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# Competence and implementation of physical fitness activities in relation to freshmen students' performance in physical education

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This study was conducted among the State, Universities and Colleges in Caraga Region. The respondents of the study include all the instructors handling physical education, chairs/heads of the department and randomly chosen freshmen students. The study employed a descriptive-correlation design to determine the competence in terms of the level of knowledge and skills, the level of implementation of physical fitness activities in Physical Education 1 and students' performance in the pre-test and post-test along the variables of physical fitness components. The instruments were adapted from the Competencies of Instructors, Implementation and Problems in Physical Education, Private Tertiary Schools and DECS Order No. 58 s. 1990. Results showed that teachers were knowledgeable and skillful and the physical fitness activities were satisfactorily implemented as rated by students, chair/dean and themselves. Teachers' age and relevant trainings in conditioning exercises, gymnastics activities, length of time to attain skills, distribution of performance, and the facilities and equipment had a significant relationship in the implementation of physical fitness activities. There was also a significant difference in the pre-test and post-test scores of the students' performance level along the variables of physical fitness components in flexibility, muscular endurance, leg power, and cardiovascular endurance, except for muscular strength and body mass index. There was a significant difference in the level of competence when the teachers were grouped according to school. It was reflected in the students' performance that there were considerable number of poor and very poor fitness category. However, the competence of teachers rated very high. Experience and relevant trainings enhance one's capacity for the implementation of the different physical fitness activities. It is recommended that teachers should be involve in seminar workshop/trainings and schools have to provide equipment and facilities for physical fitness activities.

**Keywords:** Competence, implementation, knowledge, skills, physical education, physical fitness activities

## INTRODUCTION

The competence of the teacher in the implementation of the content of the lesson is very imperative in the students'

performance. Therefore, PE teachers will be considered effective and competent to the extent that they not only

contribute to the development of their health-related physical fitness in the short term (during primary school years), but also to the children's life choices as adolescents and adults in the long-term (Viscione et al., 2019, Rink and Hall, 2008). Learning and growth in students have been found to closely correlate with teachers' self-efficacy (Goddard et al., 2000)

In the Philippines, the basis for the implementation of physical education is the DECS Order no. 58, s.1990 requiring State Universities and Colleges to implement the guidelines and standards for College Service Physical Program (CSPE). Quality, daily physical education in the nations' schools is an important part of a student's comprehensive, well-rounded education program and a means of positively impacting life-long health and well-being. The optimal physical education program will foster a lifetime commitment to physical activity as part of a healthy lifestyle (Akhter and Ahmed, 2021). Appropriate sequence of learning activities is critical to develop a high-quality physical education curriculum (Reston, 2004). Physical fitness is the main component of a person's physical education. It involves mastering a wide range of motor skills and abilities that help to successfully specialize in any chosen activity (Ilynich et al., 2010). Exercises has a serious stimulating effect on the different organs of the body (Makhov and Medvedev, 2020). Thus, it is necessary to perform physical exercises and activities regularly (Skoryatina and Medvedev, 2019).

The World Health Organization (WHO) states that Governments should promote and protect people's health via a properly designed health promotion program. A well-designed health program is cheaper compared to medical intervention or treatment (Luca et al., 2022, Galloway, 2003; Fries et al., 1994.). The strength of the nation is seldom greater than the collective well-being of its people, and its vigor is no stronger than the vitality and will of the citizenry (Marcos, 1973). The physical fitness testing is a test designed to measure physical strength, agility, flexibility, cardiovascular endurance, muscular strength and endurance, power and body composition (Howley and Thompson, 2017) It is used in educational institution as to measure students' physical fitness.

The purpose of the study is to look into the competence of the teacher and their capability to implement the physical fitness activities for the key to a better learning is the teacher who directly influence the students' performance. The policy of the implementation and the content of the activities is imperative in achieving the goal of physical education which is to develop healthy and physically fit generation.

## **MATERIALS AND METHODS**

### **Research Design**

The study utilized the descriptive-correlation research design, specifically employing the quantitative and

qualitative approach. The study provided a description as well as quantification through scoring of the teachers' profile, level of competence of the teachers, and the level of implementation of physical fitness activities. It also measures students' performance in terms of flexibility, muscular endurance, muscular strength, leg power and body mass index or body composition.

