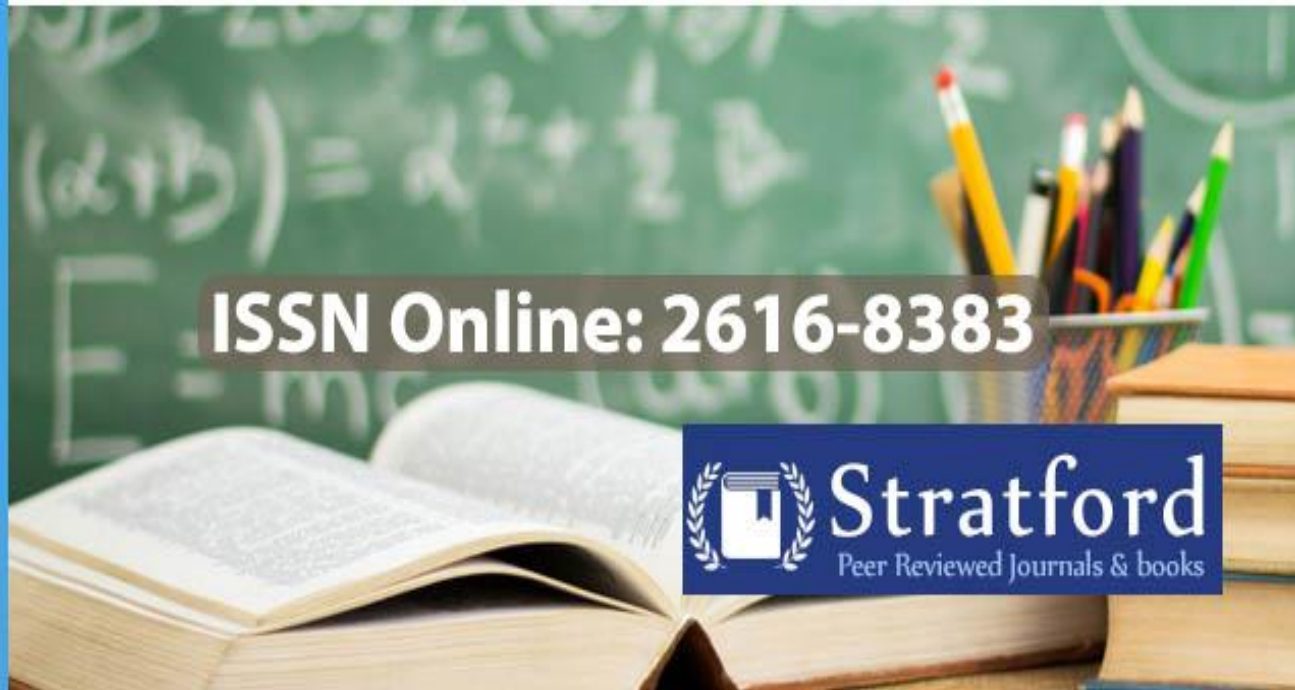


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Mukayiranga Regine & Dr. Hesbon Opiyo Andala, PhD

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Sports' Participation and Students' Academic Performance in Public Secondary Schools in Rwanda

^{1*}Mukayiranga Regine & ²Dr. Hesbon Opiyo Andala, PhD

¹Post graduate student, Mount Kenya University, Rwanda

²Lecturer and research coordinator, school of education, Mount Kenya University,
Rwanda

*Email of the corresponding author: mukayirangaregine@gmail.com

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Abstract

The participation of students in various sport activities enhances the students' learning activities which could significantly affect the school academic performance. The purpose of this study was therefore to analyze the relationship between sports' participation and students' academic performance in secondary schools in Kicukiro district in Rwanda. The study employed correlation research design. The target population was 5377 respondents while the sample size was 372 respondents obtained by using Yamane formula. The data was collected using questionnaires, interview guides and document analysis. The findings revealed that sports participation in public secondary schools of Kicukiro District is at a low level. The study also found students' academic performance is poor in all the four academic performance indicators: classroom grades, completion rate, retention rate and national examination results. It was found there is a statistical and significant relationship between sports' participation and students' academic performance in public secondary schools of Kicukiro District with the P-value of .000 and Pearson Coefficient of Correlation of .887. It was also found the value of Adjusted R Square was .785 an indication that 78.5% of the variation in students' academic performance can be explained by sports' participation (regular sports activities organization, encouragement to participate in sports activities, enough time for sports activities, availability of qualified sports facilitators and adequate sports facilities). This also explains that the remaining 21.4% of academic performance can be affected by other variables. The study recommended that MINEDUC through Rwanda Basic Education Board to avail enough sports' amenities that will facilitate sports' participation in all schools across the countries. All stakeholders of education sector are recommended to support sports' participation among students and educators in Rwanda, as it is the only and one shortcut for improving students' academic performance.

Keywords: *Sport participation, academic performance and secondary schools*

1.0 Introduction

Sports include all kind of physical activities or games which are done or organized at different levels in order to maintain or develop physical ability and provoke enjoyment among participant and spectators (Whitlock, 2016). Sports' participation has been found as an effective and efficient mean of engaging students in physical activities for the aim of boosting their academic performance and their educational attainment. Within schools, sport activities can be organized after school activities or a program organized by the local community in which the school is located. Whitlock (2016) notes that sports activities have an important benefit for students as they improve students' completion rate and retention rate which are essential indicators of students' academic performance.

Globally, Dannely and Lambourne (2011) conducted the study in Europe and indicate that in schools, students with talents in school valued games have a chance to participate in sports activities regularly through trainings and competitions. They continue saying that students who are not school team members participate in sports activities occasionally because many schools no not have exact period of time for sports activities. This failure to organize regular sports activities hinders students' ability to participate in in sports. In some secondary schools of Rwanda, sports activities are conducted at the end of lessons and in weekends; this is inadequate time because day scholar students tend to lack the chance of participating in such sports activities. Even if sports has been considered as an essential ingredient in improving students' academic performance by various experts from the health sector and by many experienced researcher, the sports' participation continues facing many challenges that hinder people from cherishing all the benefits connected to sport activities.

