population so as to fully capture their responses with regards to the perceived internal and external factors influencing their academic performance.

Although Saunders, Lewis, and Thornhill (2009) posited that the use of census surveys should be avoided due to its associated problems of time, money, and access constraints, its advantages cannot be overlooked. The census survey allows the researcher to better address all research questions or hypotheses formulated for the study if the population is a manageable size. It also provides more worthwhile results as every member of the population is included in the study (Saunders et al., 2009). The inclusion of all music students in the selected senior high schools in the Cape Coast metropolis in the study presents a good justification for obtaining all relevant information from all music students regarding the internal and external factors influencing their academic performance. Hence, the population for this study was not sampled

since the census survey was used to gather all the 440 music students from the purposefully selected senior high school.

Data Collection Instruments

Data collection is an important aspect of any type of research study. Inaccurate data collection can significantly impact the results of a study and ultimately lead to misleading results and conclusions (Yin, 2011). This section discusses the data collection tools used for the study, with sound and justifiable reasons for the choice.

The study collected primary data through the use of a structured questionnaire. A structured questionnaire is a well-constructed series of questions or items to which participants in a research project or programme respond. The questionnaire was used because it allowed for the actual conditions regarding the internal and external school factors influencing music students' academic performance to be known easily.

Questionnaires are easy to administer, friendly to complete, and fast to score, and therefore take relatively little time for researchers and respondents. Additionally, questionnaires are valuable methods of collecting a wide range of information from a large number of individuals or respondents. Singh (2007) maintains that a questionnaire is almost always self-administered, allowing respondents to fill it out themselves. They have a highly structured format, often used where the aim is to generate quantitative data from a large sample to answer research questions and/or test hypotheses. To corroborate this view, Fowler (2013) mentions that questionnaires are efficient tools for surveying large samples of respondents in a shorter period of time than interviews or other research methods, and with less expense.

The questionnaire consisted of three sections. The first section, "A," focused on the background characteristics of the students. Section "B" focused on internal school factors, whereas Section "C" focused on the external school factors influencing performance in WASSCE music. The questionnaire was adapted from an extensive literature review. On which basis the items were self-developed and measured on a 4-Likert scale rated as 1 indicating strongly disagree, 2 expressing disagree, 3 connoting agree, and 4 implying strongly agree.

Despite the merits associated with the use of questionnaires, they do have some inherent disadvantages that pose threats to the usage and validity of the instrument. Krosnick (2018) posits that designing and developing a questionnaire takes a lot of time and effort. Framing complex questions is not possible because questionnaires must be short and easy to understand. In dealing with the disadvantages associated with the instrument used in the study, meticulous steps were taken to ensure the validity and reliability of the instrument by conducting a pre-test.

Validity and Reliability

The key important criteria to ensure when employing a questionnaire for a study is the validity and reliability of the instrument. Validity is essentially demonstrating that a given instrument measures what it claims to measure (Sürücü & Maslakçi, 2020). The term "reliability" simply refers to an instrument's stability and consistency in measuring what it intends to measure (Cresswell, 2014). The role of reliability is to minimise the errors and biases in a study (Saunders et al., 2016). Validity and reliability tests were conducted to ensure that the instrument truly measures what was intended to be measured.

First of all, to ensure content validity in this study, the items on the instrument were carefully formulated to match the research objectives.

The questionnaire was also submitted to the supervisor and other experts in the field to professionally scrutinise it and make necessary corrections, clarifications, deletions, and additions regarding the questionnaire items, instructions, consent form, grammatical errors, and layout of the instrument. In addition, the researcher's supervisor assisted in vetting and reframing some items on the instrument to ensure that the study covered all relevant internal and external factors influencing music students' performance.

In all, the questionnaire was pre-tested on twenty (10 SHS 2 and 10 SHS 3) music students at Jukwa Senior High School. The comments from the pilot study were used to refine the final instruments. Jukwa Senior High School was selected because it is located in the Central Region of Ghana, where Cape Coast is a suburb. The school offers the General Art Programme with music as a course of study. Senior high school students reading music in this school possess similar attributes to those in the selected schools in the Cape Coast metropolis for the actual study. After the pre-test, a few grammatical errors were identified and corrected. The details of the pilot testing using Cronbach's alpha to analyse it can be found in Appendix E.

It has been revealed in earlier research that reliable scales are those with a Cronbach's alpha coefficient of 0.70 or more (Pallant, 2020). Similarly, Agyapong (2011) also concurred with these scholars by revealing that for an instrument to be deemed reliable, the measure must display a positive correlation (reliability coefficient) that reaches or has a reliability coefficient

(r) of.70 or above. Based on this threshold, it can be concluded that the study instrument had good internal consistency values, as shown in Appendix E.

Data Collection Procedure

In every research project, the primary goal of data collection is to obtain information to answer the research questions (Creswell & Creswell, 2017). The authors also claim that data collection procedures are made up of several interrelated steps, including sampling, obtaining permissions, and recruiting participants and respondents, as well as identifying data sources, recording data, and conducting data collection procedures. First, an ethical clearance was obtained from the University of Cape Coast Institutional Review Board (UCC-IRB) through an application process. This was done to ensure all ethical consideration requirements were satisfactorily met.

After the ethical clearance, the researcher collected an introductory letter from the Department of Music and Dance, University of Cape Coast, to solicit the needed assistance and cooperation from the respondents (students from the selected schools) for the effectiveness of the study. The researcher visited the selected schools to seek permission from the school management and then arranged for convenient days and times for the administration of the questionnaires. Arrangements were made with the respondents to schedule and administer the questionnaire. The respondents were presented with the questionnaire on the agreed-upon date and were also briefed on the aim of the research being solely for academic purposes. Respondents were assured of their anonymity and confidentiality.

The questionnaire was administered and collected over a period of one month to ensure greater return or retrieval of the questionnaires. As a result,

the study recorded a (92%) ninety-two percent response/return rate (403 questionnaires retrieved).

Ethical consideration

Observation of research ethics helps to protect the rights of the research participants and promote the integrity of the research (Israel & Hay, 2006). The following measures were taken as a way of observing ethics in the study.