It is co-relational because it sought to find the relationship between the teachers' profile and competence, profile and level of implementation. Furthermore, the significant difference in the level of competence and level of implementation when the teachers were grouped according to school was sought. It is a qualitative in the sense that it desired to identify the facilitating and hindering factors in the implementation of physical fitness activities.

### **Research Environment**

This study was conducted among the SUCs in the Caraga Region. This region is an administrative region of the Philippines, on the North Eastern portion of the Island of Mindanao, designated as Region XIII. The region has 4 state colleges and universities, namely: Agusan del Sur College of Agricultural Technology (ASCAT), formerly, Manobo Industrial School established in 1908 with the total of 2,167 freshman students with 6 physical education teachers and is located in Bunawan, Agusan del Sur; Caraga State University (CSU) formerly Agusan Agricultural High School established in 1946, located in Ampayon, Butuan City with the total of 2,374 freshman students and 8 physical education teachers; Surigao del Sur State University formerly Surigao del Sur Polytechnic State College established in 1992 with 2,235 freshman students and 4 physical education teachers and is located in Tandag, Surigao del Sur; and Surigao State College and Technology formerly school of Arts and Trades 1969 with 1,967 freshman students and 5 physical education teacher and is located in Surigao City.

### **Participants**

Table 1 shows the matrix presentation of the respondents. The respondents of this study include all the instructors handling P.E 1/ physical fitness subject, heads/chairs of the department and randomly chosen freshman students who were enrolled P.E 1 in the State, Universities and Colleges (SUCs) of Caraga Region. There were 400 students selected randomly using the sloven's formula to determine the number of respondents from 8,743 freshman students enrolled in the 1<sup>st</sup> semester of the school year 2018-2019. There were 23 teachers' participants and 4 department chairs/ heads.

The instrument used for the implementation of physical fitness/ P.E.1 was adapted from the study "The Competencies of Instructors, Implementation and Problems in Physical Education, Private Tertiary Schools, Butuan City: Basis for a Development Program." Another questionnaire was also based on the DECS Order No. 58 s. 1990. It

**Table 1.** Matrix Presentation of the Respondents

School Name	Actual no. of Students	Research Respondents Students	Research Respondents Faculty	Research Respondents Chair/Head
School A	2,167	99	6	1
School B	2,374	109	8	1
School C	2,235	102	4	1
School D	1,1967	90	5	1
Total	8,743	400	23	4

## Research Instruments

contains all the activities that should be included in the implementation of P.E. 1/ physical fitness activity.

The questions used in the questionnaire were used in the interview guide. The purpose of this was to determine the veracity of answers found in the questionnaire.

The instrument for the competencies of teachers in terms of knowledge and skills was from the Performance Evaluation System of the State, universities and colleges and some of the items were adopted from several references to suit the need to be tested for teachers' competency. It was subjected to reliability testing with Cronbach alpha of .901 for knowledge, and .877 for skills based on standardized items.

The physical fitness test which determined the students' physical fitness performance is a standardized test from the Bureau of Physical Education and Sports. It has two parts: the pre-test which was conducted by the instructor the start of the class to evaluate the level of fitness of the students and the post-test which was conducted before the end of the semester to assess the improvement of the students' based on the activities implemented through physical fitness activity. This had been widely used in the Philippine school setting and used as the bases to measure one's fitness.

The interview with the teachers regarding the facilitating and hindering factors in the implementation of physical fitness activities consisted of a free-flow of questions wherein the researcher listed down all the factors which influenced the implementation.

There were three sets of questionnaires, one set for the instructors, one set for students and the other set for the chair/heads of the department. The first part of the questionnaire for the teacher was about the profile. Part II included items to measure the extent of implementation of physical fitness activities in P.E. 1. Each item was rated using a four-point scale. Part III was about the competence of the teacher which they had to rate themselves. Part IV was an informal interview with the teacher to elicit the facilitating and hindering factors on the implementation of P.E. 1 physical activities. The questionnaire for the students had 3 parts. Part I included items to measure the extend of implementation, Part II included items on the competency of the instructor handling the subject in terms of knowledge and skill. Part III was the students' performance evaluation based on the physical fitness test. The questionnaire for the

chair/heads had two parts. Part I for the implementation of physical fitness activities as implemented by the instructor and the second part is the competence of the teacher handling physical education.

**Data Gathering Procedure**

The researcher made a communication letter countersigned by the research adviser to conduct the study. Permission was sought from the Director of Commission on Higher Education of Caraga region to conduct a study among State Universities and Colleges in the region. Permission was also requested from the respective State Universities and Colleges presidents to administer the questionnaire among the instructors, students and chair/deans. The communication was then endorsed to the P.E coordinators to facilitate administration of the questionnaire to the faculty and students.

