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PHYSICAL ACTIVITIES PARTICIPATION AND ACADEMIC PERFORMANCE OF THE CASE STUDENTS OF COLEGIO DE LA PURISIMA CONCEPCION

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ABSTRACT

The relationship between physical activity and academic performance is a topic of interest in education and public health research. While the exact nature of this relationship can vary among individuals, there is evidence to suggest that regular engagement to physical activity can have a positive impact on academic performance. The main objective of this study was to determine the level of participation in physical activities and its relation to the academic performance of the CASE students of Colegio de la Purisima Concepcion. Specifically, the study was focused on finding answers to the following questions: 1) What is the socio-demographic profile of the respondents? 2) What is the level of participation in physical activities of the CASE students as a whole and in terms of sports and simple exercise? 3) What is the level of the academic performance of the CASE students? 4) Is there a significant difference in the level of participation in physical activities of the CASE students when grouped according to sex, year level, and program? 5) Is there a significant difference in the academic performance of the CASE students when groupedaccording to sex, year level, and program? and 6), Is there a significant relationship between the physical activity participation and the academic performance of the CASE students?The descriptive-correlation design was used in the study to determine the relationship between the level of participation in physical activities in terms of sports and simple exercises and the academic performance of the 130 students-respondents. A questionnaire, composed of three parts was used to gather data from the respondents which was validated by a panel of experts and was tested for reliability before it was distributed to the respondents. Prior to the distribution of the questionnaire, the researcher sought permission and approval to conduct the study from the dean of the CASE department. The data gathered were tabulated and analyzed using SPSS. Results revealed that considering the socio-demographic profile of the respondents, majority were females, first year level, and taking up Bachelor of Secondary Education program. As regards to the level of participation in physical activities of the respondents, the result was verbally interpreted as "high." Results also disclosed that the students involve themselves in sports, and they participate in sports-related school activities. The result further highlighted that participation in physical activities like doing simple exercises, interest the students in a usual manner, They involve themselves in physical exercises the most to improve their mental health and academic performance as well. However, they do less of hard exercises. They prefer light type of exercises. Findings on the academic performance of the students as a

whole, presented a grade point average of 1.79, interpreted as "very good," indicating that students in the CASE department have a commendable academic performance in their preliminary grade. They exude excitement in the first few months of the school days. There was no significant difference in the level of participation of the students in physical activities when they were grouped according to sex, year level and programs. Likewise, there was no significant difference in the academic performance of the students in terms of prelim grade weighted average when they were grouped according to sex. However, a significant difference was noted in the year level and programs. Finally, no significant relationship was found between the level of physical activity participation and the academic performance of the students. This means that participation in physical activities has no bearing in the academic performance of the students.

Keywords: Physical activities participation and academic performance

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1. Introduction

Education and public health researchers are interested in the connection between academic achievement and physical activity. There is evidence to suggest that regular physical activity can improve academic achievement, even though the precise nature of this association varies from person to person. The relationship between physical activity and academic performance is a topic of interest in education and public health research. While the exact nature of this relationship can vary among individuals, there is evidence to suggest that regular engagement to physical activity can have a positive impact on academic performance.

In order to find out how different kinds of physical activities and how it affected the academic performance of Korean teenage students, the study conducted by Wi-Yong-So (2012) showed that both boys' and girls' academic performance was positively connected with moderate physical activity, and boys' academic performance was positively correlated with intense physical activity. It is suggested that in order to support students' health and well-being and possibly improve their academic performance in the process, educational institutions and legislators should think about implementing physical activity programs in schools.

Ignacio and Buot (2017) carried out a study in the Philippines on the influence of physical exercise involvement on academic attainment in a few Philippine universities. The study was participated by thirty-six collegiate athletes and the findings showed a significant correlation between the student-athletes' academic achievement and their engagement in physical activities. It further reiterated that engaging in physical activity enhances athletes' understanding of scholastic performance, cognitive functions, and developing patience and rationality.

Participation in sports or structured physical activities can help students develop long life skills such as time management, discipline, and goal-setting. These skills can be transferable to academic settings and can lead to better academic performance. Engaging in organized sports or physical education programs can help students in acquiring lifelong abilities including goal-setting, discipline, and time management. These abilities can be applied in educational contexts and result in improved academic achievement.

It is important to remember from the aforementioned research that there is a variety of individual factors that might affect the association between physical activity and academic performance, such as age, sex, fitness level, and the frequency, intensity, kind, and duration of physical exercise. Even though regular exercise can improve academic achievement, it should be viewed as one

component of a comprehensive strategy for well-being that also takes into account a number of other elements.

