

Effects of Sports Participation on the Academic Performance of Grade 12 Students after the K-12 Implementation

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Abstract Implementing the K-12 program is part of an active effort by stakeholders in Philippine education to solve the shortcomings in the educational system. This new educational framework seeks to deliver a more thorough and well-rounded educational experience for the students. However, this system's implementation and the addition of extracurricular activities like athletics provide several difficulties for students. This study compared the academic performance of athletes and non-athletes in Grade 12 Senior High School students ($N=60$) using their midterm scores and a self-report survey questionnaire after the K-12 implementation. Data from the students' midterm scores and a self-report survey questionnaire administered after implementing the K-12 program were analyzed using a t-test. The results showed no significant difference in the midterm scores between non-athletes (78.13 ± 13.71) and athletes (73.7 ± 9.13), with a p-value of 0.146. The results of the survey questionnaire showed that only two (2) questions out of fifteen (15) (Do you skip classes? and Do you have enough allowance?) had a significant difference ($p>0.05$). The results of the current study demonstrated that student-athletes perform academically on par with non-athletes and can function both inside and outside the classroom. They could maintain attendance despite needing more time for training and getting used to the K-12 system. This study generally demonstrated that with the establishment of K-12, Grade 12 Senior High School pupils' engagement in athletics had little bearing on their academic achievement. The study's findings are crucial for promoting and supporting student participation in sports activities across all education stakeholders.

Keywords General Academics, K to 12 Programs, Student Participation in Sports Activities, Athletics as Extracurricular, Activities, Self-report Survey Questionnaire

1. Introduction

Following popular stereotypes, some believe one can be academically or athletically inclined, but rarely both [1]. But for athletes, they must perform well academically or athletically. Student-athletes are described as a "Diverse Special Population" because of the roles they need to accomplish inside the campus, as students and athletes with different lifestyles than regular students [6]. Furthermore, Sedlacek and Adams-Gaston [25] classify student-athletes as "nontraditional" due to their sports experiences, obligations, and roles on campus. The researchers found four areas that student-athletes must commit to and focus on daily: academics, sports, personal development, and career development [6].

Academics are the primary focus of the school

environment, and extracurricular activities play a role in molding a well-rounded individual [23]. Being a student-athlete is not easy because they spend most of their time on sports training instead of studying, which may affect their academic performance in the long run. The good academic performance of an athlete is essential to be eligible to compete in athletic events, receive a scholarship, and graduate with the chosen degree. Student-athletes must perform responsibilities such as attending classes, studying, and passing examinations [6]. The study of Aries et al. [3] found that students involved in athletic activities for more than ten (10) or more hours per week had lower academic performance than non-athletes.

A qualitative study by Emerson et al. [9] showed that external factors motivate student-athletes to achieve and believed that grades are an external evaluation of their performance. The same study found that student-athletes communicate with one another about grades. In the study of Aries et al. [3], student-athletes were found to surpass the sociability aspects compared to non-athletes. Sports enthusiasts claim that sports participation motivates

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student-athletes, and the results of Grimit support this [17], wherein the student-athletes performed better in the classroom, developed remarkable time management skills, felt motivated to complete their degree and were motivated to attend classes.

Interestingly, there needs to be more information in the literature about the effects of sports participation on the academic performance of senior high school students after implementing the K-12 curriculum in the Philippines education system. Thus, this study compared the academic performance of student-athletes and non-athletes in Grade 12 Senior High School students using their midterm scores and a self-report survey questionnaire after the K-12 implementation.

1.1. Objectives of the Study

This study compares the academic performance of student-athletes and non-athletes in Grade 12 Senior High School students after the K-12 implementation.

Specifically, it aims to answer the following questions:

1. Do student-athletes differ from non-athletes in their academic performance if compared using the midterm scores?
2. Do student-athletes differ from non-athletes in their self-report activities using the survey questionnaire?
3. Is there a significant difference in the academic performance of student-athletes and non-athletes in Grade 12 Senior High School students after implementing K-12?

2. Materials and Methods

2.1. Research Design

This study used comparative and descriptive quantitative designs [1] to determine the effects of sports participation on the academic performance of grade 12 students after implementing K-12 (Figure 1).

