

# QUALITY Physical Education, Learning Styles, and Motivation of College Students in Physical Education Classes: An Explanatory Sequential DESIGN

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## ABSTRACT

This study explored the influence of quality physical education (QPE) and learning styles on college students' motivation in physical education (PE) using a mixed methods approach, particularly explanatory sequential design. For the quantitative phase, respondents were randomly chosen from among the selected higher education institution in Region XII, and for the qualitative phase, participants were purposively chosen from the respondents of the quantitative phase to participate in the in-depth interview and focus group discussion. Sets of adapted survey tools and an interview guide were used to gather data. The mean, standard deviation, and linear regression were used as statistical tools for the quantitative strand. Further, coding and thematic analysis were employed for the qualitative strand. Findings revealed high mean ratings in QPE, learning styles and colleges students' motivation in physical education respectively. Furthermore, QPE and learning styles were both found as significant predictors of college students' motivation in physical education. Moreover, results showed that the high percentage of the variance of the college student motivation in PE was explained by the independent variables, QPE, and learning styles, thus it can be said that a certain percentage of the variance can be attributed to other factors aside from the variables explored in the study. The combined influence of quality physical education and learning styles as predictors of motivation in physical education among college students was a good fit for the data in this study. Also, the participants' standpoints on the salient findings of the study were probed for further explanation in the qualitative strand. Thus, the joint display revealed the confirming-merging nature of data integration.

**KEYWORDS:** *Education, quality physical education, learning styles, motivation, explanatory sequential design, Philippines*

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## INTRODUCTION

Motivation is recognized as a crucial component when examining college students' discipline, and academic performance, as well as Physical Education (PE) achievement (Priest and Yandel, 2019). To support this claim, Hawthorne (2021) stated that, for teaching and learning to be successful, motivation among students is a necessary component. However, motivation of college students to engage in PE classes in school has significantly decreased (Pokrovskaya et al. 2020). College students regretfully treat P.E as a subject like a spare tire; if they want to go to class, they will; if not, they won't (Kretschmann, 2014). Also, Silva and Coffani (2016) found that most of the students consider it a less essential subject and typically a form of entertainment that is not as important as other disciplines that foster the development of strong intellectual skills.

In the global arena, particularly in Nigeria (Coterón, et al., 2020) have discovered a significant decline in PE due to a lack of involvement, motivation, and interaction in PE activities. In China, Gu and Zhang (2016) discovered that students' interest score in PE deteriorated as they advanced in grade level. Higher grades resulted in lower mean scores. The reason for this is linked to the perceived ability of students; when students think that they are not capable, motivation levels decline.

In the Philippines, the decline in college student motivation in PE is also a serious concern. Bendejo and Gempes (2019) found that student motivation in any physical education-related school activity is at an extremely low level. Similarly, Bailon et al. (2018) discovered that many Filipino students leave school early because they do not wish to participate in physical education activities. The survey further revealed that students lack motivation to participate in PE activities because they consider PE-related activities boring.

In the SOCCSKSARGEN region, Tagare (2023) found that inspiring students to actively participate in PE classes is generally a challenging task for physical education teachers. As students' physical abilities, degrees of interest, and level of effort in PE lessons vary among students. Thus, it is crucial to understand motivational concerns in this context. Likewise, Calixtro (2020) carried out research on how the epidemic affected students' motivation for physical education. The findings revealed that students are unmotivated to attend classes; learners show disruptive behavior and engage in inappropriate educational activities; instructional environments need to be tweaked to adhere to standard health protocols; instructional tactics and learning tasks need to be

retrofitted which affects the level of motivation among students to participate in their PE classes.

Moreover, researchers have recognized the benefits of quality physical education (QPE) and learning styles in developing motivation in PE classes amongst college students. Owing the ideas of Ho et al. (2019) and Chen (2016), they emphasized that QPE serves as a fundamental means of imparting students with essential knowledge, skills, physical fitness, and positive attitudes. These attributes are crucial for enabling students to become motivated and proficient in physical movement and competent performers, thereby facilitating their active engagement in a diverse range of physical activities.

Meanwhile, Almeda (2018) and Alemdag (2020) posited that different learning styles in PE lessons and activities will maximize college student' learning experience. They also reiterated that the teachers' role in supporting the use of learning styles would capitalize on the students' relatively high motivation to engage in PE tasks and activities, particularly during the formative years, when the behavior would likely be more frequent and occur spontaneously. Hence, need support and learning styles surfaced as two of the most relevant and recent variables that may impact college students' motivation in PE classes.

Despite numerous studies demonstrating relationships between quality physical education and students' motivation in PE classes (Girard et al., 2019; Ho et al., 21019) as well as learning styles and college students' motivation in PE (Catingob, 2020; Ghaedi & Jam, 2014; Moneva et al., 2020), however, this only shows bivariate relationship, and the researcher has not found any of the same type published in the locality. Furthermore, the researcher has not discovered any relevant study involving the three variables in one study. This dearth of literature justifies the need for this study to be carried out to debunk and illuminate such a gap. With this mixed methods design, the researcher considers this study as different to those existing researches, making this a contribution to new knowledge.

