AJPESH 3 (2) (2023): 99-109 e-ISSN 2797-0426
ACPES Journal of Physical Education, Sport, and Health http://journal.unnes.ac.id/sju/index.php/ajpesh

Senior High School Students: Their Fitness Level and Their Academic Performance

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Submitted: 2023-08-14. Revised: 2023-10-05. Accepted: 2023-12-08

Abstract. Adolescence is a common experience for adolescents worldwide, preparing them for the future and developing academic performance. In the Philippines, increasing educational accountability and the No Child Left Behind Act have reduced physical education classes, affecting students' fitness and cognitive development. Physical fitness plays a crucial role in academic performance, as it increases blood flow, oxygen extraction, and pulmonary ventilation. Improved cardiorespiratory fitness reduces depression, anxiety, and self-esteem, leading to better academic performance. Play is essential for learning, and physical activity improves the cardiovascular, vascular, metabolic, endocrine, and immune systems. Adolescent sedentary lifestyles, caused by gadgets, can lead to poor academic performance. Hence, the purpose of this study is to examine the relationship between students' physical fitness levels and academic performance in Senior High School students officially enrolled in S.Y 2022-2023.

Key words: Fitness Level, Academic Performance , Senior High School Students

How to Cite: Lacasan, J., Lacasan-Nagba, J. (2023). Senior High School Students: Their Fitness Level and Their Academic Performance. *ACPES Journal of Physical Education, Sport, and Health*, *3*(2), 99-109.

DOI: http://dx.doi.org/10.15294/ajpesh.v3i2.73112

INTRODUCTION

Adolescence to a general shifting of time in school away from physical education to allow more time on academic subjects, some children are withheld from physical education classes or recess to participate in remedial or enriched learning experiences designed to increase academic performance (Pellegrini and Bohn, 2021; Overall, a rapidly growing body of work suggests that time spent engaged in physical activity is related not only to a healthier body but also to a healthier mind (Hillman et al.)

When physical activity is used as a break from academic learning time, post-engagement effects include better attention, increased on-task, and improved academic performance. Further, after-school physical activity programs have demonstrated the ability to improve cardiovascular endurance, and this increase in aerobic fitness has been shown to mediate improvements in academic performance as well as the allocation of neural resources underlying performance on a working memory task (Kamijo et al.)

Early research in South Australia focused on quantifying the benefits of physical activity and physical education during the school day; the benefits noted included increased physical fitness, decreased body fat, and reduced risk for cardiovascular disease. A longitudinal study in Trois-Rivières, Québec, Canada, tracked how the academic performance of children from grades 1 through 6 was related to student health, motor skills, and time spent in physical education.

In a special issue of Research Quarterly for Exercise and Sport (2010), multiple articles describe the current state of physical fitness among children in Texas; confirm the associations among school performance levels, academic achievement, and physical fitness; and demonstrate the ability of qualified physical education teachers to administer physical fitness tests. Also, using data from Texas schools, Van Dusen and colleagues (2011) found that cardiovascular fitness had the strongest association with academic performance, particularly in mathematics, over reading. For children in a school setting, regular participation in physical activity as part

of an after-school program is particularly beneficial for tasks that require the use of working memory (Kamijo and colleagues.)

METHOD

Research Design

The researcher used the descriptive-correlational research design to determine the relationship between two variables which are fitness level and academic performance among senior high school students of Iligan City National High School where the research was conducted. The date of implementation of the study was on June 2018 to November 2018. The researcher chose to conduct the study in Iligan City National High School because it offers Senior high school Sports track students and the only secondary school that offers Sports track curriculum in the city.

In this study, the researchers used a standardized Physical Fitness Tests with corresponding standardized score scale or norms for the evaluation of the respondents' Physical Fitness tests results. Students' academic performance is the reflected average grades in their first and second quarter marked grades in form 138 as the whole 1st semester.

The Population

The respondents of this study were the ABM, STEM, HUMSS, TVL and SPORTS Track adolescent (between ages 16-25, World Health Organization) senior high school students officially enrolled in S.Y 2022-2023.

