

## THE MOST PREVALENT SPORTING ACTIVITIES OFFERED BY PUBLIC SECONDARY SCHOOLS IN IMENTI NORTH SUB-COUNTY, MERU COUNTY, KENYA

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### Abstract

This study sought to establish the most prevalent sporting activities offered by public secondary schools in Imenti North Sub-County, Meru County, Kenya. The sporting activities were put into three categories, namely, athletics, indoor activities and outdoor activities. This study employed a descriptive research design. Fifteen schools were identified in this study by using a stratified sampling based on the zones. The sample size comprised 15 class teachers, 15 games masters, 15 principals and 225 form three students. The data was obtained through structured questionnaires, oral interviews, and secondary and primary sources to ensure the reliability and validity of the study. Twenty-two students from form three students in two public secondary schools in Buuri Sub County were used for the pre-test, which was approximately 10 per cent of the sample size. After the data was collected, it was sorted, cleaned and coded subsequently. The data was keyed into Statistical Package for Social Sciences (Version 27) for processing. Inferential and descriptive statistics were utilised for data analysis. The study established that five of the six most prevalent sporting activities in public secondary schools in Imenti North Sub-County were the outdoor games category. The study concluded that outdoor games were the most prevalent sporting activities in secondary schools. The study recommends that school administrators should invest in indoor and outdoor games to avail a variety of sporting activities that students can choose from.

**Key terms:** Offered, prevalent, public, secondary schools, sporting activities.

## 1.0 INTRODUCTION

There are many sports activities available in and out of public secondary school, including athletics such as jumping, running, and throwing; indoor sports such as badminton and table tennis; outdoor games such as rugby, soccer, and basketball; and physical education exercises such as aerobics and yoga. Some families encourage their children to partake in sports in addition to academics, while at the same time, other parents inspire their children to only concentrate on becoming professional sportspeople in the future. Singleton (2016) further elucidates that schools also advocate for students to participate in these games due to the financial gains associated with them. For example, in Kenya, many schools participate in organised sports activities due to the prize money associated with success (Obondo, 2020). Earlier observations by Singleton (2016) indicated that athletes were more likely to exhibit good behaviour and higher school attendance rates.

## 2.0 LITERATURE REVIEW

Many institutions and students prefer outdoor games to indoor activities due to perceived benefits. For example, soccer is the most popular sport worldwide, generating a lot of income for clubs, players, and sponsors (Medel & Cabezuelo-Lorenzo (2018). This reveals why most people are more interested in these games instead of less popular ones, such as badminton. Although outdoor sports offer immense economic and social value, it is also mandatory to consider their contribution to academic attainments. Logan and Cuff (2019) observe that many children are coerced into sports as children. Many scholars prove that students' involvement in sports such as soccer, rugby, and basketball may have negative implications on academic performance. Conversely, others argue that these sports have many benefits that can improve the academic outcomes of students. For example, Valkenborghs et al. (2019) conclude that involvement in outdoor sports from an early age encourages positive cognitive development in later years. The scholars argue that during sports, students learn to use their brains to think, remember and problem-solve (Valkenborghs et al., 2019). Mahalakshmi et al. (2020) support these observations by claiming that physical activity boosts cognitive functions by increasing brain blood flow and the secretion of norepinephrine and endorphins, which foster new nerve creation and synaptic plasticity. During games, the players are expected to maintain high levels of concentration.

According to Valkenborghs et al. (2019), routine attentiveness during games makes students more attentive in the classroom, which contributes to better academic attainments. A study conducted by Tasdubgen et al. (2020) established that students who indulged in outdoor sports had better problem-solving skills and creativity than other students. The scholars attributed these results to the fact that these students were expected to routinely employ fast, creative reactions during the game. Good decision-making skills contribute to better academic outcomes since the students can deal with complex problems in the classroom. Finally, De Prada et al. (2020) aver that most outdoor sports are team-oriented, which improves the teamwork skills of the students. Modern-day classrooms are student-centred, unlike traditional classes that are teacher-centred. This means that collaboration and teamwork in the school are mandatory for academic success. Furthermore, during sports, the team members develop a sense of shared identity with one another and with their schoolmates. Therefore, involvement in these games improves teamwork and inclusivity in the classroom, resulting in better learning outcomes and improved academic performance.