Moreover, this study is significant because it contributes to a deeper understanding of three topics: quality physical education, motivation, and learning styles of college students. Also, this paper may provide an avenue for educational institutions to further their PE curriculum in response to the change of times. Further, this study can be beneficial to future researchers who would like to explore the broader phenomena related to quality physical education,

motivation and learning styles. In addition, the results of this study may also be presented to the local, national, international conference and translated into publishable articles so that there would be more who may benefit from the study.

## **Theoretical Lens**

As a pragmatist, the researcher needs to see the complete picture of the study to determine and test theories, explore and understand experiences, and solve the problem. For this reason, solving a social problem needs the balance of both quantitative and qualitative data. The emphasis on initiatives that have a meaningful consequence in solving learning issues, particularly students' motivation in PE classes, is the study's primary concern. Moreover, this pragmatic approach is set to design the process of conducting research, including all phases for the theoretical underpinning to collect and analyze data. Hence, it can be deduced from the above that the philosophical worldview of things is vital to the meaning of research methodology.

This inquiry was anchored and gleaned from the concept of Self Determination Theory (Deci & Ryan, 1985) and Sociocultural Theory (Lev Vygotsky, 1978). Self-determination theory, proposed by Deci and Ryan (1985), emphasizes the specific motivation created by the interaction between individuals and their environments. This theory gives researchers an individual understanding of the cognitive, emotional, and behavioral patterns related to student progress, particularly in physical education.

The second theory that I used in my research is Lev Vygotsky's (1978) Sociocultural Theory. It is based on the premise that a learner does not develop in isolation from his or her environment, with a student's motivation in a PE activity—a specific interaction between the student and the teacher—acting as the smallest unit of analysis. Furthermore, Miller (2011) asserted that the theory proposes that the individual and the environment are inseparable rather than two autonomous entities that impact one another. Learning takes place as a direct result of the relationship between the instructor and the student, which in turn leads to successful development.

## **METHODS**

### **Research Design**

In this study, the researcher employed mixed methods, specifically an

explanatory sequential study. Mixed methods research design is an evolving research technique that promotes the systematic synthesis or mixing of quantitative and qualitative data within a single study or ongoing investigation or inquiry (Li et al. 2015; Creswell, 2013). This method collects and analyzes both quantitative and qualitative data and integrates data during data collection, analysis and discussion. This method used procedures that implemented quantitative and qualitative components concurrently (Creswell & Clark, 2011). Further, it combines elements of qualitative and quantitative approaches for the broad purpose of breadth and depth of understanding and corroboration.

In the quantitative phase, the researcher specifically used a descriptive correlation approach in order to address the problems in the study and achieve its purpose. This approach measures two or more relevant variables and assess a relationship between or among them (Schmitz, 2012). It is fit to use descriptive correlatives in the quantitative phase because the researcher wanted to describe and examine the relationship between quality physical education, learning styles and motivation of college students in PE classes. Survey method employed using adapted survey questionnaires with a five-point Likert scale.

In the qualitative phase, the phenomenological qualitative research design was employed. Phenomenology, as stated by Creswell and Creswell (2018), that this design involves describing the lived experiences of a phenomenon of some individuals. The fundamental goal of the approach is to arrive at a description of the nature of the phenomenon (Creswell, 2018). Hence, the researcher examined the viewpoints of the participants wherein a broad, general inquiry is aimed, and the data consists largely of words or texts using open-ended questions focusing on the significant quantitative findings (Creswell & Clark, 2011).

### **Participants**

For the quantitative strand of the study, 300 college students served as the respondents. For multiple linear regression, Bujang et al. (2017) suggested a minimum sample size of 300 or more to generate an approximation of estimates with parameters in a survey Purposive-stratified quota sampling was used in selecting participants in order to achieve a homogeneous sample whose units share the same characteristics or traits (Creswell, 2013).

In the qualitative strand, 10 1st to 4th year college students were invited for the in-depth interview (IDI) and seven for focus group discussion (FGD) which

were taken from the 300 respondents in the quantitative strand. Meanwhile, Creswell and Clark (2017) said that for phenomenological research, 10 participants for IDI and seven participants for FGD are sufficient. Thus, participant's standpoints on the quantitative data were considered and dealt with accordingly.

### Data Analysis

Mean is the average of two or more sets of data. It is a numerical value used to indicate the central value of the group data. Standard Deviation (SD) is the measure of the spread of the numbers in a set of data from its mean value. It is a numerical value used to indicate how widely individuals in a group vary. Moreover, Multiple Linear Regression was used to determine if the two variables, quality physical education, and learning styles can influence college students' motivation in physical education in Region XII. While the data from the IDI and FGD were analyzed using thematic analysis. The interview was recorded so that data and notes obtained could be analyzed to determine the emerging codes and themes. This method emphasizes pinpointing, examining, and recording patterns or themes within data. Themes are patterns across data sets that are important to the description of a phenomenon and are associated to a specific research question (Mertens, 2018).

### Trustworthiness of the Study

Trustworthiness aimed to establish the credibility, transferability, conformability, and dependability of the research findings (Lincoln & Guba, 1985). Thus, the framework for assessing truthfulness of the research is based on the four criteria of Lincoln and Guba (1985) which are credibility, transferability, dependability, and conformability.