The researcher applied for a research permit from the Institutional Review Board at UCC. It is important that research participants get informed before they are approached for data collection. To comply with this, the respondents were informed before data collection through the use of consent letters. Consent letters contained important information about the research and the importance of respondents' participation in the study. The aim was to seek their informed consent and ensure voluntary participation. There was also an opportunity granted to respondents to withdraw from the study if they felt like doing so. Anonymity and confidentiality were keenly observed in the study, as respondents were assured in these regards. In this study, the names of participants were kept anonymous, and the data collected from the respondents was used for academic purposes. This ensured that respondents did not hold back vital information. This has contributed to the high return rate of 92%.

Data Processing and Analysis

Patton (2002) notes that analysis of any kind of data refers to its systematic examination to determine its parts, the relationship among the parts, and their relationship to the whole. According to Blanche and Durrheim

(2006), the main objective of data analysis is to transform data into a meaningful form in order to answer the research question.

The data collected from respondents was analysed descriptively. Descriptive statistics were used because they enabled the researcher to analyse and describe the occurrences via the data garnered in order to address each research question posed for the study (Pallant, 2016). The raw quantitative data obtained from the questionnaires was processed and organised using Statistical Package for Social Sciences (SPSS) version 26. The closed-ended responses were coded, after which data analysis was carried out using descriptive statistics (i.e., frequencies, percentages, means, and standard deviation) and inferential statistics (one-way ANOVA and post-hoc test).

Research questions one and two were analysed using means and standard deviations. To achieve this, the students were made to rate whether they strongly agreed, agreed, disagreed, or strongly disagreed with the internal and external school factors, respectively (SA = strongly agree, **A** = agree, D**D** = strongly disagree). Using means, the scales were scored as follows: strongly agree =4, agree = 3, disagree = 2, and strongly disagree =1. The criterion value of 2.50 was established for the scale. To obtain the criterion value (CV = 2.50), the scores were added together and divided by the number scale (4+3+2+1 = 10/4 = 2.50). To interpret the scores for the items measuring the internal and external factors, respectively, any item with a mean score less than **2.50** indicates the unavailability or absence of the attributes, whereas mean scores greater than **2.50** were interpreted as the availability of the attributes. Similarly, standard deviations ranging from **0.0 to 1.0** indicate good

values as they are dispersed around the mean as compared to those ranging from **1.0** and above, indicating values far from the mean values.

Research hypotheses one and two sought to compare mean differences among the eight schools involved in the study on internal and external factors, respectively, that affect students' performance in music. The independent variable is the school, while the dependent variables are the internal and external school factors that affect music students' performance. To analyse these mean differences, a one-way ANOVA test was conducted, after which a post-hoc test was run to ascertain the mean differences among each school. To conduct this test, a Bonferroni test was conducted to compare multiple pairs of schools in the dataset to determine if there are significant differences between them after conducting the ANOVA or not. It provides simultaneous confidence intervals for all pairwise differences between the means of the schools. These were all possible after the normality assumption was satisfactorily achieved; thus, the Shapiro-Wilk normality test was conducted as shown in Appendices A and D.

Chapter Summary

This chapter discusses in detail and in a systematic manner the methodology used for the study, which includes the research approach, research design, the study population, sampling and sampling procedures adopted for the study, the instruments used, and procedures followed in the collection and analysis of data.

CHAPTER FOUR

RESULTS AND DISCUSSION

Introduction

This chapter presents the results of the analysis and interpretation of the findings of this research. The first part of this chapter presents the demographic characteristics of the students. These were analysed using frequencies and percentages. In the second part, the analysis of the main results of the study is presented based on the research questions framed for the study.

Demographic Characteristics of the Students

This section presents the background information of the students who responded to the questionnaire. Demographic variables of the students included their age range, gender, and class. The data was analysed using frequencies and percentages. Table 3 presents the demographic characteristics of the students from the selected senior high schools for the study.

Table 3: Demographic Characteristics of the Students

Variables	Subscale	Frequency	Percent (%)
Gender	Male	303	75
	female	100	25
Schools	Ghana National	30	8
	Efutu	66	16
	Adisadel	31	8
	St Augustine	76	19
	UPSS	35	9
	Academy of Christ the King	69	17
	Mfantsipim	76	19
	Wesley Girls	20	4
Age-range	12-15	9	2
	16-20	385	96
	20 and above	9	2
Class	SHS 2	182	45
	SHS 3	221	55
Total		**403**	**100**

Source: Field survey, (2021)

Data Table 3 shows that 303 (75%) of the students were males and 100 (25%) were females. This means that there are more male music students in the Cape Coast Metropolis than females. The data further reveal that there are 30(8%) music students in Ghana National, 66(16%) music students in Efutu, 31(8%) music students in Adisadel, 76(19%) music students in St Augustine, 35(9%) in UPSS, 69(17%) in Academy of Christ the King, 76(19%) in Mfantsipim, and 20(4%) music students in Wesley Girls. This indicates that

St. Augustine has more music students, and Wesley Girls were the least represented in terms of music students.

Data in Table 3 further show that 9 (2%) were within the age range of 12–15 and 20 and above. Within the age range of 16-20, represented 385(96%). The majority of the students were within this age range. More so, there were more students in SHS 3, 221 (55%), than those in SHS 2, 182 (41%).

Research Question One: What are the internal school factors influencing performance in WASSCE music among selected Senior High Schools in the Cape Coast Metropolis?

One of the main motivations for this study was to find out the internal school factors influencing performance in WASSCE music among the selected senior high schools in the Cape Coast Metropolis. Table 4 shows the internal school factors influencing performance in WASSCE music among the selected senior high schools in the Cape Coast Metropolis.

Table 4: Internal School Factors

No.	Items	CV=2.5 Mean	±Std.D
1.	Are your teachers punctual	3.52	.640
2.	The school has a library	3.47	1.214
3.	Teachers' quality and commitment to support students	3.34	.742
4.	Do your teachers support one another	3.31	.744
5.	Do teachers involve you in the instructional strategies to use	3.22	1.719
6.	Teachers experience in solving students' academic challenges	3.21	.797
7.	Are your teachers supervised to ensure they complete the syllabus	3.19	.749
8.	Do your teachers write lesson notes	3.11	.738
9.	Teachers emotional and social skill in providing special support and tutorials for students	3.13	.806
10.	Clarity of teacher's presentation in recognizing students learning pace	3.13	.779
11.	Do teachers hold meetings with you concerning your performance	3.11	.882
12.	Availability of counseling and guidance to students for creating better academic performance	3.08	.922
13.	The classrooms are well ventilated and always clean	3.04	.877
14.	Existence of role model teachers in the school	3.00	.873
15.	Teachers have the required .and sufficient teaching aids	2.93	.890
16.	The computer lab is well equipped	2.87	.951
17.	I have the technical support I need	2.75	1.347
18.	The students always have the textbooks required	2.74	1.023
19.	Rewards given in the school for student's good scorer	2.73	1.078
20.	I have adequate access to the equipment necessary for my studies	2.63	.967
21.	Students always gets the required books in the library.	2.59	.990
22.	The classrooms, laboratories have adequate music equipment and materials	2.45	1.106
23.	The school has enough music laboratories	2.32	1.071
24.	Lack of proper reading place where they can use freely	2.30	1.050
25.	Teachers discuss many topics in a short period of time	2.29	.990

