# Effects of Physical Education on the Learners Academic Performance in Secondary School. A Case of Kabojja Secondary School. 

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#### Abstract

The following goals served as the study's guidance as it examined the impact of physical activity on the academic achievement of pupils in secondary school with a focus on kabojja Secondary School: To look into the connection among exercise and pupil achievement in kabojja secondary school, to evaluate how much tangible education contributes to students' achievement in kabojja secondary school, and to look into how relevant physical education is to student achievement in kabojja secondary school. According to the study's findings, age follows a normal distribution and has a total likelihood of one since the average deviation (8.908) is between the range of the youngest age (5) and the highest age (35). Because the kurtosis value (0.923) exceeds 0.05, the unproven theory is rejected, and it is determined that the disturbance factor has an abnormal distribution. In order to experience such desirable results, there should be a demand for an excess of physical activity to reach a threshold limit; in addition, vigorous sports have higher effects on school achievement than moderate intensity sports.


Keywords: physical education and academic performance

## Background

Before discussing the health advantages of exercise and fitness, it's crucial to remember that achievement in school is influenced by a variety of factors. These include parental participation (Fan and Chen, 2001), socioeconomic standing (Sirin, 2005), and a wide range of other demographic characteristics. A parent's aspirations for their kid's academic achievement are an important indicator of how well they will succeed in school. Another element that has been shown to have a big effect on academic achievement is attendance (Stanca, 2006; Baxter et al., 2011). Children have to be attentive in order to learn the appropriate material, hence participation should be taken into account when evaluating aspects that affect their educational achievement.
In private charitable boarding schools, the first attempts to make physical education a required part of the curriculum date back to the latter half of the 18thcentury. With the help of the writings of Gutsmuths (2003) and Pestalozzi (2007), several types of physical activity (PA) were connected to various educational and primary gymnastics concepts for youngsters of German and Swiss ancestry.

After the middle of the nineteenth century, for example, in Belgium, the Netherlands, Italy, and France, the European roots of PE were already apparent in other nations, primarily in the west and south of Europe, with cross-border application of differently absorbed early European conceptions. The different turns, and up and downs, in the Europeanization of PE shaped many national teaching concepts of PE, even in countries which seem to be the unique birthplaces of their "own national concepts of gymnastics, games and sports" (Germany,
Sweden, the UK) (Naul, 2004).

## Problem Statement

The No Child Left Behind Act and the 2015 Every Child Achieves Act put enormous pressure on school districts and administrators to raise standardized test scores, which has caused them to place more emphasis on core subjects like math, science, and English language arts (ELA) while downplaying the value of regular physical activity such as break, being active during classroom bre aks, and fitness classes. According to Smith \& Lounsbery (2009) on page 39, "education's budgetary constraints have resultedin the nee d to reconsider money, which has frequently had adverse consequences for physical education." Tomporowski et al. (2007) reviewed the literature to determine how exercise affects children's .

## Objective of Study

The study was guided by the following objectives:-

1. To investigate the relationship between physical education and students' performance in kabojja secondary school.
2. To analyze the contributions of physical education to the students' performance in kabojja secondary school.
3. To examine the relevance of physical education to the academic performance in kabojja secondary school.

## Research Questions

1. What is the relationship between physical education and student's performance in kabojja secondary school?
2. What are the contributions of physical education to the students' performance in kabojja secondary school?
3. How relevant is physical education to the academic performance in kabojja secondary school?

## Methodology

## Research design

The investigation's research strategy provided a chance to thoroughly examine one component of the issue in the constrained amount of time. According to the data collection plan, qualitative as well as quantitative info were gathered. While the numerical data supplied statistical information of the subject of study in the manner of numbers and tables as well as the quantifiable feat ures of the topic, qualitative responses gave a thorough examination and explanations of knowledge on the study's subject.

## Analysis of populations

This study was conducted in the neighborhood of Wakiso area, Kabojja Intermediate School, and nearby schools. More than 500 pupils attend Kabojja Secondary School, both in the intermediate and regular levels. Organizational and responder demographics have been incorporated in the research demographics.

