

Students' Attitudes And Academic Performance In Physical Education

Buena D. Calunsag¹, Chiedel Joan G. San Diego²

{calunsagbuena@gmail.com¹, chiedel.sandiego@g.msuit.edu.ph²}

JH Cerilles State College Dumingag Campus Dumingag, Zamboanga del Sur¹, Mindanao State University – Iligan Institute of Technology Tibanga, Iligan City²

Abstract. This study aimed to find out the relationship of the students' attitudes and academic performance in PE. Descriptive-correlation of research using standardized questionnaire were used. The respondents were college students who had taken PE 1, 2, 3 and 4. Respondents who have good PE academic performance have positive attitudes towards PE. There was a significant relationship between attitudes towards the activities, curriculum, and academic performance in PE. While teacher, facilities and academic performance have no significant relationship. There was no significant difference in respondents' attitudes and PE academic performance in terms of gender. However, according to course, there was a significant difference. Thus, 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 physical activities that are interesting that would help and make the students more active and participative.

Keywords: academic performance, attitudes, physical education

1 Introduction

The Commission on Higher Education (CHED) (2017) emphasized that the Physical Education subject has a big responsibility for the total human development of 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, 1988). 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, and develops fair play, socially desirable behavior, and self-esteem. It serves as a vehicle for helping the students to develop the knowledge, attitudes, behavioral skills, and confidence needed to adopt and maintain physically active lifestyles. Aras (2013) revealed that a physically active student has a higher level of academic motivation. Heper (2012) 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, 2006).

One factor that influences the academic performance of a person is his/her attitude. These are the basics that significantly affect the life of a person in different aspects and areas (Keskin, Herguner, Donmez, Berisha & Ucan, 2017). Additionally, Martinen, Fredrick, and Silverman (2018) explained that attitudes control a person's behavior. It is one of the factors in every school subject across the curriculum. Rikard and Banville (2006) 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 (2006) and Sproule and Wang (2007) added that the motivation and awareness of the subject were significantly affected by students' attitudes. On the other hand, Figley (2013) reported that PE contributed to the empowerment of student's health and the development of positive attitudes.

Another factor to consider is the designed curriculum of the subject. Bernstein, Philips, and Silverman (2011), Dismore and Bailey (2011), and Subramanian and Silverman (2007) 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, 2015; Al-shinawi, 2006). Hence, PE teachers should design and conduct activities that will help the students develop holistically. Al-tamimi (2009) stressed that the most effective method in ensuring a high level of learning, especially in PE subjects, 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 an individual's attitude toward and performance in Physical Education. Also, it aims to determine the relationship between students' attitudes and their academic performance toward the subject.

2 Methods

This study used a descriptive-correlational research design. It aimed to present the respondents' gender, course, attitudes toward PE, and their academic performance. It also aimed to determine whether a significant relationship exists between attitudes and academic performance. This study was conducted at Josefina Herrera Cerilles State College (JHCSC) Dumingag Campus.

The 60 respondents who were officially enrolled in the second semester for the academic year 2019-2020 had taken PE 1, 2, 3, and 4 subjects. A purposive random sampling technique was utilized in the study. The researcher used a researcher-modified questionnaire adapted from the study of Lam (2005), Sanes (2008), Aros, Caranto, and David (2015), Junio and Liwag (2016), and Ricacho, Arpon and Ampong (2019). The survey questionnaire was pilot tested to ensure its reliability and validity. To analyze the gathered data, the 4-point Likert scale was used. To analyze the data, the researcher employed the following statistical treatment; frequency and percentage, mean, analysis of variance, Post Hoc test, t-test, Pearson r, and Levene's Test.

3 Results and Discussion

Respondents Profile

Table 1 shows the gender and course demographics of the respondents.

Table 1 Respondents' Gender and Course

| Course | Gender | | | | Total |
|--------------|-----------|-----------|-----------|-----------|-----------|
| | Male | | Female | | |
| | Frequency | Percent | Frequency | Percent | |
| BEED | 2 | 3.3 | 10 | 16.7 | 12 |
| BSED | 2 | 3.3 | 10 | 16.7 | 12 |
| BPED | 2 | 3.3 | 10 | 16.7 | 12 |
| BSIT | 4 | 6.7 | 8 | 13.3 | 12 |
| BSAG | 5 | 8.4 | 7 | 11.6 | 12 |
| TOTAL | 15 | 25 | 45 | 75 | 60 |

It is shown in Table 1 that there are 15 male respondents and 45 female respondents. In this study, majority are female respondents. It also shows that there is an equal number of respondents per program.

