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Influence of Learners' Participation in Education and Sport Based Co-Curricular Activities on Academic Performance in Public Secondary Schools in Kenya

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Abstract

The study investigated the influence of learner participation in education-based and sport-based co-curricular activities on academic performance in public secondary schools in West Pokot County, Kenya. Grounded in Austin's theory of involvement, it employed a mixed-method approach and a convergent mixed research design. The target population included 50 principals, 200 co-curricular teachers, and 826 form three students from 50 schools. A sample of 277 respondents (232 students, 36 teachers, and 9 principals) was selected using simple random and purposive sampling techniques. Data was collected through questionnaires and interviews and analyzed descriptively and thematically. Findings revealed that academic clubs (36.2%), debate clubs (20.7%), and field trips were the most popular education-based co-curricular activities, while article writing (1.7%) and symposiums (3.4%) had the least participation. Athletics and football were the most widely offered sports, while handball, volleyball, basketball, netball, and table tennis were limited due to inadequate resources and expertise. Students participated more in athletics and football, which, along with other sports, positively influenced academic performance. Music, drama, scouting, and guiding were also widely available and had high participation rates. The study concluded that both education-based and sports-based co-curricular activities positively impacted academic performance. However, resource constraints limited access to certain activities. It recommended proactive planning and management by school principals and teachers to enhance intellectual growth. Schools should improve sports facilities, train teachers, and diversify clubs to include public speaking, poetry, and photography. These recommendations aim to integrate co-curricular activities more effectively into education, benefiting all stakeholders.

Keywords: Co-Curricular, Education-Based Activities, Sports-Based Activities, Sports Facilities, Academic Performance.

1.1 INTRODUCTION

Co-curricular activities, as the name implies, are those, not directly related with the prescribed curricular/formal classwork. Co-curricular activities are vital for the holistic development of learners, as they foster interest and enhance intellectual capacity. Co-curricular activities, including sports, athletics, scouting, clubs, debates, and excursions, play a crucial role in students' holistic development by fostering social, emotional, and cognitive skills (Veliz & Shakib, 2014; Zaman, 2017). These activities are embedded within schools and communities, providing lifelong learning experiences and alternative resources for student engagement (Acquah & Anti Partey, 2014). Participation in co-curricular activities enhances cognitive development, interpersonal communication, and job-related skills while fostering mental well-being and reducing problem behaviors (Daniyal *et al*., 2012; Olson, 2015; Tan & Pope, 2017).

Empirical studies link co-curricular participation with improved academic performance, higher self-esteem, reduced dropout rates, and better mental health outcomes (Fujita, 2016; Guest & Schneider, 2015; Leung, Ng & Chan, 2011). Schools leverage these activities to mitigate absenteeism, bullying, and disengagement, thus promoting pro-social behavior and resilience (Daniyal *et al*., 2012; Gilman *et al*., 2014). Furthermore, structured activities create leadership and mentorship opportunities, enhancing students' sense of belonging and social capital (Fredricks & Eccles, 2016; Bekomson *et al*., 2020).

Sports-based co-curricular activities contribute to students' self-identity and social skills but can also pose challenges such as competition-induced stress and school deviance (Marsh & Kleitman, 2005; Acquah & Anti Partey, 2014). While athletics positively impacts academic performance, the relationship is weaker than other co-curricular activities (Fujita, 2016). Studies in the U.S. show a correlation between participation and higher GPAs, increased social development, and reduced dropout rates (Stephens & Schaben, 2016; Dearman, 2017). European studies highlight reduced risky behaviors and better school attendance among participants (Sauerwein & Fischer, 2016), while Asian studies emphasize youth development, social interaction, and educational attainment (Ma & Shek, 2014; Daniyal *et al.*, 2012).

In Africa, co-curricular activities benefit students but do not guarantee academic success (Kariyana *et al*., 2012). Studies in Ghana and Nigeria indicate mixed outcomes, with some students struggling to balance academics and extracurriculars while others excel in subjects like physics (Acquah & Anti Partey, 2014; Adeyemo, 2010). East African research underscores the role of infrastructure in supporting learning and discipline (Sulaiman *et al*., 2017), while Tanzanian and Kenyan studies affirm co-curricular activities' positive effects on school attendance, self-confidence, and self-concept (Lyoba & Mwila, 2022; Kamau *et al*., 2020; Okumu *et al*., 2017). Overall, participation fosters commitment, teamwork, and perseverance, reinforcing holistic educational experiences (Kumar & Kumar, 2012).

1.2 Statement of the Problem

Despite the recognized role of co-curricular activities in fostering learners' competencies beyond the classroom (Moore, 2016), the impact of education-based and sport-based activities on academic performance remains debatable (Daniyal *et al*., 2012). While some studies argue that co-curricular participation enhances retention and self-perception, critics contend that such activities divert time from academics and hinder performance (Ibiam & Enendu, 2015; Mullen, 2016). Conversely, others assert that participation in co-curricular activities positively influences academic achievement (Dearman, 2017; Granger, 2014). In Kenya, research has largely examined activities such as athletics, football, music, and drama independently, leaving a gap in understanding their holistic influence on academic outcomes. This study seeks to bridge this gap by investigating how learners' involvement in education-based and sport-based co-curricular activities affects academic performance in public secondary schools in Kapenguria sub-county, West Pokot County.

1.3 Research Purpose, Objectives and Questions

The purpose of this study was to investigate the influence of learners' participation in education-based and sports-based co-curricular activities on academic performance in public secondary schools in Kapenguria sub-county, West Pokot County.

The study was guided by two research objectives thus:

i. To establish the influence of education-based co-curricular activities on academic performance in public secondary schools.
ii. To examine the influence of sport-based co-curricular activities on academic performance in public secondary schools.

The study was guided by the following research questions:

i. How do education-based co-curricular activities influence academic performance in public secondary schools?
ii. What influence do sport-based co-curricular activities have on academic performance in public secondary schools?

1.4 Theoretical Framework

Astin Theory of Involvement

The theory was fronted by Astin (1984) and postulate that learners are not passive participants in their education but instead actively determine their level of involvement in school activities. This study examined how learner participation in education based and sport-based co-curricular activities influences academic performance, with the expectation that actively engaged students would show varying levels of academic achievement compared to their non-participating counterparts. Additionally, involvement in these activities increases interactions between teachers and students, which enhances learning and personal development.

Astin further emphasized that co-curricular involvement demands both physical and psychological energy, creating competition for a learner's limited time. Successful students are those who effectively balance academics and co-curricular activities. This study explored how students manage this balance and the skills they acquire through participation. However, over-involvement in co-curricular activities can reduce the time allocated to academics, leading to lower academic performance and reduced teacher interaction. The theory suggests that participation in education-based, sport-based, social-based, and community-based co-curricular activities is as vital as academic work. For instance, learners engaged in community service, such as environmental conservation, develop teamwork and problem-solving skills applicable in classroom settings. Furthermore, increased engagement with instructors beyond traditional lessons fosters a richer learning experience. This theory is particularly relevant to the study as it explains how student involvement in co-curricular activities ultimately impacts academic performance.

2.1 LITERATURE REVIEW

This section examines literature on education-based and sport-based co-curricular activities and draws out the relationship between study variables.

2.2 Education - Based Co-curricular Activities and Academic Performance

Education-based co-curricular activities are related to academics such as debates, symposiums, environmental clubs, science congress and competitions related to the different subjects offered in the education curriculum. The impact of education-based co-curricular activities on the academic performance of students in high schools in the United States was investigated by Ritchie (2018). The specific focused on the number of academic co-curricular activities that the students were involved in and their grade point average and relied on descriptive and inferential statistics. The results of the study showed that the involvement of learners in co-curricular academic activities led to an increase in the grade point averages of high school learners.

Ayesha *et al.*, 2024 in their study role of co-curricular activities in educational performance and character building from teacher's perspective in Shakargarh, categorized co-curricular activities into two; physical and non-physical. A questionnaire was prepared as the data collection instruments. A total of 120 respondents were randomly selected from eight schools, with 15 respondents chosen randomly from each school. The collected data underwent analysis using the Statistical Package for Social Science (SPSS). The findings revealed that nonphysical activities such as reading, Naats, and debates were ranked among the top three, while physical activities like cricket, handball, and football were identified as the top three physical activities. According to the study, co-curricular activities contribute to character building, enhance physical health, and positively impact the academic learning of students. This study categorized the co-curricular activities according to types and examined their influence on academics in Kapenguria, West Pokot County.

