

# Level of Participation to Sports and Its Implication to Academic Performance of High School Student-Athletes

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## Abstract

Student participation in sports has a big impact in their academic performances that influence their studies and their future. The researchers of the study aim to investigate the significant relationship between level of sports participation and academic achievement of the 173 student-athletes in a private high school in central Pasig City, Philippines, SY 2022-2023. Quantitative correlation is the research design in order to assess a social phenomenon to establish and describe relationship between their sports participation and academic performance important to identify the areas to be assisted and to improve for better performances in both field of endeavour. Based on the significant findings of this study, the researcher recommends 1) the school administrators may orient teachers in preparing important tasks that will give merit to student-athletes, 2) the need for coaches and academic teachers to agree on scheduling of the training of the players, 3) the learning competencies in academic subjects to be align in physical activities and sports, 4) and this study be replicated and validated in the public schools and colleges; and further investigation be made on the effect of respondents perception of role and other factors on their level of participation in different team sports without jeopardizing their academic performances.

**Keywords:** Level of participation, sports, academic performance, high school student-athletes.

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## INTRODUCTION

Student participation in sports is a major decision and a commitment. Given the multitude of areas that needs to be examined, this implies that the person has to exert effort. There are the research findings regarding the benefits and outcomes of involvement in sports. On the other hand, researchers took notice that academics and sport participation as a possible legacy has become an increasingly popular line of inquiry and is linked with general well-being and improved decision-making and cognitive abilities of the student-athletes (Teare *et al.*, [1] and *Annear et al.*, [2]). For these reasons, it is essential to understand the student-athletes in order to help them manage the potentially deleterious effects stress may have on athletic and academic performance (Delos Santos [3]).

According to MU Health Care [4], playing a sport requires a lot of time and energy. Some people may think this would distract student-athletes from schoolwork. However, the opposite is true. Sports require memorization, repetition and learning — skill

sets that are directly relevant to academic performances. Also, the determination and goal-setting skills a sport requires can be transferred to the classroom.

Ishihara *et al.*, [5], agreed that physical activity is considered a promising behaviour to improve cognitive function and academic performance among adolescents. As evidence on the relationships of different sports to academic performance and evaluate its effect, the findings indicate that participation in specific sports may have significant benefits for academic participation, another, considering that quitting in sports activities reversed these benefits, sustained participation in sports is important for academic success.

In support of the inherent difficulty in sports involvement, Delos Santos [3] noted that athletes experiences have significant amount of challenges in academic performance, social demands, required to spend a substantial amount of time participating in activities related to their sport, such as attending practices and training sessions, both physical and mental issues that may affect their overall athletic and academic

performance. It is a common knowledge that membership in an athletic event entails a lot of pressures and expectations (Cohn [6]). The athlete is accountable to almost everybody in the school. They are expected to perform at their best all the time.

The student-athletes are expected to attend to various responsibilities at one point in time. They are supposed to assume despite multiple roles, many students still aspire to be part of athletic activities by joining an individual, dual or a team sports that gives them enjoyment, have freedom, independence, to make friends and meet new people chance to start building the future sport they've always dreamed about and one of the best ways to make the most of their time in school (Read-Bone [7]). Notwithstanding the scholarship and other related perks that go with the status.

Keech [8] said, the National Federation of State High School Associations (NFHS) asserts "The Case for High School Activities" that promotes citizenship and sportsmanship in the 11 million students who participate nationwide. Activity programs instill a sense of pride in school and community, teach lifelong lessons and skills of teamwork and self-discipline and facilitate the physical and emotional development.

Furthermore, regarding the sports program governing the Filipino youth, the 1987 Philippine Constitution, Section 19 [9] "The State shall promote physical education and encourage sports programs, league competitions, and amateur sports, including training for international competitions, to foster self-discipline, teamwork, and excellence for the development of a healthy and alert citizenry."

Insights obtained from researches that involved student-athletes can pave the way for creating a school environment that promotes athletic excellence without undermining academic competence. It is a perennial concern among all educational institution how to balance these two important areas. School wants to have an edge when it comes to athletic competitions while at the same time maintaining a respectable level of accreditation status from reputable accrediting organizations. It is against this background that a study on the sports participation and its implication to the academic performance of high school varsity players is undertaken.

The study intends to present the level of sports participation and academic performance of high school varsity players in one private high school in Pasig City. Findings will be utilized to point out possible implications relevant to school policies that address their needs. The research will examine the following variables namely: 1) Demographic Profile of the Participants, 2) Level of Sports Participation, 3) Level of Academic Performance and 4) The Significant Relationship between Sports participation and academic performance. The student-athletes participation will be assessed in

terms of the following dimensions namely: 1) Practices, 2) experiences, 3) skills and 4) orientation. It will try to determine the frequency and number of hours allotted to trainings as well as the number of other sports that the athletes are engaged in since it can also influence their level of performance during class and during athletic competition.

Academic performance was based on the obtained grade during the preparation and on-season of the sports competition in the second grading school calendar period in the three known academic subjects namely English, Math, and Science. This will be conducted in the School Year 2022-2023. The researchers embark on this topic because they have been witness to the difficulties encountered by students-athletes.

This school in Pasig City is one of the high performing schools in both academic and athletic participation in the Division of Pasig City Schools of and in the National Capital Regional Meet as well as other organizations is notable. This status quo is one of the sources of pressures that student-athletes experience. Through this study, areas that impact on student-athletes' performance will be given more emphasis in the hope of enhancing the existing program for student-athletes. This can lead to better performance in athletic competition in particular and life tasks in general. To help the school in formulating guidelines in motivating more the students to study hard so that there is no conflict while performing excellent in their field of sports competition.