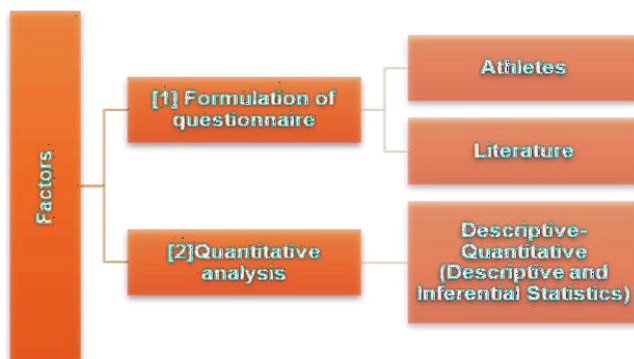


Figure 1. Schematic diagram of the Descriptive-Quantitative Analysis

2.2. Research Instrument

The study used a validated survey questionnaire and midterm score to measure the participants' academic

performance. The questionnaire was formulated based on the information gathered from the athletes and existing data from the literature. The questionnaires were validated according to content, construct, and face by Department of Senior High School experts. The instrument was finalized based on their opinion and suggestions [1]. The survey part of this study was limited to a self-report context only. The survey questionnaire consisted of 15 questions and scored using 4-point Likert-type scales: (1) Never, (2) Sometimes, (3) Often, and (5) Always [17]. The midterm scores of students are used to measure their academic performance. The rationale for using midterm scores is that the examination is conducted after the sports events. For this reason, the researcher believes that the midterm scores would accurately measure the athletes' academic performance without the biases of the teacher factor (Figure 1). The teacher factor is based on the statement of Bonura [5] that many students and professors believe that student-athletes receive discriminatory treatment on campus academically, like having good grades without earning them. The consolidated results are presented in the bar and heat map using Microsoft Excel 2010.

2.3. Participants

A total of 60 students were the participants of this study and were selected using convenience sampling [3]. These 60 students were purposively selected and categorized by researchers to have 30 student-athletes and 30 non-athletes. In this study, student-athletes participated in sports competitions before the midterm examination. On the other hand, non-athletes refer to students who did not participate in any sports competition before the midterm examination. The following researcher-made criteria are utilized for the selection of respondents: (1) Enrolled as Grade 12 Senior High School students; (2) Taking Media and Information Literacy under the same subject teacher at the time of this study; and (3) Involved in sports competition before the midterm examination (for the athlete). The selected criteria were formulated to avoid the teacher and subject bias factors and control the other facets not covered in this study but could affect the respondents' academic performance.

2.4. Data Analysis

Data analysis was done through descriptive and inferential statistics [23]. The mean, standard deviation, and percentage were used for the descriptive statistics [20] using Microsoft Excel 2010. For the inferential statistics, the Statistical Package for the Social Sciences (SPSS) v20 was used as a statistical tool to analyze the data using a t-test. The alpha value of 0.05 was used as the cutoff for significance.

3. Results

3.1. Midterm Scores

The midterm scores showed that the non-athletes

generated the highest mean with a value of 78.13 ± 13.71 , compared to student-athletes with 73.7 ± 9.13 (Figure 2). Although non-athletes had higher midterm scores than student-athletes, based on statistical analysis, there was no significant difference in the midterm scores of students. Student-athletes and non-athletes ($p=0.146$) performed similarly to each other regarding midterm examinations.