A study conducted by Muhammad *et al.*, 2022 to examine the effect of Co-Curricular-activities on the academic achievement of Secondary School Students in District Quetta intended to find out how much boys and girls have an interest and participation in Co-curricular-activities. The study was Exploratory and the researcher used Pearson Correlation to explore the relation between Co-curricular activities and academic achievement. The researcher selected the sample of 386 (191 Boys and 195 Girls) secondary school students of grade 10th from 10 different secondary schools. The study revealed that boy students were more active in Co-curricular activities at the secondary level. The Pearson Correlation value indicates that Co-curricular activities have a positive link with academic improvement.

Romica & Philip, (2020) examined the effects of extra and co-curricular activities on an intermediate pupil's academic performance in Binmaley, Pangasinan. the study identified the profile of pupils in terms of type of school, number of learners, teachers, extra and co-curricular organization and the number of extra and co-curricular activities participated in by the students, the extent of contribution of the extra and co-curricular activities to the attainment of learning competencies of scouting, journalism, mathematics enhancement, science quest and camp, leadership development, athletic meet, arts and talent competition, the problems encountered by the pupils in participating extra and co-curricular activities as perceived by the teachers and the significant relationship between the extent of contribution of extra and co-curricular activities to the learning competencies and their profile variables. The descriptive method of research was used in the study. Purposive sampling technique was used in determining the respondents. The research questionnaire that was used in gathering the data is a questionnaire distributed and retrieved by the researcher. The study found out that there is a significant relationship between the extent of contribution of co-curricular activities to the learning competencies and school profile. Also, the participation of the learners in the co-curricular activities contributes in attaining their learning competencies. In this study, the focus is on the influence of these c-curricular activities to academic performance of students in public secondary schools.

Fredricks & Eccles (2016) examined the impact of co-curricular activities using a large – student sample in the US. The longitudinal study used interviews and self-administered questionnaires and involved parents of school going children. The findings indicated that participation in both high school clubs predicted academic adjustment, educational status and civic engagement later on in life. Moreover, the strength of the relation between activity participation and development differed by type of activity, outcome, and time point.

Further, Champoux (2016) analysed the influence of students' involvement in education-based co-curricular activities on their educational achievement. The research was conducted on 18 students from a liberal arts institution in New York. The grade point average was compared from a time when the students were not highlighted involved in education-based co-curricular activities to when they were highly involved in these activities. A questionnaire with both a Likert scale and open-ended questions were utilized by the study. The findings of the research indicated that learners' participation in education-based co-curricular activities contributed to an improvement in their academic performance. Besides, learners were more connected to the university through their participation in education-based co-curricular activities.

Shamsudin *et al.*, (2014) examine the influence of physical, educational, and social co-curricular

activities on students' academic performance in Malaysia. A cross-sectional design with a quantitative approach was used in the study. Data was collected from a total of 150 learners in selected public universities in Malaysia. The findings revealed that there is no connection between participation in co-curricular activities and students' academic performance. Particularly, there was no significant positive link between engagement in educational, physical and social co-curricular activities and the academic achievement of learners. The findings suggested that the co-curricular activities were designed in such a way that they were not of benefit to the academic attainment of students. The current study focuses on secondary school learners with a focus on education-based co-curricular activities.

Another study was conducted by (Rathore, *et al*., 2018) in Lahore. The researcher took thirty schools and colleges in Lahore, the researcher selected 636 secondary and higher secondary students, and surveyed the 10th and 12th class examination grades and class attendance. The researcher used multiple regression and unveiled the findings that there is a positive relationship between the participation in co-curricular activities and academic performance. The researcher further argued that there was an academic enhancement in terms of class division and class attendance in the participatory group, that is, those who participated in co curricula had a frequent class attendance which enhanced their academic performance.

Finally, Adeyemo (2010) investigated the relationship between learners' involvement in education-based co-curricular activities and their performance in the Physics subject. The sample consisted of two hundred senior secondary school learners from Lagos state, Nigeria. The research utilized a questionnaire and physics students' achievement test (PAT) to collect data. The collected data was analysed using regression analysis and the results indicated that participation in education-based co-curricular activities significantly influenced learners' achievement in Physics. However, the current study will focus on the overall academic performance of learners as opposed to only the physics subject.

2.3 Sport - Based Co-Curricular Activities and Academic Performance

Sport-based co-curricular activities encompass physical activities such as athletics and football that are questionnaireal in complementing and enriching the regular curriculum. Empirical studies have reported the positive association between sports activities and academic performance. Involvement in sports activities does not guarantee good marks in the examination but it may be possible good students are involved in sports related activities (Daniyal *et al*., 2012). According to Reeves (2008), students who took part in three or four co-curricular activities during the academic year had dramatically better grades than those who participated in no co-curricular activities at all.

Ashfaq (2021) carried out a study in Ex-Fata in Pakistan about function of sports and co-curricular activities (CCA) on academic achievement among secondary schools students in newly merged districts in khyber Pakhtunkhwa Province ex Federally Administrative Tribal Areas. A sample size of 200 subjects was chosen from 10 high schools in the Frontier Region Kohat (FR Kohat). A questionnaire of five points likert scale after in quest of due authorization from heads of institutions was used to reach to the in facet of the recognizable truth. Arithmetical technique Mean, Percentage and Standard Deviation were run to inspect the collected records. The pollster analyzes the link of sports and co-curricular contribution and its optimistic role to enhance educational performances of secondary schools students as to increase grade point average GPA. Sports and Co-curricular activities have optimistic outcome on students' management. It was also established that, student who participated in sports gain improved self-confidence, poise and self honor. This study was conducted to determine the skills students gain as they participate in sports. Finally Ashafaq concluded that involvement in sports and co-curricular activities have an imperative result on student's accomplishment score and other related activities.

Furthermore, Ashafaq (2021) also looked at the challenges associated with students participating in sports and he established that schools are faced with budget problems; most of heads of institutions are not interested in sports and co-curricular activities; most of teachers and parents consider these activities as wastage of time; facilities are not available for students; proper security is not available for partakers and students need proper nutrition but unfortunately balance diet not available for them. However, this study did not focus on these factors, instead it was concerned on how learner participation in co-curricular activities influences academic performance in Kapenguria Sub County, West Pokot County.

In Northern Ireland, Mullen (2016) investigated the connection between co-curricular activity involvement and student academic achievement. A questionnaire was used to determine the degree to which students participate in co-curricular activities, as well as the types of activities they participate in. On the other hand, learners' standardized scores were used as a measure of their academic performance. The results revealed a negative relationship between students' participation in co-curricular physical activities and their academic achievement. The research however recommended further studies on the same to establish if the results hold.

In the context of 11th Grade female Hispanic learners in the United States, Manlove (2014) aimed at

finding out the influence of engagement in co-curricular athletic activities on their GPA. The study utilized a mixed-method design. The findings indicated that the participation of female Hispanic learners in athletic activities positively impacted their academic achievement. Additionally, Qurban, *et al.*, (2018) delved into the relationship between participation in sports and the academic performance of learners in Pakistan. The study utilized questionnaires to collect data on the students' level of engagement in sports and their subsequent academic performance. Structure equation modelling was used in the analysis of data. The results found no direct relationship between participation in sports and the academic performance of learners in Pakistan. The difference with the current study is that Qurban *et al.*, (2018) conducted their study on the university students in Pakistan while the current study was carried out in Kapenguria sub-county, west Pokot County.

Rathore *et al.*, (2018) in their study about the relationship between co-curricular activities and exam performance with reference to role of attendance, in Pakistan examined the role of co-curricular activities and exam performance of students at different levels of class attendance. Secondary data (co-curricular participation data, attendance of 10th class and grades in 10th class board exams) of 636 students through multistage purposive sampling was collected from thirty high schools of Lahore. Multiple regression analysis demonstrated that co-curricular activities have positive impact on student's exam performance. Sobel test of mediation showed that attendance partially mediated the association of involvement in co-curricular or non-classroom activities with exam performance. The study established that participation in co-curricular activities improves class attendance of students which then play an important role in achieving high grades in exams. The study concluded that students who were involved in co-curricular or non-classroom activities had better grades or exam performance from those students who were not part of these activities.