A brief orientation on the questionnaire administration was conducted and confidentiality of responses was assured. After administration, questionnaire was retrieved, data collected, coded and statistically analyzed.

**Statistical Treatment**

Simple percentage was used to determine the distribution of the teacher respondents in terms of the teachers' profile and the facilitating and hindering factors in the implementation of physical fitness activities. Mean and Standard Deviation were used to determine the level of competence of the teachers handling P.E. 1 and also for the implementation of physical fitness activities as rated by the teachers themselves, the students and the chairs/heads. Frequency was used to determine the students' performance to its fitness category in the pretest and posttest along the variables of physical fitness components. Further, Chi- square and pearson-*r* were used to test the significant relationship between the profile and competence, profile and level of implementation and competence and level of implementation in terms of knowledge and skills of the teacher. ANOVA and t-test /F-value – these tools were used to determine whether there was significant difference in the pretest and post test scores of the students' performance level along the variables of physical

**Table 2.** Level of Competence of the instructors handling Physical Education 1 in freshmen students in terms of knowledge as rated By Themselves, Chairs / Deans, and Students

Statements	Teachers			Heads			Students		
	Mean	SD	Remark	Mean	SD	Remark	Mean	SD	Remark
1. Identify strengths, and areas for improvement after the physical fitness test (pretest)	3.28	0.46	Very High	3.17	0.62	High	3.41	0.69	Very High
2. Communicates measurable objectives of activities and uses assessment rubrics for student evaluation.	2.89	0.96	High	3.22	0.65	High	3.31	0.74	Very High
3. Presents the content of the subject matter, tailored to the students' knowledge.	3.56	0.51	Very High	3.22	0.73	High	3.32	0.67	Very High
4. Inform the students of the competencies they will be expected to acquire.	3.61	0.50	Very High	3.22	0.65	High	3.51	0.65	Very High
5. Exhibits mastery of the subject matter.	3.56	0.62	Very High	3.39	0.61	Very High	3.34	0.69	Very High
6. Builds on previous concepts and topics	3.50	0.51	Very High	3.11	0.47	High	3.40	0.65	Very High
7. Connect the subject matter and topics	3.61	0.50	Very High	3.39	0.50	Very High	3.55	0.59	Very High
8. Updates knowledge in his/her field.	3.56	0.51	Very High	3.17	0.51	High	3.57	0.63	Very High
9. Planned instruction includes a warm-up, flexibility and cool-down period.	3.50	0.51	Very High	3.28	0.57	Very High	3.23	0.56	High
10. Reinforces learning through audio or visual devices such as music and video clips to enhance instruction.	3.22	0.55	Very High	3.17	0.51	High	2.93	0.69	High
Mean	3.43	0.33	Very High	3.24	0.39	High	3.36	0.41	Very High

fitness components, and significant difference in the level of competence and level of implementation when the teachers were grouped according to school. Lastly, Cronbach alpha was used to test the reliability of the instrument for the competence of teachers in terms of knowledge and skills.

## RESULTS AND DISCUSSION

This chapter shows the results obtained by the researcher from the data gathered. These are analyzed and interpreted in reply to the specific problems in Chapter 1. The presentation and discussion were arranged in the following topics: the profile of the teachers, the level of competence of the instructors handling physical education in terms of knowledge and skills, the level of implementation of P.E. 1 activities as rated by the teachers themselves, the chairs, and the students, students' performance level in the pretest and posttest, test of relationship in the profile and competence, profile and level of implementation, level of competence and level of implementation in terms of knowledge and skills, test of difference in the pretest and post test score of the student performance, level of competence and level of implementation when the teacher were grouped according to school, the facilitating and hindering factors in the implementation of physical fitness activities and an action plan created by the researcher which aimed to enhance teachers' competency, teaching

style and techniques for a better implementation of P.E. 1 activities to develop students' fitness.

Table 2 shows the evaluation of competence of the instructors handling Physical Education in freshmen students in terms of knowledge of the instructors handling P.E. 1. It is noted that the teachers rated themselves as very high with a mean of 3.43, the same with the students' rating with a mean of 3.36, while it was only high for their immediate superiors with a mean of 3.24. Overall, teachers were rated very high on competence in terms of knowledge by the students and themselves while in item number 10 which is Reinforces learning through audio or visual devices such as music and video clips to enhance instruction the student and chairs have the same rating as high.