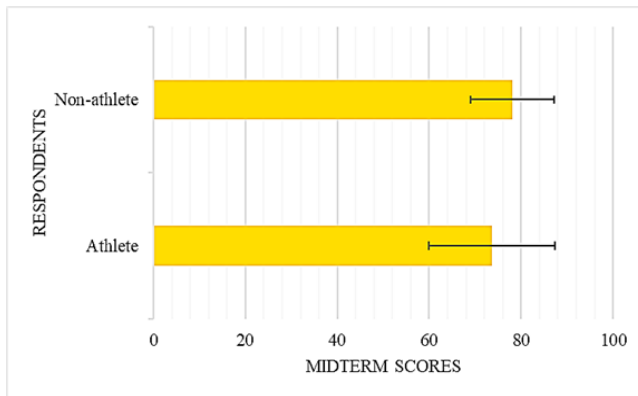


Figure 2. Results of Midterm examination

3.2. Survey Questionnaire

The validated survey questionnaire explored the different activities that could affect the student's academic performance during the midterm examination (Figure 3). The result in the heat map of question number one showed that (Do you attend classes regularly?); the highest percentage generated in student-athletes was 73.33% that answered they always attend classes regularly, 23.33% responded often, and 3.33% responded sometimes. The same trend was observed for the non-athletes, in which 90% responded they always attend classes regularly, 3.33%, and 6.67% sometimes. No one, both athletes and non-athletes, responded never. Statistical analysis showed no significant difference in respondents' responses in both athletes and non-athletes ($p>0.05$). In question number two (Do you go to school on time?), the highest percentage generated in athletes was 50% that responded they often go to school on time, followed by 20% that responded they always go to school on time, 3% responded sometimes, and no one answered never. Different trends were found for the non-athletes, wherein 46.67% responded they always go to school on time, followed by 30% that responded often, 13.33% responded sometimes, and the lowest percentage was 10% that responded never (Figure 4). Although there were variations in the responses of student-athletes and non-athletes, statistical analysis showed that there was no significant difference in their responses ($p>0.05$) (Table 1).

The result in the heat map of question number three showed that (Do you skip classes?) (For athletes: training or game and for non-athletes: another reason), the highest percentage generated in athletes were those who answered

they sometimes skip classes, followed by never, often, and always (43.33%, 30%, 20%, and 6.67%, respectively). A different trend was found for the non-athletes wherein those who answered never generated the highest percentage, followed by sometimes, and both always and often generated the lowest percentage (73.33%, 13.33%, 6.67%, and 6.67%, respectively). Statistical analysis showed a significant difference in athletes' responses compared to non-athletes. The heat map of question number four showed that (Do you participate in class discussion?); the highest percentage generated in athletes was 46.67% who answered they always participated in class discussion, 40% that often answered, 3.33% answered, and no one answered never. The same trend was found for the non-athletes, in which 63.33% answered they always participate in class discussion, 23.33% responded often, 10% answered sometimes, and 3.33% answered never. Statistical analysis showed no significant difference in the responses of respondents. The heat map of question number five showed that (Do you spend time to study for every examination?); the highest percentage generated in athletes was 43.33% that answered they often spend time to study for every examination, followed by 33.33% that answered both always and never, and 20% answered sometimes spending time to study for every examination. Different trends were found for the non-athletes, wherein 46.67% answered they always spend time studying for every examination, 23.33% responded often, 20% answered sometimes, and 10% answered never (Figure 4). Statistical analysis showed that there was no significant difference in the response of respondents ($p>0.05$) (Table 1).

Survey Questions
•Q1. Do you attend classes regularly?
•Q2. Do you go to school on time?
•Q3. Do you skip classes?
•Q4. Do you participate in class discussions?
•Q5. Do you spend time studying for every examination?
•Q6. Do you attend tutorial classes?
•Q7. Do you borrow notes from your classmates when missed a lesson?
•Q8. Do you cheat during the major exam?
•Q9. Do you understand the lesson very well?
•Q10. Do you use a cellphone or other gadgets during the class discussion?
•Q11. Do you spend more time with your boyfriend/girlfriend rather than studying?
•Q12. Does your family pressure you to excel in class?
•Q13. Do your peers a bad influence in your studies?
•Q14. Do you have enough allowance?
•Q15. Do you watch YouTube tutorials related to your subject?

Figure 3. Survey questions

		Q1 (%)	Q2 (%)	Q3 (%)	Q4 (%)	Q5 (%)	Q6 (%)	Q7 (%)	Q8 (%)	Q9 (%)	Q10 (%)	Q11 (%)	Q12 (%)	Q13 (%)	Q14 (%)	Q15 (%)
Athlete	A	73.33	20	6.67	46.67	3.33	6.67	36.67	3.33	10	6.67	0	3.33	3.33	26.67	6.67
	O	23.33	50	20	40	43.33	10	26.67	13.33	73.33	20	3.33	10	10	53.33	6.67
	S	3.33	30	43.33	3.33	20	43.33	3.33	50	16.67	50	16.67	40	36.67	20	50
	N	0	0	30	0	33.33	40	3.33	33.33	0	23.33	80	46.67	50	0	36.67
Non-athlete	A	90	46.67	6.67	63.33	46.67	3.33	30	6.67	26.67	13.33	3.33	6.67	13.33	20	0
	O	3.33	30	6.67	23.33	23.33	6.67	33.33	6.67	46.67	16.67	0	10	0	33.33	26.67
	S	6.67	13.33	13.33	10	20	26.67	23.33	40	26.67	43.33	10	30	26.67	30	40
	N	0	10	73.33	3.33	10	63.33	13.33	46.67	0	26.67	86.67	53.33	60	16.67	3.33