## RESULTS

### Quantitative Results

#### *Status of Quality Physical Education of the Respondents*

**Table 1.1**

*The Status of Quality Physical Education*

	Mean	SD	Description
Skill Development and Bodily Awareness	4.52	.72	Very High
Facilities and Norms in Physical Education	4.43	.70	Very High

Quality Teaching of Physical Education	4.44	.74	Very High
Plans for Feasibility and Accessibility of Physical Education	4.14	.86	High
Social Norms and Cultural Practice	3.13	1.41	Moderate
Governmental Input for Physical Education	4.07	.83	High
Cognitive Skill Development	4.37	.75	Very High
Cognitive Habituated Behaviour in Physical Activities	4.29	.75	Very High
<b>Overall Mean</b>	<b>4.17</b>	<b>.66</b>	<b>High</b>

Table 1.1 has reflected an overall mean of 4.17 described as high which means that the quality physical education is oftentimes observed. In addition, its minimal standard deviation of .66 shows that the responses of the students are clustered close to the mean. The domain skill development and bodily awareness has the highest mean of 4.52 described as very high. While, the domain social norms and cultural practice has the lowest mean of 3.13 described as moderate.

### *The Status of Learning Style of Respondents*

**Table 1.2**  
*The Status of Learning Styles of Respondents*

	<b>Mean</b>	<b>SD</b>	<b>Description</b>
Visual Learners	3.72	.66	High
Auditory Learners	3.63	.70	High
Tactual Learners	3.67	.71	High

It is shown in Table 1.2 the status of learning styles of respondents in the three categories namely as visual, auditory, and tactual learners with category means of 3.72, 3.63, and 3.67 described as high which means that these learning styles of respondents are oftentimes demonstrated. Considering the degrees of dispersion, the standard deviation ranges from .66 to .71 which are all less than one indicating that the responses are relatively clustered around the mean. The domain with the highest mean is visual learning learners with a mean of 3.72 describe as High which are supported by the item mean rating ranging from 3.31 to 4.32. Meanwhile, domain auditory learners have the lowest mean of 3.63

described as high.

### *The Status of Motivation in Physical Education of the Respondents*

**Table 1.3**

*The Status of Motivation in Physical Education of the Respondents*

	<b>Mean</b>	<b>SD</b>	<b>Description</b>
Amotivation	2.27	1.02	Low
Introjected Regulation	3.46	1.10	High
Identified Regulation	4.19	.88	High
Intrinsic Motivation	4.38	.94	Very High
<b>Overall Mean</b>	<b>3.90</b>	<b>.80</b>	<b>High</b>

It is shown in Table 1.3 that the status of motivation in physical education of the respondents after reversing the ratings in amotivation has an overall mean rating of 3.90 which is described as high. It means that the motivation in physical education of the respondents is always manifested. Considering the degrees of dispersion in this variable, standard deviation is .80 indicating that responses are clustered near the mean. It can be seen in the table that the domain intrinsic motivation got the highest mean of 4.38 described as very high which are supported by the item mean rating ranging from 4.37 to 4.41 . On the other hand, the domain amotivation got the lowest mean of 2.27 describe as low which are supported by the item mean rating ranging from 2.12 to 2.31.

## Significance of the Influence of Quality Physical Education, Learning Styles towards Motivation in Physical Education

**Table 2**

*Significance of the Influence of Quality Physical Education, and Learning Styles towards Motivation in Physical Education*

<b>Motivation in Physical Education</b>				
<b>Individual Influence of Predictors</b>	<b>Standardized Coefficient</b>	<b>t</b>	<b>p-value</b>	<b>Remarks</b>
Quality Physical Education	.25	3.83	.00	Significant
Learning Styles				
Visual Learners	.25	2.71	.01	Significant
Auditory Learners	-.03	-.33	.74	Not significant
Tactical Learners	-.06	-1.19	.24	Not significant
<b>Combined Influence of Predictors</b>				
R	.43			
R <sup>2</sup>	.18			
F	19.07			
P	.00			Significant

Table 2 shows the results of the multiple regression analysis, which is set at level of significance,  $\alpha = 0.05$  (two-tailed). The standardized beta coefficient of quality physical education is .25, with t-statistics of 3.83 and  $p = .00$  which is lesser than the .05 level of significance. This indicates that in individual capacity, the quality physical education is a significant predictor of motivation in physical education. It means that for every unit increase in the level of quality physical education, there is a corresponding significant increase of .25 in the level of motivation in physical education of the respondents.

On the one hand, the standardized beta coefficient of visual learning styles is .25, with a t-statistics of 2.71 and  $p = .01$  which is less than .05 level of significance. This result indicates that visual learning style is a significant predictor of motivation in physical education. It means that for every unit increase in the status of visual learning style corresponds to .25 increase in the level of motivation in physical education of the learners. On the other hand, auditory, and tactical learning styles have standardized beta coefficients of -.03,

and -.06 respectively and their p-values are both greater than .05 level of significance indicating that they are not a significant predictor of motivation in physical education.