Instrumentation

Standardized Physical Fitness Tests with corresponding standardized score scales or norms were used to evaluate the respondents' Physical Fitness results. The standardized Physical Fitness Test (PFT) by Cagas, J.Y. (2016, January 19) in DepEd manual. The manual is composed of eleven (11) components with corresponding tests, namely;

Tests for Health-related Fitness

Body composition (BMI)
1.2 Flexibility (Sit-and-Reach)
1.3 Cardiovascular fitness (3-minute step test)
1.4 Muscular fitness (Push-up)
1.5 Muscular strength (Planking)

2. Tests for Skill-related Fitness

2.1 Speed (40-m Sprint)
2.2 Leg power (Standing long jump)
2.3 Agility (Hexagon Agility Test)
2.4 Reaction time (ruler Drop Test)
2.5 Coordination (paper ball bounce Test)
2.6 balance (one-leg balance test)

The respondents of this study performed the following tests mentioned. This instrument was used to evaluate the physical fitness level of the respondents.

Data Collection Procedure

The researcher set a schedule for the respondents on when to conduct a Physical Fitness Test (PFT) using the standardized physical fitness test with a corresponding score scale to determine the physical fitness level of each respondent. When the PFT was done, the researchers asked the advisers of the respondents to gather their first semester average grades as a basis for the academic performance of the respondents. When the respondents' physical fitness test results were available, and the academic performance of the respondents was identified as reflected in form 138, the researcher then consulted a reliable statistician to check the significant relationship between the two variables statistically.

Statistical Treatment

Using Statistical Package for the Social Science (SPSS) version 2.0., data collected were analyzed as follows; *frequency and percentage*, to determine the profile of the respondents and *mean* to determine the respondents' sports fitness skill performance, *Pearson correlation coefficient*, to test the relationship between fitness level and Academic Performance of the respondents.

RESULT AND DISCUSSION

The profile of the respondents in this study consisted of the following; age, gender, respondents' SHS strand, family income, and percentage of physical fitness in terms of skill-related and health-related components.

Table 1. Frequency and Percentage Distribution of Respondents' Age

Age		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	16.00	3	3.0	3.0	3.0
	17.00	21	21.0	21.0	24.0
	18.00	65	65.0	65.0	89.0
	19.00	9	9.0	9.0	98.0
	20.00	1	1.0	1.0	99.0
	23.00	1	1.0	1.0	100.0
	Total	100	100.0	100.0	

Table 1 presents the respondents' age that shows 65 out of 100 or 65% of the sampled senior high school students from the Iligan City National High School are 18 years old. According to the data gathered, ages 20 and 23 years old are the least age group found among the respondents garnering only 1% out of 100 % of the respondents. This indicates that most of the respondents were able to take their senior high school class on the preferred age starting at 16 years old.

Accordingly, more than half of the respondents are 18 years old and in Grade 12 class. Thus, the least age group of respondents ages 20 and 23 may have encountered problems causing them not to be in school at an early age. Even though there is a law that is enacted in the year 1988 **"**Republic Act No. 6655 An Act Establishing and Providing For A Free Public Secondary Education and Other Purposes", most low-income families can't afford to send them to school.

Respondents' Sex

The respondents' gender is presented in Table 2; it shows the gender distribution of the respondents, frequency, and percentage distribution belonging to each gender category.

Table 2. Frequency and Percentage Distribution of Respondents' Sex

Sex	Frequency	Percent	Valid Percent	Cumulative Percent
Male	43	43.0	43.0	43.0
Female	57	57.0	57.0	100.0
Total	100	100.0	100.0	

Table 2 clearly shows that 57 out 100 of the total number of respondents' sampled senior high school students from the Iligan City National High School are female and 43 out 100 sampled senior high school students are male. Maybe this happen because most strands that is offered in Iligan City National High School are most preferable by female students, thus some male students preferred to enrolled themselves to those courses that is more preferable by men.

Respondents' Strands

The respondents' strand is presented in Table 3 that shows the total number of respondents according to strand, its frequency and percentage distribution belonging to each strand.

Table 3. Distribution of the Respondents According to their Strands

Strand		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Sports	20	20.0	20.0	20.0
	TVL	20	20.0	20.0	40.0
	STEM	20	20.0	20.0	60.0
	HUMSS	20	20.0	20.0	80.0
	ABM	20	20.0	20.0	100.0
	Total	100	100.0	100.0	

Table 3 shows that the 100-target sample were divided equally for the five (5) strands offered in the Iligan City National High School, these are Sports Track, TVL, STEM, HUMSS, and ABM. Twenty samples from each strand. There are 7 males and 13 females for the ABM respondents', 8 males and 12 females for HUMSS respondents', 12 males and 8 females for STEM respondents. For the TVL respondents there's a male and consists of 19 females, Sport Track has 15 males and 5 female respondents.