Figure 4. Heat map showing the percentage of the responses categorized according to the respondents. Intense red means the highest percentage, and intense blue means the lowest percentage. The following initials mean: (Q1) Do you attend classes regularly; (Q2) Do you go to school on time; (Q3) Do you skip classes; (Q4) Do you participate in class discussions; (Q5) Do you spend time studying for every examination; (Q6) Do you attend tutorial classes; (Q7) Do you borrow notes from your classmates when missed a lesson; (Q8) Do you cheat during the major exam; (Q9) Do you understand the lesson very well; (Q10) Do you use a cellphone or other gadgets during the class discussion; (Q11) Do you spend more time with your boyfriend/girlfriend rather than studying; (Q12) Does your family pressure you to excel in class; (Q13) Do your peers a bad influence in your studies; (Q14) Do you have enough allowance; (Q15) Do you watch YouTube tutorials related to your subject

The heat map of question number six showed that (Do you attend tutorial classes?) the highest percentage generated were athletes who responded they sometimes attend tutorial classes, followed by never, often, and always (43.33%, 40%, 10%, and 6.67%, respectively). The same trend was found for the non-athletes, wherein 63.33% answered they never attended tutorial classes, followed by 26.67% who answered sometimes, and 6.67% answered often. The lowest percentage was 3.33%, responded always. Statistical analysis showed no significant difference in the responses of respondents. In question number seven (7) (Do you borrow notes from your classmates when missed a lesson?), the highest percentage generated were athletes who responded they always borrow notes from their classmates when they missed a class, followed by sometimes, often, and never (36.67, 33.33%, 26.67%, and 3.33%, respectively). The same trend was found for the non-athletes, wherein 30% responded they always borrowed notes from their classmates when they missed a lesson, 33.33% responded often, 23.33% responded sometimes, and 13.33% responded never. In question number eight (Do you cheat during a major exam?), the highest percentage generated in athletes was 50% that responded they sometimes cheat during a significant exam, 33.33% responded they never cheat during a significant exam, 13.33% responded often, and the lowest percentage was 3.33% responded always. Different trends were found for the non-athletes, in which 46.67% responded they never cheat during a significant examination, 40% responded sometimes, and the lowest percentage found was 6.67%, who answered always and often (Figure 4). Statistical analysis showed that there was no significant difference in the response of respondents ($p > 0.05$) (Table 1).

The results in the heat map of question nine showed that (Do you understand the lesson very well?), the highest percentage generated in athletes was 73.33%, who responded that they often understand the task very well, followed by 16.67%, who responded sometimes and always. No one of the participants responded never. The same trend was found for the non-athletes, wherein 46.67% responded that they

often understood the lesson very well, followed by 26.67% who answered always and sometimes, and none of the non-athlete participants answered never (Figure 4). Statistical analysis showed no significant difference in respondents' responses ($p > 0.05$) (Table 1). In question number ten (10) (Do you use a cell phone or other gadgets during a class discussion?), the highest percentage generated were athletes who answered they sometimes use a cell phone or other devices during a class discussion, followed by never, often, and always which calculated as 50%, 23.33%, 20%, and 6.67%, respectively. A different trend was found for the non-athletes, wherein those who answered sometimes generated the highest percentage, followed by never, often, and always, which were calculated as 43.33%, 26.67%, 16.67%, and 13.33%, respectively. In question number eleven (11) (Do you spend more time with your boyfriend/girlfriend rather than studying?), the highest percentage generated in athletes was 80% that responded they never spend more time with their boyfriend/girlfriend rather than studying, 16.67% responded sometimes, and 3.33% responded often spending time with boyfriend / girlfriend rather than learning. The same trend was observed for the non-athletes, in which 86.67% answered they never spend more time with their boyfriend/girlfriend rather than studying, no one responded often, 10% answered sometimes, and 3.33% answered always. Statistical analysis showed no significant difference in respondents' responses ($p > 0.05$). The heat map of question number twelve showed that (Does your family pressure you to excel in class?), the highest percentage generated in athletes was 46.67% answered that never their family pressures them to excel in class, 10% responded, and 40% responded sometimes. The same trend was found for the non-athletes, in which 6.67% answered that their family constantly pressures them to excel in class, 10% responded often, 30% answered sometimes, and 53.33% answered never (Figure 4). Statistical analysis showed no significant difference in respondents' responses ($p > 0.05$) (Table 1). In question number thirteen (13) (Do your peers have a bad influence in your studies?), the highest