Moreover, the F-ratio in Table 2 indicates the overall regression model, which is the combined effect of quality physical education, and learning styles as predictors of motivation in physical education, is a good fit for the data in this study. The results reveal that quality physical education, and learning styles significantly predict the motivation in physical education as shown in the result of  $F(4, 337) = 19.07$ ,  $p < .05$ . Therefore, the regression model is a good fit of the empirical data of this study.

Furthermore, the R-square value reflects the proportion of variance in the motivation in physical education that can be explained by the quality physical education and learning styles. The R-square value is reported at .18 indicating that 18 percent in the variability of the motivation in physical education can be explained by the combined influence of the predictors, quality physical education, and learning styles. The remaining 82 percent is attributable to the unexplained variance, or other factors not included in this study.

### Quantitative Result

**Table 3**  
*Profile of the Participants*

Participant No.	Pseudonyms of the Participants	Sex	Study Group	Region
01	IDI 1	M	IDI	Region XII
02	IDI 2	M	IDI	Region XII
03	IDI 3	M	IDI	Region XII
04	IDI 4	F	IDI	Region XII
05	IDI 5	F	IDI	Region XII
06	IDI 6	M	IDI	Region XII
07	IDI 7	F	IDI	Region XII
08	IDI 8	F	IDI	Region XII
09	IDI 9	F	IDI	Region XII
10	IDI 10	F	IDI	Region XII
11	FGD 1	F	FGD	Region XII
12	FGD 2	F	FGD	Region XII

13	FGD 3	M	FGD	Region XII
14	FGD 4	M	FGD	Region XII
15	FGD 5	M	FGD	Region XII
16	FGD 6	F	FGD	Region XII
17	FGD 7	F	FGD	Region XII

As shown by Table 3, there were 17 participants who were purposively selected by the researcher to make clarifications for the qualitative strand of this mixed methods study. There were ten IDI participants which are composed of six females and four males. All of them were part of the group of respondents who answered the survey questionnaires during the conduct of the quantitative strand. On the other hand, a total of seven FGD participants were also purposively selected, composed of three males and four females and were also among the respondents who answered during the quantitative strand.

***Standpoints of the Participants with the Qualitative Results of Quality Physical Education***

**Table 4**

*Standpoints of the Participants with the Qualitative results of Quality Physical Education*

<b>Essential Theme</b>	<b>Cored Ideas</b>
Confirmed high rating of Quality Physical Education	Engaging in activities, practicums, and sports enhances physical skills and awareness
	Experiencing diverse sports and activities yearly improves skills progressively.
	Active participation in activities enhances skills and awareness, especially with genuine interest.
Confirmed the very high level of making teaching and learning physical education fun and enjoyable	Getting to explore different facilities and being able to learn new skills.
	Trying out different activities using the right facilities and mastering new techniques.
	Trying out diverse activities and witnessing personal progress.
Confirmed how religious culture is an issue that	Certain religious holidays and practices often result in extended absences from school for

contributes to the development of unequal learning opportunities in the country.	some students, which can put them at a disadvantage compared to their peers who do not observe these practices.
	Imposing dress codes or restrictions that conflict with certain religious practices.
	Schools may not accommodate dietary restrictions during lunch, making it difficult for students with specific religious dietary needs to fully participate in school meals and social interactions.
Confirmed that gender is an issue that contributes to the development of unequal learning opportunities in the country.	Gender nonconformity can create a hostile school environment for transgender and non-binary students.
	Dress codes and school policies that reinforce traditional gender norms can limit students' comfort and self-expression.

Table 4 showed the Thematic Analysis on the responses of the participants pertaining to the Quality Physical Education. There were four emerging themes that were identified namely: Confirmed high rating of Quality Physical Education, Confirmed the very high level of making teaching and learning physical education fun and enjoyable, confirmed how religious culture is an issue that contributes to the development of unequal learning opportunities in the country and Confirmed that gender is an issue that contributes to the development of unequal learning opportunities in the country.

**Confirmed high rating of Quality Physical Education.** Most of the participants articulated that Quality Physical Education is important. They elaborated that utilizing effective teaching methods is crucial, especially since they are learning about physical education. Here under is the shared point of view of the participants:

*Through our different practicums and activities that our instructors engage us umm. . . ah, na – nag – na develop and na enhance po yung PE skills and bodily awareness po namin. (FGD\_07)*

*Engaging in activities, practicums, and sports improves physical abilities and awareness.*

*Ang pag-try ng iba't ibang sports at activities taun-taon, nagpapagaling ng skills nang paulit-ulit. (FGD\_03)*

*Experiencing diverse sports and activities yearly improves skills progressively.*

*Ang mga school activities ay nag-boost ng confidence at movement ng mga estudyante. (IDI\_04)*

*School activities boost students' confidence and movement.*

**Confirmed the very high level of making teaching and learning physical education fun and enjoyable.** Another essential theme identified from the responses of the participants of this study. Participants' responses are as follows:

*Nakaka-excite po na umm. . . nakaka-explore po kami ng iba't-ibang facilities at natututo ng mga bagong skills po. (FGD\_02)*