Respondents' Family Monthly Income

Table 4. Family Monthly Income

Family Income		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	10,000 below	70	70.0	70.0	70.0
	10,000 to 15,000	13	13.0	13.0	83.0
	15,000 to 20,000	10	10.0	10.0	93.0
	20,000 above	7	7.0	7.0	100.0
	Total	100	100.0	100.0	

Table 4 shows the family income of the senior high school students from Iligan City National High School. As the table presented, 70 out of 100 or 70% of the students' family income only earns 10,000 below per month.

This is possible because most low income generating families preferred to enrol their children in a public school. The family income, high or low, can have its impact on student's achievement in all their learning years. Since they are in their early years, their family incomes can affect their education (Humlum, 2011).

Some students from low income have difficulties to understand or learn as fast as others. Their vocabulary can be less and not that much as the other students from different background. Also, their way of learn and understand are different from others, because their parents may not help them at home or they have single parent (Jensen, 2013).

In addition, there were only 7 % respondents who checked higher earning salary which is 20,000 and above. Thus, this indicates that most family of the senior high school students of Iligan City National high School are earning below the minimal monthly income which teachers and other stake holders must be aware of.

Percentage of Physical Fitness Sport: Health Related

Table 5. Distribution of Respondents' Cardiovascular Fitness

Cardiovascular Fitness		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Poor	21	21.0	21.0	21.0
	Poor	19	19.0	19.0	40.0
	Below Average	20	20.0	20.0	60.0
	Average	15	15.0	15.0	75.0
	Above Average	12	12.0	12.0	87.0
	Good	4	4.0	4.0	91.0
	Excellent	9	9.0	9.0	100.0
	Total	100	100.0	100.0	

Table 5 shows that most of the sampled senior high school students' cardiovascular fitness are very poor, poor and below average which accumulates 60% or 60 out 100 sampled senior high school students and only 40% of the sampled students are average, above average, good and excellent.

Study showed that an estimated 7.5 million adolescents (34 %) and 8.5 million adults (14%) have poor fitness. Prevalence of poor fitness was higher in adult females (16%) than males (12 %) (Carnethon, 2005). By this in can be clearly realized that females have a higher prevalence of having poor fitness than men. According to British Heart Foundation risk factors for cardiovascular disease are particular habits, behaviours, circumstances or conditions that increase a person's risk of developing cardiovascular disease**,** including lack of exercise, unhealthy eating, smoking, diabetes, age and family history.

Also, the students nowadays didn't really engage themselves on any physical activity because they prefer to spend their leisure time on social media, online games and other internet stuff.

Table 6. Distribution of Respondents' Muscular Endurance

Muscular Endurance		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Poor	40	40.0	40.0	40.0
	Poor	37	37.0	37.0	77.0
	Below Average	1	1.0	1.0	78.0
	Average	16	16.0	16.0	94.0
	Good	5	5.0	5.0	99.0
	Excellent	1	1.0	1.0	100.0
	Total	100	100.0	100.0	

Table 6 shows that most of the sampled senior high school students' muscular endurance are very poor and poor which accumulates 77% or 77 out 100 sampled senior high school students and only 22% of the sampled students are average, above average, good and excellent.

According to an article from Personal Touch Fitness muscular endurance is the ability of a muscle to repeatedly exert force against resistance. Performing multiple repetitions of an exercise is a form of muscular endurance, as is running or swimming. If your muscles have to contract in a similar pattern more than one time, you are using muscular endurance.

To have a better muscular endurance an individual should have a regular exercise such as weight training, thus it can be seen on the table that mostly of the senior high school students have poor muscular endurance maybe because they don't engage themselves to any kind of physical activities regularly.

Table 7. Distribution of Respondents' Muscular Strength

Muscular Strength		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Poor	6	6.0	6.0	6.0
	Poor	8	8.0	8.0	14.0
	Below Average	24	24.0	24.0	38.0
	Average	60	60.0	60.0	98.0
	Above Average	2	2.0	2.0	100.0
	Total	100	100.0	100.0	

Table 7 shows that 60 out of 100 or 60% of the sampled senior high school students' muscular strength is average. Since most of the respondents ages 16-23, studies shows that another factor over which we have little control is age. Also people of all ages can increase their muscle size and strength as a result of a safe and effective strength training program. However, the rate of strength and muscle gain appears to be greater from age 10-20, the years of rapid growth and development. After reaching normal physical maturity, muscular improvements usually don't come as quickly.