26.	Non availability of support system for students that would help them.	2.26	.960
27.	Low level of awareness and sensitivity of staff towards all.	2.26	.923
28.	Students are overcrowded in the classroom	2.23	1.215
29.	Non availability of teaching materials	2.23	.941
30.	Lack of qualified and experienced teachers	1.99	1.004
	Mean of means	**2.73**	

Source: Field survey, (2021)

Data in Table 4 show that students agreed that some internal school factors positively affect their music performance that influence their performance in the WASSCE. These factors had a mean of more than 2.5 (Are your teachers punctual?), the school has a library, Teachers' quality and commitment to support students, Do your teachers support one another? Do teachers involve you in the instructional strategies to use? Teachers experience in solving students' academic challenges, Are your teachers supervised to ensure they complete the syllabus? Do your teachers write lesson notes? Teachers emotional and social skills in providing special support and tutorials for students, Clarity of the teacher's presentation in recognising students learning pace, Do teachers hold meetings with you concerning your performance? Availability of counselling and guidance to students for creating better academic performance, The classrooms are well ventilated and always clean. Existence of role model teachers in the school, Teachers have the required and sufficient teaching aids. The computer lab is well equipped, and I have the technical support I need. The students always have the textbooks required; rewards are given in the school for students's good scores; I have adequate access to the equipment necessary for my studies; and students always get the required books in the library. Also, the mean of the means was greater than the criterion value (MM<CV). This implies that some internal

school factors do necessarily influence students' music performance (2.73<2.50), which are also likely to influence their performance in the WASSCE.

Again, it was revealed that some other factors negatively affected students music performance (the classrooms and laboratories have adequate music equipment and materials, the school has enough music laboratories, there is a lack of a proper reading place where they can use it freely, teachers discuss many topics in a short period of time, there is no availability of a support system for students that would help them to be academically competent, there is a low level of awareness and sensitivity of staff towards all, students are overcrowded in the classroom, there is no availability of teaching materials, and there is a lack of qualified and experienced teachers). These factors have a mean of less than 2.5 and are likely to impact students' performance in their WASSCE.

Research Question two: What are the external school factors influencing performance in WASSCE music among selected Senior High Schools in the Cape Coast Metropolis?

Another thrust of this research was to ascertain the external school factors influencing performance in WASSCE music among the selected senior high schools in the Cape Coast Metropolis. Table 5 shows results on the external school factors influencing performance in WASSCE music among the selected senior high schools in the Cape Coast Metropolis.

Table 5: External School Factors

No.	Items	CV=2.5 Mean	±Std.D
1.	When I am unable to understand a relevant topic, I stay patiently and try to get it rather to give up	3.35	.752
2.	Both parent working	3.28	.928
3.	I can always manage to solve difficult problems if try hard enough	3.22	.775
4.	I always try to obtain feedback on my performance from my seniors and colleagues	3.19	.757
5.	I interact with my parents	3.15	.890
6.	I am able to self-motivate	3.12	.945
7.	I often think about my study when I am away from home	3.09	.825
8.	Parents are educated	3.02	.945
9.	I get along with peers	2.98	.910
10.	I have many siblings	2.74	1.020
11.	Learner with few siblings	2.69	1.022
12.	I hesitate on taking time away from study	2.55	1.360
13.	Less amount of time invested on studying	2.19	.989
14.	Less attendance on tutorial and other related activities	2.07	.982
15.	Inability to become well planned and organized	2.03	1.019
16.	Learner with step parents	1.89	1.050
17.	Absence of regular school attendance	1.88	1.063
18.	Lack of self confidence	1.86	.906
19.	My parents have negative attitude towards academic performance	1.85	1.036
20.	Parents not working	1.69	.905
	Mean of means	**2.59**	

Source: Field survey, (2021)

Data in Table 5 show that, the students agreed that some external school factors affect their performance in music and are likely to affect their performance in the WASSCE. These factors have mean of more than 2.5 (When I am unable to understand a relevant topic, I stay patiently and try to get it rather to give up, Both parents working, I can always manage to solve difficult problems if try I hard enough, I always try to obtain feedback on my

performance from my seniors and colleagues, I interact with my parents, I am able to self-motivate, I often think about my study when I am away from home, Parents are educated, I get along with peers, I have many siblings, Learner with few siblings and I hesitate on taking time away from study). Also, the mean of means was greater than the criterion value (MM<CV). This implies that some external school factors influence their performance in music (2.59<2.50), and are likely to influence their performance in the WASSCE. Since the variation between the means is not much, it can, therefore, be argued that, external school factors on an equal score affect student performance in WASSCE music.

Again, it was revealed that some external school factors negatively affect the students' performance in WASSCE music. This is because some factors had a mean of less than 2.5 (less amount of time invested in studying, less attendance in tutorials and other related activities, inability to become well planned and organised, learner with stepparents, absence of regular school attendance, lack of self-confidence, my parents having a negative attitude towards academic performance, and parents not working).

Research Hypothesis 1

H0: There is no statistically significant difference in internal school factors that affect music students' performance across SHS.

H1: There is a statistically significant difference in internal school factors that affect music students' performance across SHS.

This research hypothesis sought to compare mean differences among the eight schools involved in the study on internal factors that affect music performance. The independent variable is the schools, while the dependent is

internal factors that affect music performance. To analyse these mean differences, a one-way ANOVA test was conducted. Before the one-way ANOVA test was conducted, the normality assumption had to be met; thus, the Shapiro-Wilk normality test was conducted. Normality was assumed since p >.05 (see Appendix A for the normality table). Also, the homogeneity of variance was conducted using Levene's test. From Levene's test, homogeneity of variance was not assumed (statistic = 3.530, p <.05) (see Appendix B for homogeneity of variance table). Since homogeneity of variance was not assumed, the Welch robust test was reported. Tables 6 and 7 show the group statistics and the results from the one-way ANOVA test, respectively.