As gleaned, it is not surprising that the teachers would rate themselves very high in almost all items this is their area of concentration. But when it comes to communicating measurable objectives of activities as well as the uses of assessment rubrics for student evaluation, the teacher respondents rated themselves only high. This is in contrast with the evaluation of their respective heads, wherein most of the items got only high ratings, except for the following which were rated very high: exhibits mastery of the subject matter; connects the subject matter and topics; and planned instruction includes a warm-up and stretching activity and cool-down period. In an attempt to substantiate the findings, the researcher somehow made some informal

**Table 3.** Level of Competence of the Instructors Handling Physical Education 1 in freshmen students in terms of Skills as rated by Themselves, Chairs/ Deans, and Students

Statements	Teachers			Heads			Students		
	Mean	SD	RMK	Mean	SD	RMK	Mean	SD	RMK
1. Assigned specific physical fitness exercise to students to be performed at home after the pretest.	2.56	1.04	High	3.17	0.92	High	2.95	0.77	High
2. Uses a diverse activity targeted to help students develop and improve motor fitness, cognitive, personal and social skill.	3.44	0.62	High	3.33	0.49	High	3.37	0.72	Very High
3. Supervises students' activities at all times.	3.44	0.70	Very High	3.39	0.61	Very High	3.48	0.66	Very High
4. Encourages student's participation.	3.61	0.61	Very High	3.50	0.62	Very High	3.69	0.58	Very High
5. Promotes teamwork in group activities.	3.67	0.49	Very High	3.67	0.49	Very High	3.71	0.57	Very High
6. Attends and responds clearly to questions ask in class.	3.72	0.46	Very High	3.50	0.62	Very High	3.57	0.59	Very High
7. Uses material that facilitate physical activities	3.56	0.51	Very High	3.39	0.50	Very High	3.38	0.72	Very High
8. Gives activities and assignments based on objectives and contents in syllabus.	3.67	0.49	Very High	3.33	0.59	Very High	3.41	0.69	Very High
9. Adjust instruction and expectations based on individual differences and needs.	3.39	0.50	Very High	3.28	0.46	Very High	3.04	0.60	High
10. Provide evidences of conducting fitness testing twice during the semester.	2.83	0.86	High	2.67	0.69	High	2.79	0.70	High
Mean	3.39	0.37	Very High	3.32	0.28	Very High	3.34	0.42	Very High
Grand Mean	3.41	0.31	Very High	3.28	0.33	Very High	3.35	0.38	Very High

interview with chairman of the P.E Department, on the basis of how they derived ratings contrary to the ratings of the teachers. A careful evaluation should be done so as to avoid conflicts among subordinates.

It was found out that the students rated their respective P.E.1 instructors very high in almost all of the items. These students confirmed the researcher when they were asked on how their teachers performed in class. There were only two items they rated as high namely: Planned instruction which includes a warm-up and stretching activity and cool down period. The student said sometimes the teacher due to time constraints, missed to execute warm up and cooling down before and after a physical activity. However, this argue with Faigenbaum and Mcfarland (2006) who stated that increasing range of motion performance maybe enhanced and reduce the risk of injury

The results prove the Facilitation Theory by Carl Rogers which stated that the teacher is imperative in the implementation of the activities through stimulation of the students to adopt and consider new ideas (Becker et al., 2010)

This Table 3 shows the means of 3.39 as rated by the teachers in terms of skills while 3.32 by the heads and 3.34 by the students which means that the rating is very high. To wit, there were items were teachers and head shares the

same perception as they both rated very high, namely: Supervise students' activities at all times; Encourages students' participation; Promotes teamwork in group activities; Attends and responds clearly to questions ask in class; Promotes teamwork in group activities; Uses material that facilitate physical activities; Gives activities and assignments based on the objectives and contents in the syllabus. There were also items which both research participants rated as high only. The teachers, the heads and even the student rate their instructor high on the following; Assigned specific physical fitness exercise to students to be performed at home after the pretest; Provides evidence of conducting fitness testing twice during the semester. One item like, "Use diverse activities targeted to help students develop and improve motor fitness, cognitive, personal and social skill" was rated high only by teachers and heads while it was rated as very high by students. "Adjust instruction and expectation based on individual difference and needs" was rated by the students as high only while teachers and heads gave a very high rating.