Statement of the Problem

The main objective of the study was to determine the level of participation in physical activities and its relation to the academic performance of the CASE students of Colegio de la Purisima Concepcion. Specifically, the study sought to answer the following questions:

1. What is the socio-demographic profile of the respondents?
2. What is the level of participation in physical activities of the CASE students as a whole and in terms of sports and simple exercise?
3. What is the level of the academic performance of the CASE students?
4. Is there a significant difference in the level of participation in physical activities of the CASE students when grouped according to sex, year level and program?
5. Is there a significant difference in the academic performance of the CASE students when grouped according to sex, year level and program?
6. Is there a significant relationship between the physical activity participation and the academic performance of the CASE students?

Hypotheses

1. There is no significant difference in the level of participation in physical activities of the CASE students when grouped according to sex, year level and program.
2. There is no significant difference in the academic performance of the CASE students when grouped according to sex, year level and program.
3. There is no significant relationship between the physical activities participation and the academic performance of the CASE students.

Theoretical Framework

The study's theoretical foundation was based on the self-determination theory, which had surfaced from the research of psychologists Edward Deci and Richard Ryan. Deci and Ryan published their seminal work, Self-Determination and Intrinsic Motivation in Human Behavior, in 1985 (Deci & Ryan, 2000). They created a theory of motivation that contends that people are typically motivated by a desire to advance and find fulfilment. The theory of self-determination aims to elucidate the relationship between self-determination and motivation, positing that people are more inclined to act when they believe their actions will have an impact on the final result. According to the self-determination theory, persons can develop a sense of self-determination after their demands for autonomy, competence, and connection are met. The self-determination hypothesis states that when a person's needs for competence, autonomy, and connection are satisfied, they can begin to have a feeling of self-determination.

Conceptual Framework

This study was based on the concept that participation in physical activity enhances learning and develops physical, mental, and scientific skills among the students which ultimately improves their academic performance. This study used the questionnaire to determine the level of physical activity participation and level of academic performance of the research respondents. Certain variables such as the sports and exercise are independent variable that may affect the academic performance of the students. This diagram was presented to show the framework of the study.

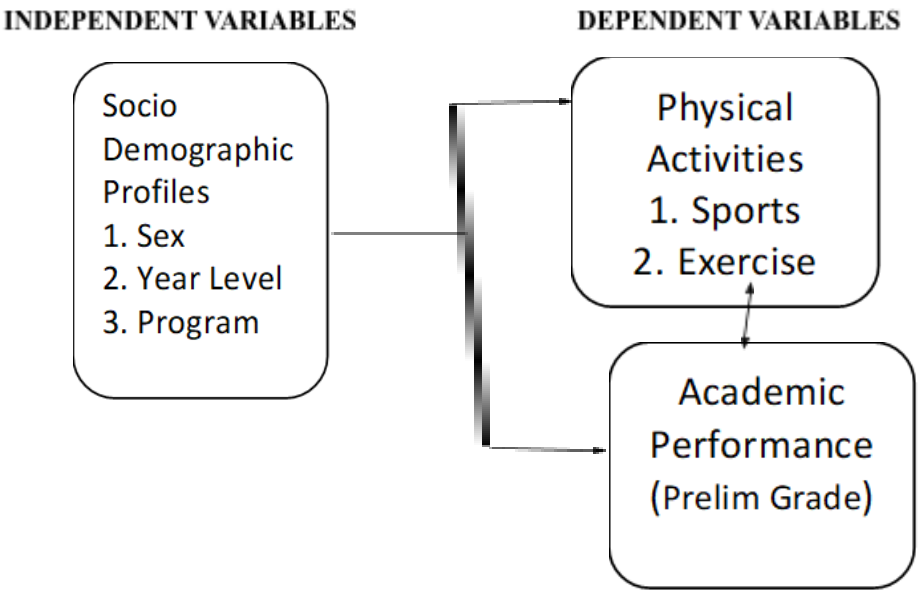

Figure 1. The schematic diagram showing the relationship of the variables in the study

2. Literature Review

Physical activities are bodily movements done by individuals from one place to another, bodily movement including during leisure time, for transporting or getting to and from places, or as part of a person's work. It has given many beneficial health well-being. These may include activities such as going to work and to include other activities one can do during his/her leisure time like walking, cycling, wheeling, sports, and other recreation and play mostly for being enjoyed for passion and at most satisfaction (Caspersen et al. 2020). Both moderate- and vigorous-intensity physical activity enhance health, and at times can be done at any level of skill and for enjoyment and satisfaction by everybody (Caspersen et al. 2020). Furthermore, there are various mental health benefits like improving brain health and cognitive development.

Physical activity has many well-established mental health benefits. These are published in the Physical Activity Guidelines for Americans in 2016 and include improving brain health and cognitive function the ability to think, a reduced risk of anxiety and depression, and improved sleep and overall quality of life for better overall health.

