INFLUENCE OF SCHOOL INFRASTRUCTURAL RESOURCES ON SECONDARY SCHOOL STUDENTS' PARTICIPATION IN CO-CURRICULAR ACTIVITIES IN LAIKIPIA WEST SUB-COUNTY, LAIKIPIA COUNTY, KENYA

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ABSTRACT

School experiences should involve classroom interactions and extend beyond the classroom walls through co-curricular activities. Co-curricular activities are believed to help in character building and skills application, promoting learners' individual development. However, there has been a dismal participation of secondary school students in co-curricular activities. Therefore, this study sought to establish the influence of school infrastructural resources on secondary school students' participation in co-curricular activities in Laikipia West Subcounty, Laikipia County, Kenya. The study adopted the descriptive survey research design. A total of 283 form three students, 22 games teachers, and 9 principals were used as respondents in the study. Schools were selected through stratified sampling on the basis whether the school is a county school, extra county, or subcounty school. Simple random sampling was used to select the students, purposive sampling for games teachers, and stratified sampling for the principals. Data was collected using questionnaires for students and games teachers, and interview schedules for the principals. The data analysis included quantitative methodology where descriptive statistics (percentages and frequencies) were used to analyze the data. The use of SPSS also aided in the analysis. Chuka university supervisors assisted the researcher in ascertaining the content validity of the research instruments and research experts in the field of education helped assess the face validity. From the findings, majority of the students and teachers agreed that insufficient field space and inadequate resources discourage learners participation in co-curricular activities. The principals also thought that lack of enough field space and resources greatly affects students' participation in co-curriculars. It was concluded that most students do not participate in co-curricular activities due to insufficiency of field space and inaccessibility of the necessary resources. The study recommended that the Ministry of Education should provide funds for the schools to acquire more ground space and the necessary materials for co-curricular activities.

Key words: "Influence", "School infrastructural resources", "Participation", "Co-curricular activities".

Introduction

School is an essential normative, social, and physical environment where learners can imitate, observe, and practice healthy behaviors (Dobbins, Husson, DeCorby, & LaRocca, 2013). Hence, education is a vast concept that is beyond the classroom walls. A comprehensive education aims at the holistic development of an individual. Quality education equips individuals with sufficient skills central to a nation's social and economic development (Knifsend, Camacho-Thompson, Juvonen, & Graham, 2018). Developmental education incorporates curricular and co-curricular activities (Deming & Johnson, 2021). Co-curricular activities (CCAs) allow students to learn and develop skills by actively participating in activities such as athletics, sports, clubs, drama, and music. Also, through CCAs, individuals develop cooperation and acquire crucial skills in negotiating with their peers.

In the United States of America (USA), co-curricular activities are associated with better attention and educational improvement, higher aspirations, and enhanced interpersonal competencies (King, McQuarrie, & Brigham, 2021). Better attention levels, enhanced motivation, social and personal maturity, and higher critical thinking are the attributes that bridge school activities with other non-academic activities. Agran, Dymond, Rooney-Kron, and Martin (2020) conducted a study to assess how much Individualized Education Programs (IEPs) entail co-curricular activities. The study involved 498 special education teachers across the United States as the respondents. From the research, teachers utilized co-curricular activities to try other skills. Several academic skills can be learned practically like a cooking club could be used to teach money counting skills or measurement. Also, service clubs can help exercise safety skills or home living, and drama clubs can be used to apply vocational skills and dressing (Agran et al., 2020). Although there are advocacies for student participation in CCAs, several factors have influenced their participation, including pre-planning, availability of adequate resources, training, monitoring, and evaluation of students and patrons participating in the activities (Stephen, 2020). Also, the value perception of the students on a particular CCA influences their participation in after-school activities.

Kenyan education has two divisions: curricular and co-curricular activities (Ali & Hassan, 2018). Experiences derived from curricular and co-curricular participation impact the development of an individual. The introduction of CCAs was to supplement academic goals. Schools also allow learners to take part in various physical activity levels. According to Mokaya (2013) most Kenyan school students have been part of CCA either as a participant or a spectator. Research shows that participation in school activities such as volleyball, football, basketball, netball, athletics, drama, choir, orchestra, and music positively impact students

(Kisango, 2016). Through participation in CCAs, learners have portrayed improved personal hygiene, patriotism, self-discipline, and improved academic achievement levels.

Participation in co-curricular activities helps students realize their talents and develop competencies and values that prepare them for future changes. Also, participation in CCAs enhances students' social integration and fosters a sense of commitment, belonging, and responsibility to the community, school, and the nation. Despite the remarkable value of CCAs and government inputs, most students may not participate in CCAs due to various sociological factors. However, there are few studies done to assess whether school infrastructural resources determine students' participation in CCAs. Thus, the current research study aimed at investigating the influence of school infrastructural resources on secondary school students' participation in co-curricular activities in Laikipia West Subcounty, Laikipia County, Kenya.