percentage generated in athletes was 50% who responded that their peers never had a bad influence in their studies, 67% responded sometimes, and 3.33% responded always. The same trend was found for the non-athletes, wherein 13.33% responded that their peers were always a bad influence in their studies, no one answered often, 26.67% responded sometimes, and 60% answered never. There was no significant difference in the responses of respondents. In question number fourteen (14) (Do you have enough allowance?), the highest percentage generated in athletes was 53.33%, who responded they often have enough allowance, followed by 26.67% who responded they always have enough allowance, 20% responded sometimes, and 0% answered never. Different trends were found for the non-athletes, wherein 20% responded always have enough allowance, 33.33% responded often, 30% responded sometimes, and 16.67% answered never. Based on statistical analysis, there was a significant difference in the response of athletes compared to non-athletes. In the last question (Do you watch YouTube tutorials related to your subject?), the highest percentage generated in athletes was 50% that responded they sometimes watch YouTube tutorials related to the topic, both always and often generated the same percentage (6.67%), and 36.67% answered never. Different trends were found for the non-athletes, in which 40% answered sometimes, 26.67% answered often, 33.33% answered never, and 0% answered always (Figure 4). Based on statistical analysis, there was no significant difference in the responses of respondents ($p < 0.05$) (Table 1).

Table 1. Summary of p- values in all questions

No.	Question	p-value
1	Do you attend classes regularly?	0.336
2	Do you go to school on time?	0.305
3	Do you skip classes? (For athletes: Training or game, For non-athletes: other reasons)	*0.017
4	Do you participate in class discussions?	0.504
5	Do you spend time studying for every examination?	1.000
6	Do you attend tutorial classes?	0.124
7	Do you borrow notes from your classmates when missed a lesson?	0.513
8	Do you cheat during a major exam?	0.533
9	Do you understand the lesson very well?	0.689
10	Do you use a cellphone or other gadgets during a class discussion?	.0780
11	Do you spend more time with your boyfriend / girlfriend rather than studying?	0.640
12	Does your family pressure you to excel in class?	1.000
13	Do your peers have a bad influence on your studies?	0.773
14	Do you have enough allowance?	*0.029
15	Do you watch YouTube tutorials related to your subject?	0.634

4. Discussion

Research shows that participation in sports has excellent cognitive and physical benefits [3]. Physically, exercise promotes heart health, good weight management, healthy blood pressure, and mental sharpness [14]. In the present study, to answer the first research question, “Do student-athletes differ from non-athletes in their academic performance if compared using the midterm scores?” a comparison of midterm results was conducted. The analysis showed that though the midterm scores of non-athletes were higher than the student-athletes, the statistical results showed no significant difference in the midterm scores (Table 1). This result supports the claims that participating in sports had no negative impact on the academic performance of athletes (midterm scores in the case of this study) despite the implementation of K-12 in the Philippine education system. This result is consistent with the study of Yarkwah and Agyei [29] that participation in sports had no adverse effects on the academic performance of student-athletes. Sports participation developed and enhanced the academic of student-athletes in terms of academic excellence, self-discipline, cognitive skills, and class participation. This result agreed with other studies that believe athletic activities enhance your skills, stamina, and endurance and help promote cognitive function [3]. Similar trends were found in the study by Gritit [17], wherein the results revealed that the student-athletes performed better in the classroom, developed remarkable time management skills, felt motivated to complete their degree, and were motivated to attend classes.

To answer the second and third research questions, “Do student-athletes differ from non-athletes in their self-report activities using the survey questionnaire?” and “Is there a significant difference in the academic performance of student-athletes and non-athletes in Grade 12 Senior High School students after the implementation of K-12” a descriptive-quantitative analysis was conducted through a survey. The descriptive-quantitative design explores the daily activities inside and outside the school of student-athletes and non-athletes to determine their coping strategies and compare them to the non-athletes. ETC [10] stated that learning is wasted when a student is late or absent. In the present study, both student-athletes and non-athletes considered regular class attendance as significant, wherein “always” rated the highest percentage compared to their other answers (Figure 1). Attendance and punctuality are essential factors in ensuring students have an equal opportunity in the curriculum. Moreover, for student-athletes to participate in sports activities, students must be present in classes [19]. Some students who are late to attend class are signs of disobedience. However, students attempt to explain excuses that prevent them from attending the class [4]. Out of many excuses, students should come on time for class.