Jonker et al (2009) argues that school team require numerous things such as energy, additional time for trainings, fundraising and pre-game retreats; students who are enrolled in difficult subjects cannot get the time for sport and lessons. The history of sports is interesting. Looking back to the ancient world, sports had a considerable connection with daily life of society members. It was one of the ways of exposing the society rituals, entertainment and welfare (Polly, 2007). The history of sports worldwide shows how sport had a role in social changes through human basic skills development and bringing harmony among society members. At the beginning the sports was limited to military trainings, competitions in sports were organized only to examine the service in which an individual can fit more.

In Greece, the use of sport has been extended in all live sectors an addition to military activities. According to Guttmann (2012) in 776 BCE (Before the Common Era), the ancient Greece organized the first Olympic game s which took place in Olympia. These games had the main purpose of creating a happy and peaceful Greece community in which togetherness is the main focus (Guttmann, 2012). After this period, the Olympic Games were to take a place after every four years and international participants were welcomed. This Olympic Games opened the mind of people and made them discover that sport activities can be used in sustainable peace provision, in healthy life development as well as in physical ability development. The sports also has been found to be an activity that can generate extra money income. Starting from 20th century the government of Greece has integrated sports in school's educational curriculum in both curricular

and co-curricular school activities, this integration of sports in educational curriculum has evidenced that sports is an essential element in terms of enhancing the quality of education measured in terms of students' academic performance.

During the colonial period in USA, the Native American people did not have the right to sports' activities. The colonialists gave them a limited time for sports' participation for both sport participants and spectators (George, 2008). Native Americans who were provided with limited opportunities to participate only sport activities were to participate in risky games which were harmful to their life such as ball games. They were not allowed to participate in modern sports activities such as football, baseball and basketball; such games were only reserved for European colonialist. This has hindered Native Americans from harvesting sports' participation outcomes and it was not integrated in education. This segregation in sports' participation persisted in USA until 1956 when President Dwight D. Eisenhower decided to enhance sports' participation in USA focusing on Native Americans in order to promote fitness culture, healthy living among citizens and increase the quality of education in all schools. Under this presidential decision, in 1956 the President's Council for Youth Fitness was founded with the mission of encouraging young Native Americans to make fitness their priority. The mission of the presidential decision has been expanded and reached other citizens regardless of their ages. This is the period in which sport has been integrated in school life around USA (Mozafari, 2012). In 21st century, the United States of America government considered that education is much more than papers, tests and books; this is why sport activities have been integrated in educational framework because sport plays a role in emotional and social aspects of education which are indispensable in students' academic performance (George, 2008).

In Africa, sports have a significant consideration in culture of in South Africa. During the pre-colonial period in South Africa, sport activities were dances, jumping and wrestling. During this period, sport activities were different from one region to another; in South Africa sports was an activity aimed at creating harmony and togetherness among society members. John (2007) highlights that when colonialists reached South Africa, they brought their modern sports like football, rugby and clucked. South Africans mastered these modern games but they have a limited chance to participate in international competition due to the chains of apartheid. John (2007) goes on indicating that in 1964, South Africa was banned from participating in Olympic Games held in Tokyo because of apartheid policies. This sanction persisted until 1992. In early 1994, the new constitution of South Africa abolished apartheid and South Africans started grabbing the benefits of sport activities by participating in international competitions in which many trophies were won by South Africans. In 1994 the African National Congress developed a Youth Sport Program in order to provide young South Africans with sports opportunities from which they have denied by colonialist. In implementing this program, sports facilities were availed around South Africa especially in the poorest communities and sports education has been reinforced in the school curriculum because it has been found that there is a relationship between sports and education especially for youth's education. In 2019 South Africa recorded 10 sport science bachelor's programs.

In Kenya, the sports have been an important element in every day's life of Kenyans for a long time. Before colonization, the major Kenyan sports activities were hunting, dances, wrestling, racing, stick fights and boar games. This activity was helping Kenyans to remain harmonized. According to Wamukoya (2012), when British colonialists arrived in Kenya, formal teams and clubs were introduced by British settlers and Asian contractors in 1922 before formal education; in 1935 the syllabus for teaching physical activities were produced focusing on football and athletics. This inclusion of sports in education has facilitated Kenyans especially young Kenyans to maximize the benefits of sport. Njororai (2016) argues that the Kenyan educational curriculum known as 8-4-4 system highlighted that sport should be compulsory in primary and secondary school education. This Kenyan adoption of sports in education has been done in line with UNESCO conference of the 21st November 1987 held in Paris; one of its resolution says that sport has a role in human intellectual development and it has to be fostered in schools (UNESCO, 2010).

In Rwanda as other African countries, her culture valued sport activities. In the ancient Rwanda, sports activities were hunting, dances, stick fights, high jumping and wrestling. This activities brought a big number of Rwandans together and it was the effective way of sustaining peace and harmony among Rwandans (Carlin, 2013). During the colonial period, new modern games like football, volleyball and basketball have been introduced in Rwanda by Europeans. Even though the number of sport activities increased, the number of Rwandans who participate in sports activities decreased because Europeans hampered Rwandan traditional sports activities by abolishing Rwandan gatherings known as “*IBITARAMO*” in which most their sport activities were practiced. After colonization, Rwandan government took a decision of enhancing sport education in schools but in vain due to various hindrances. In 2003, Rwandan government through the Ministry of Sport worked hard to boost sports' participation among public servants and amongst students at all levels of education (Ntwali, 2014).