Ayesha & Ahmad (2020) canvassed the correlation between co-curricular activities and academic performance. The study was correlation in nature and employed descriptive research. The population of the study was all the college students, both male and females of government and private sector of district Lahore. The tool that was designed to collect data was a questionnaire that constructed on Likert scale. The study established that there is a moderate positive relationship between participation in co-curricular activities and academic achievement of the students. It is concluded that co-curricular activities play a major role in the academic achievement of the students at college level. The students who actively participate in co-curricular activities have higher percentages than those students who do not participate. The researcher of this study was determined to establish if the same findings will be realized on secondary school students. This study concentrated on the influence of the co-curricular activities on academic performance of public secondary school students in Kapenguria, West Pokot County.

The study Co-Curricular Activities, Physical Activity Motivation and Sports Performance of High School Athletes done by Angeline, 2022 was a descriptive study that determined the co-curricular activities, physical activity motivation and sports performance of high school athletes in Mina National High School. A total of 40 purposively selected respondents who are the athletes in the Integrated Meet (Division Level). To gather data a researcher-made questionnaire for Co-curricular Activities, Sports Performance of the athletes and a Physical Activity Motivation Questionnaire Checklist based on the studies and Theory by Edward L. Deci and Richard Ryan (2000) were used. Frequency distribution, Mean, Standard Deviation were the descriptive statistics while the Mann-Whitney U Test, and Spearman Rho Correlation Coefficient Analysis, set at.05 level of significance, were the inferential statistics. A significant relationship existed between physical activity motivation and the level of sports performance of students.

Further, Itankan and Akke (2019) delved into the nexus between co-curricular activities, particularly sports and the academic achievement of senior secondary school learners in Mathematics. The study targeted secondary schools in Nigeria and adopted a simple survey design. The study relied on a questionnaire based on a Mathematics sports-related scale to collect and collate data. The scale had 10 items that were administered to eighteen senior secondary schools in the North-East zone of Nigeria. The sample size was 590 learners. The study questionnaires were validated and found to be reliable. Analysis was done with reliance on the Spearman rank statistical method. According to the findings, there is a strong positive relationship between students' participation in sports and their academic achievement in Mathematics. As opposed to only the Mathematics subject, the emphasis of the current study was on the overall academic performance of learners as influenced by their participation in co-curricular activities in public secondary schools in Kapenguria sub-county, West Pokot County.

In Uganda, Bagaya and Sekabembe (2011) examined the link between learners' participation in sports and its influence on their academic performance. The data utilized in the study were gathered with the aid of a self-administered questionnaire. The data obtained were analysed using percentages and means. The hypotheses that guided the study were tested using Spearman's correlation coefficient and the findings showed there was a significant negative relationship between students' participation in sports and their academic performance.

In the Kenyan context, Kiptala and Okero (2014) examined the relationship between students' involvement in co-curricular activities and their performance in academics. The focus of the study was on Kenyan secondary schools. Kurt Lewin's perception theory guided the study. The research utilized an ex-post-facto research design. Learners that participated in volleyball and football sport were involved in the research. A questionnaire facilitated the collection of data. Analysis of data was done using frequencies, percentages, means and standard deviations. Besides, the inferential statistics utilized were Pearson correlation and ANOVA. The results indicated that 59.7% of the learners that participated in the sporting activities exhibited dismal academic performance. However, relative to students participating in volleyball, those participating in football were academically superior. Overall, there was no significant relationship between students' involvement in co-curricular activities and their educational achievement. The research sought to ascertain if this is the case among students in secondary schools in Kapenguria sub-county, West Pokot County.

Agnes *et al.*, (2020) investigated the influence of participation in competitive co-curricular activities (that is sports, music and drama) on the self-concept among secondary school students in Central Region, Kenya. The study adopted the Ex-post Facto research design and data was collected through a self-concept inventory questionnaire and examination of school records from students' participants (1,408) in the regional championships in central region Kenya. Data was analyzed using Independent t-test and Two-way ANOVA. The results indicated that participants had higher scores on self-concept than non-participants, and t-test revealed that there was a significant difference between participants and non-participants self-concept level. This implies that participation in co-curricular activities had a positive influence on students' self-concept in reference to gender, school type, class and parental economic status. The findings also revealed that participants in drama had a higher self-concept compared to sports and music. The researcher of this study focused on the influence of co- curricular activities on the development of competence skills. This study also categorized different type of co-curricular activities and their influence on academic performance in Kapenguria, West Pokot County.

Kapelinyang and Lumumba (2017) examined the relationship between the participation of learners in co-curricular activities and their educational attainment. To accommodate both qualitative and quantitative data, the study used a concurrent mixed-method approach. Using both simple and stratified random sampling techniques, a sample size of 250 students, 15 co-curricular teachers, and 5 principals were drawn. The quantitative data was analysed using descriptive statistics, while the qualitative data was analysed using thematic analysis. Regression analysis was utilized in ascertaining if a significant relationship existed between learners' participation in co-curricular activities and their educational attainment. Findings indicated that participation in athletics, music and soccer positively influenced the academic performance of learners. The study will establish if the same holds among learners in public secondary schools in Kapenguria sub-county, West Pokot County.

3.1 RESEARCH DESIGN AND METHODOLOGY

The study employed a descriptive survey research design with a convergent mixed research approach to explore the influence of learner participation in co-curricular activities on academic performance in public secondary schools in Kapenguria sub-county, West Pokot County (Cooper & Schindler, 2008). This design was appropriate for gathering large amounts of data and generating insights that could inform sustainable recommendations (Gatara, 2010). The research was conducted in Kapenguria sub-county, a semi-arid region with harsh climatic conditions, high poverty levels, and security challenges, which often limit students' participation in co-curricular activities. The study targeted 50 public secondary schools, including 826 Form Three students, 200 teachers overseeing co-curricular activities, and 50 principals, summing up to 1,076 respondents (Mensah & Eric, 2017). Sampling was conducted using both purposive and simple random techniques, selecting nine schools (18%), 36 teachers, nine principals, and 232 students (Mugenda & Mugenda, 2003). The final sample size was determined using Bartlett et al.'s (2001) formula, which yielded 232 students, constituting 28.1% of the total student population.

Data collection involved the use of questionnaires for students and teachers, and an interview guide for principals, structured into sections focusing on various types of co-curricular activities. The validity of the research instruments was ensured through a pilot study, expert review by supervisors from Moi University, and adjustments based on feedback (Cooper & Schindler, 2014). Reliability was assessed to ensure consistency in the measurement of concepts (Sekaran & Bougie, 2010). Face validity was enhanced by testing for comprehension among respondents, while content validity was established through expert opinions. Criterion validity was tested through a pilot study involving two physical education teachers and twenty students from two secondary schools. The study's methodology provided a structured approach to investigating the relationship between co-curricular participation and academic performance, ensuring the findings were credible and applicable to similar educational contexts.

4.1 RESULTS AND DISCUSSION

The section presents the research findings, analysis, interpretation, and discussion of study variables, detailing the achievement of study objectives based on data collected from 277 respondents using descriptive statistical techniques and a Likert scale for measurement.

4.2 Education-Based Co-Curricular Activities

The questionnaire required that both students and teachers to detail the nature of the education-based co-curricular activities their schools offer and the responses are shown below.

4.2.1 Education- Based Activities Offered in Schools

The students' questionnaire required that the students to detail the nature of the education-based co-curricular activities offered in their schools. The responses are shown below.

Table 4.1: Students' Responses to Distribution of Education based Co-curricular Activities Offered in their Schools

Education based activity	Offered	Not offered
Academic clubs	84 (36.2%)	148 (63.8%)
Article writing	4 (1.7%)	228 (98.3%)
Debate clubs	48 (20.7%)	184(79.3%)
Symposiums	8 (3.4%)	224(96.6%)
Field trip	36 (15.5%)	196(84.5%)

From the table above the data shows that 84 (36.2%) students confirmed that academic clubs are offered in their schools, while148 (63.8%) are not offered, 4 (1.7%) confirmed that article writing was offered in their schools, 228 (98.3%) were not offered, 48 (20.7%) confirmed that debate clubs was in their schools while 184 (79.3%) affirmed it was not offered, while 8 (3.4%) confirmed that symposiums was offered in their schools, 224 (96.6%) said that it was not offered and 36 (15.5%) confirmed that field trips were offered, while 196 (84.5%) affirmed it was not offered in their schools.