*It's exciting how we are getting to explore different facilities and being able to learn new skills.*

*Ang saya po kasi nakaka-try po kami ng ibang activities na gamit yung tamang facilities at namamaster po naming yung techniques. (IDI\_10)*

*Fun trying out different activities using the right facilities and mastering new techniques.*

*Confirmed how religious culture is an issue that contributes to the development of unequal learning opportunities in the country. This one of the theme emerged during the IDI and FGD. The participants stated that:*

*Sa pila ka religious holidays kag praktis, madugang ang pag-absent sa klase sang iban nga estudyante, nga maka butang sa ila sa disadvantage sa ila kon ma compare sa ila mga upod nga wala nagasunod sang mga practice nga ni. (FGD\_01)*

*Certain religious holidays and practices often result in extended absences from school for some students, which can put them at a disadvantage compared to their peers who do not observe these practices.*

*Ang dress codes o mga restrictions po sa ila nga religious practice ay maaaring magdulot kumbaga ng mga barriers sa pagsali ng mga students sa mga klase sa PE. (FGD\_04)*

*Imposing dress codes or restrictions that conflict with certain religious practices.*

**Confirmed that gender is an issue that contributes to the development of unequal learning opportunities in the country.** Another essential theme identified from the responses of the participants of this study. Several participants' responses are as follows:

*Yung ano po... hindi pagkakapantay-pantay ng genders sa school umm, naga create po sang hindi okay nga environment sa school para sa transgender kag non-binary nga mga studyante. (FGD\_02)*

*Gender nonconformity can create a hostile school environment for transgender and non-binary students.*

*Yung dress codes po at yung mga policy sa school nga hindi ano. . . umm, nang ga limit bala sa comfort kag self-expression sang students kay hindi sila in sa tradtional nga gender. (FGD\_07)*

*Dress codes and school policies that reinforce traditional gender norms can limit students' comfort and self-expression.*

### ***Standpoints of the Participants with the Qualitative Results of Learning Style***

**Table 4.1**

*Standpoints of the Participants with the Qualitative Results of Learning Style*

<b>Essential Theme</b>	<b>Core Ideas</b>
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Confirmed high rating of Quality Physical Education	Engaging in activities, practicums, and sports enhances physical skills and awareness
	Experiencing diverse sports and activities yearly improves skills progressively.
	Active participation in activities enhances skills and awareness, especially with genuine interest.
Confirmed the very high level of making teaching and learning physical education fun and enjoyable	Getting to explore different facilities and being able to learn new skills.
	Trying out different activities using the right facilities and mastering new techniques.
Confirmed how religious culture is an issue that contributes to the development of unequal learning opportunities in the country.	Certain religious holidays and practices often result in extended absences from school for some students, which can put them at a disadvantage compared to their peers who do not observe these practices.
	Imposing dress codes or restrictions that conflict with certain religious practices.
Confirmed that gender is an issue that contributes to the development of unequal learning opportunities in the country.	Gender nonconformity can create a hostile school environment for transgender and non-binary students.
	Dress codes and school policies that reinforce traditional gender norms can limit students' comfort and self-expression.

Table 4.1 showed the Thematic Analysis on the responses of the participants pertaining to the Learning Style. Likewise, were four significant themes extracted from the testimonies of the IDI and FGD participants: Confirmed high rating of Quality Physical Education, Confirmed the very high level of making teaching and learning physical education fun and enjoyable, Confirmed how religious culture is an issue that contributes to the development of unequal learning opportunities in the country and Confirmed that gender is an issue that contributes to the development of unequal learning opportunities in the country.

**Confirmed high rating of Learning Style.** During the interview, most of the participants acknowledged the high rating of learning style as shown in their responses below.

*Sa akin, ah... mas nakatutulong talaga ang iba't ibang learning sources tulad ng mga libro at uhm... mga videos sa pagkuha ng kaalaman sa sayaw. (FGD\_01)*

*For me, various learning sources like books and videos really help in acquiring knowledge about dance.*

*Sa pag o-observe po sa mga uhm... practices atsaka pagtatanghal po, uhm... mas na i-improve po ang mga estudyante sa pamamagitan ng pag-aaral mula ah... sa iba. (FGD\_06)*

*Observing practices and performances improves students' skills through learning from others.*

**Confirmed very high of checking the answer carefully after they finished the test.** Another essential theme identified from the responses of the participants of this study. Several participants' responses are as follows:

*Chinecheck ko po talaga nang grabe yung mga answers ko po para ma make sure na na kumpleto ko lahat. (IDI\_05)*

*Also meticulously reviewing answers to ensure accuracy and completeness.*

*Grabe din po yung pag check ko ng answer para ma make sure na tama at ma tama yung mga mali. (IDI\_06)*

*Also scrutinized each answer to ensure precision and make any needed corrections.*

**Confirmed that they are having problems with class activities that involve visualizations, such as cutting parts to fit each other.** This theme pertains to the challenges faced by students with activities requiring visualization. The participants stated that:

*Na budlayan ko mag process kag mag manipulate kumbaga sang mga shape kag pattern kung hindi klaro ang gina hambal. (IDI\_07)*