This only means that teacher respondents were skillful in the field of physical education particularly in P.E. 1. This finding is somehow supported by Blakemoore (2005) who stressed that in order to have effective physical activity program, a quality physical education policy and quality

**Table 4.** Level of Implementation of P.E 1 in freshmen as rated by the Teacher-Respondent Themselves, Chairs/ Deans, and Student

Statements	Teachers			Heads			Students		
	Mean	SD	RMK	Mean	SD	RMK	Mean	SD	RMK
3.1 Conditioning Exercises									
1. Warm-up exercises (5-10 mins)	3.74	0.54	Very High	3.52	0.51	Very High	3.52	0.64	Very High
2. Flexibility exercises (from head to toe)	3.65	0.57	High	3.52	0.51	Very High	3.32	0.74	Very High
3. (Main workout) Strength and endurance exercises	3.39	0.66	Very High	3.61	0.50	Very High	3.28	0.71	Very High
4. Aerobics and Cardio exercise	3.48	0.59	Very High	3.52	0.51	Very High	3.39	0.63	Very High
5. Cool down exercise (4-8 mins)	3.61	0.58	Very High	3.39	0.58	Very High	3.43	0.68	Very High
<b>Mean</b>	<b>3.57</b>	<b>0.46</b>	<b>Very High</b>	<b>3.51</b>	<b>0.45</b>	<b>Very High</b>	<b>3.39</b>	<b>0.51</b>	<b>Very High</b>
2.2. Gymnastics Activities									
6. Fundamental gymnastics positions	3.48	0.73	Very High	3.30	0.56	Very High	2.74	0.83	High
7. Calisthenics/ freehand exercise	3.39	0.72	Very High	2.70	0.82	High	2.79	0.83	High
8. Stunts and Tumbling exercise	3.00	0.74	High	3.04	0.47	High	2.10	0.96	Low
9. Pyramid Building Activities	3.09	0.90	High	2.26	0.86	Low	2.08	0.91	Low
<b>Mean</b>	<b>3.24</b>	<b>0.64</b>	<b>High</b>	<b>2.83</b>	<b>0.53</b>	<b>High</b>	<b>2.43</b>	<b>0.71</b>	<b>Low</b>
3.3 Length of Time to attain the skill									
10. Four months or 32 hrs (The activities have been done for the whole semester)	<b>3.39</b>	<b>0.58</b>	Very nHigh	3.13	0.63	High	3.07	0.75	High
3.4 Distribution of Performance (Chose 1 item only)									
11. 2 meetings per week ate 30-40 mins of physical activities or 1 meeting per week at 80 mins of physical activities with rest in between	3.42	0.59	Very High	3.22	0.52	High	3.50	0.70	Very High
3.5 Facilities and Equipment									
12. Activities are conducted in a gym with available equipment for the activity.	2.22	0.85	Low	2.48	0.85	Low	2.92	1.01	High
<b>Grand Mean</b>	<b>3.17</b>	<b>0.34</b>	<b>High</b>	<b>3.03</b>	<b>0.44</b>	<b>High</b>	<b>3.06</b>	<b>0.45</b>	<b>High</b>

physical education teacher are required.

The teachers acknowledge that there were cases wherein they could not provide exercises to students individually but addressed them as a group. The same was also observed by the heads and the student. Admittedly even the teachers handling the subjects confirmed that there were times that they could not conduct fitness testing twice due to interruptions of classes and in the absence of facilities in which weather conditions sometimes would not allow to have it outside, beside time constrains.

The result showed that teachers and heads were more familiar with the objective of the activities and the values of the activities conducted in the class than the students.

According Davis et al. (2005), the length of time to attain physical fitness should be inculcated in the mind of the

students to encourage them doing physical fitness activities even outside P.E. classes due to the limited number of hours allocated for P.E. classes every week as well as the number of hours in a class.

