

Students' Attitudes and Academic Performance In Physical Education

Buena D. Calunsag, MAEd PE

J.H. Cerilles State College, Dumingag Campus, Dumingag, Zamboanga del Sur

ABSTRACT

This study aimed to find out the relationship of the students' attitudes and academic performance in Physical Education. The study used descriptive-correlation method of research using standardized questionnaire as the basic instrument in gathering data. This study was conducted in Josefina Herrera Cerilles State College (JHCSC) Dumingag Campus. The respondents were the college students who were officially enrolled in the second semester in the academic year 2019-2020 had taken PE 1, 2, 3 and 4 subjects. The respondents who have good academic performance in PE have positive attitudes towards the subject. There was a significant relationship between attitudes towards the activities, curriculum, and academic performance in PE. There was no significant relationship between attitudes towards activities, teacher, facilities, and academic performance. There was no significant difference in respondents' attitudes and academic performance towards Physical Education in terms of gender. However, there was a significant difference in the attitudes and academic performance of respondents towards Physical Education according to course. It is concluded that academic performance in PE is greatly affected by attitudes of students. Attitudes influence their actions to engage in academic work. It is recommended that the PE teachers may design and give more physical activities that are interesting to the students that would help and make them more active and participative.

KEYWORDS: *academic performance, attitudes, physical education*

INTRODUCTION

The Commission on Higher Education [1] emphasized that the Physical Education subject has a big responsibility for the total human development of the students. It is an inclusive subject that has a wide range of physical activities that are appropriate to all learners of all abilities and ages. The subject involves a developmentally appropriate process since students engage in activities based on their growth and maturation, as well as their changing activity patterns.

Physical Education is an essential factor for the physical, social, and moral well-being of an individual. It is an integral part of the educational program designed to promote the optimum development of the individual physically, socially, emotionally, and mentally through total body movements in the performance of properly selected physical activities. A program contributes to the holistic development of the individual (Andin) [2]. Physically, it develops and maintains good health and a high level of physical fitness; socially, it provides opportunities for the development of desirable traits needed for adjustments to the social life in general; emotionally, it offers opportunities for self-expression and emotional mastery; and mentally, it develops the mental

capacities of the individual as he learns the mechanical principles underlying movement, acquires knowledge and understanding of rules and strategies of games and sports and discovers as ways of improving his movement in dance and gymnastics. More so, it enhances physiological and motor skills development, develops fair play, socially desirable behavior, and self-esteem. It serves as a vehicle for helping the students to develop knowledge, attitudes, behavioral skills, and confidence needed to adopt and maintain physically active lifestyles. Aras [3] revealed that a physically active student has a higher level of academic motivation. Heper [4] emphasized that this subject is an effective way of providing and maintaining physical coherence. Physical Education and its programs help maintain and improve the person's total human development: physically, mentally, socially, and psychologically (Acak) [5].

One factor that influences the academic performance of a person is his/her attitudes. These are the basics which significantly affect the life of a person in different aspects and areas (Keskin, Herguner, Donmez, Berisha & Ucan) [6]. Additionally, Martinen, Fredrick, and Silverman [7] explained that attitudes control a person's behavior. It is one of the factors in every school subject across the curriculum. Rikard and Banville [8] also explained that attitudes derived from beliefs about himself or herself help shape one's behavior and determine one's involvement. Studies conducted about PE revealed that the attitudes of the students to the subject affected their academic performance. Hunuk [9] and Sproule and Wang [10] added that the motivation and awareness of the subject were significantly affected by students' attitudes. On the other hand, Figley [11] reported that PE contributed to the empowerment of students' health and the development of positive attitudes.

Another factor to consider is the designed curriculum of the subject. Bernstein, Philips, and Silverman [12], Dismore and Bailey [13], and Subramanian and Silverman [14] revealed that learners felt a tedious experience in PE when the designed curriculum consisted of repetitive and lack of challenging activities. The school PE program plays a very significant part in developing students' attitudes and awareness of sports and physical activities. What the students learn from these PE activities will be a part of their daily life even outside the school (Al-Oun & Al-leheby) [15]; (Al-shinawi) [16]. Hence, PE teachers should design and conduct activities that will help the students develop holistically. Al-tamimi [17] stressed that the most effective method in ensuring a high level of learning, especially in PE subject, is to come up with an excellent curriculum and equip teachers with adequate teaching competencies.

Hence, the aim of this study is to identify the factors that influence more an individual's attitude towards and performance in Physical Education. Also, it aims to determine the relationship between students' attitudes and their academic performance towards the subject.