The government of Rwanda launched the Sport Development Policy aimed at increasing the number of Rwandans who are doing sports in 2012; under this policy, many sport facilities have been availed across the country and in schools. In this line, in 2016 Rwanda introduced a monthly sport initiative referred to as Car-Free Day in order develop a healthy living and combat non communicable diseases among Rwandans. The Ministry of Sports and Culture in participation with the Ministry of Education are working corroboratively in order to sustain sport culture in Rwanda especially in primary and secondary schools because sport is indispensable in the battle of providing students with healthy and wealth life, physical fitness and intellectual development which can facilitate students to achieve more academically (Carlin, 2003). It is obvious clear that school's failure to participate in sports activities may contributes to students' poor academic performance.

1.1 Problem Statement

The participation in sports activities is also considered to have a great significance in psychological development of children as it produces positive and indispensable outcomes which enable children to acquire new skills easily (Collins, 2013). Even though sports' participation has been considered by many researchers to have a great significance in children's psychological and cognitive development, the main problem is still being where we are in Rwanda in terms of sports'

participation in order to improve students' academic performance. The problem of sports' participation and students' academic performance have been vital in Rwanda for a long period of time because sports activities have been considered as the business of wealthy people who have time to waste. The sports has been considered as an entertainment focused business that has less to contribute in education sector (Mozafari, 2012). According to Adler (2011) sports' participation in schools is still a dilemma regardless of governments' efforts to improve sports' participation to all citizens for healthy life provision. This is connected with biased believes that sports activities require enough energy and time which students who want to perform highly academically cannot get. This is why sports' participation is still behind in different schools worldwide including secondary schools of Rwanda. Sagatun (2007) shows that students' failure to participate in sports activities affects negatively their academic performance and their cognitive development.

The problem of poor students' academic performance in both primary and secondary schools has been an important concern in Rwandan education sector for a long period. According to MINEDUC (2016) in 2015, at primary level the completion rate was low at 34.5%, the repetition rate was at 25.3%, the dropout rate were at 27%, the transition rate from lower secondary to upper secondary (in public and government aided boarding schools) were at 47.7 % and the transition rate from upper secondary university was at 38%, this shows how low the academic performance is in secondary schools in Rwanda. MINEDUC (2016) also indicates that in 2016, at secondary level, completion rate was low at 55%, the repetition rate was at 21%, the dropout rate was at 25% and the transition rate from lower primary to upper primary was at 52%. This implies that there is a problem in Rwandan students' academic performance which forced the Rwandan Ministry of Education to call experts research upon conducting researcher about factors behind students' poor academic performance. Ndengeye (2015) finds that students' academic performance is affected by students' unhealthy life, diseases, violence, drug usage, risky sexual behaviors, school dropout, demotivation and many others which can be minimized through integrating sports in educational curriculum.

1.2 Objective of the paper

The paper sought to analyze the relationship between sports' participation and students' academic performance in secondary schools in Kicukiro district in Rwanda.

2.0 Literature Review

2.1 Sports Participation in Secondary Schools of Rwanda

In post-colonial Rwanda, there was informal education known as “*ITORERO*” for boys and “*URUBOHERO*” for girls, this informal education system had the aim of providing young Rwandans with Rwandan values referred to as “*UBUPFURA*” (Tabaro, 2012). In this informal educational system, sports activities such as dance, high jumping, stick fights and wrestling were included. Ndengeye (2015) says that when the Europeans arrived in Rwanda in 1885, they have introduced the formal education for their own interest. In the formal schools started by Europeans in Rwanda, sport and other co-curricular activities have been provided with a limited value in favor other activities which are at the center of colonialist's interests such as evangelization and training African leaders and make them able to defend colonialist's interests in Rwanda (Akinyi, 2012).

The removal of Rwandan gatherings and the introduction of formal schools contributed in Rwandans' change of attitude toward sport activities and made them consider sport as an activity that has to be done after accomplishing all tasks as a recreational activity that helps individuals to rest and spend their time (Ndengeye, 2014). This belief limited Rwandans to recognize that sport activities have numerous benefits such as improving cognitive health, national pride, harmony and togetherness among society members (Sarah, 2014).

Even though Rwandans were unaware of the benefits of sports in their life, sports activities made a step forward as years were moving on with modernity and modern era. During this modern period, different sports apart from dancing, high jumping, archery and hunting were adopted in Rwanda. From developed European countries. This enabled Rwanda to adopt international sports such as football, volleyball, athletics and basketball. Montague (2014) argues that football was the most popular sports with different clubs as well as regular national competitions. The government of Rwanda through the Ministry of Sports and Culture made a tremendous effort in sports participation. This effort enables Rwandans to participate in Olympic Games in 1984 in Los Angeles, in Paralympic Games in 2004 and in Summer Olympics in London in 2012 (Gourevitch, 2012). The Rwandans participation in sports international competitions has awaken sports participation awareness among Rwandans. In October, 2012, Rwandan government launched the Sports Development Policy aimed at increasing the percentage of Rwandans playing sports and become the first country in Africa. Under this policy, many measures have been taken in order to achieve the goals of the Sports Development Policy.

Under this policy many play ground has been built, different recreational centers have been availed and Rwandans have been sensitized about benefits of sports in their lives. Even if measures have been taken to enhance sports culture amongst Rwandans, the Ministry of Youth, Sports and Culture continued to face a challenge of a small number of Rwandans playing sports (Gourevitch, 2012). In order to address this issue, in 2016 Rwandan government in collaboration with its potential stakeholders in sports sector launched a monthly sports initiative referred to as Car-Free Day in order to bridge the gap of lack of people playing sports and to improve healthy living by combating non-communicable diseases. Physical education has been integrated in educational curriculum at all levels of education even if challenges are still being faced.