Shown in Table 4 is the level of implementation of P. E. 1 activities. Remarkable are the items that were rated low by the students, such as, stunts, and tumbling exercise and pyramid building activities. The latter was also rated low by the heads. Both teachers and heads shared the same low rating on "Activities are conducted in a gym with available equipment for the activity", while student rated it as high. "Conditioning exercises" was rated very high by all respondents. Teachers themselves rated flexibility exercises, stunts and tumbling exercise, and pyramid building activities high but had a low rating for the

**Table 5.** Students' Performance Level in the Pre-test

Pre-test score	Flexibility	Muscular Endurance	Muscular Strength	Leg Power	Cardio- Vascular Endurance	Fitness Category
1	1	0	0	0	0	Superior
2	3	2	3	2	0	Excellent
3	30	6	13	37	22	Very Good
4	54	22	7	38	51	Good
5	72	71	32	71	105	Average
6	70	72	141	66	97	Poor
7	80	137	114	96	35	Very Poor

**Table 6.** Students' Performance Level in Post test

Pre-test score	Flexibility	Muscular Endurance	Muscular Strength	Leg Power	Cardio- Vascular Endurance	Fitness Category
1	1	0	0	0	0	Superior
2	2	2	3	2	0	Excellent
3	40	9	8	33	54	Very Good
4	62	27	9	44	75	Good
5	77	76	33	97	129	Average
6	70	75	156	70	43	Poor
7	58	121	101	64	9	Very Poor

students. It may be inferred that the teachers might have inhibited such activities for safety reasons.

The result is associated with the findings of the United Kingdom Health Service (2012) that it is important to develop and maintain aerobic endurance, joint flexibility, and muscle strength which is important in a comprehensive exercise program, especially as people age. The low ratings from the students would mean that the teachers handling the Physical Education subject must conduct activities in stunts and tumbling and pyramid building since these activities help improve muscular strength, endurance, flexibility, balance and control. This is supported by Caballero (2014) in his study which revealed that the teachers were not competent in teaching the content of the subject which include gymnastics activities.

The teacher and the chairs who are experts in the physical education, know the safest environment where to conduct such activities whether indoor or outdoor, facilities, and equipment needed so they rated it as low but students since their concern is only for execution with caution as per instruction of the teachers, as long as they can execute the activity with or with a modified physical equipment.

The result of this area is associated with the study of Andaya (2001), that facilities and equipment are essential in the implementation of physical fitness activities. It emphasized the importance of having adequate facilities in order to fully implement physical education program, though the teacher can improvise based on her exposure in the field of physical education.

The data show the result of the pretest performance of the students. The students taking up P.E. 1. Were given a pretest on flexibility, muscular endurance, muscular strength, leg power and cardio vascular endurance.

As reflected on Table 5, one student was considered to be superior in flexibility. For flexibility test, 3 students were excellent, 30 students were very good, 54 of them were good, 72 students were average, 70 students had the fitness category of poor and 80 of them were very poor. For muscular endurance 2 students were excellent, 6 students were very good, 22 students were good, 71 of them were average, 72 of them were poor and 137 or almost half of the students had very poor performance. With muscular endurance, 3 students were excellent, 13 students were very good, 7 students were good, 32 students were average, 141 students were poor and 141 students were very poor performance. As to leg power, 2 students were excellent, 37 students were very good, 38 students were good, 71 students were average, 66 students were poor and 96 of them were very poor. Lastly for cardiovascular endurance, 54 students were very good, 75 students were good, 129 students were average and with the very least number of students with poor and very poor ratings.

The pretest result of the students' performance in physical fitness test as observed by the researcher showed that there were more students whose fitness category belonged to poor and very poor category which means that the students' physical fitness activities in high school did not enhance or influence students' fitness and did not meet the goal of physical education. Fitness declined as they grow older and consequently there were decreasing number of students who were perceived to have an average or above average level of fitness. This trend had also been reported in previous studies (Dollman et al., 2005)

Table 6 shows the students' performance level in post test. This presented the post test performance of the students In flexibility 1 student is superior, 2 students were excellent, 40 students were very good, 62 students were

**Table 7.** Test of Relationship between level of competence and Level of Implementation in terms of knowledge

Variables	Pearson-r	Degree of Correlation	p-value	Decision on Ho	Remark
Knowledge					
Conditioning Exercises	0.461	Moderate correlation	0.027*	Reject Ho	Significant
Gymnastics Activities	0.168	Very low correlation	0.444	Do not Reject Ho	Not significant
Length of time to attain Skills	0.229	Low correlation	0.294	Do not Reject Ho	Not significant
Distribution of Performance	0.154	Very low correlation	0.484	Do not Reject Ho	Not significant
Facilities and Equipment	0.217	Low correlation	0.320	Do not Reject Ho	Not significant