STATEMENT OF THE PROBLEM

This study aimed to determine the relationship between students' attitudes towards Physical Education and their academic performance in Physical Education. Specifically, it aimed to discuss the following topics: 1. levels of respondents' attitudes toward Physical Education based on the following aspects: Subject, Activities, Teacher, Curriculum, and Facilities; 2. academic performance of the respondents in PE; 3. Test for significant relationship between respondents' attitudes and academic performance in PE; 4. Test for significant difference in the academic performance in PE when the respondents were grouped according to gender and course; and 5. Test

for significant difference in the attitudes towards PE when the respondents were grouped according to gender and course.

METHODOLOGY

The descriptive-correlation method is utilized in pursuing this study. This study was conducted in Josefina Herrera Cerilles State College (JHCSC) Dumingag Campus. The respondents included 12 respondents per program namely, Bachelor of Elementary Education (BEED), Bachelor of Secondary Education (BSED), Bachelor of Physical Education (BPED), Bachelor of Information Technology (BSIT) and Bachelor of Science in Agriculture (BSAG).

The researcher used the purposive random sampling technique. To analyze the data, the researcher employed the following statistical treatment; frequency and percentage, weighted mean, confidence interval, Regression, analysis of variance, t-test, Pearson r, and Levene's Test.

RESULTS AND DISCUSSIONS

Respondents' Attitudes towards Physical Education

It is revealed in Table 1 that the respondents have a very positive attitude towards PE with an average weighted mean of 3.60. Top among their answers are *the subject helps them to stay away from destructive habits, develops the spirit of sportsmanship, develops personal discipline, improves self-esteem and physical life*. They enjoyed their class and were excited to attend their PE classes. They subject does not only focus on one aspect of life but the total human formation. This implies that Physical Education has a very positive impact to the lives of the students.

The result is analogous to the study of Obeda [18] that Physical Education is viewed as an important means in promoting health and wellness that may, in return influence students to lead physically active lifestyles. The same is true of what Villones [19] also said that quality Physical Education promotes lifelong physical activities because students acquire physical skills and attitudes necessary to remain active for life.

Table 1. Respondents' Attitudes towards Physical Education in terms of the Subject

Indicators	Weighted Mean	Verbal Interpretation
1. I like PE because it helps me to stay away from destructive habits: smoking, drinking alcoholic beverages, and spending much time on social media.	3.87	Very Positive
2. I like PE because it helps me develop the spirit of sportsmanship.	3.82	Very Positive
3. I am happy with my PE class.	3.73	Very Positive

4. I like PE because it helps develop personal discipline.	3.67	Very Positive
5. I believe that PE subject improves my self-esteem.	3.62	Very Positive
6. I believe that PE improves my physical life.	3.63	Very Positive
7. I enjoy my PE classes.	3.60	Very Positive
8. I am excited to attend my PE classes.	3.58	Very Positive
9. I feel that PE is relevant to my degree.	3.37	Very Positive
10. I am interested in PE because I am naturally inclined to dance.	3.15	Positive
Average Weighted Mean	3.60	Very Positive

It is revealed that the respondents have a very positive attitude towards PE in terms of the activities with an average weighted mean of 3.38. They believed that participating in PE activities helps prevent hypokinetic diseases; spending 2 hours in the PE classes is not enough to do the activities and exerting much effort would help them to be physically fit and healthy. The result implies that the respondents are physically active in which they love to do activities that requires much physical exertion.

These results are affirmed by the study of Zhang, Solomon, and Gu [20] that students were bound to exert much effort and even concentrate on PE subjects because they believed that the subject is a significant, exciting, and helpful school subject and perceived self-rule and capability. It is also supported in the study of Sanes [21] that physical education helps the students prepare to become active, healthy adults, build social skills as well as physical strength and coordination. Students felt that PE subject offered an enjoyable and exciting environment which students learned how to handle success and failures. Kayani, et al., [22] also clearly explained that physical education activities have much interest on the potential benefits in the development of cognitive abilities and it is strongly recommended as an effective instrument for building psychological well-being. Hillman et al., [23], also emphasized that physical activity has an impact in the increasing cognitive abilities and disclosed that physical activity is linked with a subsequent decrease in mental problems, including depression and insanity. Tomporowski [24] added that properly managed physical activities are important for processing information, particularly in adults.