For students to engage in physical activity for extended periods, physical education programs are carefully thought out and executed effectively. It must improve their physical capabilities, health-related fitness, self-responsibility, and enjoyment of physical activity. Sports and physical exercise are widely encouraged for their beneficial effects on kids' physical health; childhood physical exercise is associated with a lower incidence of cardiovascular disease in youth and adulthood. Additionally, an increasing amount of research indicates that physical activity benefits several mental health outcomes, such as improved mood states and health-related quality of life (Joe Piggin, 2020).

Having the benefits for both physical and mental health, a firm conviction that regular physical activity is linked to improved brain function and cognition which in turn benefits scholastic achievement.

Foreign Studies

Promoting fitness is crucial in the European countries. The focus on incorporating physical activity into one's lifestyle and encouraging moderate-intensity exercise provide sedentary people with much-needed opportunities to improve their health by engaging in enjoyable, personally fulfilling physical activities that are easier to fit into their daily schedules. People should develop healthy lifestyle habits, such as frequent exercise, when they are still young. Their lifestyle choices can impact adulthood and lower the chance of illness (Wuest, 2018).

In most of the Asian countries, regular moderate physical activity can extend a person's life and improve their health. It can be difficult to determine what constitutes a healthy body weight and amount of physical exercise for kids, teens, and adults. It is evident that the nation's children and adults need to be more physically active and eat healthier meals, despite the inconsistent results in survey estimates for physical activity and overweight/obesity and the limits of the BMI (Miller et al. 2016).

In Hawaii, approximately one-third (35.8%) of the students met the recommended physical activity criteria for health by engaging in physical exercise for at least 60 minutes per day on five or more of the previous seven days - 43.8% of males and 27.8% of females were active, respectively. The focus should be on making physical activity joyful and fulfilling. In schools and other environments, a wide variety of both competitive and noncompetitive activities suitable for varying ages and skill levels should be offered. To increase and maintain underserved communities' engagement, further efforts must be done. Professionals in physical education, fitness, and sports ought to take the lead in the fitness movement and have a big say in how it develops (Ratchford, 2017).

According to WHO 2017, in Thailand, sports participation has increased dramatically on all fronts. Under the direction of governmental or private organizations, the number of kids and young adults participating in organized sports outside of the classroom has increased dramatically. One of the main areas of current exercise physiology study is the effects of fitness and physical activity on an individual's health. Chronic illnesses, many of which fall under the category of hypokinetic diseases, pose the greatest threat to people's health and well-being. Hypokinetic diseases are mostly caused by inadequate physical activity, sometimes in combination with poor nutritional habits. Most people can engage in physical activities as part of their lifestyle. Walking, shoveling, gardening, yard work, dancing, and a range of sports are examples of activities. These activities appeal to people who don't like doing strenuous things because of their mild intensity. People should make moderate-intensity physical activity a daily ritual and a fundamental component of their lifestyle.

In India, A study by Singh et al. (2015) who had limited their review to longitudinal studies to characterize the potential link between physical exercise and academic achievement. It was determined that children's academic performance is favorably correlated with physical activity; however, only two high-quality studies were found, and it was emphasized that further high-quality studies are needed. Future research should also thoroughly examine the explanatory mechanisms and the dose-response connection between the two variables.

Any movement of the body made possible by the skeletal muscles that requires more energy to create than at rest is considered physical activity. As a subset of physical activity, exercise is designed, planned, executed, concurrent, and intentional with the aim of achieving or sustaining physical fitness (Exercise and physical fitness, 2010; Exercise for children, 2010; WHO, 2010). The physical effort the body puts out during exercise leads to a healthier level of physical fitness that benefits both mental and physical health. Energy is necessary for the performance of all physical activities, including those connected to daily living, moderate-intensity exercise to enhance fitness, exercise to promote health, recreational sports, and highly competitive athletics.

In a study by Rassmussen 2013, he reiterated that better attention, more on-task behaviors, and enhanced academic achievement are among the post-engagement impacts that occur when physical activity is employed as a break from academic study time. More importantly, when given the bare minimum of instruction, teachers can effectively encourage students to engage in vigorous or moderate energy expenditure during physical activity breaks. They can also use these breaks as part of an extracurricular program or just to refocus students' attention during a lesson. Additionally, it has been demonstrated that after-school physical education programs can increase cardiovascular endurance. This increase in aerobic fitness has been linked to modest gains in academic performance and in the distribution of neural resources during basic performance on a working memory task.

In the last thirty years, a number of reviews and meta-analyses have discussed the connection between physical exercise, physical fitness, and cognition (which is broadly understood to include all mental functions). Most of these reviews have concentrated on the connection between academic achievement and physical fitness, which is a physiological characteristic that is typically described in terms of maximal oxygen consumption or cardio-respiratory capacity.

Reviews that have been published more recently have tried to characterize the impact of a single or acute physical activity session on academic achievement. These evaluations have concentrated on the impact of acute physical activity on adult cognition as well as the health of the brain in older persons. Age has been taken into account in several analyses (Einstener 2016).