Indoor games have increased in recent years due to the integration of certain games, such as computer games. Hegde et al. (2019) state that indoor games refer to sports held inside arenas, gyms, and other buildings. According to the researchers, computer games are still not utilised in most classrooms. Instead, many schools worldwide still offer traditional games such as chess, table tennis, badminton/racket, and swimming as the most common indoor games. Consequently, most studies have concentrated on the influence of badminton, chess, and table tennis on academic performance. For example, Patil (2020) claims that badminton has a positive influence on student educational outcomes. Firstly, Patil (2020) states that indoor games such as chess have been associated with low physical activity. Some scholars posit that indoor games have low physical activity, which affects the cognitive and academic performance of students (Singh et al., 2019). Compared to outdoor activities, indoor sports are seen as less strenuous physically. Contrary to these assertions, Patil (2020) notes that badminton combines the physical demands of other sports, such as athletics and the cognitive expectations associated with indoor games. In this game, the players are expected to work on strategy, teamwork, speed, and accuracy to become successful. Consequently, the students have better cognitive and physical abilities that contribute to academic excellence.

In addition to badminton, table tennis also contributes to the academic performance of students positively. In many countries, including Kenya, games such as table tennis are seen as low organisational sports and are disregarded in favour of outdoor games such as football and rugby. As explained by Ragot et al. (2020), many schools and students are changing this perspective for two reasons. Firstly, urbanisation has limited the space available for outdoor sports that require large fields. For example, track and field activities require large pitches, which may be difficult or expensive to attain. As a result, schools have to consider indoor sports such as table tennis that occupy smaller spaces. Secondly, many educators and students recognise the potential benefits of these activities (Ragot et al., 2020). Kubiak et al. (2019) postulate that table tennis is a competitive fine motor game that requires immense concentration. Subsequently,

Lack of focus and anxiety may result in failure in the game. Accordingly, these table tennis players must develop impeccable concentration and emotional regulation skills to become successful (Kubiak et al., 2019). Students can also benefit from these skills to improve their academic outcomes. For example, some subjects, such as math, require concentration to excel. Additionally, as justified by Ragot et al. (2020), indulging in indoor sports such as table tennis also improves the physical and cognitive development of students. Hence, indoor sports such as table tennis and badminton are attributable to better fine motor skills and higher cognitive abilities, which may result in better academic performance.

### **3.0 METHODOLOGY**

This study employed a descriptive research design. Hence, the descriptive research design was appropriate in establishing the most prevalent sporting activities that are offered in public secondary schools in Imenti North Sub-County, Meru County, Kenya. A descriptive research design was appropriate because of its suitability in gathering data on the population's perceptions in addressing research questions.

### **4.0 RESULTS AND DISCUSSION**

#### **The Prevalent Sporting Activities that are Offered in Public Secondary Schools**

## Students Involvement in Athletics

The students' participants were asked to state the athletic activities they were involved in before the COVID-19 break. The majority of the participants (40.4%) were involved in running, 22.7 per cent engaged in jumping, 13.3 per cent were involved in throwing, and 12.3 per cent were engaged in walking. The results signify that running was the most prevalent sporting activity under the athletics category, with an involvement of two-fifths of the participants. Hence, the schools sampled had given the students an opportunity to engage in athletics.

These results are in line with the assertion of Kamau et al. (2020), who posited that the Kenyan curriculum aims to provide a holistic curriculum that develops a child mentally, physically, socially, and morally fit. The researcher claims that these aims can only be attained through curricular and co-curricular activities such as athletics. Moreover, Yukhymenko-Lescroart (2018) observed that participation in athletics improves academic performance. Since the athletes are expected to undergo numerous and strenuous training sessions to become more successful than their opponents, the same skills could be replicated in the academic arena, and consequently, academic excellence is attained.

The results support the assertion of Singleton (2016), who concluded that athletes had higher GPAs, lower dropout rates, better attendance rates, and higher graduation rates compared to their counterparts. Subsequently, the aforementioned researchers established that participation in athletics had a positive influence on the academic performance of the students. At a later stage, this study would investigate whether students' involvement in sports influenced their academic performance.