Table 2. Respondents' Attitudes towards Physical Education in terms of the Activities

Indicators	Weighted Mean	Verbal Interpretation
1. I like to participate in PE class because it prevents me from hypokinetic diseases like obesity, diabetes, stroke, and heart disease.	3.85	Very Positive
2. The two hours a week PE class is not enough for the different physical activities.	3.43	Very Positive
3. I love to attend PE class because I want to exert too much effort.	3.40	Very Positive
4. I like PE activities that are strenuous or require great exertion.	3.38	Very Positive
5. I like PE activities because I am not forced to do activities that I hate most.	3.37	Very Positive
6. I like PE because every time I join activities, I feel I belong.	3.22	Very Positive
7. I enjoy PE because of the varied physical activities I can participate in.	3.30	Very Positive
8. I am not bored to attend PE class because of the repeated activities done.	3.08	Very Positive
Average Weighted Mean	3.38	Very Positive

It is revealed that the respondents have a very positive attitude towards PE in terms of the teacher with an average weighted mean of 3.60. The respondents commended the good qualities of the PE teacher namely, *empathizes with the learners, encourages the learners to participate, is always present and on time to attend the classes and is expert to the field*. This implies that teachers play a significant role in the teaching and learning process thus, they need to be equipped with the knowledge and skills needed to improve the students' academic performance and participation in the different activities.

Osborne et al., [25] emphasized that PE teachers are of great importance to students' education; their influence is not easy to measure. Their gestures, attitudes and words can go a long way in the life of each person. Cariaga [26], opined that teachers will need to address positive issues that are affecting their schools and the students. Teachers are accountable for student learning in all discipline and for providing programs to meet the needs of all students.

Table 3. Respondents' Attitudes towards Physical Education in terms of the Teacher

Indicators My PE teacher...	Weighted Mean	Verbal Interpretation
1. Shows concern to those students who cannot perform the activities well.	3.75	Very Positive
2. Encourages me when I make mistakes in executing the exercises.	3.72	Very Positive
3. Encourages everyone to participate in the activity by serving as a model.	3.68	Very Positive
4. Is always on time.	3.67	Very Positive
5. Is physically fit.	3.63	Very Positive
6. Is frequently present in class.	3.60	Very Positive
7. Is an expert in PE.	3.58	Very Positive
8. Supervises the physical activities conducted.	3.58	Very Positive
9. Can teach well even if there are limited facilities and equipment.	3.53	Very Positive
10. Has the enthusiasm in teaching the subject.	3.48	Very Positive
11. States the objectives of the lesson.	3.40	Very Positive
Average Weighted Mean	3.60	Very Positive

It is revealed in Table 4 that the respondents have a very positive attitude towards PE in terms of the curriculum with an average weighted mean of 3.70. The PE curriculum, for them has benefits for their lifestyle empowering themselves physically, socially, mentally, and emotionally. Moreover, values of endurance, teamwork and socialization are developed. It also contributes to forming of national integrity and a healthy society. Physical education curriculum develops students' self-esteem that become a central part of their lives in and outside of school. Moreover, it broadens one's perspective in learning, interact and maintain a harmonious relationship with others in the society and help develop interpersonal and intercultural relation in the national and world community. A high-quality physical education is the cornerstone of school's physical activity program.

The result is supported by Junio and Liwag [27] who emphasized that curriculum plays an extremely important role in determining college student’s attitudes in physical education. Orlanda [28] also added that a rich curriculum will bring a better and richer content, strategies, and objectives which will be implemented by the PE instructors. Sanes [21] and Standish [29] also emphasized that in the planning of the physical education curriculum consideration should be given on an equitable basis to the needs and interest of the learners helping to build positive attitudes towards all activities.

Table 4. Respondents’ Attitudes towards Physical Education in terms of the Curriculum

Indicators	Weighted Mean	Verbal Interpretation
1. PE classes empower and challenge students to take responsibility for his or her own ability to lead and live an active lifestyle.	3.88	Very Positive
2. PE classes promote an understanding of the importance of movement in their daily lives.	3.82	Very Positive
3. PE should remain in the curriculum because it improves the person physically, mentally, and emotionally.	3.75	Very Positive
4. PE provides opportunities for social interaction.	3.65	Very Positive
4. PE provides activities that can develop attitudes, such as endurance and teamwork.	3.65	Very Positive
5. PE class is designed for two hours per week only, which is not enough for the different physical activities.	3.58	Very Positive
6. PE classes promote a way of life in which physical activity is valued, enjoyed, and integrated into daily life.	3.55	Very Positive
Average Weighted	3.70	Very Positive
Mean		

The respondents have a positive attitude towards PE in terms of the facilities with an average weighted mean of 3.02. It is revealed that sanitary drinking water is available in the campus and there are safety features for all areas of sports activities including first aid facilities. The campus gym is spacious enough to maximize learning. However, the respondents reported that the campus has no venue for athletic activities that can be conducted during rainy weather.