Table 8. Distribution of Respondents' Flexibility

Flexibility		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Poor	1	1.0	1.0	1.0
	Below Average	12	12.0	12.0	13.0
	Average	9	9.0	9.0	22.0
	Above Average	9	9.0	9.0	31.0
	Good	3	3.0	3.0	34.0
	Excellent	66	66.0	66.0	100.0
	Total	100	100.0	100.0	

Table 8 shows that 66 out of 100 or 66% of the sampled senior high school students' flexibility is excellent. Since most of the respondents are females it can be easily realized why the result of the respondents' flexibility test is excellent because female are more flexible than male

According to Gummerson, there are 3 reasons why female is more flexible than male because of genetics, sports played and psychological.

Generally, men have larger frames and higher testosterone levels than women. In studies, higher testosterone levels are associated with muscle gain and weight loss. This means that men will generally be leaner and stronger than women. The larger frame of men means that they have relatively bigger hearts and lungs which help a lot with cardiovascular exercise. Estrogen causes women's bodies to hold more fat than men.

Table 9. Distribution of Respondents' Body Composition

Body Composition		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Obese	2	2.0	2.0	2.0
	Severely Obese	4	4.0	4.0	6.0
	Underweight	25	25.0	25.0	31.0
	Healthy Weight	67	67.0	67.0	98.0
	Overweight	2	2.0	2.0	100.0
	Total	100	100.0	100.0	

Table 9 shows that 67 out of 100 or 67% of the sampled senior high school students' body composition is healthy; however there are 25 students who are underweight which might be high for a given sample. Body composition refers to the amount of lean body mass (muscle) and fat mass in the body. Below is a chart indicating the normal percentage of body weight from specific tissues. Many factors influence body composition, including gender, age, diet, activity level, and genes.

Percentage of Physical Fitness Sport: Skill Related Components

Table 10. Distribution of Respondents' Agility

Agility		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Poor	9	9.0	9.0	9.0
	Below Average	32	32.0	32.0	41.0
	Average	47	47.0	47.0	88.0
	Above Average	8	8.0	8.0	96.0
	Good	1	1.0	1.0	97.0
	Excellent	3	3.0	3.0	100.0
	Total	100	100.0	100.0	

Table 10 shows that 47 out of 100 or 47% of the sampled senior high students' agility is average, however there were 41 students who are below average and poor in terms of their agility which might be a significant figure. Agility is an extremely important skill for field and court sport athletes. The ability to change direction quickly and safely in response to stimuli is crucial for high level performance and limiting injury potential.

Thus, sports track students must have above average level of agility since this group of students will always be exposed in different forms of activities designed in their curriculum. Agility is an extremely important skill for field and court sport athletes. 41 students who are below average and poor in terms of their agility which might be a significant.

Table 11. Distribution of Respondents' Balance

Balance		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Poor	3	3.0	3.0	3.0
	Poor	49	49.0	49.0	52.0
	Below Average	21	21.0	21.0	73.0
	Average	12	12.0	12.0	85.0
	Above Average	3	3.0	3.0	88.0
	Good	2	2.0	2.0	90.0

Excellent	10	10.0	10.0	100.0
Total	100	100.0	100.0	

Table 11 shows that 49 out of 100 or 49% of the sampled senior high students' balance is poor. Only 27 out of 100 sampled students has an average, above average, good and excellent in terms of their balance. 73 out of 100 are below average, poor and very poor in their balancing.

In biomechanics, balance is an ability to maintain the line of gravity (vertical line from centre of mass) of a body within the base of support with minimal postural sway. Sway is the horizontal movement of the centre of gravity even when a person is standing still.

A certain amount of sway is essential and inevitable due to small perturbations within the body (e.g., breathing, shifting body weight from one foot to the other or from forefoot to rearfoot) or from external triggers (e.g., visual distortions, floor translations). An increase in sway is not necessarily an indicator of dysfunctional balance so much as it is an indicator of decreased sensorimotor control.