### Statement of the Problem

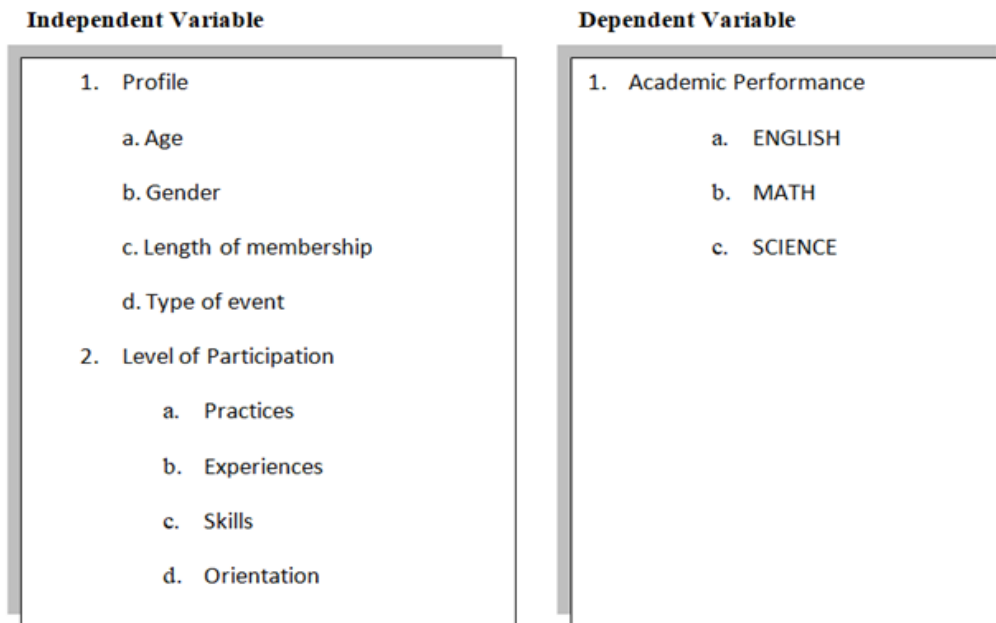
The current study seeks to determine the sports participation of high school student-athletes and its implication to their academic performance. Specifically, it will answer the following questions:

1. What is the profile of the respondents in terms of:
  - a. Age;
  - b. Gender;
  - c. Length of membership in the varsity team;
  - d. Type of event involved in team sports, individual and dual sports?
2. What is the level of participation of the players in the varsity team in terms of:
  - a. Practices;
  - b. Experiences;
  - c. Skills;
  - d. Orientation to sports?
3. What is the level of academic performance of the student-athletes in terms of:
  - a. English;
  - b. Math;
  - c. Science?
4. Is there a significant relationship between level of sports participation and academic achievement of the student-athletes?

## Hypothesis Testing

There is no significant relationship between the sports participation and academic performance of the high school varsity players.

## Research Paradigm



**Figure 1: Paradigm**

The research will follow the process presented in Figure 1. The independent variable which is in the first box contains all the given or the preliminary information that will be obtained from the research sample through the use of data gathering tools. The given consists of the profile of the respondents and level of participation. The Input is essential and relevant in order to provide baseline information relevant to the participants. This can help indicate the participants' current status and condition in so far as the other research variables are concerned.

Academic performance which is the dependent variable of the study is measured in terms of the acquired grade in relevant subjects namely Mathematics, Science and English. Numerical rating obtained reflects the level of ability or aptitude that the learner has and the level of motivation and interest towards a particular subject. It can also be indicative of the capacity of the teacher or facilitator to harness the learner's inherent qualities and direct towards attaining the expected learning outcome of each subject. It is hypothesized by the researchers that academic performance will be influenced by the profile of the respondents as well as the level of sports participation of the student-athletes.

The findings generated by the current study specifically the relationship between the profile, athletic participation and academic performance will lead to formulation of development program for the student-athletes. It will be reflective of the analysis and implications derived from the findings of the study.

These implications are anchored also on the theory of Aquino *et.al.* [10] stated that the student-athletes' experiences in the activities discover the significance of participation in sports and academic performance is very relevant.

Furthermore, the policies on training, development and support for the varsity players that will be formulated and initiated by the respective personnel involved are also the expected output of the study.

### Significance of the Study

The current study is significant in view of the possible contribution in terms of laying down the framework to be used in the development of training program for high school varsity players of Pasig Catholic College. The study is also beneficial to the following groups of people,

- *School administrators* - Findings can be used as basis for policy formulation and implementation relevant to training, benefit and development of coaches and athletic directors as well as the athletes of the division. Results obtained can provide an impetus to setting up of a 5-year Development Plan that will put to the fore the welfare of the student-athletes first and foremost, the coach and athletic directors. It can initiate a different view and treatment of student-athletes and their coaches considering that they contribute greatly in establishing the reputation of the educational institution.

- *Athletic directors* - Results of the study can be used to define the interventions that are appropriate to the needs of the varsity players. It can serve as a needs assessment vital in establishing linkage with the academic coordinators. Thus, academic coordinators can be oriented to the need of the student-athletes to be given academic assistance in terms of tutoring, additional exercises relevant to a given subject that student-athletes experience difficulty as well as provisions on missed examinations. Improved relationship between athletes, athletic directors and academic coordinators can lead to improved athletic performance.
- *Coaches* - Results obtained from the study can be utilized to formulate specific coaching strategies and approaches that will optimize performance of varsity players not only in athletic competition but also in academic endeavours. Coaches can be guided as to what should be given more emphasis in training and preparing student-athletes to a given athletic event. Training is more holistic taking into consideration not only the concerns directly link to sports but other relevant concerns as well such as academic and family relationship.
- *Parents of varsity players* - Findings can be used to create awareness and social support system at home that will contribute to improved performance in athletic competition and inside the classroom. Findings can help parents realize the significant role they play in enhancing performance in both academic and athletic field. It can generate further support in the athletic and academic endeavour that the student-athletes pursue.
- *Varsity players* - Results from the study can generate an improved self-awareness about level of participation in sports and limitations inherent that can lead to an enhanced perception of oneself. An enhanced self-concept contributes to better athletic and academic performance. To be aware on the level of participation to other activities in school so that they could easily adjust to needs of requirements in academic and pressure from the community like the school, home and neighbourhood.