The result affirmed what Limon [30] stressed that the most overlooked factor that influences knowledge and skills acquisition of learners is physical school facility. Flores et al., [31] also stressed that facilities are one of the factors that affect the students’ academic performance. Gulhe

[32] and Pate et al., [33] also emphasized that it might be impossible to achieve satisfactory results from students whose training facilities and equipment are inadequate or substandard. Facilities make teaching and learning more interesting and effective in various PE activities since massive participation is expected, if there are enough available facilities to be used by the students. It was supported by Hardman [34] that the failures to reconstruct/ replace/maintain (out) dated and /or provide new facilities has had negative impacts on the state of physical education. Ravizza and Stratton [35]; Submaraniam and Silverman [14]; Ding and Yugiyama [36] said that if students were provided with a comfortable learning environment, their enjoyment of PE would be increased and their learning would be impacted. Thus, this would imply that school facility is an essential factor in the teaching and learning process.

Among the five variables, curriculum got the highest mean of 3.70 and facilities got the lowest mean of 3.02. This implies that curriculum really plays significantly in shaping the attitudes of the students. The result is supported by Marttinen, Fredrick & Silverman [7], that attitude is a factor in just about every school subject across the curriculum.

Table 5. Respondents' Attitudes towards Physical Education in terms of the Facilities

Indicators	Weighted Mean	Verbal Interpretation
1. There is always an available sanitary drinking water.	3.67	Very Positive
2. There are safety features for all areas of sports activities including first aid facilities.	3.45	Very Positive
3. There is an adequate storage room for facilities and equipment.	3.42	Very Positive
4. The gym is spacious enough to maximize learning.	3.30	Very Positive
5. There are dressing and shower rooms for students and teachers.	3.05	Positive
6. The equipment is new.	2.90	Positive
7. The facilities are upgraded.	2.87	Positive
8. There is sufficient quantity and variety of PE supplies for the class like balls, raquets, net.	2.68	Positive
9. There is a venue for athletic activities that can be conducted during rainy weather.	1.83	Negative
Average Mean	3.02	Positive

Respondents' Academic Performance in PE

Out of the 60 respondents 44 (73.30%) have grades from 1.75-1.25 while 16 (26.70%) have grades lower than 1.75. The numerical number 44 was taken from the number of respondents got a grade of 1.75-1.25, which earned 73.3%. The result of this data shows the performance of students towards physical education and it is important since this measures their ability and the development

they acquired. A byproduct of their participation in all activities and the main goal of every curriculum.

Table 6. Respondents' Academic Performance in Physical Education

Grades	Equivalent Grades	Frequency	Percent
1.00	97-100	0	0
1.25	94-96	3	5
1.50	91-93	21	35
1.75	88-90	20	33.3
2.00	85-87	9	15
2.25	82- 84	6	10
2.50	79-81	1	1.7
2.75	76-78	0	0
3.00	75	0	0
Total		60	100

As shown in Table 7, the average grade of the respondents is 87.57 which is interpreted as *good*. A 95% confidence interval for the true value of the average grade shows a minimum value of 84.49 and a maximum value of 90.65. This implies that the students are performing good enough in PE since none of them got a grade which is below 80.

Table 7. Respondents' Grades Descriptive

Descriptive		Statistic
Grade	Mean	87.57
	95% Confidence Interval	Lower Bound 84.49
	For Mean	Upper Bound 90.65

Relationship between Respondents' Attitudes and Academic Performance in PE

Table 8. Relationship between Respondents' Attitudes towards PE and their Academic Performance

Variables	Standardized Coefficients	r	p-values
	Beta		
Subject	-.030	0.045	.878
Activities	.412	0.338	.007
Teacher	.065	0,097	.744
Curriculum	.242	0.597	.034
Facilities	.119	0.0291	.073

* Correlation is significant at the 0.05 level (2-tailed).

Out of the 5 variables, activities and curriculum are found to have a significant relationship with their academic performance. Activities and curriculum play a significant role in the academic performance of the respondents. This result is supported by Orlanda [28] that an enhanced curriculum will draw on an appealing and compelling content, design, and goals. Ferguson et al. [37] specifies that if physical education programs are designed to promote students' attitudes, they can increase their perception about the importance of physical activity and the need to exercise through physical education program.

Difference in the Academic Performance in PE when the Respondents were grouped according to Gender and Course

Independent t – test was used in the differences in grades according to gender.

Table 9. Respondents' Academic Performance when Grouped according to Gender

		<i>Levene's Test for Quality of Variances</i>				
Grade	Equal variances assumed	F	Sig.	t	df	Sig. (2-tailed)
		.411	.524	.302	58	.764

The Levene's test shows a p-value of 0.524 proving that the population has equal variances. This signifies that the grades of male and female are not significantly different because they have the same academic performance at 0.05 degree of confidence.