**Table 1: Students Involvement in Athletics**

| Athletics Category | Frequency | Per cent |
|--------------------|-----------|----------|
| Running            | 82        | 40.4%    |
| Jumping            | 46        | 22.7%    |
| Throwing           | 27        | 13.3%    |
| Walking            | 25        | 12.3%    |

The participants were asked to state the amount of time they were utilising in athletics activities before the COVID-19 break. The results in Table 1 indicated that the majority of the participants (29.6%) utilised 5 to 6 hours, 29.1 per cent 3 to 4 hours and 28.6 per cent 1 to 2 hours in a week. Slightly more than a tenth of the participants (12.3%) did not engage in any athletic activity, while 0.5 per cent of the participants utilised more than 8 hours a week in athletics activities. The results signify that most of the athletics participants utilised a minimum of three hours a week on the sport. Only less than a third indicated utilisation of less than three hours a week. Hence, most participants had sufficient time to participate in athletics activities, which was good for their health. The results support the finding of Singleton (2016), who reported positive outcomes from engaging in athletics at all age levels. He concluded that engaging in athletics refreshes a student's mind, and, as a result, the student is able to concentrate well during preps and lessons. Consequently, a student who actively engages in sports registers better academic results than their sedentary counterparts. Besides, when a student spends a significant proportion of school time in sports, little time is left to engage in undesired activities like truancy, bullying, taking drugs and vandalism.

**Table 2: Distribution of Participants by Time Utilised in Athletics Activities**

| Duration                    | Frequency | Per cent |
|-----------------------------|-----------|----------|
| 1 to 2 hours in a week      | 58        | 28.6     |
| 3 to 4 hours in a week      | 59        | 29.1     |
| 5 to 6 hours in a week      | 60        | 29.6     |
| More than 8 hours in a week | 1         | .5       |
| Not applicable              | 25        | 12.3     |
| Total                       | 203       | 100.0    |

The participants were asked to state their frequency of participation in athletics before the Covid-19 break. As shown in Table 2, nearly half of the participants (44.8%) frequently participated, 31.5 per cent sometimes participated, 12.3 per cent never participated, and 11.3 per cent always participated in athletics activities. The results imply that most of the participants who engaged in athletics did so regularly. Only less than a third indicated that they sometimes engaged in athletics activities. Hence, most participants endeavoured to participate in athletics activities often. The results reflect the assertion of Singleton (2016), who posited that participation in athletics had a positive influence on the students' academic performance. When a student utilises athletics activities as an avenue of relaxing from high-concentration study work, his mind refreshes, and ultimately, his concentration span for class work improves. On the other hand, a student who does not engage in sports is likely to have a lot of free time. Subsequently, the student is tempted to engage in undesired activities like taking drugs, which in turn lowers his academic performance.

**Table 3: Distribution of Participants by Frequency of Participation in Athletics**

| Frequency Level | Frequency | Per cent |
|-----------------|-----------|----------|
| Always          | 23        | 11.3     |
| Frequently      | 91        | 44.8     |
| Sometimes       | 64        | 31.5     |
| Never           | 25        | 12.3     |
| Total           | 203       | 100.0    |

A cross-tabulation was performed to compare the time utilised in athletics activities between males and females. As shown in Table 3, 32.7 per cent of females utilised 5 to 6 hours a week in athletics activities compared to 26.5 per cent of their male counterparts who utilised an equal proportion of time on athletics activities. Moreover, 46.5 per cent of females utilised 3 to 4 hours a week in athletics activities, while only 11.8 per cent of their male counterparts spent the same span on athletics activities. On the other hand, 47.1 per cent of the males utilised 1 to 2 hours a week in athletics activities compared to 9.9 per cent of their female counterparts who utilised an equal proportion of time on athletics activities. The results suggest that female participants spent more time in athletics activities than their male counterparts. It is also paramount to note that the proportion of the male participants (13.7%) who were not participating in athletics activities was slightly higher than that of their female counterparts (10.9%). Consequently, there were more female participants participating in athletics activities than male participants.