### Scope and Limitation

The study intends to investigate the level of sports participation and academic performance of the

high school student-athletes of a private high school in the central Pasig City, Philippines. It will make use of a correlation research design. A total of 173 varsity players will participate in the study obtained from various sports events namely volleyball, basketball, pep squad, chess, badminton, table tennis, athletics (Track & Field), billiards, swimming and taekwondo during the school year 2022-2023. Variables to be covered in the researcher-made questionnaire are length and frequency of practice, experiences and number of membership of specific sports, orientation and level of skills of the student-athletes.

Academic performance will be measured using the grades obtained in the following subjects in the school year 2022-2023. Findings of the study can only be generalized and applied to the participants of the research. Factors such as the family background and gender are deemed to influence the varsity players' level of participation and academic performance and are therefore not within the scope of the study.

### METHODOLOGY

This chapter presents the research design to be used, the characteristics of the research sample as well as the data gathering tools. It will also try to discuss the setting where the study will be conducted as well as the procedure to be undertaken. The statistical tools to be used to test the null hypothesis will be spelled out.

The researchers employed the quantitative correlation research design. According to Bhattacharya *et al.*, [11] emphasized the collection of objective data in order to assess a social phenomenon to establish and describe relationship between variables concerning a given research sample. In the present study, the variables to be correlated are sports participation and academic performance. The study attempts to find out if the two variables are related and from the obtained findings, implications will be drawn that will serve as basis for improving existing program for student-athletes in a private high school.

### Respondents of the Study

The study will involve 173 student-athletes from different sports events namely basketball, volleyball, pep squad chess and others for the Academic Year 2022-2023 in a private high school located in Pasig City, Philippines. Below are the sports events, the number of respondents per events and its percentage equivalents:

**Table 1: The Student-Athletes per Sports Events**

Sports Event	Respondent	Percentage
Basketball	48	27.7
Pep squad	30	17.3
Volleyball	27	15.6
Athletics	19	11.0
Chess	3	1.7
Table Tennis	4	2.3
Badminton	8	4.6
Swimming	17	9.8
Taekwondo	10	5.8
Billiards	6	3.5
Others	1	.6
<b>Total</b>	<b>173</b>	<b>100.0</b>

### Research Instrument

The study will make use of data gathering tools that will be able to provide answers to the research questions formulated. It will make use of the Personal Data Sheet and a researchers-made questionnaire and the obtained grade in the three subjects for the Second Grading Period of S.Y 2022-2023. The Personal Data Sheet will determine the age, years of membership and type of event that the respondents are involved with.

The researcher made tool is a self-report inventory which will attempt to measure the level of team sports participation of the respondents. It will cover three dimensions indicated in the statement of the problem 2 and is consists of the experiences, practices and skills of the respondents. For the practice dimension, respondents will be asked to indicate the number of hours spent on training per week and the number of days allotted for trainings. Experiences will be assessed by asking the respondents to indicate the number of other sports they engaged in. Skills will be measured by the rating that the respondents will assign to their athletic competence which ranges from excellent to poor.

Another test to be used in the current research is the Orientation in Sports Questionnaire. This questionnaire seeks to determine the motivational orientation of the participants which are categorized into task orientation and ego orientation. It is consist of 11 items that determine the inherent orientation in sports of the respondents. The Orientation in Sports Questionnaire will be used together with self-report inventory in determining the level of participation in sports.

The researchers made self-report inventory will be validated by using triangulation. Three experts will be requested to examine the items. Experts consist of a Physical Education teacher, Athletic/Sports coordinator

and Test construction expert. Their expertise will be based on the defined number of years practicing their specialization which is 7 or more years. After validation of the experts, the self-report inventory will be pilot tested to a sample of high school varsity of another private school. Pilot testing will be conducted to ensure validity and reliability of the self-report inventory developed by the researchers.

Academic performance will be based on the grades obtained during the second grading period in the following subjects: Math, English, and Science. To facilitate interpretation and analysis of the academic performance in the subjects mentioned, range of grades and verbal interpretation will be created.

### Data Gathering Procedure

In view of the standards observed in the process of research permission and consent of the groups who will be involved in the current study will be sought. Letter of consent will be submitted to the administrator of the school where pilot testing will be conducted. Parents of pilot test group will also be informed and whose consent will also be obtained. After the pilot test, another set of letters will be prepared to the actual participants.

Letter of permission will be submitted to the Office of the President and the Office of the Athletics department. Furthermore, consent letters will also be given to the parents of the high school varsity. This is in accord with the principle of informed consent for minors. Upon approval of the President and the Athletics Department, another letter will be submitted to the Registrar Office in order to get the ratings of the participants in the three subjects mentioned.

The participants of the study will be assured of the confidentiality of their responses and measures will be undertaken strictly to protect their identity. Scores and other data will be encoded in Ms Excel and statistical analysis will be done using Statistical Package for Social Sciences (SPSS).

### **Statistical Treatment of Data**

In order to determine the profile of the respondents in terms of gender, length of membership and type of event, frequency and percentage will be used.