2.1.1 Sports Participation hindrances in Secondary Schools of Rwanda

Sports activities are important in the life of every individual, everyone should be given an equal chance to participate in sports activities in different ways (Simith, 2010). The benefits of sports participation for human beings especially for youth requires schools to enhance sports among students in though both curricular and co-curricular school activities. Therefore, schools have to create an equal opportunity that welcomes all students in sports. This opportunity has been a challenge in many schools including African secondary schools due to inability of school leaders to organize regular sports activities that welcome every student regardless of the age, gender, energy, program of study and talent. Dannelly and Lambourne (2011) indicate that in schools, students with talents in school valued games have a chance to participate in sports activities regularly through trainings and competitions. They continue saying that students who are not school team members participate in sports activities occasionally because many schools no not

have exact period of time for sports activities. This failure to organize regular sports activities hinders students' ability to participate in in sports. In some secondary schools of Rwanda, sports activities are conducted at the end of lessons and in weekends; this is inadequate time because day scholar students tend to lack the chance of participating in such sports activities.

Children in their nature are likely to learn and acquire new skills by observing and imitating people around them. When children are exposed to the environment in which people like doing sports, the children will also like sports. Aberneth (2013) argues that encouragement students to do sports is different from forcing students to do sports. Teachers and school leaders should not force students to participate in any kind of sports; a child is free to participate in no matter kind of sports activity for own preference. Not every child is sporty, therefore, students should not be forced to do what they do not want to do. In Rwanda, parents, teachers, school leaders and school community members should encourage students to do sports. Parents fail to motivate their children to participate in sports by failing to participate in sports due to not according sports with a time in every day's agenda. Leor (2013) in his *Leor In-Home Early Learning* says that teachers and school leaders fail to motivate students to like sports; He says that teachers do not focus on different sports activities in lesson plans and in school curriculum, he highlights that even those limited sports activities integrated in schools curriculum some teachers make them complicated and tiresome because they do not know the that the purpose of sports is not to make participants tired. The failure of teachers and sports facilitators to simplify and make sports activities funny discourages students and create among them the unwillingness to participate in sports activities.

Sports activities are indispensable in health, cognitive and psychological development of a human being. Sports should be given an effective value and time in ever days' activities. Physical exercises are essential ingredients that can enable students to achieve more academically and make them prosperous in their future. Even if sports activities are important in psychological and cognitive development of students, the limited time has been allocated to sports in schools (Aberneth, 2013). In 2015 the Rwandan Ministry of Education launched a new educational curriculum known as Competency Based Curriculum (CBC), this new curriculum has the aim of enhancing the quality of education that has been questionable for a long time all three levels of education. The time allocated to sports in the new educational curriculum of Rwanda is one period of forty minutes in both ordinary and advanced levels Rwandan secondary schools (Gourevitch, 2012). The period of forty minutes is not enough considering the way sports activities require sometimes students to change place and clothes. This limitation in terms of time is faced in at least all public secondary schools of Rwanda.

Teaching sports like other subjects requires educators who are trained and who are competent enough to provide students with adequate knowledge and competency in sports. According to Hardman (2009) the majority of sports teachers are teachers of other major subjects and sports is added as an additional subject in order to complete teachers' workload. ; this is why the majority of sports teachers do not prepare physical education academic documents such as unit plan, lesson plan, formative and summative assessments. Marshall (2018) says that in many countries around the world, many governments have taken measures of enhancing physical education in schools but they have forgotten to avail sports tutors who are qualified in the achievement of measures

intended to enhance sports' participation among students. Mackendrick (2011) notes that in most secondary schools, sports education is done by generalist teachers with modest and less competency in sports teaching and learning methods. The scarcity of qualified sports teachers limits sports' participation in secondary schools including secondary schools in Rwanda.

Sports facilities are tools, equipment and infrastructure which are necessary in physical exercises. For people to be able to do sports, enough facilities should be available. The problem of insufficiency of sports facilities in schools has been a debate that interested many researchers. Hardman (2012) presents that the problem of sports amenities is faced by many schools especially by secondary schools of third world countries. According to Curry (2012) sports' participation in secondary schools requires combined efforts because sports activities are dependent to enough amenities which are expensive to the extent that it is not every country that can afford the cost. Marchall (2018) announces that among all countries around the world, only 30% of them have succeeded to avail enough sports facilities for their citizens; the rest of them figuratively speaking with a percentage of 70% do not have financial ability to provide their citizens with adequate sports amenities. This is why sports' participation is still a dilemma in secondary schools of Rwanda.

2.1.2 Benefits of Sports' Participation in Secondary Schools of Rwanda

Sports' participation has is necessary for human being, the following are benefits of sports' participation in secondary schools of Rwanda. Sports has been found as activities which are necessary in every day's life of every human being regardless of everything. WHO (2016) explains that health and wellbeing is not only the absence of diseases, illness and infinity but also physical, social and mental wellbeing. Based on this explanation provided by World Health Organization, Ewes and Siemett (2009) classed aspects of life into five major categories which are emotional health, social health, physical health, mental health and spiritual health. They say that these five aspects of human being's health are all improved though sports' participation. The physical health is improved by sports through physical fitness and non-communicable diseases prevention; the emotional and mental health is improved in terms of preventing a sports' participant from stress, negative thinking and drug abuse which can lead to mental disorder.

Students' academic performance means what student is able to achieve at the end of an educational program, it can be measured in terms of tests grades, national examination results, completion late, repetition rate and transition rate. Trudeau and Shepard (2008) say that sports activities are necessary for everyone. They add that sports' participation as an essential element which is fruitful in terms of psychological and cognitive development of children, sports' participation should be integrated in school educational curriculum in order to provide students with quality education which is a response to the problem of poor academic performance. Taras (2015) highlights those physical activities help students to have good academic performance. He says that physical exercises are connected with improved health for school aged children that enables them to develop their skills and to reduce risky behaviors which hinder students' from achieving well. Therefore, students' performance in academics is a result of frequent participation in physical activities.