The result of the study is supported by Subramanian and Silverman [14]. They also found that there was no gender difference in attitudes between men and women toward physical education. Moreover, the study of Sanes [21], also reported that there was no significant difference in the attitude towards PE between the men and women respondents. In the study of Goni, Wali, Ali and Bularafa [38] it was also revealed that there were no significant differences exist between gender and academic performance in the participation of activities. Also, in the study of Zeng, Hipsher, and Leung [39] found that both men and women respondents show positive and similar attitudes towards physical activity. Ricacho et al. [40] concluded that both men and women have positive response towards physical education and the performance on physical education activities.

Table 10. Analysis of Variance in the Differences in Grades according to Course

	Sum of Squares	df	Mean Square	F	p value
Between Groups	1543.384	4	385.846	3.108	.022
Within Groups	6828.403	55	124.153		
TOTAL	8371.787	59			

The analysis of variance shows a p value of 0.022 which is less than 0.05. The result signifies that there is a variation in the grades of the respondents when grouped according to course. This implies that students from different courses have different learning preferences and performances. The result proves what Junio and Liwag [27] explained that there was recognition of the existence of different learning preferences among people even in the early times. Lorenzo & Lorenzo [41] implied that teachers should provide learning activities that will meet the varied preferences of the students.

It is revealed in Table 11 that the BEED got the highest mean among the five courses with the mean of 91.3. The study proves on what Lorenzo and Lorenzo [41] explained that teacher education students are persistent in their studies and they prefer to be told exactly of what and how to do things.

Table 11. *Descriptives of the Grades of Respondents when Grouped according to Course*

Course	N	Mean
BEED	12	91.30
BPED	12	90.33
BSED	12	90.08
BSAG	12	88.56
BSIT	12	77.58
TOTAL	60	87.57

Table 12. *Post Hoc Analysis for Grades when Grouped according to Course*

Course	Courses	p value
BEED	BSED	.789
	BPED	.832
	BSIT	.004
	BSAG	.549
BSED	BEED	.789
	BPED	.956
	BSIT	.008
	BSAG	.739
BPED	BEED	.832
	BSED	.956
	BSIT	.007
	BSAG	.699
BSIT	BEED	.004
	BSED	.008
	BPED	.007
	BSAG	.019
BSAG	BEED	.549
	BSED	.739
	BPED	.699
	BSIT	.019

*. *The mean difference is significant at the 0.05 level.*

As shown in the Post Hoc Analysis in Table 12, the BSIT grades are significantly different from the other courses. However, the rest of the courses show no significant differences. BSIT is different among the five programs since it is the only course that got a low performance compared to the four

programs in terms of their attitudes towards physical education. Only this course got a grade of 2.5 or 79-81 compared to other courses whose grades are ranging from 1.75-1.25.

Difference in the Attitudes towards PE when the Respondents were grouped according to Gender and Course

Table 13. Significant Difference in the Respondents' Attitudes towards PE when Grouped according to Gender

	<i>Levene's Test for Quality of Variances</i>				
	F	Sig.	t	df	Sig. (2-tailed)
Respondents' Attitudes Equal variances assumed	.953	.333	-1.843	58	.070

The Levene's test for equality of variances in Table 13 shows a p-value of 0.333 which is less than 0.05, therefore the population where the data was collected is assumed to have equal variances. It also shows a p-value of 0.070 which is greater than 0.05, therefore the attitudes of the male and female respondents are not significantly different, but they have the same attitudes towards PE at 0.05 level of significance. This result is similar to the study of Villiones [19] who there is no significant difference found on the male and female respondents on their attitudes in physical education. Moreover, Eagly [42] found that engaging oneself in any worthwhile physical activities was content in both genders. On the contrary, in the study of Birthwistle and Brodie [43] found that there is a significant difference in the attitudes towards physical activity, women were proven to have a higher attitude towards physical activity than men.

Table 14. Analysis of Variance in the Differences of the Respondents' Attitudes towards PE according to Course

	Sum of Squares	df	Mean Square	F	p value
Between Groups	.246	4	.062	14.094	.00014
Within Groups	.240	55	.004		
TOTAL	.486	59			

The result shows that respondents who are from different courses signify varied attitudes towards PE. As explained by Magulod [44], students who are taking BS Industrial Technology and BS Information Technology learn best through visual, collaborative and experiential learning while Teacher Education students prefer to work independently without being reminded of their activities, prefer to study in a quiet, well lighted, cool, relax, comfortable and informal setting environment (Lorenzo & Lorenzo) [41].