## Sample size determination

The Yamane 1973 algorithm for calculating sample size was used to identify the aggregate amount of institutions that were selected using a technique known as statistical sampling. The sample size ( n ) in this formula is calculated as follows:

N is the number of individuals, and n is the necessary sample size. (e) is the statistically significant projection, which is typically provided as (0.05).

As a result, there were three schools in the organizational sample. The individual who responds to the participant population is used as the purposive and random selection. The distribution of the sample according to the responder categories was 30 in total.

## Sampling Procedures

The study participants were selected both purposively and randomly based on one's level of experience, position occupied, educational status and other relevant considerations. Purposive sampling was applied to; the LC III, LC I, head teachers, learners as they were considered as primary stakeholders and are purposively selected. Teachers and Parents were randomly selected. The data collection plan provided the details of the specific respondents that were sampled, their institutions, their numbers, and the methods used to collect data from them.

## Methods and Tools of Data Collection

In order to strengthen the reliability of the data, the investigator used a variety of strategies for triangulating it. The primary and secondary information were gathered using interviewing and conducting surveys review techniques. For each of the methods, an online survey and interview guide were created in accordance. Below are the tools' specifications. Specifically, sur veys and conversations with key informants will be used to gather primary data.

## Questionnaire

Self- administered surveys were the primary means of gathering data for the study. Closed and open-ended queries made up the majority of the questionnaires. The type of data to be gathered the amount of time available, and the study's goals all had a role in the tool's selection.
Interview advice
As a follow-up data collection tool for some participants, such as the LCI, LCIII, and head teachers, who might have had highly busy schedules to complete the survey forms, the guide to interviews was employed since it allows for the pursuit of in-depth understanding of the topic.

## Analyzing Data

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Before being evaluated, the data gathered throughout the study was first arranged, sorted, and sanitized. The statistical evaluation was carried out using SPSS (Nelson K, 2022) and coding was applied for the quantifiable constructs. The results will be displayed in tables, figures, and statistics after doing inductive as well as descriptive statistical analyses. The replies from the qualitative data were examined for any emergent themes using a content analysis method.

## RESULTS

## Demographic characteristics of respondent's

This comprised the analysis of the gender of the respondents, the age, the marital status, the respondent's number of children, level of education, job type and the participation in the in the study. This is presented in bar graphs and pie charts.

The table 1 below shows gender respondents

| Respondents | Frequency | Percentage |
| :--- | :--- | :--- |
| Male | 20 | 67 |
| Female | 10 | 33 |
| Total | 30 | 100 |

Figure 1: pie showing percentage distribution of respondent's gender


## Source: Primary data (2022)

Figure 1 shows that $20(67 \%)$ respondents were male and $10(33 \%)$ were females. This shows that though the VSLAs target both the male and female members, most of the respondents, (the males), have taken advantage of physical education to improve their performance while most females have not taken the initiative to participate in the study.

The table 2 below shows respondents' age

| Respondents | frequency | percentage |
| :--- | :--- | :--- |
| $10-20$ | 5 | 16 |
| $21-30$ | 20 | 67 |
| $31-40$ | 05 | 16 |
| 40 and above | 30 | 100 |
| Minimum | 5 | Kurtosis $=0.923$ |
| Maximum | 35 |  |
| Standard deviation | 8.908 |  |

Figure 2: Graph showing distribution of respondent's age


Source: Primary data (2022)
Since the standard deviation (8.908) lies within the range of the minimum age (5) and the maximum age (35), age is normally distributed and has a total probability of one. The kurtosis value ( 0.923 ) is greater than 0.05 and thus we reject the null hypothesis and conclude that the disturbance term is not normally distributed

Table 3 below shows Level of education

| Level of education | frequency | percentage |
| :--- | :--- | :--- |
| certificates | 15 | 50 |
| diploma | 10 | 33.3 |
| undergraduate degree | 5 | 16.6 |
| Total | 30 | 100 |

Most of the respondents, 50 per cent who participated in the study had attained certificates in terms of education level; 22.5 per cent attained diploma and 16.25 per cent attained an undergraduate degree. The findings indicate that few people who advanced beyond certificate level did mind less in participating in the study.