*Difficult to process and manipulate shapes and patterns without clear verbal guidance.*

*Daw challenging para sa akon intindihon kag kis'a mas kailangan ko damo pa nga explanation para ma gets. (IDI\_08)*

*Finding it challenging to visualize how pieces fit together, and often need more verbal explanations to grasp these concepts.*

***Standpoints of the Participants with the Qualitative Results of Motivation in Physical Education***

**Table 4.2**

*Standpoints of the Participants with the Quantitative results of Motivation in Physical Education*

Essential Theme	Core Ideas
Confirmed high rating of Motivation in Physical Education	Observing peers excel in activities externally motivates students to participate and perform
	Intrinsic motivation arises when students seek to showcase their skills and passion.
	External influences, such as witnessing others enjoy activities, inspire students to engage.
Confirmed that they are not seeing the importance of Physical Education to their life	Lack of understanding regarding how the skills and knowledge gained in physical education translate to real-life situations. FGD7
	Perceiving academic subjects as more directly linked to future success. IDI7
Confirmed that they are not seeing what they are getting out of Physical Education.	Lack of personalized feedback in physical education, leaving students unsure about their strengths and areas for improvement. IDI10
	Physical education doesn't contribute to academic success or career readiness. FGD7
Confirmed that engaging in Physical Education is fun	Interaction and bond with peers through team sports and group exercises. FGD7

Energetic and active environment of physical education provides a refreshing break from sedentary classroom activities. FGD4

The table 4.2 showed the Thematic Analysis on the responses of the participants pertaining to the Motivation in Physical Education. There were four emerging themes that were identified namely: Confirmed high rating of Motivation in Physical Education, confirmed that they are not seeing the importance of Physical Education to their life, confirmed that they are not seeing what they are getting out of Physical Education, and Confirmed that engaging in Physical Education is fun.

**Confirmed high rating of Motivation in Physical Education.** Most of the participants confirmed a high rating for Motivation in Physical Education. Below is the collective viewpoint shared by the participants.

*Pagnakikita po sa mga kasama mo na magaling sila, ay, umm. . . nag, nag motivate sa mga estudyante na sumali at magpakita ng skills po. (FGD 02)*

*Observing peers excel in activities externally motivates students to participate and perform.*

*Intrinsic motivation kasi ay,ay, umm. . . ito ay nagmumula kapag ang mga estudyante ay naghahanap na magpakita ng kanilang mga galing at passion. (IDI 03)*

*Intrinsic motivation arises when students seek to showcase their skills and passion.*

**Confirmed that they are not seeing what they are getting out of Physical Education.** Another essential theme identified from the responses of the participants of this study. Several participants' responses are as follows:

*Hindi po ma intindihan kung paano nga umm. . . ang skills kag knowledge nga makuha mo sa physical education ma dala sa real life. (FGD\_07)*

*Lack of understanding regarding how the skills and knowledge*

*gained in physical education translate to real-life situations*

*Makita nila nga mas ma dala sa future ang academic achievements. (IDI\_07)*

*Perceiving academic subjects as more directly linked to future success.*

**Confirmed that they are not seeing what they are getting out of Physical Education.** This theme pertains to the sets of reasons shared by the participants when asked about their amotivation in Physical Education. The participants stated that:

*Hindi siya kayo personalized sa mga feedback kag daw di sure ang students kung diin gid bala strength nila kag ano kailangan ma improve. (IDI\_10)*

*Lack of personalized feedback in physical education, leaving students unsure about their strengths and areas for improvement.*

*Ang PE kuno hindi man maka contribute sa acad success o ma ready ka sa career mo. (FGD\_07)*

*Physical education doesn't contribute to academic success or career readiness.*

**Confirmed that engaging in Physical Education is fun.** This theme pertains to the sets of reasons shared by the participants when asked about their intrinsic motivation in Physical Education.

*Maka interact kag bond ka sa mga upod mo sa team sports kag mga exercise niyo bilang grupo. (FGD\_07)*

*Interaction and bond with peers through team sports and group exercises.*

*Tapos nagiging energetic ako tapos active kasi nakaka refresh yung environment ng Physical Education na nakakaalis sa*

*classroom na sigi upo lang ang activity. (FGD 04)*

*Energetic and active environment of physical education provides a refreshing break from sedentary classroom activities.*

**Data Integration of Quantitative and Qualitative Results**

**Table 5**

*Joint Display of Quantitative and Qualitative Results*

<b>Research Area</b>	<b>Quantitative Results</b>	<b>Qualitative Results</b>	<b>Nature of Integration</b>
Level of Quality Physical Education	Descriptive level of quality physical education was 4.17 described as high which means that quality physical education was oftentimes observed. Refer to Table 1.1.	Informants/participants confirmed the high rating of quality physical education in the quantitative result. Based on the interviews and FGD, it could be surmised that engaging in diverse activities enhances physical skills and awareness, with dedicated teachers fostering a positive environment and accessible projects and responsive policies ensure student participation and benefit. Refer to Table 4.	Connecting, merging (confirmation)