1. To determine the level of participation in terms of practices, experiences and skills, mean and standard deviation will be used.
2. Academic performance in English, Math, and Science will be determined using the mean and standard deviation.
3. Significant relationship between level of participation and academic performance will be determined using Pearson r coefficient of correlation.

## **RESULTS AND DISCUSSION**

This chapter presents analyses and interprets the data gathered in order to draw out important and relevant

information to determine the sports participation of the student-athletes and its implication to their academic performance.

For clarity and consistency in the discussion, the data are presented in four parts. The first part presents the profile of respondents in terms of age, gender, length of membership in the varsity team and type of event involved in team sports, individual and dual sports. The second part discusses the level of participation of high school varsity players that includes practices, experiences skills and orientation to sports.

The third part is about the academic performance of student-athletes that was measured in terms of their second quarter grades in English, mathematics, and science. The fourth part is the discussion of the coefficient of correlations between the profiles, level of participation of respondents to their academic performance.

### **Profile of School Varsity Players to Team Sports**

The profile of school varsity players is analyzed using the factors such as of gender, age, length of membership in the varsity team and type of event involved in team sports, individual and dual sports.

**Table 2: Frequency and percentage Distribution of the Profile of Respondents**

<b>Profile of Respondents</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Gender</b>		
Female	60	34.7
Male	113	65.3
<b>Total</b>	<b>173</b>	<b>100.0</b>
<b>Age</b>		
17 and above	1	.6
15 to 16	78	45.1
13 to 14	87	50.3
11 to 12	7	4.0
<b>Total</b>	<b>173</b>	<b>100.0</b>
<b>Sports</b>		
Basketball	48	27.7
Pep squad	30	17.3
Volleyball	27	15.6
Athletics	19	11.0
Chess	3	1.7
Table Tennis	4	2.3
Badminton	8	4.6
Swimming	17	9.8
Taekwondo	10	5.8
Billiards	6	3.5
Others	1	.6
<b>Total</b>	<b>173</b>	<b>100.0</b>
<b>Number of Years in the Team</b>		
Six Years	1	.6
Five years	4	2.3
Four Years	25	14.5
Three years	47	27.2
Two Years	40	23.1
One year	56	32.4
<b>Total</b>	<b>173</b>	<b>100.0</b>

Table 2 presents the profile of the student-athletes in terms of frequency and percentage distribution.

It is presented on the table that out of 173 respondents 113 or 65.3 percent are males and 60 or 34.7 percent are females. This may be interpreted that the school varsity players in the locale of the study is dominated by male players. Such masculinity of respondents support the explanation that doing tedious activities like getting involve in different team sports is being possessed by male individuals.

In addition, the age profile of players is ranging from 13 to 14 years old with the highest frequency of 87 which is 50.3 percent of the total respondents. Followed by age bracket of 15 to 16 with 78 that is 45.1 percent. It could be further interpreted that 7 or 4.0 percent whose age of respondents is ranging from 11 to 12 years old, and only 1 or 0.6 percent whose age is 17 years old and above.

With regards to different sports played by respondents it could be gleaned on the same table that out of the 173 players 48 or 27.7 percent are in basketball, followed by pep squad with 30 equals to 17.3 percent, while 27 or 15.6 percent in volleyball. 19 or 11.0 percent

who played athletics, 17 or 9.8 percent focused on swimming, 10 or 5.8 percent for Taekwondo, 8 or 4.6 percent for badminton, 3 or 6.5 percent in billiards, with 4 or 2.3 percent in table tennis, 3 or 1.7 percent for chess and 1 or 0.6 percent for other sports.

A cursory glance on the table about the profile of the student-athletes is noticeable that the number of years they have played in different sports ranges from 1 to 6 years. Of the 173 total respondents 56 or 32.4 percent who played as varsity player for one year, 47 or 27.2 percent for three years, 40 or 23.1 percent for two years, 25 or 14.5 percent for four years, 4 or 2.3 percent for five years and 1 or 0.6 percent for six years.

Such findings may be explained by the phenomenon that most of the players are neophyte interpreted that school coaches wanted to have players to stay longer and potential in the following years to come. For those who played for six years served as seniors and team leaders and inspiration to newer athletes.

Meadows [12] in her study also found out, on average, schools in different geographical areas experience a significant increase in freshman enrolment following athletic success.

**Table 3: Frequency and Percentage Distribution on the Participation of Respondents on Number of Times and Hours Practicing and Type of Training Received**

<b>Number of Times Practicing</b>	<b>Frequency</b>	<b>Percentage</b>
1.others	19	11.0
2.Thrice	87	50.3
3.Twice	52	30.1
4.Once	15	8.7
<b>Total</b>	<b>173</b>	<b>100</b>
<b>Mean/SD</b>	<b>2.64</b>	<b>0.79</b>
<b>Number of Hours Practicing</b>		
1. Others	9	5.2
2. 2 ½ hours to 3 hours	86	49.7
3. 1½ hours to 2 hours	75	43.4
4. 30 minutes to 1 hour	3	1.7
<b>Total</b>	<b>173</b>	<b>100</b>
<b>Mean/SD</b>	<b>2.58</b>	<b>0.62</b>
<b>Type of Training Received</b>		
1.Aerobics	15	8.7
2.Continuous	111	64.2
3.Intermittent	36	20.8
4.Others	11	6.4
<b>Total</b>	<b>173</b>	<b>100</b>
<b>Mean/SD</b>	<b>2.25</b>	<b>0.70</b>

The Table 3 is about the frequency and percentage distribution on the participation of respondents on the number of times and hours practicing and type of training received.