Several studies primarily involving children have looked at the important connections between physical activity, athletic engagement, and academic achievement; physical activity and mental and cognitive health; and physical activity and nutrition. The majority of these reviews' findings are consistent with the conclusions made in Fedewa and Ahn's (2016) meta-analytic evaluation. The strongest correlations were discovered between reading performance and IQ, then between aerobic fitness and mathematical achievement. The link between physical exercise, fitness, and academic performance is arbitrated by a variety of cognitive performance measures, participant variables, and research design types. In relation to physical activity treatments, which took place both inside and outside of the school day, the most significant improvements in academic performance were associated with small peer groups consisting of approximately ten young people of a similar age.

Local Studies

A number of studies have found a high correlation between children's aerobic fitness and many memory domains (e.g., Chaddock et al., 2016a, 2017; Kamijo et al., 2017; Monti et al., 2017). In San Pablo National High School in Calamba, Laguna, a thorough analysis of a notable growing body of research indicating that physical activity may promote cognitive development while simultaneously highlighting the need for more research to fully comprehend the complex relationship between physical activity and cognitive function (Sibley et al. 2016).

When physical activity is applied as a break from focusing on academics, post engagement outcomes include better attention (Pituk, et al. 2019), improve on-task behaviors (Mahar et al., 2016), and enhanced academic performance (Donnelly and Lambourne, 2015). The contrast between 1st-grade students housed in a classroom with stand-sit desks and another classroom where the students could stand only at his/her decision turned out that children who were highly likely to stand, exerting significantly more energy than those who were seated were most likely being able to learn effectively (Benden et al., 2016). Teachers can provide physical activity breaks as part of a supplemental curriculum or simply as a way to restart student attention during a lesson (Kibbe et al., 2016).

Post-engagement effects include improved attention (Grieco et al., 2016; Bartholomew and Jowers, 2016), improved on-task behaviors (Mahar et al., 2016), and improved academic achievement (Donnelly and Lambourne, 2015). More significantly, instructors can incorporate physical activity breaks into their curricula or use them to merely refocus students' attention throughout a class (Kibbe et al., 2016). When given the opportunity to do so, and given the bare minimum of instruction, can effectively develop in pupils a vigorous or moderate energy expenditure (Stewart et al., 2017).

Additionally, it has been demonstrated that after-school physical education programs can enhance cardiovascular endurance. This rise in aerobic fitness has been linked to modest gains in academic performance (Fredericks et al., 2017) and the distribution of brain resources during basic working memory tasks (Kamijo et al., 2016).

In another study, a significant relationship between physical activity and cognition in school-age children (ages 4 to 18), indicating that physical fitness and physical activity levels may be related to cognitive outcomes during development. Eight assessment categories (perceptual skills, IQ, achievement, verbal tests, mathematics tests, memory, developmental level/academic readiness, and "other") can be linked to cognitive performance by engaging in physical activity. The results show a positive correlation between physical activity and all cognitive outcomes, with the exception of memory (Sibley and Etnier, 2015).

Despite the fact that this study focuses on motivational factors, the findings highlight the significance of enjoyment of participating in this type of instruction is one of the advantages of having a sports education program in every institution. Students would usually like to participate in physical education activities in this area, which Siedentop specifically created with a festive tone (Siedentop, 2014). A study by Wallhead, Garn, and Vidoni (2014) examined the impact of a Sport Education model curriculum on the motivation of high school students for extracurricular activities and physical education in order to bolster this idea.

Despite the fact that this study focuses on motivational factors, the findings highlight the significance of enjoyment or satisfaction and the function it plays in physical education. In this study, the sports education model and the multi-activity model are compared as teaching strategies. Two distinct classes were employed, one utilizing the Sport Education model of instruction and the other the multi-activity model. Four sports and thirteen twenty-five lessons per sport were taught to the sport education class in this study, the multi-activity model offers a bigger benefit when it comes to teaching sports in units of four to nine lessons, Wallhead, Garn, and Vidoni (2014), which is more in line with the conventional methodology.

A branch of kinesiology called exercise physiology describes the body's short-term biochemical responses to the stress of physical activity as well as how it adapts over time to repeated physical activity sessions. In this study, "exercise" refers to the combination of physical activity and diets with the aim of promoting increased levels of overall health, mental well-being, and physical fitness. Dieting is the practice of combining physical activity with a wide range of food intake to provide the nutrients necessary for an active, fulfilling, and healthful lifestyle (Miller, 2016). He stated that when trying to lose weight, dieters frequently combine diet with exercise, especially if they are overweight or obese. Consuming a range of meals that give you the nutrients you need to stay healthy, feel well, and have energy is known as healthy eating. Protein, carbs, fat, water, vitamins, and minerals are among the nutrients. Most people with an interest in physical education, whether as professionals or students, are focused on the continuous application of kinesiology's foundational knowledge.