**Table 4: Cross Tabulations of Time Utilized in Athletics Activities Based on Gender**

| Time span                   |   | Gender |        |
|-----------------------------|---|--------|--------|
|                             |   | Male   | Female |
| 1 to 2 hours in a week      | F | 48     | 10     |
|                             | % | 47.1%  | 9.9%   |
| 3 to 4 hours in a week      | F | 12     | 47     |
|                             | % | 11.8%  | 46.5%  |
| 5 to 6 hours in a week      | F | 27     | 33     |
|                             | % | 26.5%  | 32.7%  |
| More than 8 hours in a week | F | 1      | 0      |
|                             | % | 1.0%   | .0%    |
| Not applicable              | F | 14     | 11     |
|                             | % | 13.7%  | 10.9%  |
| Total                       | F | 102    | 101    |
|                             | % | 100.0% | 100.0% |

A chi-square test was conducted to investigate the relationship between time utilised in athletics activities and gender. The relationship between time utilised in athletics activities and gender was significant,  $\chi^2(4, N = 203) = 47.615, p < .001$ , as shown in Table 4. Hence, it was concluded that time utilised in athletics activities differed significantly between genders.

**Table 5: Chi-Square Tests of Time Utilized in Athletics Activities Based on Gender**

|                              | Value  | df | P - Value |
|------------------------------|--------|----|-----------|
| Pearson Chi-Square           | 47.615 | 4  | .000      |
| Likelihood Ratio             | 51.618 | 4  | .000      |
| Linear-by-Linear Association | 1.834  | 1  | .176      |
| N of Valid Cases             | 203    |    |           |

### Students' Involvement in Indoor Games

The students' participants were asked to state the indoor games they were involved in before the COVID-19 break. As shown in Table 5, a third of the participants (33.0%) were involved in swimming, 30.5 per cent in badminton, 25.6 per cent in tennis, 25.1 per cent in table tennis and 21.7 per cent in lawn tennis. The results imply that swimming was the most prevalent indoor sport, with the involvement of a third of the participants. Hence, the schools sampled had given the students an opportunity to engage in indoor games. The results are in line with the findings of Hegde et al. (2019), who concluded that many schools worldwide still offer traditional games such as table tennis, badminton/racket, and swimming as the most common indoor games. The results also correspond well with the finding of Patil (2020), who claimed that badminton has a positive influence on students' academic outcomes as the players are expected to work

on strategy, teamwork, speed, and accuracy to become successful. Consequently, the students have better cognitive and physical abilities that contribute to academic excellence.

**Table 6: Students Involvement in Indoor Games**

| Indoor Game type | Frequency | Per cent |
|------------------|-----------|----------|
| Swimming         | 67        | 33.0     |
| Badminton        | 62        | 30.5     |
| Tennis           | 52        | 25.6     |
| Table tennis     | 51        | 25.1     |
| Lawn tennis      | 44        | 21.7     |

The participants were asked to state the duration of time they utilised in indoor games before the COVID-19 break. Results in Table 6 show that the majority of the participants (35.0%) utilised 1 to 2 hours in a week, 26.1 per cent utilised 3 to 4 hours, 20.2 per cent were not engaged in indoor games, and 18.7 per cent utilised 5 to 6 hours a week in indoor games. Hence, the time utilised in indoor games was much lower than the time utilised in athletics activities shown earlier in this study. Besides, the proportion of participants who did not engage in indoor games was much higher than the section of participants who did not engage in athletics activities. Consequently, the prevalence of athletics activities was much higher than the prevalence of indoor games.

**Table 7: Distribution of Participants by Time Utilised in Indoor Games**

| Duration               | Frequency | Per cent |
|------------------------|-----------|----------|
| 1 to 2 hours in a week | 71        | 35.0     |
| 3 to 4 hours in a week | 53        | 26.1     |
| 5 to 6 hours in a week | 38        | 18.7     |
| Not applicable         | 41        | 20.2     |
| Total                  | 203       | 100.0    |

The participants were asked to state their frequency of participation in indoor games before the Covid-19 break. As shown in Table 7, 36.0 per cent frequently engaged, 25.6 per cent sometimes participated, 20.2 per cent never engaged, and 18.2 per cent always participated in indoor games. These results signify that a significant proportion of the participants regularly engaged in indoor games. More than half of the participants indicated regular participation in indoor games. These results are in line with the assertion of Kubiak et al. (2019), who posited that table tennis players must develop impeccable concentration and emotional regulation skills to become successful. Hence, to perfect their skills in indoor games, the players consistently participated in the games. The same consistency could be replicated in academic work to attain excellent performance in academics. The findings also support that of Ragot et al. (2020), who argued that indulging in indoor sports such as table tennis also improves the physical and cognitive development of students. Hence, indoor sports such as table tennis and badminton are attributable to better fine motor skills and higher cognitive abilities, which may result in better academic performance.