<p>Facilities and Norms in Physical Education</p> <p><i>On making teaching and learning of physical education fun and enjoyable.</i></p>	<p>The descriptive level of facilities and norms in Physical Education on making teaching and learning of physical education fun and enjoyable, with a category mean of 4.57, indicating that facilities and norms in Physical Education on making teaching and learning of physical education fun and enjoyable is often observed among PE students. Refer to Table 1.1</p>	<p>Informants/participants confirmed a very high level of facilities and norms in Physical Education on making teaching and learning of physical education fun and enjoyable. Based on the interviews and FGD, it could be gathered that the general assertions are confirming the very high level of facilities and norms in Physical Education on making teaching and learning of physical education fun and enjoyable. (Refer to table 4)</p>	<p>Connecting, merging (confirmation)</p>
<p>Social Norms and Cultural Practice</p> <p><i>On having religious culture as an issue contributing to the development of unequal learning opportunities in the country.</i></p>	<p>The descriptive level of social norms and cultural practice on having religious culture as an issue contributing to the development of unequal learning opportunities in the country, with a category mean of 3.17, indicating that social norms and cultural practice on having religious culture as an issue contributing to the development of unequal learning opportunities in the country often observed among PE students. Refer to Table 1.1</p>	<p>Informants/participants confirmed a moderate level of social norms and cultural practice on having religious culture as an issue contributing to the development of unequal learning opportunities in the country. Based on the interviews and FGD, it could be gathered that the general assertions are confirming the moderate level of social norms and cultural practice on having religious culture as an issue contributing to the development of unequal learning opportunities in the country. (Refer to table 4)</p>	<p>Connecting, merging (confirmation)</p>

<p>Social Norms and Cultural Practice</p> <p><i>On having gender as an issue contributing to the development of unequal learning opportunities in the country.</i></p>	<p>The descriptive level of social norms and cultural practice on having gender as an issue contributing to the development of unequal learning opportunities in the country, with a category mean of 3.01, indicating that social norms and cultural practice on having gender as an issue contributing to the development of unequal learning opportunities in the country often observed among PE students. Refer to Table 1.1</p>	<p>Informants/participants confirmed a moderate level of social norms and cultural practice on having gender as an issue contributing to the development of unequal learning opportunities in the country. Based on the interviews and FGD, it could be gathered that the general assertions are confirming the moderate level of social norms and cultural practice on having gender as an issue contributing to the development of unequal learning opportunities in the country. (Refer to table 4)</p>	<p>Connecting, merging (confirmation)</p>
<p>Level of Learning Styles</p>	<p>Descriptive level of Learning Style is 3.67 described as high which means that learning styles were oftentimes demonstrated by the students. Refer to Table 1.2.</p>	<p>Informants/participants confirmed the high rating learning styles in the quantitative result. Based on the interviews and FGD, it could be surmised that diverse learning sources, like books and videos, aid in dance knowledge, while observing practices and performances and recording sessions enhance skills, with online videos and active listening aiding development, and engaging in activities fostering creativity and learning. (Refer to table 4.1)</p>	<p>Connecting, merging (confirmation)</p>

<p>Visual Learners</p> <p><i>On checking the answer carefully after they finished the test.</i></p>	<p>The descriptive level of visual learners on checking the answer carefully after they finished the test, with a category mean of 4.32, indicating that visual learners on checking the answer carefully after they finished the test are often observed among PE students. Refer to Table 1.2</p>	<p>Informants/participants confirmed a very high level of visuals learners on checking the answer carefully after they finished the test. Based on the interviews and FGD, it could be gathered that the general assertions are confirming the very high level of visual learners on checking the answer carefully after they finished the test. (Refer to table 4.1)</p>	<p>Connecting, merging (confirmation)</p>
<p>Auditory Learners</p> <p><i>On having problems with class activities that involve visualization, such as cutting parts to fit each other.</i></p>	<p>The descriptive level of auditory learners on having problems with class activities that involve visualization, such as cutting parts to fit each other, with a category mean of 3.17, indicating that auditory learners on having problems with class activities that involve visualization, such as cutting parts to fit each other are often times observed among PE students. Refer to Table 1.2</p>	<p>Informants/participants confirmed a moderate level of auditory learner on having problems with class activities that involve visualization, such as cutting parts to fit each other. Based on the interviews and FGD, it could be gathered that the general assertions are confirming the moderate level of auditory learner on having problems with class activities that involve visualization, such as cutting parts to fit each other. (Refer to table 4.1)</p>	<p>Connecting, merging (confirmation)</p>