Respondents' Attitudes towards Physical Education

Table 2 presents the students' attitudes toward physical education in terms of the subject.

Table 2 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 in Table 2 that the respondents have a very positive attitude toward 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, and improves self-esteem and physical life. They enjoyed their class and were excited to attend their PE classes. The 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 on the lives of students.

The result is analogous to the study of Obeda (2018) that Physical Education is viewed as an important means of promoting health and wellness that may, in return, influence students to lead physically active lifestyles. The same is true of what Villones (2015) also said quality Physical Education promotes lifelong physical activities because students acquire the physical skills and attitudes necessary to remain active for life.

Table 3 presents the students' attitudes towards physical education in terms of the activities.

Table 3 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 classes 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 attending PE class because of the repeated activities are 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 activities, with an average weighted mean of 3.38. They believed that participating in PE activities helps prevent hypokinetic diseases; spending 2 hours in PE classes is not enough to do the activities, and exerting much effort would allow them to be physically fit and healthy. The result implies that the respondents are physically active in that they love to do activities that require much physical exertion.

These results are affirmed by the study of Zhang, Solomon, and Gu (2012) 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 (2008) that physical education helps students prepare to become active, healthy adults and build social skills as well as physical strength and coordination. Students felt that PE subject offered an enjoyable and exciting environment in which students learned how to handle success and failures. Kayani et al., (2018) also clearly explained that physical education activities have much interest in 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., (2008) also emphasized that physical activity has an impact on increasing cognitive abilities and Hamer (2008) disclosed that physical activity is linked with a subsequent decrease in mental problems, including depression and insanity. Tomporowski (2003) added that properly managed physical activities are important for processing information, particularly in adults.

Table 4 presents the students' attitudes towards physical education in terms of the teachers.

Table 4 Respondents' Attitudes towards Physical Education in terms of the Teacher

| My PE teacher... | Indicators | 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 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 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 an expert in 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 required to improve the student's academic performance and participation in the different activities.

The result is analogous to the study of Aros, Caranto, and David (2015). It was emphasized in their study that the highest impact among the domains that affect students' academic performance is the teacher-related factor. Osborne et al., (2016) 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 (2014), opined that teachers would need to address positive issues that are affecting their schools and the students. Teachers are accountable for student learning in all disciplines and for providing programs to meet the needs of all students.

Table 5 presents the students' attitudes toward physical education in terms of the Curriculum.

Table 5 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 |
| 5. PE provides activities that can develop attitudes, such as endurance and teamwork. | 3.65 | Very Positive |
| 6. PE class is designed for two hours per week only, which is not enough for the different physical activities. | 3.58 | Very Positive |
| 7. 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 Mean | 3.70 | Very Positive |

It is revealed in Table 5 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, which becomes a central part of their lives in and outside of school. Moreover, it broadens one's perspective in learning, interacting, and maintaining a harmonious relationship with others in society and helps develop interpersonal and intercultural relationships in the national and world community. A high-quality physical education is the cornerstone of the school's physical activity program.

The result is supported by Junio and Liwag (2016) and Figley (1985), who emphasized that curriculum plays an extremely important role in determining college students' attitudes toward physical education. Orlanda (2015) also added that a rich curriculum would bring better and richer content, strategies, and objectives which will be implemented by the PE instructors. Sanes (2008) and Standish (2005) also emphasized that in the planning of the physical education curriculum, consideration should be given on an equitable basis to the needs and interests of the learners helping to build positive attitudes towards all activities.

Table 6 presents the students' attitudes towards physical education in terms of the facilities.