As a part of society, sport has a big impact on social structures and procedures. Sport's role in the sociocultural process has recently been investigated and analyzed. Over the last ten years, there has been a growing focus on the important role that sport plays in physical activity. The idea behind this kind of research, according to Rivenes (2017), is that sport—a social component that has historically received little attention—is important and deserving of investigation. Furthermore, sport has recently gained some academic recognition, which has prompted investigation and inquiry.

As studies had shown, exercise and sports as physical activities have been taken into account while examining conventional social structures and social dynamics. Typical sociological interests include social processes including social status, success, social mobility, and social change, as well as social structures like the family, politics, religion, and economy. The focus of sport studies from a sociological perspective is on physical activities, which are frequently associated with sports, and the relationship and interaction between sport and the social order.

According to Harper (2018), the objective parts of academic subject matter and teaching methodology have taken center stage in physical education curricula. These aspects are primarily

concerned with statistically measurable aspects of human performance, such as the neuromuscular, mechanical, and physiological analysis of physical tasks. Consequently, people's primary perception of sport was as a physical activity rather than a social one.

With the exception of the history of physical education, courses that concentrate on the physical components of human performance, including exercise physiology and biomechanics, have historically been mandatory. However, courses that focus on the social science fields are frequently not. The sociological and psychological aspects of sport were essentially nonexistent in the physical education curriculum until recently (Khoury SR, et al. 2019). Not only have physical education teacher-training programs and the sociology discipline failed to promote scholarly interest in the socio-cultural study of sport, but so has kinesiology.

On the contrary, the unexpected result of state-mandated academic success testing has been a decrease in the possibilities for kids to engage in physical activity both inside and outside of the classroom. Some kids are taken out of physical education classes or recess to participate more in remedial or enriched learning experiences intended to improve their academic performance, in addition to the school moving away from physical education to allow kids to concentrate more time on academic subjects (Pellegrini and Bohn 2019).

Furthermore, several studies have shown that there is scant evidence to back up the claim that studying harder will improve exam performance. In fact, according to 11 out of 14 correlation studies, physical activity throughout the school day had a positive impact on academic achievement (Rasberry et al., 2019). Overall, a small but rapidly expanding body of research indicates that engaging in physical activity is associated with both physical and mental well-being (Hillman et al., 2018).

3. Research Method

A combination of descriptive, and correlational designs were used in this study. A descriptive design is used to describe the features of the population that the respondents represent or to explain the status or state of a population as it currently exists (Herera, 2019). This design was specifically employed to describe the respondents in terms of level of participation in physical activities and their academic performance. To determine if a relationship occurred between the participation in physical activities and academic performance, a correlational research design was used. Correlational study, to put it simply, aims to determine whether two or more variables are related to one another (McCombes, 2019).

The respondents of the study were composed of students from CASE department of Colegio de la Purisima Concepcion in the academic year 2022-2023, one of the vital processes to keep this study successful. The chosen respondents came from the different programs of the college in all year level. The questionnaire was used as the main data gathering instrument consisting of three parts. Part 1 gathered data on the socio-demographic profile of the students in terms of sex, year, and course. Part 2 consisted of questions that dealt with sports and simple exercises participation; and part 3 presented the grade weighted average in prelim of the respondents. The instrument was submitted to a panel for content validation. Content validation involves careful analysis of the items to determine whether or not they suit the data needed to answer the problem as well as their relevance to the study. The validation of instrument by the panel members who are experts in the content of the study is sufficient according to Calmorin (2016). After establishing the questionnaire with rating scale, it had undergone validity testing and was pilot tested for reliability. The questionnaire was subjected specifically for face and content validation. The validators involved were research specialists, linguists or grammarian, and statistician who were considered experts in their field of specialization.

To test the reliability of the questionnaire, it was pilot tested. It was administered to 30 students who had similar characteristics with that of the target respondents but were not part of the actual survey (Garrett, 2012). This number was considered adequate for the reliability test. After the content validation of the instruments, it was pre-tested to 30 students from other colleges who were not included in the study. The reliability coefficient was computed using Cronbach alpha because there was no right or wrong answer. According to Smith as cited by Payoso (1987), an instrument is reliable

if the reliability coefficient is .80 and above, not more than 1.0, then the questionnaire is valid and reliable. The reliability coefficient for the questionnaire was .855 which showed that it is reliable.