**Table 8.** Test of Relationship between level of competence and Level of Implementation in terms of skills

Variables	Pearson-r	Degree of Correlation	p-value	Decision on Ho	Remark
Knowledge					
Conditioning Exercises	0.470	Moderate correlation	0.024*	Reject Ho	Significant
Gymnastics Activities	0.360	Low correlation	0.042*	Reject Ho	significant
Length of time to attain Skills	0.581	Strong correlation	0.004**	Reject Ho	significant
Distribution of Performance	0.357	Low correlation	0.044*	Reject Ho	significant
Facilities and Equipment	0.020	Negligible correlation	0.928	Do not Reject Ho	Not significant

good, 77 students were average, 70 students were poor and 58 students were very poor. In muscular endurance 2 students were excellent, 9 students were very good, 27 students were good, 76 students were average, 75 students were poor and 121 students were very poor. In muscular strength 3 students were excellent, 8 students were very good, 9 students were good, 33 students were average, 156 students were poor and 101 students were very poor. In leg power 2 students were excellent, 33 students were very good, 44 students were good, 97 students were average, 70 students were poor and 64 students were very poor. In Cardio-Vascular endurance 54 students were very good, 75 students were good, 129 students were average, 43 students were poor and 9 students were very poor.

In the post test results, the number of students who got very poor ratings decreased. This means that with proper guidance from the teacher in charge the fitness categories mentioned will also improve. Having designated physical education specialist resulted in lesson that focused on the individual physically, socially and emotionally when the activities are conducted safe, inclusive and equitable environment (Robinson, 2008). With teachers specialized in the field of physical education handling the activities, it showed that there was really an improvement in the students' performance.

The analyzed result showed the significant relationship between the level of competence and level of implementation in terms of knowledge. It is shown in Table 7 that there is a significant relationship between the level of competence of the teacher respondents and the level of implementation of the physical activities in P.E. I in terms of knowledge on conditioning exercises while there is no significant relationship in knowledge in gymnastics activities, length of time to attain skills, distribution of performance and facilities and equipment.

This means that the teachers' knowledge on conditioning exercises is essential in the implementation of the activities

in P.E. 1. As observed there were teachers who generalized all exercises to all individuals which contradict to the fact that exercises should be specific to suit the need of the individual. This finding is supported by the theory of Becker's Health Belief Model that physical fitness activities can have a major impact on the degree to which and individual will engage in regular exercise (Glanz et al., 2008).

Table 8 shows the test of relationship between level of competence and level of implementation in terms of skills. The significant relationship between level of competence and level of implementation in terms of skills, study emerged that conditioning exercises with the p-value of 0.024 with a moderate correlation, gymnastics activities with a p-value of 0.042 with low correlation, length of time to attain the skills with a p-value of 0.004 with strong correlation and distribution of performance with a p-value of 0.044 with a low correlation had a significant relationship to the level of competence of the teacher in terms of skill. The facilities and equipment had no significant relationship in the level of competence and level of implementation of the activities. The result implies that a skillful teacher has the accuracy and ability to perform different exercises, identify what particular exercises enhance a particular component or develop one's fitness, can demonstrate conditioning exercises and can assist very well the students in the performance of gymnastics activities. The teacher has also the ability to determine how long to develop a particular fitness component and can manage the distribution of performance in order to achieve one's fitness despite some interruption of classes. Educational background, relevant trainings, exposure and knowledge and skills of the teachers handling physical education subject is essential for the implementation of the fitness program (Sears et al., 2014)

Table 9 show the test of difference in the pre-test and post test score of the students' performance level of along



**Table 9.** Test of Difference in the Pre-test and Post test Score of the Students' Performance level of along the variables of Physical Fitness components

Source of difference	Mean	SD	t-value	p-value	Decision on Ho	Remark
<b>Flexibility</b>						
<i>Pre-test</i>	5.33	1.36				
<i>Post test</i>	5.11	1.34	5.631	0.000**	Reject Ho	Significant
<b>Muscular Endurance</b>						
<i>Pre-test</i>	5.99	1.11				
<i>Post test</i>	5.86	1.15	3.320	0.001**	Reject Ho	Significant
<b>Muscular Strength</b>						
<i>Pre-test</i>	6.05	1.04				
<i>Post test</i>	6.05	0.97	0.279	0.780	Do not Reject Ho	Not Significant
<b>Leg Power</b>						
<i>Pre-test</i>	5.45	1.38				
<i>Post test</i>	5.26	1.37	4.043	0.000**	Reject Ho	Significant
<b>Cardio-Vascular</b>						
<i>Pre-test</i>	5.23	1.08				
<i>Post test</i>	4.61	1.02	10.257	0.000**	Reject Ho	Significant
<b>BMI</b>						
<i>Pre-test</i>	2.65	2.18				
<i>Post test</i>	2.63	2.18	0.382	0.703	Do not Reject Ho	Not Significant