Table 4.2: Responses of Teachers on Distribution of Education-based Activities Offered in Schools

Education based activity	Offered	Not offered
Academic clubs	8(22.2%)	28(77.8%)
Article writing	2(5.6%)	34(94.4%)
Debate clubs	10(27.8%)	26(72.8%)
Symposiums	5(13.9%)	31(86.1%)
Field trip	9(25%)	27(75%)

From the table above, 8(22.2%) teachers affirmed that academic club was offered in their schools while 28(77.8%) said it was not offered, 2(5.6%) of teachers affirmed that article writing was offered in their schools while 34(94.4%) affirmed it was not offered, 10(27.7%) of teachers indicated that debate clubs were offered while 26(72.8%) said it was not offered in their schools, 5(13.9%) of teachers confirmed that symposiums were offered while 31(86.1%) said it was not offered in their schools, 9(25%) of the teachers said that field trips were offered while 27(75%) said that field trip were not offered in their schools.

The findings from table 4.2 indicate that, majority of schools offer academic clubs, followed by the debates while article writing is least offered in many schools. Generally speaking, most of the schools don't offer most of the education-based activities as indicated by the high percentages of the education-based activities not offered as indicated by the students. On the other hand, it implies that the popularity of these activities is yet to be manifested in the schools in the region which may negatively influence learners' academic performance.

From table 4.2 it can be deduced that, the debate clubs have popularity of being offered in the schools, followed by field trips then academic clubs. However, article writing is the least offered which agrees with what students expressed in table 4.1.

Majority of the principals also confirmed that, academic clubs are mostly offered, followed by debate clubs then field trips in their schools. However, they also confirmed that article writing was the least education-based co-curricular activities offered in their schools. Participation in academic club debate clubs and field trips widens the scope at which the students interact with education content. This implies that they are exposed more often to the content taught in class hence making it easy for them to relate during exams. This in turn positively influences their academic performance. Non popular education-based co-curricular activities like article writing and symposiums present a disadvantage to students since they are unable to have an interaction with

others concerning content learnt in class. This may have a negative impact on the students' academic performance.

4.2.2 Frequency of Students' Participation in Education-based Co-curricular Activities

The figure below shows the data that was collected after the students were asked on how frequent they participate in different education based co-curricular activities.

Table 4.3: Frequency Students' Participation in Education- Based Co-Curricular Activities

Statement	F/%	Always	Frequently	Occasionally	Rarely	Never
Academic clubs	F	19	17	52	40	104
	%	8.2	7.3	22.4	17.2	44.8
Article writing	F	8	24	26	59	115
	%	3.4	10.3	11.2	25.4	49.6
Debate clubs	F	39	29	24	45	95
	%	16.8	12.5	10.3	19.4	40.9
Symposiums	F	4	20	30	31	147
	%	1.7	8.6	12.9	13.4	63.4
Field trips	F	24	18	49	31	110
	%	10.3	7.8	21.1	13.4	47.4

From the table above; 19(8.2%) students always participated in academic clubs, 17(7.3%) frequently participated in academic clubs, 52(22.4%) occasionally, 40(17.2%) rarely participated in the academic clubs while 104(44.8%) never participated in any academic clubs. In article writing; 8(3.4%) always participated, 24(10.3%) frequently participated in article writing whereas, 26(11.2%) occasionally participated, as 59(25.4%) rarely participated in it, while 115(49.6%) did not participate in article writing. In debate clubs, 39(16.8%) always participated, 29(12.5%) frequently participated in debating, whereas 24(10.3%) occasionally participated in debating club, while 45(19.4%) rarely participated in debating and 95(40.9%) never participated in debating. 4(1.7%) always participated in symposiums, 20(8.6%) frequently participated, occasionally, 30(12.9%)) participated in symposiums, while 31(13.4%) rarely participated in symposiums and 147(63.4%) never participated in symposiums. Going for field trips; 24(10.3%) always participated, 18(7.8%) frequently were involved, 49(21.1%) occasionally went for field trips.31 (13.4%) rarely went for field trips while 110(47.4%) did not participate in field trips.

The teachers were also asked to give their responses on how frequent the students participated in education -based activities. The table below shows the teacher responses on this item.

From the findings of table 4.3 of students' responses above, it is clear that most students do not participate in most education- based co-curricular activities across the schools. This is in agreement findings from education-based co-curricular activities offered in schools from table 4.1 by students. It indicates that the popularity of the education-based co-curricular activities is still low.

Table 4.4: Teachers Responses on Frequency of Students' Participation in Education-based Co-curricular Activities

Statement	F/%	Always	Frequently	Occasionally	Rarely	Never
Academic clubs	F	9	6	2	4	15
	%	25	16.7	5.6	11.1	41.7
Article writing	F	4	8	6	9	9
	%	11.1	22.2	16.7	25	25
Debate clubs	F	4	8	10	5	9
	%	11.1	22.2	27.8	13.9	25
Symposiums	F	2	6	3	3	22
	%	5.6	16.7	8.3	8.3	61.1
Field trips	F	2	4	6	6	18
	%	5.6	11.1	16.7	16.7	50

From the above table, 9(25%) of teachers said that students always participated in academic clubs, 6(16.7%) said students frequently participated in academic clubs, 2(5.6%) confirmed students occasionally participated, 4(11.1%) teachers said that students rarely participated in the academic clubs while 15(41.7%) teachers said that students never participated in any academic clubs. In article writing; 4(11.1%) teachers affirmed that students always participated, 8(22.2%) teachers said that students frequently

participated in article writing whereas, 6(16.7%) teachers said occasionally participated, as9(25%) rarely participated in it, while 9(25%) of teachers affirmed that students did not participate in article writing. In debate clubs, 4(11.1%) of teachers said that students always participated, 8(22.2) teachers confirmed that students frequently participated in debating, whereas 10(27.8%) of teachers said that students occasionally participated in debating club, while 5(13.9%) of teachers said that students rarely participated in debating and 9(25%) of teachers said that students never participated in debating. 2(5.6%) of teachers said students always participated in symposiums, 6(16.7%) teachers affirmed that students frequently participated, occasionally, 3(8.3%) teachers said students participated in symposiums, while 3(8.3%) of teachers said that students rarely participated in symposiums and 22(61.1%) of teachers said that students never participated in symposiums. Going for field trips; 2(5.6%) teachers said that students always participated, 4(11.1%) teachers said that students frequently went for field trips, 6(16.7%) teachers said students occasionally went for field trips.6(16.7%) teachers said students rarely went for field trips while 18(50%) of teachers confirmed that students did not participate in field trips.

From table 4.4 on teachers' responses above, it can be noted that, majority of students never participated in education -based co-curricular activities, especially symposiums. This may be due to, insufficient time and resources to plan and prepare for them in schools or attending them from neighboring schools. Apparently, teachers observed that student actively participated in debates. This may be due to the fact that teachers in charge were able to organize them frequently. Further, it may be the only available option in some schools for the students to participate in. This is advantageous as students improves prowess in language and comprehension. In agreement with teachers' observation, a study done by Romica & Philip (2020) stated that the number of teachers supporting a co-curricular activity affects the participation of the same activity by students. Therefore, in this study, the students' low involvement in education-based co-curricular activities might be due to fewer teachers interested in guiding them in the activities.

4.2.3 Students' Responses on Influence of Education-based Co-curricular Activities on Academic Performance

Students were asked to comment on Education based Co-curricular Activities and their responses were recorded in the table below.