Prior to the actual data collection. The researcher wrote a request letter, duly signed by the Dean of the College of Arts, Sciences, and Education and research adviser, to ask permission, get approval, and follow protocols and guidelines. After the approval, the researcher sought permission from the students for their participation in the study. Then, the researcher personally administered the questionnaire to the respondents together with the adviser. In addition, the researcher was present during the administration of the questionnaire to ensure the one hundred percent retrieval of the instrument and to assist the respondents should they have inquiry, questions, or clarifications regarding the statements and indicators. Frequency and percentage count were used to describe the demographic profile of respondents. The mean was used to determine the level of participation in physical activities respondents in school. The analysis of variance was used to determine the difference in the level of participation in physical activities of the respondents when grouped according to sex, year, and course. The independent sample t-test was used to determine the difference in the academic performance when they are classified according sex, year, and course while the Pearson-r was used to determine the relationships between the physical activity participation and academic performance of the participants. The level of significance was set at alpha 0.05. All statistical data analysis was computed SPSS (Statistical Package for the Social Sciences) software program used by researchers in various disciplines for quantitative analysis of complex data.

4. Results and Discussion

Profile of the Respondents

Table 1 presents the socio-demographic profile of the respondents. Results show that in terms of sex, thirty-eight (29.2%) of the respondents are males and ninety-two (70.8%) are females. Considering the year, results show that forty-three (33.1%) of the respondents are first year; thirty-eight (29.2%) are second year; twenty-two (16.9%) are third year and twenty-seven (20.8%) are fourth year. Results further show that in terms of course, majority are from Bachelor of Secondary Education with seventy-two (55.4%) respondents followed by Bachelor of Arts in Political Science with 23 (17.7) respondents. From Bachelor of Elementary Education, there are eight (6.2%) respondents; Bachelor of Physical Education with fifteen (11.5%) respondents; Bachelor of Science in Psychology with eleven (8.5%) respondents, and lastly, Bachelor of Arts in Communication with one (.8%) respondent.

Table 1. Profile of the respondents.

Profile	Frequency	Percent (%)
Gender		
Male	38	29.2
Female	92	70.8
Total	130	100.0
Year		
1st Year	43	33.1
2nd Year	38	29.2
3rd Year	22	16.9
4th Year	27	20.8
Total	130	100.0
Course		
BSED	72	55.4
BPED	15	11.5
ABPolSci	23	17.7
BSPsych	11	8.5
ABCom	1	.8
BEED	8	6.2
Total	130	100.0

Level of Physical Activities Participation

Table 2 presents the level of physical activities participation of the CASE students as a whole and in terms of sports and simple exercise. The level of the physical activities as a whole has a grand mean of 3.79 interpreted as "high." Specifically, in terms of sports participation, data gathered present a mean of 3.86 and the verbal interpretation is "high." Likewise, in the component of simple exercises, the mean is 3.73 and the verbal interpretation is also "high."

Table 2. Level of Physical Activities Participation

Indicators	Mean	Verbal Interpretation
Sports	3.86	High
Simple Exercises	3.73	High
Grand Mean	3.79	High

Level of Physical Activities Participation in terms of Sports

The level of physical activities participation in terms of sports is presented in Table 3. Based on the data presented in Table 3 on the level of physical activities participation specifically in sports, statement number one (1), which states "I involve myself in sports" has the highest mean (4.21) verbally interpreted as "very high", while statement number seven (7), "I participate in any kind of sports" has the lowest mean (2.42) and verbally interpreted as "low." This shows that despite with the busy schedule of students they still find time to engage in sports that they prefer.

Table 3. Level of physical activities participation in terms of sports

Statements	Mean	Verbal Interpretation
1. I involve myself in sports.	4.21	Very High
2. I enjoy playing sports.	4.19	High
3. I participate in sports-related activities in school.	4.20	High
4. I understand that playing sports improves my academic performance.	4.15	High
5. I engage in sports to help improve my mental health.	4.11	High
6. I prefer to join sports than doing simple exercises.	3.98	High
7. I participate in any kind of sports.	2.42	Low
8. I am active in sports because it helps my grade.	3.19	Average
9. I love playing sports with friends and classmates.	4.05	High
10. I participate in sports to increase my confidence and mental being.	4.11	High
Grand Mean	**3.86**	**High**

The findings are supported by the study of Bullon (2017) where it showed that students who participate in organized sports earn higher grades. The data supports the notion that, in addition to being good for practitioners' health, sports help higher education institutions achieve their performance targets.

In another study, Lidner (2020) concurred that students in Hongkong with high self-ratings tended to participate more frequently and to a greater extent than students with lower self-reported performance. As indicated, students' active participation in sporting activities do not in any way affect their academic performance.

Level of Physical Activities Participation in terms of Simple Exercises

The level of physical activities participation in terms of simple exercises is shown in Table 4. Statement number one (1) which states "I involve myself in simple exercises" has the highest mean (4.12), verbally interpreted as "high" while statement "I like doing hard exercises" has the lowest mean (2.38), interpreted as "low."