Table 15. Mean of Respondents' Attitude towards PE by Course

Course	N	Mean
BEED	12	3.2417
BSED	12	3.2417
BPED	12	3.1417
BSAG	12	3.1500
BSIT	12	3.0750
TOTAL	60	3.1700

It is revealed in Table 15 that among the five programs, the BEED and BSED got the highest mean of 3.24 and followed with the BSAG and BPED which means that these four courses have a good attitude towards PE. BSIT got the lowest mean of 3.07 which means that among the five programs, BSIT has the lowest level of attitudes towards PE.

Lorenzo and Lorenzo [41], affirmed that education students motivated themselves persistently, preferred to do task at a time, and preferred to study independently. The results also confirmed the study of Magulod [44] that most of the students from Information Technology and Industrial Technology courses were inclined to hands on activities which require strong skills to learn, operate, control properly and safely an extensive range of equipment tools and system used.

Table 16. Post Hoc Analysis for the differences in the Attitudes of the Respondents towards PE

Course	Courses	p value
BEED	BSED	1.0001
	BPED	.0001
	BSIT	.0301
	BSAG	.0016
BSED	BEED	1.000
	BPED	.0201
	BSIT	.0003
	BSAG	.0018
BPED	BEED	.0215
	BSED	.036
	BSIT	.017
	BSAG	.758
BSIT	BEED	.000
	BSED	.0015
	BPED	.017
	BSAG	.007
BSAG	BEED	.0012
	BSED	.00113
	BPED	.758
	BSIT	.00714

*. The mean difference is significant at the 0.05 level.

The Post Hoc Analysis in Table 16 shows the following results: There is no significant difference in the attitude of BEED respondents and BSED respondents towards attitude in PE with a p value of 1.001. There is a significant difference in the attitude of BEED respondents and BPED respondents towards attitude in PE with a p value of 0.001. As shown in Table 18, BEED got a higher mean of 3.2417 compared to that of BPED with a mean of 3.147. There is a significant difference in the attitude of BEED respondents and BSIT respondents towards attitude in PE with a p value of 0.0301. As shown in Table 18, BEED got a higher mean of 3.2417 compared to that of BSIT with a mean of 3.0750. There is a significant difference in the attitude of BEED respondents and BSAG respondents towards PE with a p value of 0.0016. As shown in Table 18, BEED got a higher mean of 3.2417 compared to that of BSAG with a mean of 3.150.

Lorenzo and Lorenzo [41], affirmed that education students preferred to study in the morning with less break and movement and majority were analytic or they preferred to learn sequentially and took time to take decision. While Magulod [44] revealed in his study that most of the students from Information Technology and Industrial Technology courses preferred visual and kinesthetic learning. Renwick and Foltz [45] supported that Information technology students exhibit a high level of preference for kinesthetic learning.

CONCLUSION

Academic performance in PE is greatly affected by attitudes of students. Attitudes influence their actions to engage in academic work. Hence, teachers must continually motivate and devise ways to keep the students engaged in Physical Education so that their positive attitudes will be sustained.

Course is a differentiating factor in the respondents' academic performance in PE and attitudes towards PE. The nature of the course that requires activity and experiential learning could explain the difference.

Gender is not a differentiating factor since both male and female respondents have positive attitudes towards the subject. The benefits of PE to their lives are felt by both respondents.

RECOMMENDATIONS

Based on the results of the study, here are some recommendations:

1. That the parents most especially from the BSIT program may encourage their sons/daughters to participate in the different Physical Education activities by having constant follow up on their performance and providing moral support to the activities done by their children.
2. In the orientation of PE classes, that the students may be informed of the importance of attitudes towards any given work or activity.
3. That the PE teachers may design and give more physical activities that are interesting to the students that would help and make them more active and participative. The students' active participation would develop their potentials and improve their performances. In addition, teachers may ensure equality in terms of treating the students most especially to the

academically challenged individuals and give extra mile effort and proper attention to them to help develop appropriate study habits and practices inside and outside the classroom.

4. That the Curriculum Designers may include varied teaching strategies and appropriate PE activities that will suit to the needs of the students in accordance to their course.
5. That the Future Researchers may use the gathered data as basis for conducting further studies related to this topic and they can benefit from this study through considering this study as one of their future references.