It is manifested on the table that of the 173 respondents 87 or 50.3 percent whose number of times practicing in a week is three times, 52 or 30.1 percent who spent practicing twice or for two times, 19 or 11 percent who practice their events in other times and 15 or 8.7 percent who practice their events once.

These findings are attributed by the situation that coaches would require players to practice their events to condition their stamina from exerting effort in playing believing that constant practice makes them perfect. Indicative data reveals that the number of hours practicing for high school student-athletes varies. Of the 173 respondents, 86 or 49.7 percent spent two and 1/2 to three hours practicing their events, 75 or 43.4 percent for one 1/2 to two hours practicing, 9 or 5.2 percent for other times and 3 or 1.7 percent for thirty minutes to one hour. This is attributed by the fact that there is a need for athletes to have regular practice that will help them assess if there is a progression of their skill in preparation for a competition. The coach on the other hand, will be

able to assist the players through an intervention schedule that will make his playing performance more acceptable.

In addition, the type of training received by high school student-athletes as respondents of the study is described to be continuous being the highest frequency of 111 or 64.2 percent from the total respondents. Eventually, of 173 respondents, 36 or 20.8 percents whose type of training received is intermittent, 15 or 8.7 percent whose training received is aerobics and 11 or 6.4 percent with other types of trainings received.

In such case, the players should receive trainings that will formalize to develop his playing skills through trainings administered by experts and other formal trainings available in their own field. The more trainings received by the player, the more chances of making his performance better as he would be considered potential athlete by the team and the school itself.

Goldsmith [13] elaborated that the athletes need evidence that they can be successful and the only currency they will bank to have an excellent game performance is that their preparation-training has been uncompromisingly perfect in every detail.

**Table 4: Frequency and Percentage Distribution on the Participation of Respondents According to Athletic Experience**

<b>Athletic Competition participated</b>	<b>Frequency</b>	<b>Percentage</b>
1. Others	18	10.4
2. 5 to 6 events	35	20.2
3. 3 to 4 events	67	38.7
4. 1 to 2 events	53	30.6
<b>Total</b>	<b>173</b>	<b>100</b>
<b>Number of Invitation to Join</b>		
1. Others	38	22.0
2. Thrice	55	31.8
3. Twice	51	29.5
4. Once	29	16.8
<b>Total</b>	<b>173</b>	<b>100</b>
<b>Number of medals/Trophies Received</b>		
1. Others	51	29.5
2. 5 to 6	21	12.1
3. 3 to 4	43	24.9
4. 1 to 2	58	33.5
<b>Total</b>	<b>173</b>	<b>100</b>
<b>Citations Obtained</b>		
1. Champion	3	1.7
2. Second place	49	28.3
3. Third place	68	39.3
4. Other place	53	30.6
<b>Total</b>	<b>173</b>	<b>100</b>
<b>Level of Meet Participated</b>		
1. PAPRISA/PRADA/UCSAA	16	9.2
2. Division meet	76	43.9
3. NCR Meet	75	43.4
4. Others	6	3.5
<b>Total</b>	<b>173</b>	<b>100</b>



Table 4 shows the frequency and percentage distribution on the participation of respondents according to athletic experience.

It is shown on the table that out of 173 respondents, 67 or 38.7 percent whose athletic competition participated is 3 to 4 events. Furthermore, it could be noted that 53 or 30.6 respondents with 1 to 2 events athletic competition participated, 35 or 20.2 percent with 5 to 6 events and 18 or 10.4 percent with other competitions joint.

On the same table, the number of invitation to join athletic events is described to have invited for three times having the highest frequency of 55 or 31.8 percent of the total 173 total respondents. Apparently, 51 or 29.5 percent who received invitation to join activities two times, 38 or 22 percent with other invitations and 29 or 16.8 percent who were invited once for competitions in athletic and sports events.

It could be gleaned on the table that the number of medals/trophies received by the student-athletes registered a variation of numbers whereby, 58 or 33.5 percent of the respondents who received 1 to 2 medals, 51 or 29.5 percent with other number of medals received, 43 or 24.9 percent with 3 to 4 medals/trophies and 21 or

12.1 percent whose number of medals/trophies received in different competitions is 5 to 6.

It is noticeable on the same table that high school student-athletes obtained citations from sports competition with third place being the highest frequency of 68 which is 39.3 percent from 173 total respondents. Specifically, 53 or 30.6 percent who obtained other citations, 49 or 28.3 percent with second place citation and 3 or 1.7 percent citations obtained from sport festivals and competitions.

According to Olinger [14], obviously, the main benefits of sports citations, medals and trophies are motivation. Student-athletes feel good to be rewarded that encourages them to work hard in their practices and performances. It encourages athletes to believe in their own abilities and help build their confidence in their chosen sports.

Finally, the table explains further the level of meet participated by the student-athletes whose highest frequency is 76 with 43.9 percent on division meet, 75 or 43.4 percent for National Capital Region Meet, 16 or 9.2 percent who participated the PAPRISA/PRADA/UCSAA Meet, while 6 or 3.5 percent with other level of meet participated.

**Table 5: Mean and Standard Deviation on the Participation of Respondents According to Skills**

No.	Skills	Mean	SD	Interpretation
1.	I give extra time to practice my skills.	3.55	0.64	Most Frequently
2.	I see improvement every time I practice.	3.49	0.67	Frequently
3.	I can make more points in every game/performance.	3.36	0.75	Frequently
4.	I avoid mistakes/turn over during practice/game.	3.24	0.80	Frequently
5.	I am an advance player in terms of skills.	3.10	0.84	Frequently
6.	I attend other trainings other than regular scheduled training ex. barangay / division level.	3.12	1.08	Frequently
	<b>Grand Mean</b>	<b>3.31</b>	<b>0.80</b>	<b>Frequently</b>

Table 5 reveal the mean and standard deviation on the participation of high school student-athletes according to skills and sports orientation.