Table 12. Distribution of Respondents' Power

	Power	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Poor	1	1.0	1.0	1.0
	Poor	27	27.0	27.0	28.0
	Below Average	40	40.0	40.0	68.0
	Average	17	17.0	17.0	85.0
	Above Average	4	4.0	4.0	89.0
	Good	8	8.0	8.0	97.0
	Excellent	3	3.0	3.0	100.0
	Total	100	100.0	100.0	

Table 12 shows that 40 out of 100 or 40% of the sampled senior high students' power is below average. Only 32 out of 100 sampled students has an average, above average, good and excellent in terms of their power. 68 out of 0100 are below average, poor and very poor power. Characterized by speed and strength, power almost always determines the kind of motion you possess during any sports or activity. Highly definitive of motor controls, coordination serves as the contributing factor for establishing the movement skills.

Table 13. Distribution of Respondents' Reaction Time

	Reaction Time	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Poor	1	1.0	1.0	1.0
	Below Average	11	11.0	11.0	12.0
	Average	18	18.0	18.0	30.0
	Above Average	43	43.0	43.0	73.0
	Good	7	7.0	7.0	80.0
	Excellent	20	20.0	20.0	100.0
	Total	100	100.0	100.0	

Table 13 shows that 43 out of 100 or 43% of the sampled senior high students' reaction time is above average. 88 out of 100 sampled students has an average, above average, good and excellent in terms of their reaction time. Only 12 out of 100 has a below average and poor reaction time. Simple reaction time (SRT) tests, where subjects simply respond as fast as possible to the occurrence of a stimulus, are among the most basic measures of processing speed.

SRTs were first studied by Francis Galton in the late 19th century (Johnson et al., 1985). More recent studies have shown significant correlations between SRT latencies of processing speed and measures of fluid intelligence (Deary et al., 2001; Sheppard and Vernon, 2008). Indeed, Jensen (2011) argued that SRT latencies provide one of the most objective metrics for comparing processing speed, and hence fluid intelligence, across different populations.

Table 14. Distribution of Respondents' Coordination

Coordination		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Poor	4	4.0	4.0	4.0
	Poor	85	85.0	85.0	89.0
	Below Average	1	1.0	1.0	90.0
	Average	6	6.0	6.0	96.0
	Good	1	1.0	1.0	97.0
	Excellent	3	3.0	3.0	100.0
	Total	100	100.0	100.0	

Table 14 shows that 85 out of 100 or 85% of the sampled senior high students' coordination is poor. Only 10 out of 100 sampled students have an average, above average, good and excellent in terms of their coordination skills.

A study was conducted in 1976 to explore factors that affected the coordination of programs and services between community colleges and area vocational technical schools in Pennsylvania. Further, an examination of the opinions of administrators from both of these institutional settings was conducted in order to give additional insight to this area. Varying levels and areas of coordination were identified among the community colleges and area vocational technical schools surveyed. Differences of opinion among administrators were identified to possible areas of coordination as well as factors that could affect coordination.

Table 15. Distribution of Respondents' Speed

Speed		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very Poor	2	2.0	2.0	2.0
	Poor	65	65.0	65.0	67.0
	Below Average	6	6.0	6.0	73.0
	Average	2	2.0	2.0	75.0
	Above Average	5	5.0	5.0	80.0
	Excellent	20	20.0	20.0	100.0
	Total	100	100.0	100.0	

Table 15 shows that 65 out of 100 or 65% of the sampled senior high students' speed is poor. Only 27out of 100 sampled students has an average, above average, good and excellent in terms of their speed. For many decades it was believed that the speed of an athlete was all about genetics. Genetics clearly play a part in an athlete excelling in speed.

However, through research and experience, it is now known that genetics is considered to be only one factor in determining playing speed potential. Epstein (2013) looked at the "sports gene" in exceptional athletes. He traveled worldwide looking at nature versus nurture in extraordinary athletes. He concluded that both genetics and training are equally essential factors of exceptional athletic success.

Sampled Senior High School Students' Significant Relationship between the Dependent and Independent Variables.

Table 16. Results of Test Statistics on the Significant Relationship between the Dependent Variable, Academic Performance and Independent Variables, Demographic Profile.

Dependent Variable	Independent Variables	p-value	Remark
Academic Performance	Age	0.290	Not Significant Relationship
	Sex	0.068	Not Significant Relationship
	Strands	.000	Significant
	Family Monthly Income	0.059	Not Significant Relationship

H_o: There is no significant relationship between the Dependent Variable Academic Performance and independent Variable, Students' Profile.

Table 16 shows that there is no significant relationship between the dependent variable, academic performance and the independent variables, Age, Sex and Family Income. On the other hand, there is a significant relationship between the independent variable academic performance and the dependent variable, strands.