REFERENCES

- i. Commission on Higher Education. Memo 80 s. of 2017. (2019). *Guidelines for Bachelor of Physical Education (BPED)*. <https://ched.gov.ph/retrieved>
- ii. Andin, C. (1988). *Teaching physical education in Philippine schools*, Rex Bookstore, Inc.
- iii. Aras, O. (2013) Examining the attitudes and views of the secondary school students and their physical education teachers and attitudes they develop toward physical education lesson. Unpublished Master's Thesis. Gazi University, Ankara
- iv. Heper, E. (2012). Concepts related to sports science and Historical development of sports. (Editor: Hayri ertan). First edition. Eskisehir: Open Education Faculty Publishing.
- v. Acak, M. (2006). *Physical Education Teacher's Manual*. Morpa Kulturyayinlari
- vi. Keskin, Herguner, Donmez, Berisha & Ucan (2017). The examination of Attitudes of secondary school students towards physical education course; *Malaysian Online Journal of educational sciences*; <files.eric.ed.gov/fulltext/EJ1150427.pdf>
- vii. Marttinen, R., Fredrick, R., & Silverman, S., (2011). Changes in students' attitudes toward physical education across a unit of instruction; *Academic Journal Article; Journal Article of Physical Education and Sports*.
- viii. Rikard, G.L. & Banville, D. (2006). High school student attitudes about physical education. Sport Education Society.
- ix. Hunuk, D., (2006). Developing health related fitness knowledge through a community of practice: Impact on student learning. <https://www.researchgate.net>
- x. Sproule, G., & Wang, C. K., (2008). Pupils perception on an experience in the invasion games: A case Study of a Scottish secondary School and its three feeder primary schools. *European physical Education review*, 14, 179-201.
- xi. Figley, G. E. (2013). Determinants of attitudes towards physical education. *Journal of Teaching Physical Education*.
- xii. Bernstein, E., Philips, S.R., & Silverman, S. (2011). Attitudes and perceptions of middle school students 'towards competitive activities in physical education, *Journal of Teaching Education*, 30 (1), 69-83, [https://www.hdle.net/100289/5208\(research commons\)](https://www.hdle.net/100289/5208(research%20commons))

- xiii. Dismore, H., Bailey, R., (2011). Fun and enjoyment in physical education: young people's attitude: Research Paper in education, v26npp 499-516 2011 (ERIC) (google scholar)
- xiv. Subramanian, P.R. & Silverman, S. (1999). Validation of scores from instruments assessing students' attitudes toward physical education. *Measurement Physical Education Exercise*,4, 29-40.
- xv. Al-oun, I.S., & Al-leheeb, M.Q.H., (2015). Obstacles facing the implementation of physical education curriculum in Iraqi public schools as perceived by teachers in Anbar governorate.
- xvi. Al-shinawi, A., (2006). The role of sports unions and sports media in developing school sports. *Study in Omani Ministry of Education*, 11-13,
- xvii. Al-tamimi, Y. (2009). Physical education lesson and its effect on secondary school students' trends in 1994-1995. *Sport Sciences Journal*, 8 (1),
- xviii. Obeda, R. (2018). Teaching competence and performance of students in physical education in selected secondary schools in Balicutro area Northern Samar
- xix. Villones, R.(2015). Gender differences on the attitudes of Philippine Normal university college students towards dancing, https://www.researchgate.net/publication/320010635_gender_differences_on_the_attitudes_of_philippine_normal_university_college_students_towards_dancing
- xx. Zhang, T., Solomon, M. a, & Gu, X. (2012) The role of teachers 'support in predicting students 'motivation and achievement outcomes in physical education. *Journal of Teaching in Physical Education*, 31, 329-343. Sporting Attitude. [http: www.elloweshall.co.uk/Page.aspx?PageID=15](http://www.elloweshall.co.uk/Page.aspx?PageID=15)
- xxi. Sanes, L. (2008). Students' attitudes towards physical education. Research paper; College of Arts and Sciences. La Salle University Ozamiz City
- xxii. Kayani, S. Kiyani, T. Wang, J., Sanchez, M.L., Kayani, S., Qurban, H. (2018). Physical activity and academic performance:the mediting effect of self-esteem and depression. Article. Department of physical Education, Zhejiang university,xixi campus, research, (google scholar)
- xxiii. Hillman, C.H. (2008). Be smart, exercise your heart: exercise effects on brain and cognition. *Nat.. Rev. Neurosci.* 2008,958 (crossref) (pubmed)
- xxiv. Tomporowski, P.D. (2003). Effect of acute bouts of exercise on cognition. *Acta psycho.* 2013, 112, 297-324 (crossref) (pubmed)
- xxv. Osborne, R., Belmont RS. & Azevedo, IO., Paiva de Carvalho, A. Rs Peixoto, RP. (2016). Obstacles for physical education teachers in publis schools: unsustainable situation (google scholar)
- xxvi. Cariaga, J. (2014). The physical education program of state universities in Isabela: an assessment, *Research journal of physical education sciences*vol.2(10) 1-8 october (2014)