Table 4.5: Students' Responses on Education-based Co-curricular Activities

Variable		SA	A	N	D	SD	Total
Participation in education-based co-curricular activities helps improve my academic performance	F	122	78	22	5	5	232
	%	52.6	33.6	9.5	2.2	2.2	100
Participation in education-based co-curricular activity has improved my organizational abilities and makes informed decisions.	F	84	119	16	9	4	232
	%	36.2	51.3	6.9	3.9	1.7	100
Participation in education-based co-curricular activity waste my time for studying	F	8	17	40	68	99	232
	%	3.4	7.3	17.2	29.3	42.8	100
Participation in education-based co-curricular activities refreshes my mind and improves my academic performance.	F	102	109	12	5	4	232
	%	44.0	47.0	5.2	2.2	1.8	100
Education-based co-curricular activities help me to be creative in my studying habits and contribute to higher academic attainment.	F	40	107	61	16	8	232
	%	17.2	46.1	26.4	6.9	3.4	100
Participation in education-based co-curricular activities captivates my commitment to learning which contributes to my academic performance.	F	95	96	33	8	0	232
	%	40.9	41.4	14.3	3.4	0.0	100
Education-based co-curricular activities offer new knowledge and skills that are not learned in the classroom that help me improve my academic performance.	F	60	103	29	28	12	232
	%	25.9	44.4	12.4	12.1	5.2	100

The distribution in Table 4.5 shows that 200(86.2 %) of the respondents affirmed that education-based co-curricular activities improves students' academic performance. 10(4.4 %) students disagreed that with education based co-curricular activities improves their academic performance. On the other hand, 22(9.5 %) were neutral. Further, 203(87.5 %) of the respondents affirmed that education-based co-curricular activities has improved their organizational abilities, while 13(5.6%) disagreed that the education – based co-curricular activities have improve their organisational skills and 16(6.9%) were neutral. When the respondents were asked whether participation in the education-based co-curricular activity is a waste of time, 25(10.7%) agreed that the participation in education-based co-curricular activities wastes their time for studying, 167(72 %) disagreed that participation in education-based co-curricular activities waste their time for study, 40(17.2%) were neutral. As further indicated, 211(91 %) of the respondents affirmed that participation in the education-based co-curricular activities tend to refresh their minds and by extension improve their academic performance, 9(3.9%) disagreed that the participation in co-curricular

activity refreshes the mind, while 12(5.2%) held a neutral opinion on the same.

When asked about creativity, 147(63.3%) of the students affirmed that participation in co-curricular activities tends to improve creativity in learning, 24(10.3%) disagreed with the statement, while 61(26.4%) were neutral. As indicated by the distribution, 191(82.3 %) of the respondents affirmed that participation in co-curricular activities helps captivate their commitment to learning hence improve their academic performance, 33(14.2%) held a neutral opinion, while 8(3.4%) disagreed with the statement. Finally, 163(70.3 %) of respondents affirmed that education-based co-curricular activities confers opportunities for students to gain new knowledge and skills that are not learnt in the classroom that helps improve their academic performance, 40(17.3%) dis-affirmed that educational- based co-curricular activities offers new knowledge and skills that are not learnt in the classroom, while 29(12.5%) held a neutral opinion.

From the findings above, it is evident that majority of the learners affirmed that educational based co-curricular activities are of help both in academic performance and organisation abilities, that is 200(86.2%) and 203(87%) learners respectively, as this was also confirmed by the research done by Adeyemo, 2010 about the relationship between participation in education- based co-curricular activities and academic performance. His study indicated that participation in education-based co-curricular activities significantly influenced learners' achievement in Physics, which was his area of interest. Most of the learners were also in agreement when they affirmed that the activities were refreshing and helped them to perform well academically. In particular, the debating competition can help strengthen one's verbal skills in language learning and help in identifying challenges which when dealt with leads to improvement on weak areas in learning. The student's interaction is also helpful as it encourages knowledge sharing and thus helps in peer – learning.

In addition, the findings confirm that most learners 167(72%) disagreed with the fact that education based co- curricular activities are waste of time. Besides, a large percentage of 211(91%) supported the idea of education based co-curricular activities enable them to learn new skills which cannot be learned in the classroom. This positively influences their academic performance. In agreement with this, Needleman (2001) found out that many co-curricular activities teach real-world skills, such as journalism, photography, or debate, which can lead to lifelong interests, even careers. Most of the studies found that children who participate in these activities are more successful academically than those who do not.

4.2.4 Teachers' Responses on Influence of Education-based Co-curricular Activities on Students' Academic Performance

Once the teachers had elaborated on the nature and frequency of participation and involvement in education-based co-curricular activities, the teachers were asked to indicate the levels of agreement on the influence of participation in education-based co-curricular activities on academic performance and their responses are found in Table 4.6.

Table 4.6: Teachers' Responses on Education-based Co-curricular Activities

Variable		SA	A	N	D	SD	Total
Students' morale in and out of class presentation after participation in education-based co-curricular activities.	F	2	32	2	0	0	36
	%	5.6	88.9	5.6	0.0	0.0	100
Learners exhibit increased interest in studies after engaging in education-based co-curricular activities	F	9	17	6	4	0	36
	%	25.0	47.2	16.7	11.1	0.0	100
Learners actively engaging in education0-based co-curricular activities outperform those who do not participate	F	2	10	10	8	4	36
	%	05.6	27.8	27.8	22.2	11.1	100
Participation in education-based co-curricular activities enhance teamwork and influences collective learning	F	14	14	6	1	1	36
	%	38.9	38.9	16.7	2.8	2.8	100
Participation in education-based co-curricular activities enhances time management skills among learners which positively impacts their academic performance.	F	8	21	5	1	1	3
	%	22.2	58.3	13.9	2.8	2.8	100

The distribution in Table 4.6 concerns the teachers' responses of the impact of the education-based co-curricular activities on students' academic performance. The table above shows that, a majority, of 34(94.5 %) of the teachers affirmed that participation in education-based co-curricular activity tends to increase the students' morale, while 2(5.6 %) were neutral on the impact. Further, most of the teachers, 26(72.2 %) affirmed that learners who participate in the education-based co-curricular activities exhibit increased interest in learning and studying, 6(16.7 %) held a neutral notion on the issue, while 2(5.6 %) disaffirmed on the increased interest in learning and studying by the students. As further indicated, 12(33.4 %) of the teachers affirmed that students who actively participate in education-based co-curricular tend to outperform those who do not, with 10(27.8 %) being neutral to the issue while 12(33.3 %) disagreed with the statement. Regarding teamwork, 28(77.8 %) of the teachers indicated that participation in the education-based co-curricular activities enhances

teamwork among students and thereby influences collective learning, 6(16.7 %) held a neutral opinion on the same, while 2(5.6%) disagreed on the enhanced teamwork. Finally, majority of 29(80.5 %) of the teachers affirmed that participation in an education-based co-curricular activity tends to enhance learners' time management skills which positively impacts their academic performance, 5(13.9%) were neutral, while 2(5.6 %) disagreed with the statement.

From the findings above, teachers, 34(94.5 %) confirmed that students participating in education -based co-curricular activities have an increased interest and morale to study thus increasing their chances to perform in academics. The principals were also in agreement when they said that students who participated in education- based co-curricular activities are motivated and encouraged. They in turn actively participate in classroom activities which eventually improves their academic performance. This is also evident from the findings as majority of teachers 26(72.2%) confirm that, education- based co-curricular activities also boosts learners' interest for the learners to study. This automatically has a positive impact on their academic performance. In addition, most of the principals supported views on learners participating in education based co-curricular activities and their academic performance. For instance, one of the principals stated that;

> *"Majority of those who participate in co-curricular activities also had improvements in the academic index in classwork"*

It is clear that; participation in the education – based co -curricular activities tend to instil social attachment of membership to particular group structures where individuals share values and norms. From the findings, majority of the teachers 28(77.8%) stated that education- based co-curricular activities improves the learners' teamwork skills. It enables them to work in groups and achieve the set targets and goals as a team. Thus, the peer group influence subsequent activity choices such as collaborative and cooperative learning and this shapes their academic success. Astin (1996) stated that peer groups are the strongest single source of influence on cognitive and affective development in schools. Peers often act as a support network, both for academic and personal matters, thereby influencing student development. With their participation in the education – based co-curricular activities, students are better able to get to appreciate their peers through personal bonding and mutual trust and commitment. This creates opportunity to develop mentoring or coaching relationships, develop personal relationships with peers who share similar interests, and possibly interact with other adults from the school or community who provide support for the activity.

4.3 Sports Based Co-Curricular Activities

The questionnaire required that the students to detail the nature of the sport-based co-curricular activities they are involved or participated in and teachers to confirm what sports were offered in schools.