This study aimed to establish how school infrastructural resources affect secondary school student's participation in co-curricular activities in Laikipia West Subcounty, Laikipia County, Kenya.

Methodology

The study adopted the descriptive survey research design in establishing the influence of school infrastructural resources on secondary school students' participation in co-curricular activities. The study was carried out in 11 secondary schools in Laikipia West Subcounty, Laikipia County, Kenya. The accessible respondents were 314 which comprised of 283 form three students, 22 games teachers, and 9 principals. 11 secondary schools were selected through stratification, 22 games teachers were purposively selected (two teachers in each of the sampled schools), and 11 principals were selected from each of the sampled schools. Form three students were preferred because they have settled in the school for an extended period and have gained experience, self-awareness, and relevant knowledge on factors that influence their decisions. Games teachers were used because they handle students participating in various co-curriculars and these teachers are well knowledgeable on matters relating to co-curricular materials and equipment. Principals were also included since they are the managers of the school and they are informed about funds allocation and the condition of the school infrastructure. Questionnaires for games teachers and students, and interview schedules for the principals were used as the research instruments. The researcher ensured face and content validity of the instruments by seeking reviews from Chuka university research experts and supervisors. Data was analyzed using Statistical Package for Social Sciences (SPSS) and presented using percentages and frequencies.

RESULTS AND DISCUSSION

Demographic Information

The first section of the questionnaires sought to establish the participant's characteristics which included gender, age, length of stay in the school, and co-curricular activities one is involved in for the students. Questionnaires for the games teachers sought background characteristics on gender, age, academic qualifications, and how long one has served as the games teacher. Interview schedule for the principals incorporated information on gender and the length one has served as the principal.

Table 1: Demographic Characteristics of Students

		Total	Percentage
Gender	Male	140	49.5%
	Female	143	50.5%
Age Group	12-14 year	0	0%
	15-17 years	277	97.9%
	18-20 years	6	2.1%
Length of stay	Since form 1	247	87.3%
	Since form 2	31	11%
	Since form 3	5	1.7%
Co-curricular activity	Sports	78	27.6%
	Drama & music	72	25.4%
	Clubs & societies	48	17%
	All	17	6%
	None	68	24%

From a total of 283 students used as respondents, there were 140 male students and 143 females, a representation of 49.5% and 50.5% respectively of the total number of respondents. Most of the students were between the age of 15-17 years (97.6%) and the others range from 18 to 20 years (2.1%). The age distribution reflects the average age bracket for secondary school students. It can also be argued that the subcounty has more secondary school girls compared to boys. 87.3% of the students joined the respective secondary schools in form one, 11% in form two, and 1.7% in form three. From the responses, 27.6% of the students are active in sports, 25.4% in drama and music, 17% in clubs and societies, 6% are involved in all categories, and 24% are not involved in any co-curricular. This study findings concur with a study done by Kamau, Rintaugu and Bulinda (2020) in Kenyan secondary school in which from a sample of 519 male respondents, 51.0% were not involved in any co-curricular activities and from a sample size of 443 female students, 48.8% were non participants in co-curricular activities. Other researchers like Ali and Hassan (2018) and Muema (2019) observed that most of the secondary school students do not participate in co-curriculars offered in their schools since they are more focused on academic success. From the study findings, students appreciate co-curricular activities but there is still a substantive number of learners that do not engage in any co-curricular activity.

Games teacher's demographic information was determined by their gender, age, academic qualifications, and the length in which one has served as the games teacher. Teacher's background information is important in assessing their ability to support and motivate students of all gender in participating in CCAs. The length of service informs the teacher's decisions on student's participation in various activities. Table 8 illustrates the demographic characteristics data for the teachers.

Table 2: Demographic Characteristics of Games Teachers

		Total	Percentage
Gender	Male	15	68.2%
	Female	7	31.8%
Age Group	20-30 years	6	27.3%
	31-40 years	9	40.9%
	41-50 years	5	22.7%
	Over 50 years	2	9.1%
Academic Qualifications	Dip/ ED	3	13.6%
	BED	16	72.8%
	MED	3	13.6%
	Others	0	0%
Length as games teacher	Less than one years	3	13.6%
	1-10 years	14	63.7%
	11-20 years	5	22.7%
	Over 20 years	0	0%

Demographic characteristics indicates the area has more male games teachers (68.2%) compared to the 31.8% of the female teachers. Majority of the teachers are between the age of 31 to 40 years (40.9%), 27.3% are between 20 to 30 years, 22.7% are between 41 to 50 years, and 9.1% are over 50 years. While most of the teachers are degree holders (72.8%), there are other who have a diploma in education (13.6%) and 13.6% are master's degree holders. The level of education is a motivating factor for the learners that despite the education level, CCAs are important activities in an individual's life. Only 13.6% of teachers have less than one year serving as games teachers, 63.7% have served for 1 to ten years, 22.7% for 11 to 20 years. Therefore, the teachers are well experienced to successfully handle the games department.