Table 6 Respondents' Attitudes towards Physical Education in terms of the Facilities

| Indicators | Weighted Mean | Verbal Interpretation |
|--|----------------------|------------------------------|
| 1. There is always 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, and 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 |

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 on 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 study of Valdez (2012) emphasized that it is important that facilities are available, adequate, and in good running condition to better facilitate learning. The result affirmed what Limon (2016) stressed, that the most overlooked factor that influences the knowledge and skills acquisition of learners is the physical school facility. Flores et al., (2015) also stressed that facilities are one of the factors that affect students' academic performance. Gulhe (2014) and Pate et al., (1997) 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 (1998) that the failures to reconstruct/ replace/maintain (out) dated and /or provide new facilities have had negative impacts on the state of physical education. Ravizza and Stratton (2007); Submaraniam and Silverman (2007); Ding and Yugiyama 2018 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.

Table 7 presents the summary of the respondents' attitudes toward PE.

| Variables | Average Mean | Verbal Interpretation |
|------------------|---------------------|------------------------------|
| Curriculum | 3.70 | Very Positive |
| Subject | 3.60 | Very Positive |
| Teacher | 3.60 | Very Positive |
| Activities | 3.38 | Very Positive |
| Facilities | 3.02 | Positive |

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 significant in shaping the attitudes of the students. The result is supported by Marttinen, R, Fredrick III R. & Silverman, S. (2018), that attitude is a factor in just about every school subject across the curriculum.

Respondents' Academic Performance in PE

Table 8 shows the general point average of the respondents' grades in Physical Education 1 to 4.

Table 8 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 |

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 who got a grade of 1.75-1.25, which earned 73.3%. Based on the computation dividing the number of students who got grades of 1.75-1.25 by the total number of respondents multiplied by 100. The result of this data shows the performance of students in physical education, and it is important since these measures their ability and the development they acquired. A byproduct of their participation in all activities and the main goal of every curriculum.

Table 9 presents the respondents' grade descriptive.

Table 9 Respondents' Grades Descriptive

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

As shown in Table 9, 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.

Relationship between Respondents' Attitudes and Academic Performance in PE

Table 10 presents the significant relationship between respondents' attitudes toward PE in terms of the subject and their academic performance in Physical Education.

Table 10 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. The remaining three variables, namely subject, teacher, and facilities, have no 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 (2015) that an enhanced curriculum will draw on appealing and compelling content, design, and goals. Ferguson et al., (2014) 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

Table 11 presents the academic performance of the respondents when grouped according to gender and course. An Independent t-test was used in the differences in grades according to gender.

Table 11 Respondents' Academic Performance when Grouped according to Gender

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

Levene's test shows a p-value of 0.524, proving that the population has equal variances. It also indicates a p-value of 0.764, which is greater than 0.05. This signifies that the grades of males and females 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 (2007). They also found that there was no gender difference in attitudes between men and women toward physical

education. Moreover, the study by Sanes (2008) also reported that there was no significant difference in the attitude toward PE between the men and women respondents. In the study of Goni, Wali, Ali, and Bularafa (2015), it was also revealed that there were no significant differences exist between gender and academic performance in the participation in activities. Also, the study by Zeng, Hipsher, and Leung (2011) found that both men and women respondents show positive and similar attitudes toward physical activity. Ricacho et al., (2019) concluded that both men and women have a positive response toward physical education and the performance of physical education activities.

Table 12 presents the analysis of variance in the differences in grades when the respondents are grouped according to their course.

Table 12 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 the course. This implies that students from different courses have different learning preferences and performances. The result proves what Junio and Liwag (2016), Duke, (2000), and Eamon (2005) explained that there was recognition of the existence of different learning preferences among people even in the early times. Lorenzo A & Lorenzo, B. 2013 implied that teachers should provide learning activities that will meet the varied preferences of the students. Grasha (1972) emphasized that the goal of instruction is to help students identify and assess their learning styles.

Table 13 shows the descriptive of the grades of respondents when grouped according to courses.

Table 13 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 |

It is revealed in Table 13 that the BEED got the highest mean among the five courses with a mean of 91.3, followed by BPED with a mean of 90.33, BSED with a mean of 90.08, and BSAG

with a mean of 88.56. Among the five courses, BSIT got the lowest mean of 77.58. The study proves on what Lorenzo A. and Lorenzo B. (2013) explained that teacher education students are persistent in their studies, and they prefer to be told exactly what and how to do things.