Table 6: Group Statistics for Schools

Schools	N	Mean	Std. Deviation
Ghana National College	30	3.1356	.29229
Efutu SHS	66	3.3187	.21972
Adisadel College	31	3.2871	.30968
St Augustine College	76	3.0935	.46297
UPSS SHS	35	2.5419	.40458
Academy of Christ the King SHS	69	3.2826	.40482
Mfantsipim	76	3.1078	.20928
Wesley Girls SHS	20	3.1000	.20276
Total	403	3.1359	.39372

Source: Field survey (2021)

The results from the one-way ANOVA in Table 7 reveal that there is a statistically significant difference among the means of schools (Ghana National, Efutu, Adisadel, St. Augustine, UPSS, Academy of Christ the King, Mfantsipim, Wesley Girls) in relation to internal factors that affect music performance.

Table 7: One-Way ANOVA Results for School on Internal Factors

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	16.970	8	2.424	21.118	.000
Within Groups	45.346	395	.115		
Total	62.316	403			

Source: Field Survey (2021)

From Table 7, F (8, 395) = 21.118, p <.001. Since p <.05, the null hypothesis is rejected. Hence, the internal factors that affect music performance differ in relation to schools. Since a significant mean difference was found, post-hoc analysis was conducted. Due to the absence of equal variance, the Bonferroni multiple comparisons test was conducted to further probe the differences. Data in Table 8 show the mean differences among schools regarding internal school factors that impact the music performance of students.

Table 8: Multiple Comparison of Means

Senior High Schools	Senior High Schools	Mean Difference	Sig.
Ghana National College	Efutu SHS	-.18313	.407
	Adisadel College	-.15154	1.000
	St Augustine College	.04210	1.000
	UPSS SHS	.59365*	.000
	Academy of Christ the King SHS	-.14705	1.000
	Mfantsipim	.02776	1.000
	Wesley Girls SHS	.03556	1.000
Efutu SHS	Ghana National College	.18313	.407
	Adisadel College	.03159	1.000
	St Augustine College	.22523*	.003
	UPSS SHS	.77678*	.000
	Academy of Christ the King SHS	.03608	1.000
	Mfantsipim	.21089*	.007
	Wesley Girls SHS	.21869	.380
Adisadel College	Ghana National College	.15154	1.000
	Efutu SHS	-.03159	1.000
	St Augustine College	.19364	.214
	UPSS SHS	.74519*	.000
	Academy of Christ the King SHS	.00449	1.000
	Mfantsipim	.17930	.371
	Wesley Girls SHS	.18710	1.000
St Augustine College	Ghana National College	-.04210	1.000
	Efutu SHS	-.22523*	.003
	Adisadel College	-.19364	.214
	UPSS SHS	.55155*	.000
	Academy of Christ the King SHS	-.18915*	.024
	Mfantsipim	-.01434	1.000
	Wesley Girls SHS	-.00655	1.000
UPSS SHS	Ghana National College	-.59365*	.000
	Efutu SHS	-.77678*	.000
	Adisadel College	-.74519*	.000
	St Augustine College	-.55155*	.000
	Academy of Christ the King SHS	-.74070*	.000
	Mfantsipim	-.56589*	.000
	Wesley Girls SHS	-.55810*	.000
Academy of Christ the King SHS	Ghana National College	.14705	1.000
	Efutu SHS	-.03608	1.000
	Adisadel College	-.00449	1.000
	St Augustine College	.18915*	.024
	UPSS SHS	.74070*	.000
	Mfantsipim	.17482	.056
	Wesley Girls SHS	.18261	1.000
Mfantsipim	Ghana National College	-.02776	1.000

	Efutu SHS	-.21089*	.007
	Adisadel College	-.17930	.371
	St Augustine College	.01434	1.000
	UPSS SHS	.56589*	.000
	Academy of Christ the King SHS	-.17482	.056
	Wesley Girls SHS	.00779	1.000
Wesley Girls SHS	Ghana National College	-.03556	1.000
	Efutu SHS	-.21869	.380
	Adisadel College	-.18710	1.000
	St Augustine College	.00655	1.000
	UPSS SHS	.55810*	.000
	Academy of Christ the King SHS	-.18261	1.000
	Mfantsipim	-.00779	1.000

Source: Field Survey (2021)

The data in Table 8 provide a Bonferroni post-hoc test that was conducted to assess the mean differences between various senior high schools (SHS) in terms of the internal school factors that affect music students' performance with their respective significance values (Sig.).

Ghana National College had a mean difference of approximately -0.18313 compared to Efutu SHS, with a non-significant p-value of 0.407. When compared to the other schools (Adisadel College, St. Augustine College, UPSS SHS, Academy of Christ the King SHS, Mfantsipim, and Wesley Girls SHS), the mean differences for Ghana National College were not statistically significant ($p > 0.05$).

Efutu SHS showed a mean difference of approximately 0.18313 compared to Ghana National College, with a non-significant p-value of 0.407. There were statistically significant differences between Efutu SHS and St. Augustine College (mean difference ≈ -0.22523, $p = 0.003$) and between Efutu SHS and UPSS SHS (mean difference ≈ -0.77678, $p < 0.001$). However, the mean differences between Efutu SHS and the other schools were not statistically significant ($p > 0.05$).

Adisadel College had a mean difference of approximately 0.15154 compared to Ghana National College, with a non-significant p-value of 1.000. The mean differences between Adisadel College and all other schools were not statistically significant ($p > 0.05$).

St. Augustine College showed a mean difference of approximately 0.04210 compared to Ghana National College, with a non-significant p-value of 1.000. There were statistically significant differences between St. Augustine College and UPSS SHS (mean difference ≈ -0.55155, $p < 0.001$) and between St. Augustine College and Academy of Christ the King SHS (mean difference ≈ -0.18915, $p = 0.024$). The mean differences between St. Augustine College and the other schools were not statistically significant ($p > 0.05$).

UPSS SHS had statistically significant mean differences when compared to all other schools, with p-values less than 0.001. The mean differences ranged from approximately -0.55810 to -0.77678.

Academy of Christ the King SHS showed statistically significant mean differences compared to St. Augustine College (mean difference ≈ 0.18915, $p = 0.024$) and UPSS SHS (mean difference ≈ 0.74070, $p < 0.001$). The mean differences between the Academy of Christ the King SHS and the other schools were not statistically significant ($p > 0.05$).