**Table 8: Distribution of Participants by Frequency of Participation in Indoor Games**

| Frequency Level | Frequency | Per cent |
|-----------------|-----------|----------|
| Always          | 37        | 18.2     |
| Frequently      | 73        | 36.0     |
| Sometimes       | 52        | 25.6     |
| Never           | 41        | 20.2     |
| Total           | 203       | 100.0    |

A cross-tabulation was performed to compare the time utilised in indoor games between males and females. The results in Table 8 indicate that 20.8 per cent of females utilised 5 to 6 hours a week in indoor games compared to 16.7 per cent of their male counterparts who utilised an equal amount of time in indoor games. Besides, 41.2 per cent of the males utilised 1 to 2 hours a week in indoor games, while 28.7 per cent of the females utilised the same amount of time in indoor games. The results signify that female participants utilised more time in indoor games than male participants. However, 29.7 per cent of the female participants were not participating in indoor games compared to 10.8 per cent of males who did not engage in indoor games. Consequently, it was concluded that the proportion of male participants who participated in indoor games was higher than that of their female counterparts. However, it is worth noting that the proportion of females who participated in athletics was much higher than that of their male counterparts. Thus, whereas female participants were inclined towards athletics activities, their male counterparts had a preference for indoor games over athletics.

**Table 9: Cross Tabulations of Time Utilised in Indoor Games Based on Gender**

| Time span              |   | Gender |        |
|------------------------|---|--------|--------|
|                        |   | Male   | Female |
| 1 to 2 hours in a week | F | 42     | 29     |
|                        | % | 41.2%  | 28.7%  |
| 3 to 4 hours in a week | F | 32     | 21     |
|                        | % | 31.4%  | 20.8%  |
| 5 to 6 hours in a week | F | 17     | 21     |
|                        | % | 16.7%  | 20.8%  |
| Not applicable         | F | 11     | 30     |
|                        | % | 10.8%  | 29.7%  |
| Total                  | F | 102    | 101    |
|                        | % | 100.0% | 100.0% |

A chi-square test was done to investigate the relationship between time utilised in indoor games and gender. The relationship between time utilised in indoor games and gender was significant,  $\chi^2(3, N=203) = 13.885, p = .003$ , as shown in Table 9. Hence, it was concluded that time utilised in indoor games differed significantly between genders.

**Table 10: Chi-Square Tests of Time Utilised in Indoor Games based on Gender**

|  |
|--|
|  |
|--|

| Statistic                    | Value  | df | P - Value |
|------------------------------|--------|----|-----------|
| Pearson Chi-Square           | 13.885 | 3  | .003      |
| Likelihood Ratio             | 14.261 | 3  | .003      |
| Linear-by-Linear Association | 12.824 | 1  | .000      |
| N of Valid Cases             | 203    |    |           |

### Students' Involvement in Outdoor Games

The students' participants were asked to state the outdoor games they were involved in before the COVID-19 break. As shown in Table 10, nearly half of the participants (47.3%) played football, 43.3 per cent played volleyball, 36.9 per cent played basketball, and 34.5 per cent played netball. Further, 33.5 per cent played handball, 31.5 per cent played hockey, 30.0 per cent played rugby, and 7.4 per cent played baseball. The results signify that football was the most prevalent sport in outdoor games. It is worth noting that running was the most prevalent athletic activity, with 40.4 per cent, and swimming was the most prevalent indoor game, with 33.0 per cent.

Consequently, it was revealed that football was the most prevalent sporting activity in secondary schools in Imenti North Sub County, with nearly half of the participants playing the game. The second most prevalent sporting activity was volleyball, while running was ranked the third most prevalent sporting activity. Basketball, netball and handball were ranked fourth, fifth and sixth, respectively. The results signify that outdoor games were the most prevalent sporting activities in secondary schools in Imenti North Sub County. Five of the six most prevalent sporting activities in the Sub County were in the outdoor games category. The results are in line with the findings of Medel and Cabezuelo-Lorenzo (2018), who established that many institutions and students prefer outdoor games over indoor activities due to perceived benefits. The researcher argues that soccer is the most popular sport worldwide, generating a lot of income for the clubs, players, and sponsors. The findings also support that of De Prada et al. (2020), who argued that most outdoor sports are team-oriented, which improves the teamwork skills of the students. Involvement in these games improves teamwork and inclusivity in the classroom, resulting in better learning outcomes and improved academic performance.