4.3.1 Sports based Co-curricular Activities Offered in Schools

The sports activities that the researcher intended to get data on included; netball, volleyball, football, handball, basketball, table tennis and athletics. The students and teachers were asked whether they participated or the sports were offered in their respective schools.

Table 4.7: Students Response on the Distribution of Sports-based Co-curricular Activities Offered in Schools

Sports based activity	Offered	Not offered
Netball	15 (6.5%)	217 (93.5%)
Volleyball	18(7.8%)	214 (92.2%)
Football	55(23.7%)	177 (76.3%)
Handball	28 (12.1%)	204 (87.9%)
Basketball	18 (7.8%)	214 (92.2%)
Table tennis	8 (3.4%)	224 (96.6%)
Athletics	84 (36.2%)	148 (63.8%)

From the table above, 15(6.5%) students said that netball was offered, while 217(93.5%) said that it was not offered in their school, 7.8%(18) of students affirmed that volleyball was offered while 214(92.2%) of students said that it was not offered in their school, 55(23,7%) of students said that football was offered 177(76.3%) of students said was not offered in their school, for handball, 28(12.1%) said it was offered while 204(87.9%) said that it was not offered, 18(7.8%) of students agreed that basketball was offered,214(92.2%) of students said it was not offered. For table tennis, 8(3.4%) students said it was offered while 224(96.6%) of students confirmed that it was not offered. 84(36.2%) students said athletics was offered, 148(63.8%) students said athletics was not offered in their school.

The teachers were also asked about the sports offered in their schools and the table below shows their response.

Table 4.8: Teachers Response on the Distribution of Sports Based Co-Curricular Activities Offered in Schools

Sports based activity	Offered	Not offered
Netball	3(8.3%)	33(91.7%)
Volleyball	3(8.3%)	33(91.7%)
Football	9(25%)	27(75%)
Handball	4 (11.1%)	32(88.9%)
Basketball	2 (5.6%)	34(94.4%)
Table tennis	6 (16.7%)	30(83.3%)
Athletics	9(25%)	27(75%)

The table above show that, 3(8,3%) teachers stated that both netball and volleyball were offered while 33(91.7%) teachers said both netball and volleyball was not offered in their schools, 9(25%) teachers said that football is offered while 27(75%) teachers affirmed that it was not offered. 4(11.1%) teachers said handball is offered, 32 (88.9%) teachers affirmed that it was not offered. When asked about basketball, 2(5.6%) affirmed that it was offered, 34(94.4%) of teachers said it was not offered. For table tennis, 6(16.7%) said it was offered in their schools, 30(83.3%) of teachers said it was not offered. Finally, 9(25%) of teachers affirmed that athletics was offered while 27(75%) said it was not offered in their schools.

From table 4.7 of students, findings indicate that athletics and football are the most popular sports offered in schools though the representation was still low. These findings relate to the previous data on the gender of the respondents where by the male students were more than female; therefore, this directly correlates with the popularity of football and athletics. This indicates that the sports are mostly played by the male students. Few students affirmed that handball, volleyball, basketball, netball and table tennis are offered in their schools, this might be due to complexity, and lack of resources to be used in the game, which makes it a hurdle for the school to offer. Lack of expertise for the sport might also contribute to the sport not being popular or offered.

The findings from table 4.8 of teachers indicate that, both football and athletics are the sports that are mostly offered in the schools. This is in agreement with students' responses, where it was confirmed that athletics followed by football were most offered sports- based activities in schools. These findings imply that the availability of resources of the games mentioned is the reason why the schools offer them. On the other hand, handball, volleyball, basketball, netball and tablet tennis are less popular according to the teachers. This is also evident from the students' responses. This implies that these sports-based co-curricular activities are not offered due to lack of expertise and resources required for the sports.

When the principals were asked about the sports being offered in their schools, majority of them affirmed that football was mostly offered and mostly played by boys compared to girls. Further, the principals said that handball, volleyball, basketball and netball are not popularly offered in their schools due to lack of resources to implement the games. Also, a good number of the principals confirmed that table tennis was a sport activity least offered in their schools which was in harmony with the results of the students from table 4.7 of students.

4.3.2 Frequency of Participation in Sports-based Co-curricular Activities in Schools

Table 4.9: Students Response on Frequency of Participating in Sports-based Activities

Statement	F/%	Always	Frequently	Occasionally	Rarely	Never
Netball	F	15	10	55	11	141
	%	6.5	4.3	23.7	4.7	60.8
Volleyball	F	20	25	60	98	29
	%	8.6	10.8	25.9	42.2	12.5
Football	F	100	65	36	31	0
	%	43.1	28.0	15.5	13.4	0
Handball	F	0	70	42	80	40
	%	0	30.1	18.2	34.5	17.2
Basketball	F	26	17	98	76	15
	%	11.2	7.3	42.2	32.8	6.5
Table tennis	F	13	46	88	57	28
	%	5.6	19.8	37.9	24.6	12.1
Athletics	F	124	60	18	18	12
	%	53.4	25.8	7.8	7.8	5.2

The table above shows that, 15(6.5%) of students always participated in netball, 10(4.3%) frequently participated in netball, 55(23.7%) occasionally participated in netball, 11(4.7%) rarely participated and 141(60.8%) did not participate at all. Volleyball participation involves 20(8.6%) who always participated, 25(10.8%) frequently participated, 60(25.9%) occasionally participated, 98(42.2%) who rarely participated and 29(12.5%) who never participated in volleyball. When asked about how often they participated in football, 100(43.1%) of the students said they always participated, 65(28.0%) of students frequently participated in it, 36(15.5%) students said occasionally participated in it, 31(13.4%) said they rarely participated and none never participated. For handball, none of the students always participated in it, 70(30.1%) frequently participated in it, 42(18.2%) occasionally participated in it, while 80(34.5%) rarely participated and 40(17.2%) never participated in the handball. When asked about basketball; 26(11.2%) always participated in it, 17(7.3%) of the students said they frequently participated in basketball, 98(42.2%) said that they occasionally participated in it, 76(32.8%) rarely participate in the game while 15(6.5%) never participated in the game at all. In table tennis, 13(5.6%) said that they always take part in it, 46(19.8%) of the students affirmed that they frequently participated in the sport, 88(37.9%) occasionally take part in table tennis, 57(24.6%) rarely participated while 28(12.1%) did not participate at all. Finally, when they were asked how often they participate in athletics; 124(53.4%) always participated, 60(25.8%) of the students said that they frequently participated in the sport, 18(7.8%) said that they occasionally participated in athletics 18(7.8%) rarely participated and 12(5.2%) never participated.

Teachers were asked on how frequent students participated in sports- based activities and their responses were recorded in the table below.

Table 4.10: Teachers' Response on Frequency of Students' Participation in Sports-based Co-curricular Activities

Statement	F/%	Always	Frequently	Occasionally	Rarely	Never
Netball	F	2	4	8	10	12
	%	5.6	11.1	22.2	27.8	33.3
Volleyball	F	1	4	12	10	9
	%	2.8	11.1	33.3	27.8	25.0
Football	F	16	10	6	4	0
	%	44.4	27.8	16.7	11.1	0
Handball	F	10	9	5	3	9
	%	27.8	25.0	13.9	8.3	25.0
Basketball	F	2	3	9	9	13
	%	5.6	8.3	25.0	25.0	36.1
Table tennis	F	4	9	9	6	8
	%	11.1	25.0	25.0	16.7	22.2
Athletics	F	6	14	8	6	2
	%	16.7	38.9	22.2	16.7	5.6

The table above display that, 2(5.6%) of teachers responded that students always participated in netball, 4(11.1%) frequently participated in netball, 8(22.2%) occasionally participated in netball, 10(27.8%) rarely participated and 12(33.3%) did not participate at all. Volleyball participation, 1(2.8%) teacher said that students always participated in the game, 4(11.1%) said they frequently participated, 12(33.3%) affirmed the students occasionally participated, 10(27.8%) said they rarely participated and 9(25%) said that the students never participated in volleyball. When asked about how often the students participated in football, 16(44.4%) of the teachers said students always participated, 10(27.8%) of teachers said students frequently participated in it, 6(16.7%) of teachers said occasionally students participated in it, 4(11.1%) of teachers said students rarely participated and none never participated. For handball, 10(27.8%) of teachers said that student always participated in it, 9(25%) of teacher said students frequently participated in it, 5(13.9%) of teachers affirmed students occasionally participated in it, while 3(8.3%) of teachers said students rarely participated and 9(25%) never participated in the handball. When asked about basketball; 2(5.6%) said students always participated in it, 3(8.3%) of teachers said students frequently participated in the game, 9(25%) said that students occasionally participated in it, 9(25%) said students rarely participate in the game while 13(36.1%) affirmed students never participated in the game at all. In table tennis, 4(11.1%) of teachers said that students always take part in it, 9(25%) of teachers affirmed students frequently participated in the sport, 9(25%) of teachers said that students occasionally take part in table tennis, 6(16.7%) said that students rarely participated while 8(22.2%) responded that students did not participate at all. Finally, when they were asked how often the students participate in athletics; 6(16.7%) said students always participated, 14(38.9%) of teachers said that students frequently participated in the sport, 8(22.2%) said that students occasionally participated in athletics 6(16.7%) said that students rarely participated

and 2(5.6%) said that students never participated in athletics at all.