Interestingly, the present study results are far from expectations. There was no significant difference in

punctuality during class attendance between the student-athletes and non-athletes. This result means that student-athletes did not use sports activities as an excuse for punctuality and avoided being undisciplined and unfair to other class members. The results of the present investigation are consistent with the study of Grimit [17] that student-athletes were motivated to attend classes. ETC [10] reported that the attendance and punctuality policy clearly states that “regular and punctual attendance is paramount in ensuring that all students have full access to the curriculum. Valuable learning is lost when students are absent or late”. Commonly, students encounter a problem with motivation to attend classes [8] and observed in the present study that some students who were not athletes also skipped classes. However, this was also observable in student-athletes, wherein the highest percentage was found in those who answered they “sometimes skip classes for training,” which was expected and understandable. This result supported their midterm scores; though the result was insignificant, the trend showed that athletes had lower midterm scores than non-athletes. However, the student-athletes could compensate for this when they were inside the classroom by contributing to class. This observation supported the present results that both student-athletes and non-athletes were active in class discussions. The percentage of those who answered “always” dominated compared to the other answers in student-athletes and non-athletes (Figure 1). This result agrees with the study of Grace *et al.* [15] that athletes give their best efforts to participate in class activities and discussions. Most students gain more knowledge and enjoy themselves if they actively contribute to class [28]. Some students are having trouble in class, not because of a lack of ability but because they lack good study skills, such as reading textbooks and notes for the exam [18]. Studying before the exam to improve memory is significant to exam scores.

Moreover, this study showed no significant difference in the study habits between non-athletes and student-athletes before the examination (Table 1). This result inferred that student-athletes tend to do the same activities academically compared to non-athletes. Yilmaz *et al.* [30] concluded that there is a significant relationship between study habits and athletes’ academic performance. Another option to cope with the class activities was attending class tutorials. In this study, student-athletes and non-athletes who do not attend tutorial classes dominated the survey. However, some of them do. This result can be an important matter that the school needs to work out, especially for the student-athletes, like it can be mandatory for them to attend tutorial classes. Students attend tutorial classes for different reasons: to fulfill their parents’ expectations, pass a university entrance examination, excel in class, get high grades, etc. [7]. As student-athlete, they tend to spend more time in training than studying, which leads to a lot of prejudices and stereotypes. The student-athletes who are more active and committed to sports than academics believe they are not smart [3]. School non-attendance might lead to severe consequences [21]. One

of the student-athletes’ coping strategies is to borrow notes from their classmates, and the results of the present study showed that student-athletes and non-athletes borrow notes from their classmates when they miss a lesson. However, what if student-athletes were not able to cope with their classes? One common problem in school is cheating. According to Graves [16], students who cheat on examinations show dishonesty and are unfair to other students. The present investigation revealed no significant difference in respondents’ responses, student-athletes, or non-athletes (Table 1).

Students have their own strategies to understand the lesson. Some students analyze the lesson through viewing, listening, and visualizing [11]. In this study, both student-athletes and non-athletes, if not always, respondents understood their lesson very well, and the difference was not significant in both participants (Table 1). This result means that even if student-athletes had extracurricular activities, they could understand the lesson like a non-participant in sports. Students assume the presence of the internet as a great help in their social and educational lives [12]. In the present study, using the internet can be another way to cope with their missed lesson. The use of the internet for educational purposes is increasing, especially for assignments that require the use of the internet [30]. In this study, student-athletes and non-athletes partly use gadgets during class discussions (Figure 1). The same trend was found in the results: both student-athletes and non-athletes had no significant difference in using YouTube for further learning (Table 1). The literature supports this result as computer-based instruction improves students’ ability. It also increases students’ understanding through visualization [22].