**Table 11: Students' Involvement in Outdoor Games**

| Outdoor Game type | Frequency | Per cent |
|-------------------|-----------|----------|
| Football          | 96        | 47.3     |
| Volleyball        | 88        | 43.3     |
| Basketball        | 75        | 36.9     |
| Netball           | 70        | 34.5     |
| Handball          | 68        | 33.5     |
| Hockey            | 64        | 31.5     |
| Rugby             | 61        | 30.0     |
| Baseball          | 15        | 7.4      |

The participants were asked to state the duration of time they utilised in outdoor games before the COVID-19 break. Results displayed in Table 11 indicate that the majority of the participants (25.1%) utilised

5 to 6 hours a week, 21.2 per cent 3 to 4 hours a week, and 20.2 per cent more than 8 hours a week. Moreover, 19.7 per cent of the participants utilised 7 to 8 hours a week, and 13.8 per cent utilised 1 to 2 hours a week in outdoor games. It is paramount to note all the participants indicated that they participated in outdoor games. This is unlike 20.2 per cent who did not participate in indoor games and 12.3 per cent who did not participate in athletics activities.

The results signify that most of the participants utilised more than four hours a week in outdoor activities. Nearly two-thirds of the participants indicated utilisation of more than four hours a week in outdoor games. Another interesting statistic is that a fifth of the participants indicated that they utilised more than eight hours a week in outdoor games. Only 0.5 per cent of the participants reported utilisation of more than eight hours a week in athletics activities, while none of the participants utilised more than eight hours a week in indoor games. The results are in line with the finding of Valkenborghs et al. (2019), who observed that involvement in outdoor sports from an early age encourages positive cognitive development in later years. The scholars argue that during sports, the students learn to use their brains to think, remember and problem-solve.

**Table 12: Distribution of Participants by Time Utilised in Outdoor Games**

| Duration                    | Frequency | Per cent |
|-----------------------------|-----------|----------|
| 1 to 2 hours a week         | 28        | 13.8     |
| 3 to 4 hours in a week      | 43        | 21.2     |
| 5 to 6 hours in a week      | 51        | 25.1     |
| 7 to 8 hours in a week      | 40        | 19.7     |
| More than 8 hours in a week | 41        | 20.2     |
| Total                       | 203       | 100.0    |

The participants were asked to state their frequency of participation in outdoor games before the Covid-19 break. As shown in Table 12, the majority of the participants (57.6%) frequently engaged in outdoor games, 29.6 per cent sometimes participated, and 12.8 per cent always engaged in outdoor games. The results imply that most of the participants regularly engaged in outdoor games. Only less than a third of the participants indicated that they sometimes engaged in outdoor games. Hence, the participants were very active in outdoor games. These results reflect the assertions of Mahalakshmi et al. (2020), who argued that physical activity boosts cognitive functions by increasing the brain blood flow and the secretion of norepinephrine and endorphins, which foster new nerve creation and synaptic plasticity. The results also support the finding of Valkenborghs et al. (2019), who concluded that routine attentiveness during games makes the students more attentive in the classroom, which contributes to better academic attainments. Moreover, Tasdubgen et al. (2020) established that students who indulged in outdoor sports had better problem-solving skills and creativity compared to other students. The scholars attributed these results to the fact that these students were expected to routinely employ fast, creative reactions during the game. Good decision-making skills contribute to better academic outcomes since the students can deal with complex problems in the classroom.

**Table 13: Distribution of Participants by Frequency of Participation in Outdoor Games**

| Frequency Level | Frequency | Per cent |
|-----------------|-----------|----------|
|-----------------|-----------|----------|

|            |     |       |
|------------|-----|-------|
| Always     | 26  | 12.8  |
| Frequently | 117 | 57.6  |
| Sometimes  | 60  | 29.6  |
| Total      | 203 | 100.0 |

Item one of the games teachers' questionnaires inquired about the sporting activities offered by the schools before the COVID-19 break. For the majority of the games, teachers indicated football, volleyball, basketball, netball and handball as the major sporting activities offered by their schools before the COVID-19 break. The results indicate that, in the opinion of the games teachers, outdoor games were the most prevalent sporting activities in Imenti North secondary schools. This finding is an accurate reflection of the students' participants regarding the most prevalent sporting activities.