**Table 10.** Test of Difference in the Level of Competence and Level of Implementation when the Teachers are Group According to school

Source of variation	Mean	SD	F-value	p-value	Decision on Ho	Interpretation
<b>Competence</b>						
<i>School 1</i>	3.51	0.39				
<i>School 2</i>	3.31	0.19	3.906	0.025*	Reject Ho	Significant
<i>School 3</i>	3.47	0.39				
<i>School 4</i>	3.86	0.12				
<b>Implementation</b>						
<i>School 1</i>	3.31	0.42				
<i>School 2</i>	3.08	0.28	0.852	0.483	Do not Reject Ho	Significant
<i>School 3</i>	3.05	0.31				
<i>School 4</i>	3.29	0.41				

the variables of physical fitness components. In flexibility, muscular endurance, leg power, cardio-vascular endurance the result is significant while in muscular strength and Body Mass Index (BMI) the result is not significant during the pre-test and post test.

After analyzing the results on the different test exercises given to the student respondents in both the pretest and posttest, a significant difference was shown and it was found out that flexibility which was tested by sit and reach exercise, muscular endurance by push-up, leg power by standing long jump and cardiovascular strength by step test yielded a significant difference. This means that after a complete discussion of the result of the pre-test the teachers were able to identify and give exercises for the students to improve their performance on the said physical fitness test. It is somehow in support to Maxwell (2006) which stated that training is an art as much as a science when it comes to the proper amount of volume or training with proper distribution that will improve fitness.

Except for muscular strength and body mass index which

did not give any difference at all, this only shows that the exercises given to improve muscular strength had no effect on the improvement of that component. This can also be traced on the result of the implementation of gymnastics activities which was low and the body mass index of the students were not contributing factor to result to a significant difference.

Table 10 above show the test of difference in the level of competence and level of implementation when the teachers are group according to school. For competence and implementation school 1, school 2 school 3 and school 4 has a result of significant.

It is evident in the statistical treatment of the data that age, relevant trainings and experiences affect the teachers' competence in handling physical education subject particularly in P.E I. It indicates that there was a significant difference in the level of competence to the level of implementation when the teachers are grouped according to school. This study is somehow supported by the study of Butalid (2011) that experience and age is significantly

**Table 11.** Post Hoc Analysis (Level of Competence)

Schools Compared	F-value	Interpretation
School 1 vs. School 2	0.225	Not Significant
School 1 vs. School 3	0.827	Not Significant
School 1 vs. School 4	0.067	Not Significant
School 2 vs. School 3	0.326	Not Significant
School 2 vs. School 4	0.003	Significant
School 3 vs. School 4	0.043	Significant

related to teaching performance.

Table 11 above show the Post Hoc Analysis of the competence level of the teachers when grouped according to school, it can be deduced that there was no significant difference in the level of competence between school 1, school 2, school 3 and school 4 and also in school 2 vs. school 4. On the other hand, there were significant differences between school 2 vs. school 4 and School 3 vs. school 4. This means that school 3 teachers compared to school 2 and 4 teachers differ in experience in handling P.E. 1 and also in relevant trainings attended. This is based on the result of the statistical treatment in which age, experience and training showed a significant relationship with competence of the teacher.

Proper implementation of the physical fitness activities in physical education will produce long-term physical fitness benefits. The above statement is also supported by the Philippine Sports Commission (2005) but this can only be realized coupled with competence.

### Conclusion

Based on the findings of the study, it can be concluded that though the competence of the teacher as rated high and very high by students, chairs/ deans and themselves, the implementation was high only. It was reflected in the students' performance that there still considerable number of students with poor and very poor fitness category. Gymnastics activities such as calisthenics were rated high only while the rest of the said activities were rated low by the students which means it was not conducted well in the school. Experience and relevant trainings enhance one's capacity for the implementation of the different physical fitness activities and on the management of time and performance. It is recommended to conduct a training program for the teacher for physical fitness activities to enhance their capabilities in providing activities that suits the students. The administration should create facilities and provide equipment for physical education classes and physical fitness activities.

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