It is exposed on the table that the participation of players as to skills registered a grand mean of 3.31 which may be interpreted with minimum variability whose standard deviation measure is 0.80. Among the 6 indicators entered into the skills of respondents, giving extra time to practice received the highest mean of 3.55 with less variability of 0.64 standard deviation that is

interpreted to have most frequently performed. This is followed by seeing improvement every time they practice whose mean is 3.49, making more points in every game/performance with a mean equivalent to 3.36, avoid mistake/turn over during practice/game whose mean is 3.24, attend other trainings other than regular scheduled training ex. barangay / division level with a mean of 3.12 and an advance player in terms of skills whose mean is 3.10 which could be interpreted that they frequently manifest the skills with less variability.

According to KU [15] playing sports is fun manifested in the frequently indicators, for practices field teaches more than just athletic skills, it confines of rules

learning invaluable lessons anything the student-athletes to pursue for their future life-style.

**Table 6: Mean and Standard Deviation on the Participation of Respondents According to Sports Orientation**

	<b>Orientation to Sports</b>	<b>Mean</b>	<b>SD</b>	<b>Interpretation</b>
1.	I am the only one who can do the play or skill.	2.73	0.97	Frequently
2.	I learn a new skill and it makes me want to practice more.	3.45	0.72	Frequently
3.	I can do better than my friends.	2.88	0.94	Frequently
4.	I am the best.	2.67	1.07	Frequently
5.	I learn something that is fun to do.	3.46	0.71	Frequently
6.	Others mess up but I do not.	2.90	0.85	Frequently
7.	I learn a new skill by trying hard.	3.52	0.71	Most Frequently
8.	I score the most points/goals/hits/stance.	2.87	0.99	Frequently
9.	Something I learn makes me want to practice more.	3.47	0.75	Frequently
10.	A skill I learn really makes me feel right.	3.49	0.65	Frequently
11.	I do my very best.	3.63	0.64	Most Frequently
	<b>Grand Mean</b>	<b>3.19</b>	<b>0.96</b>	<b>Frequently</b>

Table 6 presents the mean and standard deviation on the participation of respondents according to sports orientation.

It is presented on the table that the participation of high school varsity players according to sports orientation received a grand mean of 3.19 which may be interpreted that they frequently manifest the indicators included for such variable whose variability coefficient is less with 0.96 standard deviation measure. Among the different indicators included for sports orientation among players, doing their very best registered the highest mean of 3.63 as they describe their orientation to be most frequent, followed by learning a new skill by trying hard as they most frequently do it whose mean is 3.52, a skill they learn really makes them feel right registered a mean of 3.49 as they frequently observed the behaviour. Moreover, the varsity players frequently perform activities something that they learn which make them want to practice with a mean equivalent to 3.47. Eventually, this is followed by learning something that is fun to do with a mean of 3.46 as they frequently experience the indicator. Further, learning a new skill and it makes me want to practice more, others mess up but they do not, they can do better than friends, they could score the most points/goals/hits/stance, they are the

only one who can do the play or skill registered identical interpretation that they frequently manifest the skill whose mean ratings is 3 when rounded to a nearest whole number.

In as much as the sports orientation of varsity players is interpreted to be frequently observing the indicators this findings may be described further that coaches tried their best to orient the players every now and then as part of their training to let the players understand better the essence of being a varsity player. In this manner, the school would be motivated to give additional incentives hence, the most frequent is the sports orientation of players the better opportunities for winning from different competitions that would add good reputation of the school in terms of sports and athletic performance. Hence, coaches likewise will be inspired to train and develop the sports orientation of the players by spending more time of dedicated training and practice of the different events which would surely add the positive result of engaging themselves in an endeavour that will make the school administrators happy which may be manifested by increase in allowance and even their salaries.

MSU [16] stated that from sport psychology research that players are more likely motivated to stay engaged in practices, persistent when the training

becomes difficult and learn from it, which will help them in their game performances.

**Table 7: Academic Performance of High School Varsity Players**

Subjects	Number of Cases	Mean	Standard Deviation	Academic Performance
English	173	87.86	3.07	Average
Math	173	85.55	3.18	Average
Science	173	84.57	3.09	Low
<b>Total Mean</b>	<b>173</b>	<b>85.99</b>	<b>3.11</b>	<b>Average</b>

**Legend: 88.80 – 92.64 = High : 84.95 – 88.79 = Average : 81.11 – 84.94 = Low**

Table 7 manifests the academic performance of high school student-athletes in English, mathematics and science.

It is manifested on the table that the academic performance of varsity players is average whose total mean rating of the final grades in four academic subjects is 85.99 with less variability of 2.84 standard deviation measure. The highest academic performance of the student-athletes is English whose mean is 87.86 which is interpreted to average academic performance. This is due to the fact that English is the Philippines second language and the educational medium of teaching instruction easier for the student-athletes compared to the other subjects. This followed by Mathematics with 85.55 mean

interpreted also average academic performance rating with 3.18 standard deviation, and Science registered a low academic performance whose mean value is 84.57. This could be explained by the phenomenon that Science subject is based on theories that players find difficulty and need to pay much attention in improving their study habits to cope up with the degree of difficulty in comprehending and analyzing different scientific concepts.

According to Pinto-Escalona [17] there is strong evidence that the physical activity and fitness levels being positively associated with cognitive and overall academic performance among youth.