A cross-tabulation was performed to compare time utilised in outdoor games between males and females. The results in Table 13 indicate that 20.6 per cent of males utilised more than 8 hours a week in outdoor games, while 19.8 per cent of females utilised an equal amount of time in outdoor games. In addition, 29.4 per cent of males utilised 7 to 8 hours a week in outdoor games compared to 9.9 per cent of their female counterparts who utilised an equal amount of time in the sport. Further, 33.3 per cent of the males utilised 5 to 6 hours a week in outdoor games, while 16.8 per cent of females utilised an equal amount of time in outdoor games. The results imply that male participants utilised more time in outdoor games than female participants. Subsequently, the study established that the proportion of male participants who engaged in indoor and outdoor games was higher than that of their female counterparts. On the contrary, the proportion of female participants who engaged in athletics was much higher than that of their male counterparts.

**Table 14: Cross Tabulations of Time Utilised in Outdoor Games Based on Gender**

| Time span                   |   | Gender |        | Total  |
|-----------------------------|---|--------|--------|--------|
|                             |   | Male   | Female |        |
| 1 to 2 hours in a week      | F | 17     | 11     | 28     |
|                             | % | 16.7%  | 10.9%  | 13.8%  |
| 3 to 4 hours in a week      | F | 0      | 43     | 43     |
|                             | % | .0%    | 42.6%  | 21.2%  |
| 5 to 6 hours in a week      | F | 34     | 17     | 51     |
|                             | % | 33.3%  | 16.8%  | 25.1%  |
| 7 to 8 hours in a week      | F | 30     | 10     | 40     |
|                             | % | 29.4%  | 9.9%   | 19.7%  |
| More than 8 hours in a week | F | 21     | 20     | 41     |
|                             | % | 20.6%  | 19.8%  | 20.2%  |
| Total                       | F | 102    | 101    | 203    |
|                             | % | 100.0% | 100.0% | 100.0% |

A chi-square test was performed to investigate the relationship between time utilised in outdoor games and gender. The relationship between time utilised in outdoor games and gender was significant,  $\chi^2(4, N=$

203) = 59.973,  $p > .001$ , as shown in Table 14. Hence, it was concluded that time utilised in outdoor games differed significantly between genders.

**Table 15: Chi-Square Tests of Time Utilised in Outdoor Games Based on Gender**

| Statistic                    | Value  | df | P - Value |
|------------------------------|--------|----|-----------|
| Pearson Chi-Square           | 59.973 | 4  | .000      |
| Likelihood Ratio             | 77.167 | 4  | .000      |
| Linear-by-Linear Association | 7.810  | 1  | .005      |
| N of Valid Cases             | 203    |    |           |

### Extent of Participation

The participants were asked to state the highest level they had participated in sports. As shown in Table 16, the majority of the participants (36.5%) indicated sub-county level, 33.5 per cent stated county level, and 22.7 per cent indicated regional level, while 7.4 per cent stated national level. The results signify that only a small proportion of the participants represented their schools at the national level. Only less than a tenth of the participants indicated participation at the national level. Besides, less than a third of the participants indicated participation up to the regional level. The results suggest that most of the participants were edged out of the competitive tournaments at either Sub County or county levels. Subsequently, a lot needs to be done to improve the quality of sporting in Imenti North Sub County.

**Table 16: Distribution of Participants by Extent of Participation in Sports/Athletics**

| Level of participation | Frequency | Per cent |
|------------------------|-----------|----------|
| Sub County level       | 74        | 36.5     |
| County-level           | 68        | 33.5     |
| Regional level         | 46        | 22.7     |
| National level         | 15        | 7.4      |
| Total                  | 203       | 100.0    |

## 5.0 CONCLUSION AND RECOMMENDATION

**Conclusion:** This study concluded that outdoor games are the most prevalent games that are offered in public secondary schools.

**Recommendation:** The school administrators should invest in indoor and outdoor games to avail a variety of sporting activities that students can choose from.

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