



METAMORPHOSIS IN TEACHING PHYSICAL EDUCATION AND ITS EFFECT ON STUDENT'S APTITUDE

¹Vivian V. Apuang, ²Romely S. Alcorano, ³Polansky Pinky A. Barrientos

¹ Associate Professor I, Capiz State University, Roxas City, Capiz, Philippines

² Associate Professor I, Capiz State University, Roxas City, Capiz, Philippines

³ Associate Professor IV, Capiz State University, Roxas City, Capiz, Philippines

¹ vivianvbapuang@gmail.com, ² romelysalcorano@gmail.com, ³ polanskypinkyabarrientos@gmail.com

Abstract: With the advent of technological advancement, artificial intelligence, and the same way where education 5.0 era commence, the league of physical education enthusiasts like educators, trainers, and researchers has been exploring factors to initiate the metamorphosis in teaching PE in this time of pandemic that contributes to effectively address the forgoing issue as to the performance of the learners. This descriptive correlational study determined the perception of students on the learning facilities and teacher characteristics that affect their aptitude in PE. The independent variable of this study was the determined factors: the perception of the learning facilities and teacher characteristics and the dependent variable was the students' aptitude in Physical Education. This study has 349 respondents taken from the total population of 3778 of Higher Education students enrolled at Capiz State University, Roxas City Main Campus during the first semester of the academic year 2021-2022. More so, this research study utilized a research-made survey questionnaire for learning facilities and teacher characteristics and a researcher-made test questionnaire in determining the students' aptitude in PE. The finding of this research discloses that learning facility and teacher characteristics have a high effect on students' aptitude in PE, students' aptitude in PE is proficient and there is a high positive correlation with a significant relationship between teacher characteristics and learning facilities. While no significant relationship was determined between the teacher characteristics and aptitude in PE, and learning facilities and aptitude in PE. Further, it is recommended that upgrading learning facilities and holistic development of teacher characteristics are recommended to further develop the advancement progress that teachers can provide among their students.

Key Words: educators, enthusiasts, learning facilities, proficient & teacher characteristics.

1. INTRODUCTION:

Quality instruction and clientele satisfaction are the mandates that every academic institution adheres to. In today's time where the topmost priority of educators is the quality of students' performance despite the current situation, the COVID-19 Pandemic, the teaching of Physical Education like any other discipline turns upside-down compared to the conventional teachings before. Influences like students' motivation to participate in physical activity on a regular basis has become an important concern of physical education educators due to this metamorphic academic situation.

With the advent of technological advancement, artificial intelligence, and the same way where education 5.0 era commences, the league of physical education enthusiasts like educators, trainers, and researchers has been exploring factors that contribute to effectively addressing the performance of learners. Many factors that can affect a student's quality of academic achievement may be inside or outside the school premises and these factors may be termed as student factors such as family factors, school factors, and peer factors (Crosnoe, Johnson & Elder, 2004). A number of studies have been carried out to identify causal factors of poor academic performance in a number of institutions worldwide. Most of the studies focus on the three intervening elements: family, academic, and personal factors (Diaz, 2003).



With the abovementioned scenario, the PE enthusiasts of Capiz State University, Roxas City campus prompts to identify the factors that affect students' aptitude in their PE class for the first semester of the Academic Year 2021-2022.

2. STATEMENT OF THE PROBLEM :

Primarily, this study aimed to determine the factors that affect students' aptitude in their PE class for the first semester of the Academic Year 2021-2022. Further, this study specifically sought to determine the extent of the factors of learning facilities and teacher characteristics that affect the students' aptitude in Physical Education, the aptitude of students towards PE, and determine if learning facilities and teacher characteristics correlate with the student's aptitude.