Figure 3 The pie chart shows the level of education


The relationship between physical education and student's performance
The table 4 below shows the relationship between physical education and students' performance in kabojja secondary school.

| No. | response | frequency | percentage |
| ---: | :--- | :--- | :--- |
| 1. | Relax muscles which sharpen their minds | 8 | 27 |
| 2. | students relate science lessons with fitness | 5 | 32 |
| 3. | Prevents stress among students in classes | 10 | 26 |
| 4. | Students get informed of sports activities | 7 | 22 |
|  | Total | 30 | 100 |

Source; primary source 2022

During the discipline study, it was found that pupils. the muscles are relaxed and their cognitive abilities are improved by the exercises that they practice in middle and high schools, as pointed out with $27 \%$ of the instructors, while the largest number of instructors said that learners are made aware of sporting events during tangible learning this is demonstrated with $32 \%$, while it was also noted throughout the survey that learners have learned to relate science instruction with wellness as demonstrated with. Additionally, it was noted during the survey that students have learned to relate the scientific community lessons with wellness as demonstrated with.

The findings of this study provide evidence for a beneficial connection between sports instruction or educational institutions physical exercise.

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Figure 3 shows the relationship between physical education and students' performance.


The contributions of physical education to the students' performance
The table 5 below the contributions of physical education to the students' performance

| No. | response | frequency | percentage |
| ---: | :--- | :--- | :--- |
| 1. | Creates students who open-minded | 8 | $26.6 \%$ |
| 2. | Removes stress among students | 5 | $16.6 \%$ |
| 3. | Sharp reasoning \& good | 10 | $33.3 \%$ |
| 4. | Prevents poor performance | 7 | $23.3 \%$ |
|  | TOTAL | $\mathbf{3 0}$ | $\mathbf{1 0 0}$ |

Source; primary source 2022
In accordance to the instructors in secondary educational institutions, physical education develops pupils who are flexible, as shown in the table five above with $26.6 \%$ of the those surveyed, in addition to instructors saying physical education helps al leviate stress between secondary educational institutions with $16.6 \%$ of the educators, while instructors also claimed that the kabojj a secondary school pupils experienced sharp argumentation and good effectiveness as a result of sporting activities, and this was recognized with this primary school.

The bar graph 4 shows the contributions of physical education to the students' performance

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Table 6: The relevance of physical education to the academic performance The table below shows the relevance of physical education to the academic performance

| No. | Response | Frequency | Percentage |
| ---: | :--- | :--- | :--- |
| 1. | Intellectual development | 5 | $16.6 \%$ |
| 2. | Neuromuscular development | 7 | $23.3 \%$ |
| 3. | Physical fitness | 8 | $26.6 \%$ |
| 4. | Develops Motor Skills and Improves Behavior | 5 | $16.6 \%$ |
| 5. | Increased concentration and focus. | 5 | $16.6 \%$ |
| 6. | Optimum development of child's physical growth | 00 | 00 |
|  | TOTAL | $\mathbf{3 0}$ | $\mathbf{1 0 0}$ |

Source; primary data 2020
The aforementioned table illustrates the connection between physical education and the educational achievement of kabojja high school. The highest percentage of those who participated ( $26.6 \%$ ), followed by $23.3 \%$ who said that neurological expansion also has an impact on educational achievement, and $16.6 \%$ who said that learning, motor skills, conduct, quantity, and focus are all outcomes of sporting activities, did not think that optimal progress in the physical development of children had any bearing on how well students did in school.

## Conclusion

According to the study's findings, sport participation and good grades in secondary school are significantly correlated. Particularly at the secondary level, it is evident that there is a variation in the sex-based association between the two variables. Future research should evaluate improvements in pupil performance in school as a result of a more vigorous physical literacy of sport and health courses by educating teachers about the significance of students' physical education. This can be done by increasing the amount of time spent learning about physical education, sport, and health, increasing the amount of time spent actively participating in that learning, supporting active rest periods, and making the most of the time prior to and following school for getting active.

## Recommendation

There should be a need for the excess of physical activities to threshold limit in order to see such desired effects; besides, high intensity activities have more effects than moderate intensity activities on academic success.

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