Hormonal changes affect students when they reach their teenage life [13]. During this stage, students engage in a relationship either seriously or not. This scenario can affect the academic performance of students. The present investigation showed that student-athletes and non-athletes do not prioritize romantic relationships over their studies. Sports activities for students with social adjustment issues are essential physically, mentally, and socially [24]. The attitude and how the students act in different school situations are mainly affected by peers but notably by parents. A significant relationship exists between the parent’s relationship and student academic performance [2]. In the literature, parents rarely support or let their children join a particular sport because not all parents want their children to be athletically inclined. Mostly, they think that being athletically inclined may hinder academic achievements, while others require their children to participate in sports for social and cognitive benefits [3]. In this study, student-athletes and non-athletes were not pressured by their families in their studies (Figure 1).

People need social interactions with their peers or friends. The influence of peers is firm, which makes one follow the others. Moreover, to feel belongingness, they tend to adapt to the influence of their friends [1]. Interestingly, the present study showed no significant difference between the two participants in terms of the influences of their peers (Table 1).

In the literature, studies have shown that sports participation is used to help students with social adjustment disorders. Students with adjustment issues who participated in sports programs reported a feeling of belonging and empowerment [24]. Aside from friendships, another factor that can affect students' academics is their financial status. Vhalery et al. [27] stated that allowance is given to students for educational needs to learn how to value money and use it wisely. The present study showed that even though money was needed for the student's studies, not all the student-athletes and non-athletes received enough allowance. However, compared to the non-athletes, student-athletes seemed to have enough allowance.

In summary, although non-athletes had higher mid-term scores than athletes, based on statistical analysis, there was no significant difference in the midterm scores of athletes and non-athletes (Table 1). This result explained in the survey questionnaire that out of fifteen questions, only two had a significant difference between respondents' responses (Figure 4). Student-athletes significantly skip classes for training compared to the non-athletes who miss classes for other reasons, and the student-athlete had enough allowance compared to the non-athletes. From this result, the education stakeholders should create programs that will facilitate the academic needs of Student-athletes during the training period. Lastly, although there were variations in respondents' responses, the statistical results showed that the other thirteen questions had no significant difference between the responses of student-athletes and non-athletes (Table 1).

5. Conclusion and Recommendations

The present investigation showed that student-athletes have the same academic performance as non-athletes, and they could perform generally inside and outside the classroom the same as non-participants of sports. Despite having extra time for training and adapting to the implementation of K-12, they could keep up with school activities. This paper showed that athletic participation did not affect the academic performance of Grade 12 Senior High School students after implementing K-12. The study results are essential for all education stakeholders to promote and support the involvement of students in sports activities.

This study is limited to Grade 12 students and focuses only on one subject. Thus, further investigation of the other level is recommended to cover different subject matter.

For the improvement of research, a qualitative method is recommended to achieve corroboration with the indications gained from the survey.

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REFERENCES

- [1] Akhtar, Z. and Aziz, S. (2011). The Effect of Peer and Parent Pressure on the Academic Achievement of University Students. *Language in India*. 11.
- [2] Aminga, R. and Kitainge, K. (2018). A Review of the Effects of Mother-Father Relationship on Academic Performance of Students. *Arts and Social Sciences Journal*. 09. 10.4172/21516200.1000339.
- [3] Aries, E., McCarthy, D., Salovey, P., and Banaji, M. (2004). A Comparison of Athletes and Non-athletes at Highly Selective Colleges: Academic Performance and Personal Development. *Research in Higher Education*. Vol. 45, No. 6.
- [4] Bataineh, M. (2014). A Review of Factors Associated with Student's Lateness Behavior and Dealing Strategies. *Journal of Education and Practice* Vol.5, No.2, 2014
- [5] Bonura, C. (2010). A study of academic motivation of inter-collegiate athletes and collegiate non-athletes. ProQuest Dissertations and Theses, 43. Retrieved from <http://ezproxy.rowan.edu/login?url=http://search.proquest.com/docview/305246>.
- [6] Carodine, K., Almond, K., and Gratto, K. (2001). College Student Athlete Success Both In and Out of the Classroom. *New Directions for Student Services*. 2001. 19 - 33. 10.1002/ss.2.
- [7] Chan, C. and Mongkolhuthi, P. (2017). The Factors Affecting Students' Choice in Studying English at Private Tutoring Schools: a Case of Thai Upper-Secondary School Students. *Journal of Nusantara Studies (JONUS)*. 2. 44. 10.24200/jonus.vol2iss2pp44-52.
- [8] Dobkin, C., Gil R., and Marion, J. (2007). Causes and Sequences of Skipping Class in College.
- [9] Emerson, J., Brooks, R., and McKenzie, E. (2009). College athletics and student achievement: The evidence at small colleges. *New Directions for Institutional Research*, 144, 65-76. doi:10.1002/ir.314.
- [10] ETC (2009). Attendance and Punctuality Policy. Retrieved 23rd September 2010.
- [11] Felder, R. M., and Henriques, E. R. (1995). Learning and Teaching Styles In Foreign and Second Language Education. *Foreign Language Annals*, 28(1), 21-31. doi:10.1111/j.1944-9720.1995.tb00767.x.
- [12] Fralinger, B., and Owens, R. (2011). YouTube As A Learning Tool. *JoYouTube College Teaching & Learning (TLC)*. 6. 10.19030/tlc.v6i8.1110.
- [13] Ganiron, T. S., Fajardo P., Baniago, P. A., and Barcelona, M. (2017). Evaluating the Factors Affecting High School Student Rebellion. Retrieved from <http://www.worldscientificnews.com/wp-content/uploads/2017/07/WSN-80-2017-158-176.pdf>.
- [14] Gill, E. (2014). Integrating collegiate sports into social work