The national pride is explained as love and devotion to the country among citizens; it is also referred to as patriotism. According to Tilly (2015) harmony, togetherness, love and peace in

country are important ingredients for sustaining national pride amongst citizens. Sports activities contribute a lot in fostering peace and national identities in the country, this peace and national identities play a role in promoting the national pride (Hilvoorde, 2010). When people participate in international sports competitions, the national flag, the national anthem and fans remind them that they are a part of their countries. Such feelings motivate them to do all their best to make their country proud in the face of the whole world. Calhoun (2017) points out that sports activities are based on national identities and cultural layers of a given nation. In conclusion, sports promote national pride by sustaining harmony, peace, love, togetherness, cultural layers and national identities.

Sports reduce the number of people who are unemployed and underemployed by creating new jobs which are fruitful financially. According to Hardman (2012) employers expect from employees hard working, time management, discipline, accountability, creativity, teamwork spirit, competitiveness, work ambition and positivity. These soft skills which are needed by employers are well mastered in the world of sports. This is why it is difficult to meet the expectations of employers when an individual does not participate in sports. Apart from equipping people with soft skills needed by employers, sports activities themselves are the source of financial income and they can be done professionally as other jobs. In the country such as Rwanda in which NISR (2019) reports that unemployment rate is at 17%, various measures to be taken to lower the unemployment rate should include sports' participation especially for students who are future employees.

2.2 Students' Academic Performance in Secondary Schools of Rwanda

The academic performance is defined by Alabi (2011) who says that academic performance is students' ability to remember learned evidences and information, use new acquired knowledge and skills in solving every days' life problems. Asiabaka (2008) highlights that academic performance is a degree at which students change in terms of cognitive ability and behavior due to what they have acquired at schools in curricular, co-curricular and extra-curricular activities. In Addition, Wanjobi (2011) argues that students' academic performance is referred to as students' ability to obtain a high grade and standard scores in examinations. What can be noticed from definitions provided by many researchers is that academic performance is the results of the combined efforts of parents, teachers, students, school leaders, government and other educational stakeholders that is evidenced by students' examination results. These definitions also tell us that the academic performance is observed in terms of marks, grades, divisions and students' behavior change. Hensen (2012) says that academic performance is a challenging issue that requires attention in its resolution. He says that students' academic performance has a connection with social, political, psychological, spiritual, cultural and economic circumstances. The failure to improve students' academic performance has negative effects to the community. Indicators of academic performance are classroom test results and grades, national examination results, completion and repetition rates.

Classroom test is a tool which is used in measure students' academic performance. Classroom test results and grades are indicators that indicate how teaching and learning objectives have been achieved. According to Zwick and Sklar (2015) results of and grades classroom test are the key indicators of educational success at all levels of education. They are used in order to provide educators and tutors with all the information needed in terms educational success improvement. It

is though tests where teachers discover fast and slow learners. The results and grades obtained by students facilitate the teachers to make a decision on what to be done next. When the results and grades are high, the teacher's can decide to move on and when the results and grades are low for the majority of students, then further investigation should be done by the teachers in order to discover the truth behind low test results and grades; based on findings of the investigation, the teachers can make a required decision about what to be done. Zwick and Sklar (2015) recommend that in order to improve students' classroom results and grades, parents, teachers school leaders and all individuals involved in education sector should join the hand together in order to create a friendly environment in schools by availing all necessary teaching and learning materials.

According to Taras (2015) the national results are the marks or divisions obtained by students in summative examinations prepared and graded at national level. These examinations are done at the end of educational cycle and from the results further decisions are made. The decisions which are made based on national examination results are like transition from one level toward another or being awarded a diploma, a degree or a completion certificate. The National Agency of Education in Sweden (2017) says that national examination results are different from classroom test results; it says that national examination results are the marks or grades gotten by students in national exams prepared on a single occasion that aims at testing all parts of the curriculum. The national examination results help educational macro-planers to make an overall judgment on how educational curriculum framework is being implemented. The national examination results are therefore important academic performance indicators as they provide evidence on how competent students are at the end of a given level of education.

The completion in academic sector is explained as an action or a process of accomplishing one level of education and makes a progress toward another which is higher than the previous one. The completion of an educational level is achieved through realization, accomplishment, fulfillment and finalization of all academic requirements of the previous level of education. The completion late rate indicates the period of time that students must spend at school in order to attain a certain level (Teras, 2015). This is why the completion rate is considered as an indicator of academic performance because once a student is achieving well academically, the period of time in one level of education decreases but when a student performing poorly, the time to be at school for such student increases. According to Trudeau (2008) the completion rate at all levels of education are determined by deferent factors such as students' cognitive ability, students' participation in school activities, students behaviors, teaching and learning facilities, teachers' competence and school environment. Greek (2012) argues that the other external factors that may have influence on students' completion rate are epidemic and pandemic diseases, wars, calamities and others. The completion rate increases due to the improvement of educational system's performance.

The repletion rate means the academic performance indication used in the determination of the number of students who repeat one grade or a year of educational level. It indicates students who fail to be promoted to the next level or year of education. The rapport of UNESCO (2014) indicates that the repletion rate which is high is an issue in both primary and secondary schools. This rapport shows that from 2000 to 2018 the repletion rate in secondary schools was at 35% in lower secondary schools worldwide. UNESCO (2014) says that this problem of high repetition rate in

secondary schools has been a challenge that hampers the realization of the universal secondary education since 2011. This problem of slowed realization of the universal secondary education is great in Africa and in Asia. The high percentage of repetition rate shows the poor students' academic performance which results in poor quality of education.

2.3 Sports' Participation and Academic Performance in Secondary Schools of Rwanda

Sports' participation is important in human being's life because it improves healthy life and cognitive development. Sports' participation is important in improving students' academic performance (Teras, 2015). The following are effects of sports' participation on students' academic performance. Sports activities are the key factors that promote healthy life among students. These activities are helpful in schools because they develop students' social and cognitive skill which are necessary in improving students' academic performance in classroom tests. According to Choi and Kim (2014) students who participate in sports are believed to possess a fresh mind that makes them perform well in all school activities such as tests exams, quizzes and home works. Bailey (2013) argues that students' academic performance is an important indicator that evidences hoe educational objectives and or aspirations are being achieved in education sector. Bailey (2013) explains participation in sports for students has various benefits like mental, social and cognitive wellbeing which enable students to obtain improved grades in classroom assignments. This is why it has been witnessed by different researchers that students' participation in physical exercises affects students' grades and results in classroom activities.