From table 4.10 of students' table above, it shows that majority of the students frequently participated in athletics followed by football. This is because of the popularity of the game in the schools, as the data from the list of the sport being offered showed. This implies that the motivation of these sports is high and therefore most students are attracted to them. On the other hand, handball, volleyball, basketball netball and table tennis are the sports that are less participated in by students. This is an implication that the students lack the motivation or accessibility of the right equipment for the sports.

4.3.3 Students' Responses on Influences of Sports-based Co-curricular Activities on Academic Performance

Once the students had elaborated on the nature of participation and involvement in sport-based co-curricular activities, the students were asked to indicate the levels of agreement on the influence of participation in sport-based co-curricular activities on academic performance and their responses are found in Tables 4.11.

Table 4.11: Students' Responses on Sport-based Co-curricular Activities

Variable		SA	A	N	D	SD	Total
Participation in Sport – based co-curricular activity helps improve my academic performance	F	55	121	24	13	19	232
	%	23.7	52.2	10.3	5.6	8.2	100
Participation in Sport – based co-curricular activity has improved my organizational abilities and helps me makes informed decisions.	F	54	129	37	4	8	232
	%	23.3	55.6	15.9	1.7	3.4	100
Participation in Sport – based co-curricular activity waste my time for studying	F	11	33	42	58	88	232
	%	4.7	14.2	18.1	25.0	37.9	100
	%	6.9	12.1	34.1	23.7	23.3	100
Participation in Sport – based co-curricular activity refreshes the mind and improve my academic performance	F	63	128	25	9	7	232
	%	27.2	55.2	10.8	3.9	3.0	100
Sport – based co-curricular activity helps improve my creativity and contribute to higher academic attainment	F	77	83	45	19	8	232
	%	33.2	35.8	19.4	8.2	3.4	100
Participation in Sport – based co-curricular activities captivates my commitment to learning	F	39	101	55	21	16	232
	%	16.8	43.5	23.7	9.1	6.9	100
Sport – based co-curricular activities offer new knowledge and skills that are not learned in the classroom	F	61	103	20	26	22	232
	%	26.3	44.4	8.6	11.2	9.5	100

The distribution in Table 4.11 shows that 176(75.9 %) of the students affirmed that sport-based co-curricular activities improves academic performance, 32(13.8 %) disaffirmed that sport- based co-curricular activities improves academic performance, while 24(10.3%) held a neutral opinion on the same. Further, 183(78.9 %) of the respondents affirmed that sport-based co-curricular activities has improved their organizational abilities, 37(15.9 %) were neutral on the issue, while 12(5.1 %) disaffirmed that sport- based co-curricular activities improves organisational abilities. When the students were asked whether participation in the sport-based co-curricular activities is a waste of time, 146(62.9 %) disagreed that participation in the sport-based co-curricular activities waste valuable time for study, 44(18.9 %) affirmed that participation in the sport – based co-curricular activities is a waste of time, while 42(18.1 %) were neutral.

As further indicated 191(82.4 %) of the students affirmed that participation in a sport-based co-curricular activity tend to refresh their minds and by extension improve academic performance, 16(6.9 %) disaffirmed that the participation in sport- based co-curricular activities refreshes one's mind, while 25(10.8 %) were neutral. When asked about creativity, 158(69%) of the students affirmed that participation in co-curricular activities tends to improve creativity in learning, 45(19.4%) were neutral to the effect of the participation, while 27(11.6 %) disaffirmed that sport – based co-curricular activity doesn't impact on creativity. As indicated by the distribution, 140(60.3%) of the students affirmed that participation in the co-curricular activity helps activate their commitment to learning, 55(23.7 %) held a neutral opinion on the commitment to learning, while 37(17%) disaffirmed that sport – based co-curricular activities activates commitment to learning. 164(70.7 %) of students affirmed that sport-based co-curricular activity confers opportunities for students to gain new knowledge and skills, 48(20.7 %) disaffirmed that sport – based co-curricular activity offers opportunities for gaining new knowledge that are not offered in the classroom, while 20(8.6 %) held a neutral.

The above findings indicate that; majority of the students 176(75.9 %) affirmed that sport-based co-curricular activity improves their academic performance. This is in agreement with the teachers' data when they related the student's participation in sports and their morale in studying and 29(80.5 %) of the teachers admitted that participation in sport-based co-curricular activities tends to increase the students' morale in studying which contributes to good academic performance. This can also be supported by the study of

Veliz and Shakib (2014) who discovered that sport provided experiences that build character and social skills that could indirectly translate to enhance academic outcomes. Moreover, a more narrowly defined explanation concerning the positive academic outcomes; where students indirectly accrue from athletic participation. Because interscholastic sport facilitates involvement in other forms of participation in school-relevant activities, athletes develop a sense of identification with the school. Thus, students who have a stronger connection, or identification with school, will benefit academically because of their psychological connection with the school mission. On the other hand, Zuckerman and Foubert (2014), dis agreed with this opinion from his study as he found out that students who involve in athletic activity correlates with a lower grade. This is due to the number of hours they spent in athletic activity per week which leads to a decline in the students' academic performance.

The outcomes also affirm that, majority of the students, 191(82.4%) agreed that sports based co-curricular activities help to refresh their minds and in extension they perform well. In addition, most of them 158(69%) agreed that sports based co-curricular activities sharpens their creativity and contributes to higher academic performance.

(Marsh & Kleitman, 2005), supports this learners' idea as they claim that, students who participate in athletics interact with peers, work for the best interest of the team, and learn to follow instructions and may contribute to the student athlete's development of self-identity. Thus, it confirms that actually sports are very fundamental to the academic performance of the students. In addition to this, teachers also agreed that, sport-based activities improves students' morale in studying as indicated in table 4.13. Majority of them were in agreement that sports have a positive impact on students' academic performance. This was also agreed upon by majority of the principals who indicated that sport boosts the morale of the students, by increasing their self- esteem which later is transferred to classwork of learners and they are able to perform well in academics.

> *"The winning mentality helps their self – esteem when it comes to classwork. They translate the same to learning process. Indiscipline case reduce too as they are actively engaged in school. It also helps manage time well as no time is wasted."*

In addition to the teachers' perceptions and opinions, most of principals added that, sports really help learners in terms of discipline and therefore they are able to participate in classroom activities actively.

The findings also indicate that, a good number of learners agreed that sports- based co-curricular activities do help them in refreshing and being creative. The skills learnt in the specific sports can be transferred to classroom work and the students are able to apply it with ease in academics. This was strongly supported by the principals as they affirmed that sports- based co-curricular activities sharpens the participation and involvement of learners in the classwork.

4.3.4 Teachers Responses on Influence of Sports-based Co-curricular Activities on Students' Academic Performance

Once the teachers had elaborated on the nature of participation and involvement in sport-based co-curricular activities by the students, the teachers were asked to indicate the levels of agreement on the influence of participation of students in sport-based co-curricular activities on academic performance and their responses are found in Tables 4.12.