3. THEORETICAL FRAMEWORK :

This study was based on the Theory of Educational Productivity by Walberg (1981) which posits that the psychological characteristics of individual students and their immediate psychological environments influence educational outcomes (cognitive, behavioral, and attitudinal). Further, Walberg's research identified nine key variables that influence educational outcomes as student ability/prior achievement, motivation, age/developmental level, the quantity of instruction, quality of instruction, classroom climate, home environment, peer group, and exposure to mass media outside of school (Walberg, Fraser, & Welch, 1986). The first three variables (ability, motivation, and age) reflect the characteristics of the student. The fourth and fifth variables reflect instruction (quantity and quality), and the final four variables (classroom climate, home environment, peer group, and exposure to media) represent aspects of the psychological environment. Clearly, student characteristics are important for school learning, but they only comprise a portion of the learning equation.

4. METHODOLOGY :

A descriptive correlational research design was used in this investigation. This research determined the students' perception on the learning facilities and teacher characteristics that affect students' aptitude in PE. The independent variable of this study were the determined factors: the perception on the learning facilities and teacher characteristics and the dependent variable was the students' aptitude in Physical Education.

This study has 349 respondents taken from the total population of 3778 (1st and 2nd year enrollees) Higher Education students enrolled at Capiz State University, Roxas City Main Campus during the first semester of the academic year 2021-2022.

Since the questionnaire used in this study was researcher-made, pilot testing was employed which determines the reliability and validity of the questionnaires. The perception of the learning facilities (10-item survey questionnaire with 0.84 Cronbach's alpha – reliable) and teacher characteristics (25-item survey questionnaire with 0.79 Cronbach's alpha – reliable) were determined using a researcher-made questionnaire where the mean from the scores from each factor was computed and interpreted. This study used the scale and interpretation presented as 1.00 – 1.80 (Very Low), 1.81 – 2.61 (Low), 2.62 – 3.42 (Average), 3.43 – 4.23 (High), and 4.24 – 5.00 (Very High).

As to the aptitude of the students, the mean from the obtained scores taken from the aforesaid researcher-made questionnaire (40-item test questionnaire with 0.79 value employing Kuder–Richardson Formula 20 – reliable) were utilized and interpreted. This study used the scale and interpretation presented as 1.00 – 7.80 (Beginning), 7.81 – 15.61 (Developing), 15.62 – 23.42 (Approaching Proficiency), 23.43 – 31.23 (Proficient), and 31.24 – 40.00 (Advanced).

Further, this study used mean to analyze the descriptive data and Pearson r in the inferential analysis of data.

5. RESULTS AND DISCUSSIONS :

Effect of Learning Facilities to Students' Aptitude in PE

The result in table 1a reveals that the learning facility has a "high" effect on students' aptitude in PE due to the obtained data of 4.22 (mean). The result implies that learning facilities such as suitable athletic facilities, first-aid facilities, sufficient quantity and variety of PE supplies for the normal class size and gym that is spacious enough to maximize learning highly affects students' aptitude as it allows them to widely explore the theories that they have learned and gain greater learning retention since they have been into operative learning via experience. The result of this study conforms with the findings of Junio and Liwag (2016) where they express that students learn the most when they feel the learning environment is conducive and equipped with serviceable facilities.



Table 1a: Effect of Learning Facilities to Students' Aptitude in PE

	N	Mean	Std. Deviation	Verbal Interpretation
Learning Facilities	349	4.22	.60335	High

<i>Legend</i>	<i>Scale</i>	<i>Interpretation</i>
	1.00 – 1.80	Very Low
	1.81 – 2.61	Low
	2.62 – 3.42	Average
	3.43 – 4.23	High
	4.24 – 5.00	Very High

Effect of Teacher Characteristics to Students' Aptitude in PE

Table 1b reveals that the effect of teacher characteristics to students' aptitude in PE is "high" (mean = 4.15) in general. Specifically, what affects the students' aptitude in PE in today's time according to gathered and treated results are subject matter expertise and personal appearance which both has a mean of 4.24. Whereas, communication skills (mean = 4.09), classroom management expertise (mean = 4.13) and instructional materials (mean = 4.03) were determined with a "high" effect as to students' aptitude in PE. The result implies that in this new learning modality, students' aptitude is greatly affective by teachers' subject matter expertise where they can rationalize topics, maintains classroom atmosphere conducive to learning and answers questions knowingly and convincingly showing high credibility, and personal appearance where students may apparently notice that their teacher is respectable as they are in their proper attire and is well groomed. This study conforms with the research findings of Coelho (2012) that reveals the importance of teachers' competence support and autonomy support in fostering students' motivational constructs and achievement outcomes in physical education.