Table 14 shows the Post Hoc Analysis of the significant differences in the grades of the respondents when grouped according to courses.

Table 14 Post Hoc Analysis for Grades when Grouped according to Course

| Course | Courses | <i>p</i> 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 14, when the BEED grades are compared to the four other courses, it is revealed that the BSIT has a significant difference with a p-value of 0.004. The researcher is 95% confident that the grades of BEED are significantly higher than those of BSIT. The same results were revealed when the grades of the BSED, BPED, and BSAG were compared; still, the BSIT got a mean difference that is lower than 0.05, which means that the BSED, BPED, and BSAG grades are significantly higher than those of BSIT. When the grades of the BSIT are compared to the four courses, it reveals a significant difference between all courses. This would mean that 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 toward physical education. Only this course got a grade of 2.5 or 79-81 compared to other courses, whose grades range from 1.75-1.25.

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

Table 15 shows the significant difference in the attitudes towards PE when grouped according to gender. An Independent t-test was used to determine if there was a significant difference in the respondents' attitudes toward PE when grouped according to gender.

Table 15 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 15 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 a 0.05 level of significance. This result is similar to the study of Antonio et al., (2006). They found that there was no gender difference on attitudes. Villiones (2015) added that there is no significant difference found on the male and female respondents on their attitudes in physical education. Moreover, Eagly (2007) found that engaging oneself in any worthwhile physical activities was content in both genders. On the contrary, in the study of Birthwistle and Brodie (2003) 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 16 presents the analysis of variance in the differences in attitudes toward PE when the respondents are grouped according to their course.

The analysis of variance shows a p-value of 0.0014, which is less than 0.05. Therefore, there is a variation in the attitudes of the respondents towards PE when grouped according to the course.

Table 16 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 (2018), 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, A. & Lorenzo B., 2013).

Table 17 shows the descriptive of the respondents' attitudes toward PE.

Table 17 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 17 that among the five programs, the BEED and BSED got the highest mean of 3.24 and followed by 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 toward PE.

Lorenzo, A. and Lorenzo, B. (2013), 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 (2018) 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 18 shows the Post Hoc Analysis on the significant differences of the attitudes of the respondents when grouped according to courses.

Table 18 Post Hoc Analysis for the differences in the Attitudes of the Respondents towards PE

| Course | Courses | <i>p-value</i> |
|---------------|----------------|-----------------------|
| 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 18 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 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 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 BSAG, with a mean of 3.150.

On the other hand, when the attitudes of the BPED respondents towards PE were compared to the four programs, it was revealed that only the BSAG respondents had no significant difference in their attitudes toward PE. In contrast, the three other courses, namely BEED, BSED, and BSIT, have a significant difference. As illustrated in Table 18, BSAG respondents got a higher mean compared to the BPED respondents. The same result is illustrated in the BSAG respondents' attitudes toward PE were compared to the BPED respondents and to the three courses.

Lastly, when the attitude of the BSIT respondents toward PE was compared to the four programs, it was revealed that the BEED, BSED, BPED, and BSAG respondents have significant differences in their attitudes toward PE. This is signified in the results shown in Table 18, that among the five programs, BSIT respondents got the lowest mean.

Lorenzo, A. and Lorenzo, B. (2013) affirmed that education students preferred to study in the morning with less break and movement and the majority were analytic, or they preferred to learn sequentially and took time to take decisions. While Magulod (2018) revealed in his study that most of the students from Information Technology and Industrial Technology courses preferred visual and kinesthetic learning. Renwick, J., and Foltz, B. (2011) supported that Information technology students exhibit a high level of preference for kinesthetic learning.

4 Conclusion and Recommendations

Academic performance in PE is greatly affected by the 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.

The course is a differentiating factor in the respondents' academic performance in PE and attitudes toward 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 toward the subject. The benefits of PE to their lives are felt by both respondents.

5 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, 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, which would help and make them more active and participative. The student's active participation would develop their potential and improve their performances. In addition, teachers may ensure equality in terms of treating the students, especially 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 the needs of the students in accordance with their course.
5. That Future Researchers may use the gathered data as a basis for conducting further studies related to this topic, and they can benefit from this study by considering this study as one of their future references.

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