Table 4. Level of physical activities participation in terms of simple exercises

Statements	Mean	Verbal Interpretation
1. I involve myself in physical exercises.	4.12	High
2. I enjoy exercising.	3.99	High
3. I exercise every day.	3.80	High

4.	I understand that exercising improves my academic performance.	4.01	High
5.	I engage in exercises to help improve my mental health.	4.03	High
6.	I prefer to do simple exercises than playing sports.	3.79	High
7.	I understand that doing exercises improves my whole being.	3.62	High
8.	I like doing hard exercises.	2.38	Low
9.	I enjoy exercising with friends and classmates	3.72	High
10.	I love doing exercise because I sweat a lot.	3.85	High
	Grand Mean	**3.73**	**High**

The result highlights that participation in physical activities like doing simple exercises interest the respondents in a usual manner, however, they do not do hard exercises. They prefer light type of exercises.

The study conducted by Zhang et al. (2017) reiterated that exercise increases the production of serotonin in attentiveness. Thus, pupils would grow happier and pay better attention in class if they exercise properly.

The contentions of Keating et al. (2020) further revealed that students who are more frequently engaged in strength exercise had significantly higher grade point average than those who are less engaged in sports. As can be observed those who are engaging in physical activities are more likely to be healthy in mind and body thus, there will be more focus for students to be more adept in their studies.

These results are consistent with the study conducted by Pestana et al. (2018), which discovered that participants in sports had a higher likelihood of performing better in the classroom than not participating in sporting events. Additionally, Haapala et al. (2017) documented the impact of physical activity on reading proficiency, putting forward a number of cognitive explanations for these benefits, including greater blood flow to the brain (particularly the hippocampus), improved neuro electric processes, and the growth of attention span and memory capacity (Donnelly et al., 2016).

Level of Academic Performance

The level of academic performance of the CASE students is shown in Table 5. The respondents of the study as a whole, presented a grade point average of 1.79, interpreted as "very good." This result shows that students in CASE department have a commendable academic performance in their preliminary grade. They exude excitement in the first few months of the school days.

Table 5. Level of Academic Performance

Indicator	Mean	Verbal Interpretation
Academic Performance	1.79	Very Good

Differences in the Level of Physical Activities Participation in terms of Gender, Year, and Course

The differences in the level of physical activities participation in terms of gender, year, and course is shown in table 6.

Table 6. The differences in the level of physical activities participation in terms of gender, year, and course

Profile	f/t-Value	Significant Value	Probability
Gender	0.511	0.547	Not Significant
Year level	0.077	0.973	Not Significant
Course	1.192	0.317	Not Significant

Table 6 displays a no significant difference in the level of physical activities participation of students when they are grouped according to gender because the obtained t-value of 0.511 has a significant value of 0.547 which is higher than 0.05 alpha. The null hypothesis which states that there is no significant difference in the level of physical activities participation of students when grouped according to gender is accepted. This means that regardless of gender, the students have the same level of participation in physical activities.

According to Zhang et al. (2023), both males and females had increased their academic achievements or had improved their scholastic record academically when engaging in sporting activities. Thus, regardless of gender, there will be no significant differences in terms of their interests and participation in sporting events.

In the study of Burns et. al., (2020), it has been revealed that for racial/ethnicity, age, sex, and BMI, adolescents who participated in one or more sports teams over the previous year also reported higher academic achievement (A's and B's) compared with adolescents who did not participate in any sports teams, even after adjusting for dietary habits, lifestyle choices.

Results also display a no significant difference in the level of physical activities participation of students when grouped according to year level because the obtained t-value of 0.077 has a significant value of 0.973 which is higher than 0.05 alpha. The null hypothesis which states that there is no significant difference in the level of physical activity participation of students when grouped according to year is accepted. This means that regardless of year level, respondents have the same level of participation in physical activities.

The contentions of Burns, Yang Bai and Rosseu (2018) stated that regardless of the year level of education the effects of sporting activities on the academic performance of the students need not matter. In other words, the passion of sporting events to young and old are the same. When students at such young age were engage in sports it becomes a natural actuation for them that joining in sporting activities in the future comes naturally as they were accustomed to it. In the area of having year level sporting activities, the study of Burns et al. (2018) reiterated that regardless of year level participation on improvement to scholastic achievement need not matter.

Results further show that there is no significant difference in the level of physical activities participation of students when grouped according to course because the obtained t-value of 1.192 has a significant value of 0.317 which is higher than 0.05 alpha. The null hypothesis which states that there is no significant difference in the level of physical activities participation of students when respondents are grouped according to course is accepted. This means that regardless of course, students have the same level of participation in physical activities. Their views and motivation in joining sporting events matters.

Differences in the Level of Academic Performance and Some Variables

Table 7. Difference in the level of academic performance in terms of gender, year and course.

Profile	f/t-Value	Significant Value	Probability
Gender	-0.997	0.684	Not Significant
Year level	4.549	0.005	Significant
Course	3.797	0.003	Significant

Results show that there is no significant difference in the level of academic performance of students when grouped according to gender because the obtained t-value of -0.997 has a significant value of 0.684 which is higher than 0.05 alpha. The null hypothesis which states that there is no significant difference in the level of academic performance of students when grouped according to gender is accepted. This means that regardless of gender, students have the same level of participation in physical activities.