**Table 8: Correlation Coefficients Between Variables to Academic Performance of High School Varsity Players**

Categories	Academic Performance of Respondents					
	English		Mathematics		Science	
	r	t value	r	t value	r	t value
Gender	-.151*	.048	-.090	.242	-.070	.361
Age	-.039	.615	-.004	.960	.020	.790
Sports	.024	.756	-.076	.317	.052	.495
Number of Years in the team	.023	.767	-.003	.967	-.004	.959
Number of Years practicing	-.018	.813	-.100	.190	.051*	.049
Type of Training Received	-.015	.843	.060	.430	.507	.524
Competition participated	.012	.872	.671*	.507	.039	.612
Number of Invitation Joint	.114	.134	-.012	.872	.051	.507
Medals/Trophies Received	-.124*	.104	-.031	.690	.049	.524
Citations Obtained	-.291**	.000	-.100	.190	.039	.612
Meet participated	-.148*	.051	.060	.430	.145*	.057
Skills	-.003	.970	.761*	.507	-.003	.968
Orientation to Sports	-.078	.306	-.103	.178	.007	.924

\*\* Correlation is significant at .01 level at 2-tailed test

\* Correlation is significant at .05 level at 2-tailed test

Table 8 presents the correlation coefficients between variables to academic performance of high school student-athletes.

It is presented on the table that gender of players registered negative correlations to their academic performance in English whose computed  $r$  values are  $-0.151$  which is greater than the tabulated value of  $0.048$ . The negative correlation coefficients may be explained by the phenomenon that the less participation on sports activities by both male and female players, the higher is their academic performance. Munoz-Bullon [18] said prior to the research study to analyse the effect that participating in extracurricular sporting activities has on academic performance has yielded contradictory results: while some authors find a positive effect of sports participation on academic outcomes, others report a negative impact.

A cursory glance on the table, provides that number of years practicing by varsity players in their specific event manifests a positive correlation coefficient to their academic performance in science whose computed  $r$  value is  $0.51$  greater than the tabulated value of  $0.049$ . Such finding may be explained by the fact that the more number of years spent practicing, the higher is their academic performance in science. As pointed out by Blowes [19] shows a positive link between participation in sport and academic performances that as players spent more time in practicing, the healthier and more active they are in understanding scientific concepts and developing scientific skills.

Indicative data further reveals that competition participated by varsity players received a positive significant relationship to their academic performance in mathematics whose computed  $r$  value is  $0.671$  bigger than the tabulated value at  $0.05$  level which is  $0.507$ . Such finding may be interpreted that the more number of competitions participated by players, the better is their academic performance in mathematics. The result of the study is supported by Reshma [20], according to her, Mathematics has become increasingly important in sports with the advancement of technology in recent years, it is useful in sports for everything, from calculating scores to average points, scoring goals, winning scores, developing strategies, and calculating probability that enhance numerical skill of student-athletes.

Moreover, the medals/trophies received by student-athletes manifests a negative significant relationship to academic performance in English with computed  $r$  value of  $-0.124$  greater than the tabulated value of  $0.104$  at  $0.05$  level. This may be explained by the situation that the lesser medals/trophies received by players from different competitions, the higher is their academic performance in English because they can spare more time in completing the requirements required by teachers in English as agreed by Munoz-Bullon [18] in

their studies the effect of awards received by athletes in relation to achievement in sport and academic performances.

It is noticeable that citations obtained by players registered negative significant relationship to academic performance in English with computed  $r$  value is  $-0.291$  at  $0.01$  and  $0.05$  level respectively. In the same manner, meet participated by student-athletes reveals significant correlation to English and science together with the skills that registered significant correlation to mathematics.

## CONCLUSIONS

In view of the foregoing significant findings of the study, the conclusions are drawn:

1. There is a significant relationship between profiles of respondents specifically the gender to academic performance of student-athletes in English subject including number of years practicing that is also significantly related to science. The null hypothesis is rejected.
2. There is a significant relationship between level of participation among student-athletes to team sports on experience such as competition participated, medals/trophies received, citations obtained and level of meet participated to academic performance in mathematics, English and Science respectively at  $0.05$  level. The null hypothesis is rejected.
3. There is a significant relationship between levels of participation among student-athletes on skills to academic performance in science. The null hypothesis is rejected.

## RECOMMENDATIONS

Based on the significant findings and conclusions of this study, the researcher recommends the following:

1. Since gender of varsity players revealed a significant relationship to academic performance in English, it is recommended that teachers in this subject would observe fairness in assigning task to students disregarding their gender by preparing an assessment plan fitted to their interest, and an intervention schedule that will give chances to players to complete such requirement. In the same manner school administrators may orient teachers in preparing important tasks that will give merit to athletes. In the same manner science teachers would help monitor coaches in preparing their schedule of practice for the entire school year to make them more scientific in their endeavour.
2. There is a need for coaches and academic teachers to agree on schedule of the training of varsity players by conferring on the details of the activities to be participated by them in a form of effective planning and evaluation of their performance. The monitoring result must be submitted formally to the school

administrator and sit down together in improving the schedule of players without sacrificing their academic subjects.

3. The result of this study shows that the level of participation among varsity players with regards to their skills is significantly related to their academic performance in science. This suggests that teachers in science may include the competencies in physical education to the subject for the players to realize that their participation in team sports serves as their practice environment of the theories learned in science. Curriculum planners would assess effectively the learning competencies in science and align it to the teaching of physical education.
4. That this study be replicated and validated in the public schools and colleges; and further investigation be made on the effect of respondents perception of role and other factors on their level of participation in different team sports without jeopardizing their academic performances.