Demographic aspects of the principals were assessed in terms of gender and the number of years one has been the principal of that school. Information obtained is crucial in determining the extent to which the principal understand the school and its operations. Table 9 shows the demographic characteristics data for the principals.

Table 3: Demographic Characteristics of Principals

		Total	Percentage
Gender	Male	5	44.4%
	Female	6	55.6%
Length of stay	Less than 15 years	11	100%
	15-30 years	0	0%
	Over 30 years	0	0%

The information obtained shows that female principals are more than male principals with 55.6% and 44.4% representations respectively. It is clear that principals have served for less than 15 years in the secondary schools found in the area.

School Infrastructural Resources and Students Participation in Co-curricular Activities

The second objective sought to establish how school infrastructural resources (field space, indoor space, coaches and trainers, and sporting materials and equipment) influence students' participation in CCAs.

From the analysis of students' responses about infrastructural resources, the results are summarized in Table 4.

Table 4: Students Responses on School Infrastructural Resources

Indicator	SD %	D %	M %	A %	S %
Inadequate field space for various sporting activities	12	8.8	4.9	44.3	30
Lack of a safe and well-ventilated space for indoor co-curriculars	9.2	24	7.1	31.4	28.3
No internal trainers in field activities	26.9	47.7	10.5	11.7	3.2
No internal trainers in drama and music	40.6	39.9	5.3	8.5	5.7
Inadequate sporting materials and equipment Inaccessible and damaged sporting materials and equipment	6.4 13.8	13.4 34.3	7.7 6.4	42.8 25.4	29.7 20.1

Key: (SD= Strongly Disagree, D= Disagree, M=Moderate, A=Agree, SA= Strongly Agree, and %= Percentage)

The results indicated that most of the students (44.3%) agreed that inadequate field space discourages them from participating in CCAs, 30% strongly agreed, 4.9% were moderate, 8.8% disagreed, and 12% strongly disagreed. The information implies that insufficient field space to some extent demotivate students from participating in various CCAs offered in the schools. Results in Table 12 shows that 31.4% of the students agreed that lack of a safe and well-ventilated indoor space discourages them from participation in indoor CCAs like chess, badminton, and table tennis. 28.3% strongly agreed, 7.1% were moderate, 24% disagreed, and 9.2% strongly disagreed. Therefore, the information implies that some of the schools in Laikipia west subcounty have adequate space for indoor CCAs but majority of the schools do not have indoor spaces which demotivates students from taking part in indoor co-curricular activities.

Results in Table 4, 26.9% of the students strongly disagreed that lack of internal coaches discourages them from participating in CCAs, 47.7% disagreed, 10.5% were moderate, 11.7% agreed, and 3.2% strongly agreed. The analysis implies that most of the schools in the area lack internal coaches and trainers for the various activities which tends to negatively impact students' participation in field activities. On the aspect of lack of internal trainers in drama and music, 40.6% of the respondents strongly disagreed that absence of internal trainers discourages them from participating in CCAs, 39.9% disagreed, 5.3% were moderate, 8.5% agreed, and 5.7% strongly agreed. Hence, from the results it is clear that most of the schools have drama and music trainers who might be teachers from the respective schools.

Most of the students (42.8%) agreed that inadequacy of sporting materials and equipment for various CCAs discourage them from participation in school activities while 29.7% strongly agreed, 7.7% were moderate, 13.4 disagreed, and 6.4 strongly agreed. From the results also, 13.8% of the students strongly disagreed that inaccessibility and damage on sporting materials and equipment discourage them from participating in CCAs while 34.3% disagreed, 6.4% were moderate, 25.4% agreed, and 20.1% strongly agreed. Therefore, from the results, most of the schools have insufficient sporting materials which tends to discourage learners from participating in CCAs. However, the existence of damaged materials may not to a great extent negatively impact learners' participation in CCAs but other factors like lack of those materials will discourage the students. The current study findings are supported by research done by Wangai (2012) on determinants of students' talent development in Mwatate district. From the findings, the researcher used a sample of 170 students and 17 teachers, 71% of the students and 64.7% of the teachers stated that lack of enough infrastructural facilities and inadequate sporting materials in the school hindered student's participation in co-curricular activities. Lack of essential facilities in the schools deny majority of the students a chance to explore and exercise their physical abilities through CCAs.