Mfantsipim had a statistically significant mean difference when compared to Efutu SHS (mean difference ≈ -0.21089, $p = 0.007$). The mean differences between Mfantsipim and the other schools were not statistically significant ($p > 0.05$). Similarly, the mean differences for Wesley Girls SHS

were not statistically significant when compared to any of the other schools ($p > 0.05$).

Research Hypothesis 2

H0: There is no statistically significant difference in external school factors that affect music students' performance across SHS.

H1: There is a statistically significant difference in external school factors that affect music students' performance across SHS.

This research hypothesis sought to compare mean differences among the eight schools involved in the study on external factors that affect music performance. The independent variable is the schools, while the dependent is external factors that affect music performance. To analyse these mean differences, a one-way ANOVA test was conducted. Before the one-way ANOVA test was conducted, the normality assumption had been met; thus, the Shapiro-Wilk normality test was conducted. Normality was assumed since $p > .05$ (see Appendix C for the normality table). Also, the homogeneity of variance was conducted using Levene's test. From Levene's test, homogeneity of variance was not assumed (statistic = 4.60, $p < .05$) (see Appendix D for homogeneity of variance table). Since homogeneity of variance was not assumed, the Welch robust test was reported. Tables 9 and 10 show the group statistics and the results from the one-way ANOVA test, respectively.

Table 9: Group Statistics for Schools

Schools	N	Mean	Std. Deviation
Ghana National College	30	3.2817	.29956
Efutu SHS	66	3.3341	.26489
Adisadel College	31	3.3081	.41132
St Augustine College	76	3.1218	.49836
UPSS SHS	35	2.9457	.42032
Academy of Christ the King SHS	69	3.2507	.45790
Mfantsipim	76	3.2766	.14925
Wesley Girls SHS	20	3.0158	.32577
Total	403	3.2142	.38763

Source: Field Survey (2021)

According to the results from the one-way ANOVA Table 10, there is a statistically significant difference among the means of schools (Ghana National, Efutu, Adisadel, St. Augustine, UPSS, Academy of Christ the King, Mfantsipim, Wesley Girls) in relation to external factors that affect music performance.

Table 10: One-Way ANOVA Results for School on External Factors

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	16.970	8	2.424	21.118	.000
Within Groups	45.346	395	.115		
Total	62.316	403			

Source: Field Survey (2021)

From Table 10, F (8, 395) = 21.118, p <.05. Since p <.05, the null hypothesis is rejected. Thus, external factors that influence music performance differ according to school. Also, since a significant mean difference was found, post-hoc analysis was conducted. Due to the absence of equal variance, the Bonferroni multiple comparisons test was conducted to further probe the differences, as shown in Table 11.

Table 11: Multiple Comparison of Means

Senior High Schools	Senior High Schools	Mean Difference	Sig.
Ghana National College	Efutu SHS	-.18313	.407
	Adisadel College	-.15154	1.000
	St Augustine College	.04210	1.000
	UPSS SHS	.59365*	.000
	Academy of Christ the King SHS	-.14705	1.000
	Mfantsipim	.02776	1.000
	Wesley Girls SHS	.03556	1.000
Efutu SHS	Ghana National College	.18313	.407
	Adisadel College	.03159	1.000
	St Augustine College	.22523*	.003
	UPSS SHS	.77678*	.000
	Academy of Christ the King SHS	.03608	1.000
	Mfantsipim	.21089*	.007
	Wesley Girls SHS	.21869	.380
Adisadel College	Ghana National College	.15154	1.000
	Efutu SHS	-.03159	1.000
	St Augustine College	.19364	.214
	UPSS SHS	.74519*	.000
	Academy of Christ the King SHS	.00449	1.000
	Mfantsipim	.17930	.371
	Wesley Girls SHS	.18710	1.000
St Augustine College	Ghana National College	-.04210	1.000
	Efutu SHS	-.22523*	.003
	Adisadel College	-.19364	.214
	UPSS SHS	.55155*	.000
	Academy of Christ the King SHS	-.18915*	.024
	Mfantsipim	-.01434	1.000
	Wesley Girls SHS	-.00655	1.000
UPSS SHS	Ghana National College	-.59365*	.000
	Efutu SHS	-.77678*	.000
	Adisadel College	-.74519*	.000
	St Augustine College	-.55155*	.000
	Academy of Christ the King SHS	-.74070*	.000
	Mfantsipim	-.56589*	.000
	Wesley Girls SHS	-.55810*	.000
Academy of Christ the King SHS	Ghana National College	.14705	1.000
	Efutu SHS	-.03608	1.000
	Adisadel College	-.00449	1.000
	St Augustine College	.18915*	.024
	UPSS SHS	.74070*	.000
	Mfantsipim	.17482	.056
	Wesley Girls SHS	.18261	1.000
Mfantsipim	Ghana National College	-.02776	1.000

	Efutu SHS	-.21089*	.007
	Adisadel College	-.17930	.371
	St Augustine College	.01434	1.000
	UPSS SHS	.56589*	.000
	Academy of Christ the King SHS	-.17482	.056
	Wesley Girls SHS	.00779	1.000
Wesley Girls SHS	Ghana National College	-.03556	1.000
	Efutu SHS	-.21869	.380
	Adisadel College	-.18710	1.000
	St Augustine College	.00655	1.000
	UPSS SHS	.55810*	.000
	Academy of Christ the King SHS	-.18261	1.000
	Mfantsipim	-.00779	1.000

Source: Field Survey (2021)

The Bonferroni post-hoc test results provided in Table 11 compare the mean differences and their respective significance values between various senior high schools (SHS) in the context of external school factors that influence music students' performance. The data in Table 11 show comparisons between different schools, the mean differences, and significance values for each comparison.

Ghana National College shows negative mean differences when compared to other schools. However, none of these differences were statistically significant at the significance level ($p > 0.05$). Efutu SHS, on the other hand, had significant mean differences with St. Augustine College ($p = 0.003$) and UPSS SHS ($p = 0.000$), both showing positive differences. The differences with other schools were not statistically significant.