The explanation of Escalona (2022) in his study said that both men and women had the desire of fulfilling their sense of satisfaction like in men who wanted to create social integration. Males place a higher value on the availability of sports facilities, —like the gym. On the contrary, results show that

the decision to participate in sports and the frequency of sports participation of males and females are affected by different factors. Females evolve in greater responsibilities in the future like child rearing and household chores. While males may retain their interest in sports.

Results also reveal that there is a significant difference in the level of academic performance of students when grouped according to year because the obtained t-value of 4.549 has a significant value of 0.005 which is lower than 0.05 alpha. The null hypothesis which states that there is no significant difference in the level of academic performance of student when grouped according to year is rejected.

This result on the academic performance and year level indicates that respondents have different levels of academic performance based on their grade weighted average. Based on the mean data, the 4th year level students have low grade weighted prelim grade compared to other year level which is higher and similar to each other. This can be a manifestation of the challenges and hardships that 4th year students experienced, for they are about to graduate. More difficult major courses and load of requirements are not easy to comply with.

Along these similar lines, a longitudinal study cited in the study of Escalona et al. (2022) found that doing sports one year later predicted improved academic achievement. Playing individual sports or sports requiring sophisticated motor abilities in particular appeared to be linked to better academic standing. Therefore, it would make sense to speculate that young top athletes, who arguably reach the highest physical activity levels, the best levels of cardiorespiratory fitness, and the highest levels of performance, may outperform the general population academically.

Results further show that there is a significant difference in the level of academic performance of the respondents when grouped according to course because the obtained t-value of 3.797 has a significant value of 0.003 which is lower than 0.05 alpha. The null hypothesis which states that there is no significant difference in the level of academic performance of students when grouped according to course is rejected.

This result indicates that students have different levels of academic performance based on their grade weighted average. CASE students have six programs with different students' capability. This only shows a diversity of student-learners in terms of their achievement and accomplishments in the classrooms. In other words, when it comes to joining sports events, the views or interest of the respondents vary.

Relationship between Physical Activities Participation and Academic Performance

The relationship between the physical activities participation and academic performance of the respondents is presented in Table 8.

Variable	N	Pearson's	Significance Value	Probability
Physical Activities Participation Academic Performance	13	0.102	0.249	Not significant

Data show that there is no significant relationship between the level of physical activities participation and academic performance of the respondents because the obtained Pearson's r value of 0.102 has a significant value of 0.249 which is higher than 0.05 alpha. The null hypothesis which states that there is no significant relationship between the level of physical activities participation and academic performance of the students is accepted.

The result is supported by the study of Kohl HW III (2013) which stated that there was no correlation found between muscle strength and flexibility. Those involve in sports assert that they can perform effectively in academic matters since they have received the necessary training to increase drive, tenacity, and self-assurance. However, occasionally, athletes cannot manage their time well enough to succeed academically (Reyes, 2020). In view of the result, the sports and simple exercise and

academic matters not significantly related, would mean that if students will be joining sporting events it will not necessarily affect their academic performance.

5. Conclusion and Implications

Based on the findings of this study, the following conclusions were drawn: Students engage in physical activities in usual regular manner. They do sports and simple exercise as they please with no pressure. The academic performance of students is remarkably very good. They quite excel in their studies and achieve their goals. Participation in physical activities like sports and simple exercises do not vary regardless of gender, course and year level; students engage in sports and simple exercises at the same level. The prelim grade weighted average of students coming from different programs and levels vary, and as to gender, they don't vary. This study found no significant relationship between the level of physical activities participation and the academic performance of students. This study concludes further that participation in sports and simple exercises does not affect or relate to the academic performance of the students.

Students' participation in physical activities at school can have positive impact as well as potential challenges in their academic performance. Sports can boost attention, memory, and problem-solving skills which can be beneficial in academic learning. Added to that, with regular physical activity, students stress level may also be reduced – making them more focused and ready to learn. Participation in sports can also foster self-discipline, time management, goal setting, and teamwork which are valuable in a positive academic performance. On the other hand, in some cases, excessive focus on physical activities like sports might lead to neglecting academic responsibilities. Stress and fatigue due to demanding sports schedules and intense training for competitions can have potential negative effects in the students' academic performance.

While physical activities participation can enhance the academic performance of the students, it is necessary to address potential challenges and ensure a balanced approach. Participation in physical activities depends on the individual student, the specific sport or form of physical exercises they are participating in, and how they handle the challenges encountered. Although this study proves that participation in sports and simple exercises do not constitute to the academic performance of students, but it has great effect on physical, social, and emotional well-being of an individual.

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