During the data gathering, we have observed most of students under the strand of STEM performed well than those who are in the HUMSS, ABM, TVL and Sport Track. Using the sufficient evidence above we can say your academic performance depends on which strands you belong.

Table 17. Results of Test Statistics on the Significant Relationship between the Dependent Variable, Academic Performance and Independent Variables, Physical Fitness: Health Related Variables.

Dependent Variable	Independent Variables	p-value	Remark
Academic Performance	Cardiovascular Fitness	0.948	Not Significant Relationship
	Muscular Endurance	0.557	Not Significant Relationship
	Muscular Strength	0.070	Not Significant Relationship
	Flexibility	0.758	Not Significant Relationship
	Body Composition	0.910	Not Significant Relationship

H_o: There is no significant relationship between the Dependent Variable Academic Performance and independent Variables, Physical Fitness Sports: HealthRelated.

Table 17 shows that there is no significant relationship between the dependent variable, academic performance and the independent variables, Cardiovascular Fitness, Muscular Endurance, Muscular Strength, Flexibility and Body Composition.

According to the University of Texas at Austin, University Health Service, person's health might affect the person academic performance. However, base of the data gathered from the senior high school students of Iligan City National Highschool, your health will not determine if you are good academically or not. Also, we have seen it during the gathering of the average for the 1st and 2nd quarter of the semester.

Also, research over the last fifty years has discovered little to no relationship between physical performance and academic performance, or the data has been based on shallow evidence (Martin & Chalmers, 2007; Taras, 2005; Sallis et al., 1999).

Table 18. Results of Test Statistics on the Significant Relationship between the Dependent Variable, Academic Performance and Independent Variables, Physical Fitness: Skill Related Components.

Dependent Variable	Independent Variables	p-value	Remark
Academic Performance	Agility	.691	Not Significant Relationship
	Balance	.157	Not Significant Relationship
	Power	.323	Not Significant Relationship
	Reaction Time	.007	Significant
	Coordination	.000	Significant
	Speed	0.685	No Significant Relationship

H_o: There is no significant relationship between the Dependent Variable Academic Performance and independent Variables, Physical Fitness Sports: Skill related component.

Table 18 shows that there is no significant relationship between the dependent variable, academic performance and the independent variables, Agility, Balance, Power and Speed. On the other hand, the academic performance of the students has a relation with the independent variable Reaction Time and Coordination.

Reaction Time is the amount of time it takes to respond to a stimulus. According to Dr. V. Christopher Amalraj Vallabadoss, April 2017 reaction time of male has a significant difference with the reaction time of female, but it has a significant relationship to their academic performance.

Also, according to Daniel V. Chagas, et.al on their research titled "Relationship Between Motor Coordination and Academic Achievement in Middle School Children" they concluded that coordination has a significant relationship with the academic achievement of the student. The better your coordination is the higher might be your performance is, which satisfy the data gathered.

During the experiment the research observed that students with high coordination and reaction time have higher grades compared to those with low coordination and reaction.

Commented [A1]: Please add discussion regarding your results and previous study

CONCLUSION

Based on the study's findings, the following conclusions are drawn: there is no significant relationship between the dependent variable, academic performance, and the independent variables, Age, Sex, and Family Income. On the other hand, there is a significant relationship between the independent variable academic performance and the dependent variable strands. Also, there is no significant relationship between the dependent variable, academic performance, and the independent variables, Cardiovascular Fitness, Muscular Endurance, Muscular Strength, Flexibility, and Body Composition and lastly, there is no significant relationship between the dependent variable, academic performance and the independent variables, Agility, Balance, Power, and Speed. On the other hand, the academic performance of the students has a relation with the independent variable Reaction Time and Coordination. After the data gathering, the researchers concluded that Sport Track students have higher Physical Fitness Levels compared to other strands. Despite of being the highest in the Physical Fitness Level, they are the lowest in academic performance. The researcher observed that instead of balancing their academic performance, they just prioritized the tournament first over their academic activities. On the other hand, STEM Strand has higher academic performance compared to other strands.

ACKNOWLEDGEMENT

We sincerely thank LACASAN FAMILY for helping us from the beginning until the end and for the motivation and financial support. Getting through success of this study required more than academic support and so many people to be acknowledged. Thus, we would like to thank our parents & grandparents for their moral and financial support. Our family and friends for all the motivation.

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