Adisadel College does not exhibit statistically significant mean differences when compared to any other school (all p-values are greater than 0.05), whereas St. Augustine College had a significant mean difference with UPSS SHS ($p = 0.000$), with St. Augustine College having a positive difference. The difference with the Academy of Christ the King SHS was also

statistically significant (p = 0.024) and positive. The differences with other schools were not statistically significant. Further, UPSS SHS had significant mean differences with all other schools (p-values are all 0.000), and all the differences are positive, whereas Academy of Christ the King SHS did not show statistically significant mean differences when compared to any of the other schools (all p-values are greater than 0.05).

Finally, Mfantsipim had a significant mean difference with Efutu SHS (p = 0.007), showing a negative difference. The differences with other schools were not statistically significant, while Wesley Girls SHS did not exhibit statistically significant mean differences when compared to any other school (all p-values are greater than 0.05).

Discussion

The discussion is done in line with the research objectives and findings.

Discussion on the internal school factors influencing performance in WASSCE music among selected Senior High Schools in the Cape Coast Metropolis

The study established that some internal school factors positively affect students' WASSCE music performances. This implies that some internal school factors do positively influence their WASSCE music performance (are your teachers punctual? The school has a library. Teachers' quality and commitment to support students, Do your teachers support one another? Do teachers involve you in the instructional strategies to use? Teachers experience in solving students' academic challenges, Are your teachers supervised to ensure they complete the syllabus? Do your teachers write lesson notes? Teachers emotional and social skills in providing special

support and tutorials for students, Clarity of the teacher's presentation in recognising students learning pace, Do teachers hold meetings with you concerning your performance? Availability of counselling and guidance to students for creating better academic performance, The classrooms are well ventilated and always clean. Existence of role model teachers in the school, Teachers have the required and sufficient teaching aids. The computer lab is well equipped, I have the technical support I need, the students always have the textbooks required, rewards are given in the school for student's good scores, I have adequate access to the equipment necessary for my studies, and students always get the required books in the library. Again, it was revealed that some other factors negatively affected students' performance in WASSCE music (the classrooms, laboratories have adequate music equipment and materials, do music teachers use laboratories? The school has enough music laboratories. Lack of a proper reading place where they can use it freely, Teachers discuss many topics in a short period of time. Non-availability of a support system for students that would help them to be academically competent, Low level of awareness and sensitivity of staff towards all, Students are overcrowded in the classroom due to the non-availability of teaching materials and a lack of qualified and experienced teachers.

An investigation of internal school factors is also essential to understanding how to enhance students' academic performance. The findings of the study are in line with the position of Chow and Yong (2013). The authors argued that there are individual-level factors such as students' self-efficacy, motivation, and engagement that have direct effects as well as mediating effects on the relationships that exist between the other predictors

and students' performance. Thus, investigation of individual-level variables also leads to a better understanding of students' academic achievements.

According to Seashore, Dretzke, and Wahlstrom (2010), school and classroom conditions, teacher quality, and student/family background conditions are directly responsible for the learning of students. These factors are also under the shade of classification put forward by Farooq et al. (2011), as the study revealed.

Earthman (2002) outlined that a good school facility supports the educational enterprise. In such a school, learning resources like physical facilities, which include classrooms in a habitable state, an equipped library, a computer room, and laboratories, are available and adequate. Other learning resources, which include text books, projectors, videos, software, and other materials relevant to learning, should be sufficient. Research has shown that clean air, good light, and a small, quiet, comfortable, and safe learning environment are important for the general positive academic achievement of learners (Lackney, 1999; & Schneider, 2002). Students in the Cape Coast Metropolis were notified of the availability of these factors in their schools.

According to Earthman (2002), school facility conditions do affect student academic achievement. He argues that school building design features and components have been proven to have a measurable influence on student learning. Among the influential features and components are those impacting temperature, lighting, acoustics, and age.

Similar to the findings of the study, Reche et al. (2012) observed that text books enable the pupils to follow the teacher's sequence of presentation of the syllabus and aid in understanding lessons. This indicates that most

schools that perform poorly spend less money on the purchase of teaching resources. The unavailability of other critical facilities, such as laboratories, may affect the delivery of music. Therefore, libraries need to be equipped with sufficient books, while laboratories need to be installed and equipped with the required apparatus and chemicals.

Fuller (2009) reviewed studies on school effects on students' performance conducted in developing countries and concluded that, compared to developed countries, school factors in developing countries explained a large portion of the variance in academic performance after controlling the social class background of the parents. It is noteworthy that these findings are only applicable to performance in music achievement due to the fact that music is more independent from indigenous forms of language and knowledge in many developing countries. Out of the studies reviewed, Fuller recorded that instructional materials such as textbooks, library size, and science laboratories could be seen as more influential factors affecting academic achievements.

Graddy and Stevens (2003) conducted an empirical study on the impact of school inputs on pupils' performance in private (independent) schools in the UK. The results indicated a negative relationship between the pupil-teacher ratio and examination results. A 1% decrease in the ratio of pupils to teachers leads to an increase of 0.12 in the percentage of A-grades at A-level. Per-pupil expenditure on plant and equipment positively impacted achievement.

Good performance is a result of high commitment levels by the teachers. For example, when teachers absent themselves from school

frequently, students go unattended and do not do well in examinations. Absenteeism by teachers reduces the amount of instructional time, and this results in the syllabus not being completed. This in turn leads to a lower output of work by the students (Ubogu, 2020). In this study, it was noted that teachers were punctual at school.

Discussion on the external school factors influencing performance in WASSCE music among selected Senior High Schools in the Cape Coast Metropolis

The study revealed that some external school factors positively affect students' WASSCE music performance (when I am unable to understand a relevant topic, I stay patiently and try to get it rather than give up; both parents are working; I can always manage to solve difficult problems if I try hard enough; I always try to obtain feedback on my performance from my seniors and colleagues; I interact with my parents; I am able to self-motivate; I often think about my study when I am away from home; my parents are educated; I get along with peers; I have many siblings; I am a learner with few siblings; and I hesitate on taking time away from study). Understanding these factors can help educational policymakers and school administrators make informed decisions to improve music education and performance in schools that may be lagging behind. For instance, schools with higher music performance scores can serve as models for others, sharing best practices and strategies to enhance music education.

Recent research on academic achievement also shows that external school factors influence students' performance (Duschl et al., 2007; Martin, Mullis, Foy, & Stanco, 2012). Studies have shown that schools play critical

roles in all aspects of pupils' development (Borg, Borg & Stranahan, 2012; Meece, Anderman & Anderman, 2006).