- education. *Journal of Social Work Education*, 50, 305-321. doi:10.1080/10437797.2014.856245.
- [15] Grace, M., Garcia, G., and Subia, G. (2019). High school athletes: Their motivation, study habits, self-discipline, and academic performance. 10.13140/RG.2.2.20538.44488.
- [16] Graves, M. S. (2008). Student Cheating Habits: A Predictor of Workplace Deviance. *Journal of Diversity Management*, 3 (1), 15-22.
- [17] Gritmit, N. (2014) Effects of Student Athletics on Academic Performance. *The Journal of Undergraduate Research*: Vol. 12, Article 5.
- [18] Gurung, R. A. R. (2005). How Do Students Really Study (and Does It matter)? *Teaching of Psychology*, 32 (4), 239-241.
- [19] Heil J. (2014) A Comparison in the Academic Achievement of High School Athletes vs. Non-athletes in the State of Kansas. MO 64468.
- [20] Ignacio, R., Ignacio, R. III, and Buot, M. (2017). Academic Achievement as Influenced by Sports Participation in Selected University in the Philippines. 001:10.5923/.edu.20170703.03.
- [21] Kearney, C. A. (2008). School Absentism and School Refusal Behavior in Youth: A Contemporary Review. *Clinical Psychology Review*, 28 (3), 451-471.
- [22] Kulik, C. L., and Kulik, J. (1985). Effectiveness of Computer-based Education in Colleges. *AEDS Journal*, 19 (2/3), 81-108.
- [23] Miles, L. (2015). Academic achievement in student athletes versus non-student athletes. *Theses and Dissertations*. 475.
- Retrieved from <https://rdw.rowan.edu/etd/475>.
- [24] Moreau, N., Chanteau, O., Benoît, M., Dumas, M., Lau- Rin Lamothe, A., Parlavecchio, L., and Lester, C. (2014). Sports activities in a psychosocial perspective: Preliminary analysis of adolescent participation in sports challenges. *International Review For The Sociology Of Sport*, 49(1), 85-101. doi:10.1177/1012690212452361.
- [25] Sedlacek, W. E., and Adams-Gaston, J. (1992). Predicting the academic success of student-athletes using SAT and noncognitive variables. *Journal of Counseling and Development*, 70, 724-727.
- [26] Thambirajah, M. S., Granduson K. J., and De-Hayes L. (2008). Understanding School Refusal: A Handbook for Professionals in Education, Health and Social Care. *London and Philadelphia: Jessica Kingsley*.
- [27] Vhalery, R., Leksono A. W., and Irvan M. (2018). Factors that Influence the Allowance Management. Vol. 2, Issue 11, pp. 39-44.
- [28] Wade, R. (1994). Teacher Education Students' Views on Class Discussion: Implications for Fostering Critical Thinking. *Teaching and Teacher Education*. Vol. 10 (2): 231-243.
- [29] Yarkwah, C. and Agyei, E. (2020). Effects of Sports Participation on the Academic Performance of Senior High School Students in Mathematics. 8. 62-74.
- [30] Yılmaz, M.B., and Orhan, F. (2010). The use of the Internet by high school students for educational purposes with respect to their learning approaches. *Procedia - Social and Behavioral Sciences*. 2. 2143-2150. 10.1016/j.sbspro.2010.03.296.