Table 1 b: Effect of Teacher Characteristics to Students' Aptitude in PE

	N	Mean	Std. Deviation	Verbal Interpretation
Teacher Characteristics	349	4.15	.53393	High
Communication skills	349	4.09	.51584	High
Subject matter expertise	349	4.24	.57916	Very High
Classroom management expertise	349	4.13	.60289	High
Instructional materials	349	4.03	.68089	High
Personal appearance	349	4.24	.59404	Very High

<i>Legend</i>	<i>Scale</i>	<i>Interpretation</i>
	1.00 – 1.80	Very Low
	1.81 – 2.61	Low
	2.62 – 3.42	Average
	3.43 – 4.23	High
	4.24 – 5.00	Very High

Students' Aptitude in PE

As to the students' aptitude in PE, the result in table 2 reveals that the students are proficient (mean = 30.58). This implies that students are not thoroughly adjusted with the mode of learning implemented in today's scenario. That the students are still needed with guidance and directives of their teacher and also with the equipment that may widen their learning avenues and improve their learning retention (Junio and Liwag, 2016).

Table 2: Students' Aptitude in PE

	N	Mean	Std. Deviation	Verbal Interpretation
Aptitude	349	30.58	4.55330	Proficient

<i>Legend</i>	<i>Scale</i>	<i>Interpretation</i>
	1.00 – 7.80	Beginning
	7.81 – 15.61	Developing
	15.62 – 23.42	Approaching Proficiency
	23.43 – 31.23	Proficient
	31.24 – 40.00	Advanced



Correlation of learning facilities and teacher characteristics on student's aptitude

The result in table 3 reveals that there is a high positive correlation ($r = .825$) with significant relationship ($\text{sig} = 0.000$) between teacher characteristics and learning facilities. On the other hand, no significant relationship was determined between the teacher characteristics and aptitude in PE, and learning facilities and aptitude in PE. The result implies that when the teachers' characteristic is optimistic, pro to change and open to advancements the learning facilities for the students are fully utilized and the experiences provided can become an agent to greater learning retention. The result of this study negates the findings of Karemera (2003) who found that students' performance is significantly correlated with satisfaction with academic environment and the facilities of library, computer lab and etc. in the institution.

Table 3: Correlation of learning facilities and teacher characteristics on student's aptitude.

	N	Pearson Correlation	Sig. (2-tailed)	Remarks
Teacher Characteristics & Learning Facilities	349	.825**	0.000	Significant
Teacher Characteristics & Aptitude in PE	349	-0.005	0.921	Not Significant
Learning Facilities & Aptitude in PE	349	-0.015	0.787	Not Significant

***. Correlation is significant at the 0.01 level (2-tailed).*

6. CONCLUSIONS AND RECOMMENDATIONS :

With the aforesaid results, the following conclusions were drawn:

- Learning facility and teacher characteristics has a “high” effect as to students’ aptitude in PE.
- Students’ aptitude in PE is proficient.
- There is a high positive correlation with significant relationship between teacher characteristics and learning facilities. While no significant relationship was determined between the teacher characteristics and aptitude in PE, and learning facilities and aptitude in PE.

With the conclusions above, the following recommendations were formulated:

- Students’ aptitude in PE may foster better when the PE enthusiasts adhere to the 21st century trends where learning facility and teacher characteristics are considered to be the core of the development.
- Proficient aptitude among students towards PE may turn to be advanced when digital teaching-learning pedagogy and utilization of techno-based activity simulation may be employed.
- Upgrading of learning facilities and holistic development of teacher characteristics are recommended to further develop the advancement progress that teachers can provide among their students.

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