Table 4.12: Teachers' Responses on Learners' Participation on Sport-based Co-curricular Activities and their Influence on Academic Performance

Variable		SA	A	N	D	SD	Total
Students' morale increases in and out of class after participation in sport-based co-curricular activity	F	8	21	5	2	0	36
	%	22.2	58.3	13.9	5.6	0.0	100
Learners exhibit increased interest in studies after engaging in Sport-based co-curricular activities	F	4	20	2	10	0	36
	%	11.1	55.6	5.6	27.8	0.0	100
Active students outperform those not involved in Sport-based co-curricular activities	F	1	10	13	6	6	36
	%	2.8	27.8	36.1	16.7	16.7	100
Participation in Sport-based co-curricular activities enhance teamwork and influences collective learning	F	15	17	2	2	0	36
	%	41.7	47.2	5.6	5.6	0.0	100
Participation in Sport-based co-curricular activity enhances time management skills among learners which improves their academic performance	F	8	28	0	0	0	36
	%	22.2	77.7	0.0	0.0	0.0	100

The distribution in Table 4.12 concerns the teachers' responses on the influence of learner participation in sport-based co-curricular activities on students' academic performance. The data show that 29(80.5 %) of the teachers affirmed that participation in sport-based co-curricular activities tends to increase the students' morale in class and outside of class presentation as they participate in sport-based co-

curricular activities, 2(5.6 %) were neutral on the impact, while 5(13.9 %) disagreed on the issue of morale. Further, 24(66.7 %) of the respondents admitted that learners who participate in the sport-based co-curricular activity exhibit increased interest in learning and studying, 2(5.6 %) held a neutral notion on the issue, while 10(27.8%) disagreed with the statement. As further indicated, 11(30.6%) of the respondents affirmed that students who actively participate in sport-based co-curricular activities tend to outperform those who do not, with 13(36.1 %) remaining neutral while 16(33.4%) disagreed with the statement.

Regarding teamwork, 31(88.9 %) of the respondents indicated that participation in the sport-based co-curricular activities enhances teamwork among students and thereby influences cooperative learning, 2(5.6 %) held a neutral opinion, while 2(5.6%) disagreed on the statement. Finally, all 100% (36) of the respondents affirmed that participation in sport-based co-curricular activities tends to enhance learners' time management skills which improve their academic performance.

The findings indicate that, 29(80.5%) of teachers confirmed that sports -based co-curricular activities enhances students' morale in academics. Also 24(66.7%) of teachers assert that sports increased learners' interest in academics. They actively participate both in classroom as in the field. The findings support the results of the study of Rona *et al.* (2017), which revealed that there was a significant relationship between participation in sports and academic success of the student-athletes. The study also deduced that participation in sports improved athletes' perceptions on academic excellence, mental processes and becoming more logical and patient. This was evident when the students said that they feel refreshed after participating in sports and therefore their interest is heightened in academics.

31(88.9%) of teachers agreed that sports -based co-curricular activities enables students with teamwork skills. This in return promotes the aspect of collaborative learning among students. It was agreed that the skills they learnt in the field could be converted to classwork and they could use the techniques in working out classroom demands. The teachers were confident that this eventually boosts their academic performance. A majority of the principals also had a strong opinion on the same as they agreed that learners who participate in sports had the ability to socialize well and easily with others hence making it possible for peer learning.

Veliz & Shakib, (2012) supports these opinions when they observed during extracurricular activities, that students are better able to get to know other peers and adults through personal bonding and mutual trust and commitment. Students involved in extracurricular activities have the opportunity to develop mentoring or coaching relationships, develop personal relationships with peers who share similar interests, and possibly interact with other adults from the school or community who provide support for the activity.

Rules and regulations in different sports may further motivate school athletes to do well in their courses. In addition, involvement in sports and other extracurricular activities may integrate students into their schools, providing a greater sense of belonging and increasing visibility and status among other students and teachers. Student-athletes may therefore feel more attached to their schools and teachers and more engaged in their classrooms, all of which can contribute to academic success.

This is in agreement with a majority of the learners who affirmed that sports activities enabled them to gain new skills and knowledge that they can apply in their academic studies and enable them to perform well. Finally, participation and achievement in sports may promote self-confidence and well-being. Sports may thus encourage students to persevere in advanced courses by integrating them into their schools and instilling the drive and confidence to succeed (Pearson *et al.*, 2009).

Even though in the same regard there those who were not sure of the non- participation is an indicator of good performance, 79(34.1%) which is fairly a big percentage. This can be borrowed from Kiptala and Okero (2003) study which stated that there was no significant relationship between students' involvement in co-curricular activities and their academic achievement. This can be an indication that some learners do not have a clear understanding of the relationship between sports and academic performance, as there is no clear indication whether there is a direct linkage of participating in sports and performing well in academics.

Participation in the sport–based co-curricular activity inculcates a winning mentality to the student and thus helps develop esteem and tend to reduce disciplinary cases by actively engaging the students in a co-curricular activity. This can translate into a learning process by itself as well as a pro-active and pre-emptive strategy to managing disciplinary issues. Participation in sport -based co-curricular activities contribute to academic success in several ways. First, the emphasis on success and hard work may increase students' desire to succeed in school and thus may enhance an academic orientation. Regulations and rules may further motivate school athletes to do well in their studies. In addition, involvement in sports activities provides a greater sense of belonging and attachment to the school and ensures learning. Students who are more successful in sports than in academics are able to command the recognition and respect of their peers, which is associated with more positive psycho-social outcomes.

5.1 CONCLUSIONS AND RECOMMENDATIONS

The study made conclusions and recommendations guided by the findings.

5.2 Conclusions

Based on the findings, the study makes the following conclusions:

Academic clubs, debate clubs and field trips were the most offered education-based co-curricular activities in schools while article writing was the least offered followed by symposiums as indicated by students, teachers and principals. On participation, it was clear that a majority of the students did not participate in most education-based co-curricular activities across the schools especially article writing and symposiums. Only a few students participated in debate clubs, academic clubs and field trips as indicated by the students, teachers and principals. The education based co-curricular activities impacts on the academic performance by directly influencing the learner's intellectual capabilities thus helping them to explore and integrate new knowledge and skills. In addition, a majority of learners affirmed that education-based co-curricular activities are of help academically and in organizational abilities. The activities were refreshing and helped them perform well academically, helped them to learn new skills which cannot be learnt in the classrooms and acquire time management skills which improves their academic performance. Further, the study concluded that students participation in education-based co-curricular activities have an increased interest in morale to study thus increasing their chances to perform in academics, boost learners interest to study, improve learners teamwork skills and enhance time management skills which positively impacts their academic performance. Further, it provides conducive atmosphere for peer and cooperative learning to occur and helps increase students' morale and interest in learning. Other avenues for learning are in students' interaction which helps promote knowledge sharing and thus deepening learning. The principals supported that students who participated in education based co-curricular activities are motivated and encouraged. They in turn actively participate in classroom work which positively improves their academic performance.

The study concluded that athletics and football are the most popular sports- based co-curricular activities offered in schools as indicated by students, teachers and principals. On the other hand, they were all in agreement that, handball, volleyball, basketball, netball and table tennis were less offered due to lack of adequate resources and expertise for the sports.

The study concluded that students frequently participated in athletics followed by football. On the other hand, handball, volleyball, basketball, netball and table tennis were the sports that were less participated in as indicated by the students, teachers and principals. On academic performance, students said that participation in sports-based co-curricular activities influences their academic performance. It improves their morale in studying, helps refresh their mind and by extension they perform well. Students stated that it sharpens their creativity. On the other hand, teachers confirmed that participation in sports-based co-curriculum activities enhances students' morale in academics, increases learners' interest in academics, enables them to acquire team work skills hence influencing co-operative learning and enhances learner's time management skills which improve academic performance. Principals further stated that participation in sports boost the morale in students by increasing their self-esteem which later is transferred to classwork of the learners as they are able to perform well in academics. They also said that learners had the ability to socialize well and easily with others hence making it possible for peer learning.

5.3 Recommendations

Based on the findings of this study and the conclusion, the study makes the following recommendations:

1. Since most of the education-based co-curricular activities were not being offered and especially article writing and symposium, principals and teachers should be proactive in planning, managing and organization of the education-based co-curricular activities in the schools. These can be done at the local and international level regularly to improve interest and develop the intellectual capacity of their students.
2. Principals should seek to expand and improve the existing physical facilities for sports in the schools and teachers should be trained on various sports activities to be enable them guide learners on various sports activities.

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