Physical education has been integrated in educational curriculum at primary, secondary and tertiary levels of education in different countries of the globe; governments have struggled to avail enough sports amenities especially in schools in order to promote physical health and cognitive development among children (Marchall, 2018). Jonker (2009) conducted a study aimed at investigating effects of sports activities on academic performance, they sampled 400 students who were about to inter the university aged between 14 and 16. From the marks obtained by the 400 sampled athletes, Jonker (2009) find a strong positive correlation between students' engagement in sporting activities and their national examination results. Students who participate in sporting activities such as volleyball, baseball, cricket, racing, football, basketball, netball and others has an additional chance to perform well in national examinations due to improved social and cognitive development gained through sports activities. Based on the findings of experienced researchers about sports and students' academic performance, various countries have made a good decision of integrating compulsory sports activities in educational curriculum with the objective of increasing students' national examination results.

The low repetition rate is a low percentage of students who failed to make a progress toward the next level of education. Once the academic performance increases, the repetition rate decreases and when the academic performance decreases, the repetition rate increases. This why it is said that the higher the academic performance, the lower the repetition rate among students. According to Fredericks (2012) sports activities are necessary in all schools regardless of their levels and their program of study, he indicates that the time spent by students in sporting activities are favorably connected to their improved academic performance that enables them to make a progress toward the next level of their academic journey. Nelson and Gordon (2016) in a research about effects of

sports on academic performance in science subjects say that students who participate in sporting activities perform well and get a exiting academic records in science subjects on which decision for students' promotion and repetition is based in different schools, especially in general education secondary schools.

Sports activities require participant to be flexible to change and to adopt themselves to a new situation easily; the sports activities also require participants to acquire new skills, tactics and rules of sports activities based on circumstances faced in a game. The way sports participants acquire new skills, tactics and rules is the same way students are required to acquire new skill, knowledge and competency from school subjects taught by educators. Trudeau and Shepard (2008) find that sporting activities in educational sector enable students to be able to master what they have learned in classes; they add that learners who play sports activities perform better than those do not attend sporting activities. Thus, sports' participation improves students' completion rate by improving their academic performance which is the foundation upon which the transition rate is base.

2.4 Other Factors Affecting Students' Academic Performance

2.4.1 Families' Financial Inability

Some families, especially families from third world countries are very humble to the extent that they are unable to get enough food to eat and the monetary ability for their children's education. Children from poor families which are financially challenged, sometimes failed to perform well academically, not because of the ignorance but because of other factors related to school fees, school materials such as notebooks, textbooks, uniforms and other hidden factors (Bladshow, 2006). In many countries especially, African countries, primary and secondary education has been made free in order to increase the number of children who are enrolled in schools and improve educational academic performance. Even though the education has been made free, students from humble families are still being challenged by malnutrition and the hidden cost of education. This is why is has been mentioned that the financial inability among families which are poor is the factor that hinders students' academic performance.

2.4.2 Child Labour

The child labour has been theorized among factors affecting students' concentration on school activities and affects their academic performance. Edmos (2010) argues that in African countries children are assigned with duties and difficult labors such as cultivating, mining, hawking, looking after the cattle, bar attending, house helping, and other activities which are harmful to their life. Duryea et al. (2013) say that child labor occurs in two different forms: at the first hand, children are engaged in unpaid works at home and in household farm or enterprises; in the second hand, children are engaged in paid labor either in markets or in other employments. Duryea et al. (2013) indicate that the time spent by children in both unpaid and paid employments interrupt their education and make their academic performance very poor.

2.4.3 Lack of Concentration on School Activities

For students to perform well academically, measures are needed to be put into place. Students who want to succeed are requested to spend enough time on school activities by revising subjects learnt

at school and by doing all school activities such as homework and assignments. When a student spends a time on sports, he or she is more likely fail in terms of academic performance. According to Cassie (2017) students' concentration on school activities has a great influence. Therefore, students' concentration on school activities should be fostered through effective lesson planning, making blain breaks routine, considering the visual environment, assigning students with frequent tasks, creating a conducive educational environment and putting students at the center of education activities.

2.4.4 Unconducive School Environment

Unconducive school environment is one of the barriers which hinder pupils from accessing education and lowers their academic achievement in Rwandan secondary schools. Unconducive environment causes students to avoid the school, even the parents with the aim of protecting their children from the harms, they suggest their daughters to stay at home. The research done by UNGEI (2015) indicates that the psychological and physical health of many children is at risk when the environment around the school is not conducive. The situation like this is connected with poverty and it causes students to dropout of schools and hinders their educational rights. Some of the things which can cause the schools environment to be conducive are like violence, corporal punishment, sexual harassment by teachers or learners and the risk of violence when students are going to school or when they are coming from the school.

3.0 Research Methodology

The correlation research design was employed in the study to indicate the relationship between sports' participation and students' academic performance in secondary schools in Kicukiro district in Rwanda. The total population was 5372 respondents and Yamane formula was used to get sample size of 265 students 107 teachers and 5 school head teachers that gave a total of 372respondets. Questionnaire, guided interview and document analysis review were used as data collection instruments. The respondents of the study were stratified in three strata and simple random sampling was used to get the respondents representing each stratum. The data management of the study was maintained by using SPSS software version 21.

4.0 Research Findings

This paper was to analyze the relationship between sports' participation and students' academic performance in secondary schools in Kicukiro district in Rwanda. This paper indicates various factors associated with sport participation and how it could affect the level of students' academic performance.