Motivation has been reported in primary, secondary and college education to influence academic performance as a mediating variable (Kusurkar et al., 2013; Soenens & Vansteenkiste, 2005). A study conducted by Lau and Roeser (2002) evidenced that inclusion of motivational variables added unique power to predict individual differences in students' performance. As they reported, psychological processes were more powerful predictors than the demographic variables in predicting students' performance. Therefore, taking motivation into consideration under emotional and motivational factors or in other words psychological factors will elaborate understanding of students' performance in music. From the findings of the study, students revealed that they are able to self-motivate but lacks confidence.

A study done in Nigeria by Alokan et al. (2013) argues that the illiteracy of parents could have a negative effect on the academic performance of their children. According to them, children whose parents are illiterate have been seen to lack home encouragement. They conclude that some illiterate parents refuse to provide their children with needed textbooks and are also discouraging them from learning. David (2007) stated that textbooks aid studies after normal school teaching because some students from illiterate parents lack assistance because of their parents' illiteracy and ignorance. The findings from this study established that parents are educated but have a negative attitude towards academic performance.

The home environment has an exceedingly great role to play in the academic performance of every child (Wamulla, 2013). The home

environment may enhance positive self-esteem, which may improve academic performance, and thus, the home environment must be encouraging and supportive towards academics. Mworia (1993) opines that for a child to make the most of his educational needs at home, he or she should have easy access to instruments like books and newspapers and a building facility with space, light, and silence that is convenient for studying. Social class is common to all societies, ancient or modern. Socioeconomic status is usually determined by wealth, power, and prestige. When evaluating and comparing people, the criteria used to rank people as wealthy is to look at their possessions in terms of type and size of house, area of residence, number of cars, and quality of clothes (Wamulla, 2013). Wealth is strongly correlated with education and occupation. Morakinyo (2003) indicates the existence of a relationship between SES and academic achievement. The study revealed that most of the parents are not working. This may affect the economic status and academic achievement of the student.

Finally, the socio-economic disadvantage has been found to be strongly associated with factors such as the home literacy environment, parents' teaching styles, and investment in resources that promote learning, such as quality child care, educational materials, and visits to museums (Shonkoff & Phillips, 2000). Families with low- incomes face greater hurdles in achieving effective parenting, which in turn often harms their children's development and educational achievement (Berk, 1997). A high socio-economic background is associated with the high literacy of the parents, who may be working professionals. Literate parents are highly involved in the academic activities of their children, both in school and at home.

The role of parents in providing extra tuition and necessary materials, motivating students to study, and emphasising applications in day-to-day life can enhance students' achievement in science.

Alrehaly (2011) emphasises the fact that parents are an important factor affecting their children's learning and achievement. Although educators have highlighted the importance of PI if children are to do well in school, researchers have not yet clearly found the extent to which PI affects students' achievement and what kind of PI is most important (Hong & Ho, 2005; Jeynes, 2002).

Topor et al. (2010) proved that increased PI was significantly related to increased academic performance, measured in terms of both a standardized achievement test and teacher ratings of the child's classroom academic performance. Ak and Sayil (2006) also identified perceived family support as a significant predictor of the Turkish students' academic performance. Olatoye and Ogunkola (2008) investigated the relative and combined influences of PI on junior secondary students' achievement in Nigeria. The results showed that PI alone accounted for 4.1% of the total variance in achievement. This percentage, though low, is shown to be statistically significant. Atta and Jamil (2012) studied the effects of PI on educational attainments in Pakistan.

Nyarko (2011) analysed the link between parental school involvement and the academic achievement of students between the ages of 15 and 20 in Ghana and found that mothers' school involvement was significantly and positively related to the students' achievement. Wei (2012) examined parental practices in facilitating children's educational outcomes within Chinese families from a social capital perspective. The researcher reported that a

higher level of support, a lower level of pressure, and more frequent communication between parents and children were associated with higher achievement.

Discussion on Research Hypothesis one

From the results, Ghana National College, Efutu SHS, and Adisadel College displayed non-significant mean differences in music performance when compared to each other and the majority of other SHS. These results suggest that, in terms of music performance, these schools have relatively similar outcomes. This information can guide educators and policymakers in allocating resources and support based on the specific needs and challenges faced by schools with similar performance levels.

In contrast, UPSS SHS demonstrated statistically significant differences in music performance compared to all other schools, signifying that it may have unique internal factors or practices that significantly impact student outcomes. Further exploration of these factors could lead to insights into effective teaching methods or curriculum enhancements. Academy of Christ the King SHS and Mfantsipim also showed significant differences in music performance compared to specific schools, indicating potential areas for targeted improvement. St. Augustine College had significant differences when compared to UPSS SHS and Academy of Christ the King SHS, underscoring variations in internal school factors that could be further investigated for improvement. These findings highlight the importance of considering internal school factors in shaping student outcomes.

Discussion on Research Hypothesis two

The identification of significant mean differences between specific schools, such as "UPSS SHS" and "St Augustine College," in relation to external school factors influencing music students' performance highlights the importance of external school-specific factors that influence music performance.

Additionally, the majority of the school pairs did not exhibit significant mean differences in music performance in terms of the external school factors. This finding suggests that, for some schools, there is a similarity in the quality of music education and student performance. While this may indicate a degree of uniformity, it also raises questions about the potential for improving music education across schools. Schools where music performance is not significantly different from others might benefit from sharing resources, strategies, and collaborative efforts to elevate the overall standard of music education so as to enhance students' performance in the WASSCE. This could involve creating a network for music educators to exchange ideas and practices or providing additional support and training to schools where music performance is lacking.

Chapter Summary

The chapter undertook a comprehensive analysis of the data in conjunction with a thorough exploration of the study's results. The findings were systematically examined in alignment with the research questions and hypotheses that were initially formulated to direct the study. In the course of these discussions, the study also established connections with existing literature to substantiate the presented findings.

CHAPTER FIVE

SUMMARY CONCLUSIONS AND RECOMMENDATIONS

Introduction

This chapter presents the summary, the conclusion and recommendations. Additionally, the chapter presents suggestions for further research.

Overview of the Study

The study investigated factors influencing performance in WASSCE music among selected senior high schools in the Cape Coast Metropolis. The study employed a descriptive cross-sectional survey using a questionnaire to collect data from 403 students in SHS 2 and SHS 3.

Summary of Key Findings

In line with research question one, the study found that specific internal school factors that positively influence students' music performance are likely to affect their performance in the WASSCE examination. On the other hand, other internal school factors also negatively impact students' music performance. Addressing these negative factors is crucial for improving students' music performance and overall academic achievements in the WASSCE.