## REFERENCES

1. Teare, G., & Marijke, T. (2021). *Sport Events for Sport Participation: A Scoping Review*. Front. Sports Act. Living, 19 May 2021. Sec. Sport, Leisure, Tourism, and Events. Volume 3 – 2021.
2. Annear, A., Sole, G., & Devan, H. (2019). What are the current practices of sports physiotherapists in integrating psychological strategies during athletes' return-to-play rehabilitation? Mixed methods systematic review. *Physical Therapy in Sport*, 38, 96-105. doi: 10.1016/j.ptsp.2019.04.018. Epub 2019 Apr 25
3. Dos, S., Marcel, L., Melissa, U., Cody, A. S., Robert, G. L., Brent, A., Bryan Mann, J., & Jay Dawes, J. (2020). *Stress in Academic and Athletic Performance in Collegiate Athletes: A Narrative Review of Sources and Monitoring Strategies*. Front. Sports Act. Living, 08 May 2020. Sec. Elite Sports and Performance Enhancement Volume 2 - 2020 | <https://doi.org/10.3389/fspor.2020.00042>
4. MU Health Care (2023). *Benefits of Sports for Adolescents*. University of Missouri Health Care. Copyright © 2023 — Curators of the University of Missouri. <https://www.muhealth.org/conditions-treatments/pediatrics/adolescent-medicine/benefits-of-sports>
5. Ishihara, T., Toshihiro, N., Koji, Y., Koichi, O., Masato, S., & Noriteru, M. (2020). Relationship of participation in specific sports to academic performance in adolescents: A 2-year longitudinal study. *SCANDINAVIAN JOURNAL OF MEDICINE & SCIENCE IN SPORTS*, 30(8), 1471-1482. Edited By: Stephen Harridge. Online ISSN:1600-0838. First published: 29 April 2020. <https://doi.org/10.1111/sms.13703>.
6. Cohn, Patrick (2023). *Does Pressure Affect Your Performance During Competitions?* Copyright © 2023 Dr. Patrick Cohn @ Sport Psychology Articles by Peak Performance Sports
7. Read-Bone, Natalie (2019). *Three Benefits to Joining a Sports Team or Society at University*. THE (Times Higher Education) Students. December 30, 2019. <https://www.timeshighereducation.com/student/blogs/three-benefits-joining-sports-team-or-society-university>
8. Keech, David (2020). *NFHS Outlines Benefits of High School Sports*. ON FOCUS, September 15, 2020 <https://www.onfocus.news/nfhs-outlines-benefits-of-high-school-sports/>
9. The 1987 Constitution of the Republic of the Philippine (1987, Section 19). *Official Gazette of the Republic of the Philippines*. <http://www.officialgazette.gov.ph>constitutions>
10. Aquino, John, M., & Mary Grace, R. (2022). The Relationship of Sports Participation in Academic Performance among College of Arts and Sciences Varsity Players. *Physical Education and Sports Studies and Research*, 1(2), PUBLISHED 2022-09-10. <https://doi.org/10.56003/pessr.v1i2.129>
11. Bhattacharya, A., & Priya, C. (2020). *A Comparison of Descriptive Research and Experimental Research*. PROJECT GURU: Get your projects done, May 18, 2020. <https://www.projectguru.in/a-comparison-of-descriptive-research-and-experimental-research/>
12. Meadows Grace, E. (2020). *Athletic Success and Its Influence on Freshman Enrollment*. University of South Carolina – Columbia. Senior Theses. 327. [https://scholarcommons.sc.edu/senior\\_theses/327](https://scholarcommons.sc.edu/senior_theses/327)
13. Goldsmith, Wayne (2023). *Tough Training – Ten Reasons Why Training has to be Tougher than Competition*. WG COACHING, May 12, 2023. <https://wgcoaching.com/tough-training/>
14. Olinger, Mary (2022). *4 Great Benefits of Sports Trophies and Awards*. SUBURBAN Custom Awards, posted March 15, 2022. <https://www.suburbancustomawards.com/2022/03/15/4-great-benefits-of-sports-trophies-and-awards/>
15. KU (2023). *Five Essential Life Lessons You Can Learn by Playing Sports*. The University of Kansas, School of Education & Human Sciences, June 01, 2023. <https://onlinesportmanagement.ku.edu/community/5-life-lessons-learned-from-sports>
16. MSU (2020). *Keeping Players Motivated with Great Practice Activities*. Sport Coaching & Leadership Blog, MSU-College of Education, November 18, 2020. <https://edwp.educ.msu.edu/sport-coaching-leadership/general-coaching-advice/keeping-players-motivated-with-great-practice-activities/>
17. Pinto-Escalona, T., Pedro, V., Esteban-Cornejo, I., & Martinez-De-Quel, O. (2022). Sport Participation and Academic Performance in Young Elite Athletes. *Int J Environ Res Public Health*,

- 19(23), 15651. PMC9737165. Published online 2022 Nov 25. doi: 10.3390/ijerph192315651
18. Muñoz-Bullón, F., Sanchez-Bueno, J. M., & Vos-Saz, A. (2017). The influence of sports participation on academic performance among students in higher education. *ELSEVIER: SPORT, Sport Management Review*, 20(4). [Htpps://doi.org/10.1016/j.smr.2016.10.006](https://doi.org/10.1016/j.smr.2016.10.006)
19. Blowes, M. (2022). *Sport during school linked to academic performance*. UNIVERSITY SYDNEY, in *Medicine & Science in Sports and Exercise Science*, 11 February 2022 <https://www.sydney.edu.au/news-opinion/news/2022/02/11/sport-during-school-linked-to--academic-performance.html>
20. Reshma, Amina (2022). *How Math Can Help Your Child Perform Better in Sports*. BYJU' S *FUTURE SCHOOL (BLOG)*, updated May 24, 2022. <https://www.byjusfutureschool.com/blog/how-math-can-help-your-child-perform-better-in-sports/>