Table 5: Teacher's Responses on School Infrastructural Resources

Indicator	SD %	D %	M %	A %	SA %
There are adequate resources that are readily accessible for all learners	50	36.4	0	9.1	4.5
Existing resources are obsolete hindering participation in CCAs	0	4.5	4.5	68.3	22.7
There is enough playground for all learners	22.7	68.3	4.5	4.5	0
School loans resources for use during CCAs	13.6	59.2	4.5	22.7	0
There are adequate co-curricular human resources in the school	4.5	13.7	9.1	68.2	4.5

Key: (SD= Strongly Disagree, D= Disagree, M= Moderate, A= Agree, SA= Strongly Agree, and %= Percentage)

From the results in Table 5, majority of the teachers (50%) strongly disagreed that there are adequate and readily accessible co-curricular resources for all learners while 36.4% disagreed, 9.1% agreed, and 4.5% strongly agreed. The results indicates that most of the schools in the subcounty have insufficient resources that are crucial for learners' participation in CCAs. On assessing whether the existing co-curricular resources are obsolete hindering students' participation in CCAs, 4.5% of the teachers disagreed, 4.5% were moderate, 68.2%, and 22.7% strongly agreed. Therefore, the responses imply that most of the necessary resources are damaged and cannot be utilized for CCAs which discourages learners from participating in various co-curriculars.

The results also shows that most of the teachers (68.3%) disagreed that the schools have enough field space for all learners to participate in CCAs while 22.7% strongly disagreed, 4.5% were moderate, and 4.5% agreed. Despite there being a few schools with sufficient space for CCAs, most of the schools lack the space which demotivates students from participating in co-curriculars. The researcher also wanted to establish whether the schools loan resources to help enhance co-curricular participation. From the responses, 59.2% of the teachers disagreed, 13.7% strongly disagreed, 9.1% were moderate, and 22.7% agreed. Therefore, the responses imply that despite the insufficiency of the co-curricular resources, most of the schools cannot loan the necessary resources which could result from lack of funds or other factors like inaccessibility of the required materials and equipment.

From the teachers' responses, majority (68.2%) agreed that the schools have adequate human resource to help students in CCAs at the same time, 4.5% strongly disagreed, 13.6% disagreed, 9.1% were moderate, and 4.5% strongly agreed. Hence, the information shows that there are enough coaches and trainers involved in different co-curriculars which encourage students' participation in CCAs. Rimbogi (2010) supports the findings of the current study that availability of adequate personnel, handball courts, soccer field, and other resources enhances the level of students' participation in co-curricular activities. For students to adequately participate in sports and Physical Education (PE), there must availability of quantitative and qualitative equipment and facilities is crucial. The findings show a strong correlation between the extent of learners' participation in CCAs and availability of infrastructural resources including coaches and teachers to guide them through the co-curricular activities.

Most of the principals stated that the schools have insufficient materials and equipment that to a great extent negatively affect students' participation in co -curricular activities. The principals also stated that the schools have inadequate field space for sporting activities which hinders introduction of various co-curricular activities. Also, some of the schools lack a well-structured and equipped indoor space for indoor co-curriculars which tends to discourage students from engaging in indoor activities. With the limited field space and insufficient co-curricular materials and equipment, students' participation in co-curricular activities is negatively affected. This study findings concur with the findings from research done by Mohamad and Esa (2017) on factors affecting students' participation in extracurricular. From the research findings, structural constraints are among the major hindrances of students' participation in extracurricular activities. According to Mohamad and Esa (2017) where infrastructural resources are inaccessible, learners tend to seclude themselves into the virtual world and engage into unhelpful activities.

Conclusion

School infrastructural resources are essential in motivating students towards CCAs. Due to insufficient field space, lack of a safe and well-ventilated indoor space, inadequacy and inaccessibility of sporting materials and equipment secondary school students in Laikipia West Subcounty are to a great extent discouraged from participating in co-curriculars. Nevertheless, the results show that lack of internal trainers and coaches in drama, music, and sports has little effect on students' participation in CCAs.

Recommendation

From the study findings, it is recommended that the government and the Ministry of Education should increase co-curricular funding to enable the schools acquire enough field space, co-curricular materials and equipment, and offer variety of activities where all students can adequately participate in activities of their choice. Through the elimination of financial barriers and other barriers to participation, learners will be motivated to participate in co-curriculars.

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