With regards to research question two, the study found that external school factors have a significant impact on students' music performance and are likely to affect their performance in the WASSCE examination, while others negatively impact their performance. These findings underscore the crucial role of external school factors in shaping academic performance, both positively and negatively.

According to research hypothesis one, the study found that in a comparison of music performance among different senior high schools (SHS), only a few schools displayed significant differences in their mean scores. UPSS SHS showed significant differences compared to all other schools, indicating a standout performance. Similarly, the Academy of Christ the King SHS had significant differences compared to specific schools. However, the remaining schools did not exhibit statistically significant mean differences when compared to each other. This underscores the presence of school-specific factors influencing student performance, with some schools showing notable distinctions while others have similar outcomes.

Based on research hypothesis two, the study found that there are some mean differences in music performance between various senior high schools (SHS), but many of these differences are not statistically significant ($p > 0.05$). Significant differences were observed for Efutu SHS with positive differences, St. Augustine College with positive differences, UPSS SHS with positive differences, and Mfantsipim with a negative difference. However, other schools did not show statistically significant mean differences, indicating that most of the variations in music performance among these schools are not statistically significant.

Conclusions

In line with the findings for research question one, it is concluded that the internal school factors do not only impact music performance but also have implications for students' performance in the WASSCE examination. Hence, addressing the negative factors identified is crucial for enhancing

students' music performance and overall academic achievements in the WASSCE.

Regarding the findings on research question two, it is concluded that external school factors play significant roles in shaping students' music performance, with some factors contributing positively while others have a negative impact. The findings underscore the importance of considering external school factors in understanding academic performance, as these factors have implications for both music performance and WASSCE results.

In relation to the findings of research hypothesis one, it is concluded that when comparing music performance among different senior high schools (SHS), only a select few schools exhibit statistically significant differences in their mean scores. UPSS SHS stands out with significant differences when compared to all other schools, indicating exceptional performance. The Academy of Christ the King SHS also displays significant differences with specific schools. However, the majority of schools do not exhibit statistically significant mean differences when compared to each other.

Based on the findings of research hypothesis two, the study concludes that while there are some mean differences in music performance between various senior high schools (SHS) in terms of external school factors, many of these differences are not statistically significant ($p > 0.05$). Notable differences include positive ones for Efutu SHS, St. Augustine College, and UPSS SHS, as well as a negative difference for Mfantsipim. This implies that, in most cases, these variations in music performance among schools are not

statistically significant, underscoring the need for further investigation to identify any delicate yet meaningful differences.

Recommendations

On the strength of the findings and conclusions arising from the study, the following recommendations are made:

1. The study's findings regarding the influence of internal school factors on music performance highlight the need for targeted interventions to address negative factors and nurture positive ones. Schools should therefore implement strategies to support students in areas where they struggle, ultimately improving their music performance and overall success in the WASSCE examination.
2. The study's revelations about the significant impact of external school factors on music performance emphasise the importance of recognising and leveraging these factors to enhance students' academic achievements. Educators and policymakers should consider how to harness the positive influences while mitigating the negative ones, potentially leading to improved performance in both music and the WASSCE examination.
3. The study recommends that schools with significant differences in mean scores should further investigate the specific practices or conditions that contribute to their success. In contrast, schools with similar outcomes may find it beneficial to share best practices or explore ways to differentiate their approach.
4. The study recommends that a standardised approach to education may not be necessary, and resources can be allocated more efficiently to

address specific school needs, such as the improvement of negative differences and the reinforcement of positive differences where they exist.

Suggestions for Further Research

Based on the findings and recommendations of this research, the study suggests that a similar study should be conducted to investigate factors influencing performance in WASSCE music among selected senior high schools in the Cape Coast Metropolis using both teachers and students as the population through a mixed method to better help provide an in-depth understanding of the phenomenon.

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APPENDICES

Appendix A

		Tests of Normality					
	School	Kolmogorov-Smirnov[a]			Shapiro-Wil		k
		Statistic	df	Sig.	Statistic	Df	Sig.
Internal factors	GHANA NATIONAL	.118	29	.200*	.956	29	.254
	EFUTU	.093	66	.200*	.985	66	.583
	ADISADEL	.124	31	.200*	.977	31	.718
	ST AUGUSTINE	.086	75	.200*	.953	75	.008
	UPSS	.122	29	.200*	.968	29	.517
	ACADEMY OF CHRIST THE KING	.092	56	.200*	.981	56	.519
	MFANTSIPIM	.062	76	.200*	.989	76	.760
	WESLEY GIRLS	.127	20	.200*	.975	20	.848
*. This is a lower bound of the true significance.							
a. Lilliefors Significance Correction							

Appendix B

	Test of Homogeneity of Variances				
		Levene Statistic	df1	df2	Sig.
Internal factors	Based on Mean	3.530	7	374	.001
	Based on Median	3.133	7	374	.003
	Based on Median and with adjusted df	3.133	7	282.992	.003
	Based on trimmed mean	3.452	7	374	.001

Appendix C

Tests of Normality							
	School	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
External factors	GHANA NATIONAL	.143	29	.136	.965	29	.432
	EFUTU	.099	65	.188	.963	65	.050
	ADISADEL	.126	30	.200*	.957	30	.260
	ST AUGUSTINE	.147	75	.000	.945	75	.003
	UPSS	.141	34	.084	.944	34	.082
	ACADEMY OF CHRIST THE KING	.158	67	.000	.930	67	.001
	MFANTSIPIM	.153	76	.000	.894	76	.000
	WESLEY GIRLS	.151	20	.200*	.962	20	.583
*. This is a lower bound of the true significance.							
a. Lilliefors Significance Correction							

Appendix D

	Test of Homogeneity of Variances				
		Levene Statistic	df1	df2	Sig.
External factors	Based on Mean	4.600	7	388	.000
	Based on Median	3.633	7	388	.001
	Based on Median and with adjusted df	3.633	7	327.00 4	.001
	Based on trimmed mean	4.522	7	388	.000

Appendix E

Reliability test for Sections (B-C) of the research instrument

SECTION B: INTERNAL SCHOOL FACTORS

Reliability Statistics	
Cronbach's Alpha	N of Items
.857	30

SECTION C: EXTERNAL SCHOOL FACTORS

Cronbach's Alpha	N of Items
.746	21