- xxvii. Junio, J., & Liwag, J., (2015). Factors Affecting students' Performance in physical education Class in Lyceum of the Philippines University- Laguna; College of Arts and sciences LPU-Laguna Journal of Multidisciplinary Research, 4(4), 2016 <https://www.researchgate.net/publication/320015516>
- xxviii. Orlanda, M. (2015) Revisiting the service physical education program at the tertiary Level: Basis for A Revitalized Program from Asia pacific. *Journal of Multidisciplinary Research*, 3 (5), 29-35, <http://www.apjmr.com/wpcontent/uploads/2016/02/APJMR-2015-3.5.3.04.pdf>
- xxix. Standish, T. (2005). Do physical activity patterns differ between age and gender groups? Liver pool John Mo. http://local.lsu.edu.ph/institutional_research_office/publications/vol.14no.4/4.html
- xxx. Limon, M. (2016). The effect of the adequacy of the school facilities on students 'performance and achievement in technology and livelihood education. *International journal of academic research in progressive education and development*
- xxxi. Flores, et al., (2015). Attitudes on school facilities and services of high and low performing marine engineering students, *Asian journal of social science, arts and humanities*
- xxxii. Gulhe, T.F. (2014). Need for advanced facilities and equipment's in physical education colleges Rajiv Gandhi college of engineering research and technology, Chandrapur, Maharashtra, India. *IOSr journal of sports and physical education (IOSR_JSPE)* e-ISSN: 2347-6737, p-ISSN:2347-6745, Volume 1, issue 6(July-Aug. 2014), pp 48-49, www.iosjournals.org
- xxxiii. Pate, D.W., Moffit, ET & Fuget, D. (1997). Current treat in case, design/construction and finishing of sports facilities-sports marketing quarterly, s(4.9-14) (google scholar)
- xxxiv. Hardman, K. (1998). Treats to physical education, treats to sports for all. Paper presentation the I.O.C. vii world congress "sports for all" Barcelona, Spain, 19-22, nov.1998(google scholar)
- xxxv. Ravizza, D. M. & Stratton, R.K. (2007). Students Perceptions of physical education teachers caring. *Research quarterly for exercise and sport*, 78, 70-72.
- xxxvi. Ding J. & Sugiyama, Y. (2018). Examining relationships between the cognitive aspect of college students' attitudes toward physical education and their social skills in physical education classes. *Advances in physical education*, 2018, 8, 20-30 <http://www.scirp.org/journal/ape>. Issn online:2164-0408; issn print: 2164-0386 (google scholar)
- xxxvii. Ferguson, K.J., Yesalis, C.E., Pomrehn, P.R., & Kirkpatrick, M.B. (2014). Attitudes, knowledge and beliefs as predictors of exercise intent and behavior in school children. *Journal of school health*
- xxxviii. Goni, U., Wali, Y.S.B., Ali, H.K. and Bularafa, MW. (2005). Gender differences in students academic performance in colleges education in Borno state Nigeria, implications for counselling journal education and practices vo. 6, no.32,s 2015.

-
- xxxix. Zeng, H.Z, Hipsher, M., Leung, R.W. (2011). Attitudes of high school students towards physical education and their sport activity preferences. *J. Soc. Sci.* 7(4):529-537.
- xl. Ricacho et al., (2019). Freshmen student's attitudes towards physical education in naval state university, *International journal of engineering and sciences and research*
- xli. Lorenzo, A. & Lorenzo, B. (2013). Learning styles of teacher education students: basis in improving the teaching-learning process. *Procedia-social and Behavioral Sciences* 10392013)595-605. www.sciencedirect.com. Retrieved 04/12/21
- xlii. Eagly, E. (2005). *Sex differences in social behavior: a social role interpretation*, Hillsdale, NJ: Lawrence Erlbaum
- xliii. Birthwistle, G.E. & Brodie, D.A. (2003). Children's' attitude towards activity and perceptions of physical education. *Health educ. Res.*, 6: 465-478. [Doi10.1093/her/6.4.465](https://doi.org/10.1093/her/6.4.465)
- xliv. Magulod, G. (2018). Learning styles, study habits and academic performance of Filipino university students in applied science courses; Implications for instruction
- xlvi. Renwick, J. & Foltz, B. (2011). Learning styles of Information Technology Students. *Proceedings of the 2011 conference on Information technology education* <https://doi.org/10.1145/2047594.2047679>