4.1 The Level of Students Participation in Sports Activities in Secondary Schools in Rwanda

The study distributed questionnaires to the respondents to assess the level of students' participation in sports activities in public secondary schools in Rwanda and the results are presented in Table 1

Table 1: The Level of Students Participation in Sports Activities in Rwanda

Statements	SD		D		N		A		SA		Mean	Std
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%		
In this school, students' sports activities are organized regularly.	130	34.9	139	37.4	53	14.2	28	7.5	22	5.9	2.1	1.1
Students are encouraged to participate in sports activities.	144	39.5	119	32.0	56	15.1	17	4.6	33	8.9	2.1	1.2
In this school there is enough time for sports activities.	122	32.8	141	37.9	53	14.2	20	5.4	36	9.7	2.2	1.2
This school has enough qualified sports facilitators.	129	34.7	132	35.5	54	14.5	19	5.1	38	9.7	2.2	1.2
There is enough sports facilities.	129	34.7	136	36.6	57	15.3	18	4.8	32	8.6	2.1	1.2

The findings from Table 1 indicate the majority of respondents with a total of 269 (72.3%) disagreed that in their schools students' sports activities are organized regularly with a mean of 2.1 and the standard deviation of 1.1, 263 (71.5%) respondents disagreed that in their students are encouraged to participate in sports activities with the mean of 2.1 and the standard deviation of 1.2, 263 (71.5%) respondents disagreed that in their school there is enough time for sports activities with 2.2 of mean and 1.2 of standard deviation. Furthermore, 261 (70.2%) respondents disagreed that in their school has enough qualified sports facilitators with the mean of 2.2 and the standard deviation of 1.2 and finally, 265 (71.3%) respondents agreed that in their school there is enough sports facilities with a mean of 2.1 and the standard deviation of 1.2. The above findings testify that the level of students' participation in sports activities in public secondary schools of Kicukiro District is very low.

The findings of the current research do not contradict findings of pre-current researchers like (Mozafari, 2012) who evidences that the level of participation in sports' activities is low in many schools due to the sports has been considered as an entertainment focused business that has less to contribute in education sector and Adler (2011) who finds that sports' participation in schools is

still a dilemma regardless of governments' efforts to improve sports' participation to all citizens for healthy life provision; Adler (2021) adds that this low level of participation in sports' activities is connected with biased beliefs that sports activities require enough energy and time which students who want to perform highly academically cannot get. Based on the above findings, it is then clear that sports' participation is still behind in different schools worldwide including secondary schools of Rwanda.

Responses of Head Teachers from the Interview Guide

In order to assess a level of students' participation in sports activities in public secondary schools in Rwanda, the current researcher conducted interviews with key informants who are head teachers from Kicukiro District. The following are answers provided by them.

The interview 1: "In public secondary schools, sports' participation is still at a low level despite different measures taken in order to enhance sports' participation in different sectors; participation in sports activities is hindered by different factors such as lack of sports facilities, insufficient facilitators, limited time and others. I cannot forget to mention that Rwandans' attitude towards sports' participation is another challenge that demotivates our students from participating in sports activities." According to Gourevitch (2012) the time allocated to sports in the new educational curriculum of Rwanda is one period of forty minutes in both ordinary and advanced levels Rwandan secondary schools. He says that the period of forty minutes is not enough considering the way sports activities require sometimes students to change place and clothes. This limitation in terms of time is faced in at least all public secondary schools of Rwanda and hinders sports' participation. Gourevitch (2012) argues that even if measures have been taken to enhance sports culture amongst Rwandans, the Ministry of Youth, Sports and Culture continued to face a challenge of a small number of Rwandans playing sports.

The interview 1: "as a school head teacher, the participation in sports activities for our students is not at a good level this is why as school leaders we encourage our students to participate in sports activities through different sports competitions. During our encouragement to enhance sports' participation among our students, we face various hindrances like lack of play grounds for some of the sports activities, unavailability of qualified sports teachers and limited financial ability." The answer provided by interviewee 2 does not contradict Mackendrick (2011) who notes that in most secondary schools, sports education is done by generalist teachers with modest and less competency in sports teaching and learning methods. This answer concurs with Curry (2012) who indicates that sports' participation in secondary schools requires combined efforts because sports activities are dependent to enough amenities which are expensive to the extent that it is not every country that can afford the cost.

4.2 Students' Academic Performance in Secondary Schools of Rwanda

The students in selected public secondary schools of Kicukiro district were given questionnaires related to students' academic performance in public secondary schools in Kicukiro district in Rwanda and the findings are as depicted in Table 2

Table 2: Students’ Academic Performance in Secondary Schools of Rwanda

Statements	SD		D		N		A		SA		Mean	Std
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%		
In my school student’s academic performance is high.	137	36.8	127	34.1	56	15.1	19	5.1	33	8.9	2.1	1.2
In my school grades obtained by students in classroom assignments are high.	131	35.2	122	32.8	63	16.9	21	5.6	34	9.1	2.3	1.2
In my school the students’ completion rate is high.	136	36.6	126	33.9	54	14.5	20	5.4	34	9.1	2.4	4.0
In my school the students’ repetition rate is high.	138	37.1	129	34.7	56	15.4	17	4.6	32	8.6	2.1	1.2
In my school the marks obtained by students in national examinations are high.	123	33.1	147	39.5	55	14.8	26	7.0	21	5.6	2.1	1.1

The results presented in Table 2 indicates that 264 (70.9%) respondents disagreed that in their school students academic performance is high with the mean of 2.1 and the standard deviation of 1.2, 253 (68.0%) respondents disagreed that in their schools grades obtained by students in classroom assignments are high with the mean of 2.3 and the standard deviation of 3.0, 262 (70.5%) respondents disagreed that in their schools the students’ completion rate is high with the mean of 2.4 and the standard deviation of 4.0, 267 (71.8%) respondents disagreed that in their schools students’ repetition rate is high with the mean of 2.1 and the standard deviation of 1.2 and 270 (72.6%) respondents with the mean of 1.5 and the standard deviation of 0.7 disagreed that in their school the marks obtained by students in national examinations are high. This implies that the academic performance of students in secondary schools of Kicukiro is still questionable as it has been shown by the findings from respondents. The findings of the current study do not contradict the findings of Erin and Russel (2012) who conducted research about physical activities and students’ academic performance in USA, Erin and Russel (2012) find students’ academic performance in USA was at the low level compared to the government effort.

Table 3 indicates divisions of students in five sampled schools since 2017

Table 3: O' level National Examination Results in the Sampled Schools (2017- 2019)

Years	2017		2018		2019	
	Gils	Boys	Gils	Boys	Gils	Boys
Division I	92	105	84	124	93	135
Division II	214	323	231	253	156	307
Division III	305	462	334	573	304	482
Division IV	309	314	342	298	310	309
Division VI	158	171	112	152	124	162
Division U	24	31	20	28	42	34
Total	1102	1406	1123	1428	1029	1429

Source: MINEDUC results from 2017-2019

Based on the results depicted in Table 3, students were still performing poorly in terms of their academic progress. In education, the academic performance of students was considered as a key criterion to judge one's total potentiality and capability. As reflected in the table it was clear that there is still a big gap to be bridged in order to boost students' academic performance in public secondary schools of Kicukiro District.

Table 4: O' level National Examination Results in the Sampled Schools (2017- 2019)

YEAR	Sex	MARKS		CANDIDATES	
		73 - 30	%	PRESENT	REGISTERED
2017	F	101	37.3	271	271
	M	204	53.5	381	383
	T	305	46.7	652	654
2018	F	154	51.8	297	298
	M	201	50.6	397	400
	T	355	51.9	684	689
2019	F	161	52.9	304	304
	M	230	57.7	398	399
	T	391	55.6	702	703

Source: MINEDUC results from 2017-2019

The findings from the above Table 4 shows that in 2017 only 305 (46.7%) candidates from five sampled schools managed pass the advanced level national examination with 73- 30 marks, in 2018 only 355 (51.5%) candidates from five sampled schools managed pass the advanced level national examination with 73- 30 marks and in 2019 391 (55.6%) students from five sampled schools managed pass the advanced level national examination with 73- 30 marks. This implies that the academic performance is poor in public secondary schools of Kicukiro District in Rwanda because the number of candidates who failed to pass the advanced level national examination above 30 marks is big. This does not differ from UNESCO (2014) which indicates that the academic performance is still poor in both primary and secondary schools especially in third world countries.

4.3 Sports’ Participation and Academic Performance in Secondary Schools of Rwanda

The third objective of the study sought to analyze the relationship between sports’ participation and students’ academic performance in secondary schools of Rwanda. Therefore, availability of regular sports activities organization, encouragement to participate in sports activities, enough time for sports activities, availability of qualified sports facilitators and adequate sports facilities in schools have influence on the students’ academic performance within secondary schools of Kicukiro District as it is presented in the below Table 5

Table 5: Correlation between sports’ participation and students’ academic performance in Rwanda

		Sports’ participation	Students’ academic performance
Sports’ participation	Pearson Correlation	1.000	.887**
	Sig. (2-tailed)		.000
	N	372	372
Students’ academic performance	Pearson Correlation	.887**	1.000
	Sig. (2-tailed)	.000	
	N	372	372

** . Correlation is significant at the 0.01 level (2-tailed).

The Findings from the Table 5 indicate there is a statistical significance relationship between sports’ participation and students’ academic performance in secondary schools of Kicukiro District since the P-value = .000 which is less than 0.01. The Pearson coefficient of correlation (r) is .887** which is very high. This implies there is positive and significant association between sports’ participation and students’ academic performance in Rwanda. The results are consistent with findings of Trudeau and Shepard (2008) which found that sporting activities in educational sector enable students to be able to master what they have learned in classes; they add that students who

participate in sports activities perform better than those who do not participate in sporting activities.

4.4 Regression Analysis between Sports’ Participation and Academic Performance in Rwanda

The model summary is illustrated in Table 6

Table 6: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.887 ^a	0.786	0.785	0.53111

a. Predictors: (Constant), Sports’ participation

From the Table 6, the value of Adjusted R Square is .785 an indication that 78.5% of the variation in students’ academic performance can be explained by one level of independent variables (regular sports activities organization, encouragement to participate in sports activities, enough time for sports activities, availability of qualified sports facilitators and adequate sports facilities). This implies that there is a strong relationship between sports’ participation and students’ academic performance in Kicukiro District of Rwanda.

5.0 Summary of findings and Conclusion

The objective of this paper was to analyze the relationship between sports’ participation and students’ academic performance in secondary schools in Kicukiro district in Rwanda. The findings indicated that there is a statistical significance relationship between sports’ participation and students’ academic performance in secondary schools of Kicukiro District since the P-value = .000 which is less than 0.01 as the level of significance and Pearson coefficient of correlation (r) is .887** which is very high. This implies that the correlation between regular sports activities organization, encouragement to participate in sports activities, enough time for sports activities, availability of qualified sports facilitators and adequate sports facilities in schools and students’ academic performance (classroom grades, completion rate, retention rate and national examination results) was positive. Basing on the findings presented in this study, the study concluded that effective participation in sport activities leads to an improvement of students’ academic performance. However, the paper discovered that students’ academic performance is poor in all four indicators which are classroom grades, completion rate, retention rate and national examination results.

6.0 Recommendations

Basing on the presented findings and drawn conclusion, the following recommendations were addressed to the Ministry of Education and educational stakeholders.

- i. MINEDUC through Rwanda Basic Education Board is recommended to avail enough sports' amenities that will facilitate sports' participation in all schools across the countries.
- ii. All stakeholders of education sector are recommended to support sports' participation among students and educators in Rwanda, as it is the only and one shortcut for improving students' academic performance.

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