<p>Level of Motivation in Physical Education</p>	<p>Descriptive level of Motivation in Physical Education is 3.90 described as high which means that students motivation in physical education was manifested most of the time. Refer to Table 1.3.</p>	<p>Informants/participants confirmed the high rating of motivation in physical education in the quantitative result. Based on the interviews and FGD, it could be surmised that observing peers excel externally motivates students, intrinsic motivation arises from showcasing skills, external influences inspire engagement, identified regulation drives improvement, students push to demonstrate capabilities, active participation manifests motivation, and self-challenge measures progress. (Refer to table 4.2)</p>	<p>Connecting, merging (confirmation)</p>
<p>Amotivation <i>On not seeing its importance to my life.</i></p>	<p>The descriptive level of amotivation on not seeing its importance to my life, with a category mean of 2.12, indicating that amotivation on not seeing its importance to my life are often times observed among PE students. Refer to Table 1.3</p>	<p>Informants/participants confirmed a low level of amotivation on not seeing its importance to my life. Based on the interviews and FGD, it could be gathered that the general assertions are confirming the low level of amotivation on not seeing its importance to my life. (Refer to table 4.2)</p>	<p>Connecting, merging (confirmation)</p>
<p>Amotivation <i>On not seeing what they are getting out of PE.</i></p>	<p>The descriptive level of amotivation on not seeing what they are getting out of PE, with a category mean of 2.16, indicating that amotivation on not seeing what they</p>	<p>Informants/participants confirmed a low level of amotivation on not seeing what they are getting out of PE. Based on the interviews and FGD, it could be gathered that the general assertions are</p>	<p>Connecting, merging (confirmation)</p>

	are getting out of PE are often times observed among PE students. Refer to Table 1.3	confirming the low level of amotivation on not seeing what they are getting out of PE. (Refer to table 4.2)	
Intrinsic Motivation On PE is fun.	The descriptive level of intrinsic motivation on PE is fun, with a category mean of 4.38, indicating that intrinsic motivation on PE is fun are often times observed among PE students. Refer to Table 1.3	Informants/participants confirmed a very high level of intrinsic motivation on PE is fun. Based on the interviews and FGD, it could be gathered that the general assertions are confirming the very high level of intrinsic motivation on PE is fun. (Refer to table 4.2)	Connecting, merging (confirmation)
Significance of the Influence of Quality Physical Education, Learning Styles towards Motivation in Physical Education	The results revealed that in singular capacity, quality physical education is a significant predictor of motivation in physical education and for the learning styles, only visual learning style is a significant predictor. However, the combined influence of the quality physical education and three learning styles is significant. Refer to Table 2.	Informants/participants confirmed the significant of the influence of quality physical education and learning styles towards motivation in physical education in the quantitative result. Based on the interviews and FGD, it could be surmised that the dedication of teachers enhances student motivation, genuine interest in activities creates more opportunities, personal willingness to learn grows with enjoyment, motivation is boosted by pursuing interests, tailored teaching methods build confidence, support from other fuels motivation, and confidence in participation increases with adjusted teaching	Connecting, merging (confirmation)

		approaches. (Refer to table 4.3)	
On quality physical education	There is a significant influence of quality physical education among PE students. (Refer to table 3)	Informants/participants confirmed the results. Based on the interviews, there is a significant influence of quality physical education (Refer to table 4.3)	Connecting, merging (confirmation)
On Learning Styles (Auditory)	There is no significant influence of auditory learning styles among PE students. (Refer to table 3)	Informants/participants confirmed the results. Based on the interviews, there is no significant influence of auditory learning styles. (Refer to table 4.3)	Connecting, merging (confirmation)

Shown in Table 5 is the joint display of study results reveals a comprehensive understanding of the level of quality physical education, learning styles, and motivation in physical education based on the data gathered quantitatively and qualitatively. The first column is the focal point being considered for integration taken from the research questions of the study. The second column covers the quantitative results lifted from Tables 1.1 to 1.3. The 4th column is a synthesis of the standpoints of the participants as reflected in Table 4. The last column is the nature of integration which is a combination of the method of integration and the fit of data integration.

**Connecting-merging confirmation.** As shown in Table 5, the following pairs of quantitative and qualitative data denote agreement or confirmation with respect to the ratings from the survey and the recurring insights from the IDI and FGD. These connecting-merging confirmation are established in the following, namely: status of the level of quality physical education, learning styles, motivation of college students in physical education and the significance of the influence of quality physical education, learning styles towards motivation in physical education.

## DISCUSSION

The result of this study reveals that the quality of physical education is high which means it is oftentimes observed. This aligns with the idea of Farci (2020) stating that high-quality physical education plays a crucial role in

fostering the holistic development of students by nurturing their physical, social, and emotional skills. These skills are integral in shaping individuals who embody the characteristics of being healthy, resilient, and socially responsible members of society.

Moreover, the status of learning styles of respondents is high which means it is oftentimes demonstrated. The results of this study conform to the statement of Almeda (2018) which posited that different learning styles in PE lessons and activities will maximize the learning experience of college students. Also, Fan (2015) emphasized that learning styles offer numerous hints as to the learning characteristics of students and supply educators with background information that can be used to organize the process of instructing students.

On the other hand, the status of motivation in physical education of the respondents after reversing the ratings in amotivation has an overall mean rating of 3.90 which is described as high. This positive result conforms with the findings of Hagger et al. (2021), who found that motivated students are more likely to demonstrate positive behaviors which are important not just for physical education success but also for achievement and personal development. Similarly, Carson et al. (2021) discovered that students who are highly motivated in PE are more likely to develop a long-term habit of physical activity.

The result of the linear regression analysis revealed that in singular capacity the quality physical education, and visual learning style reflected a significant influence towards motivation in physical education while the two other learning styles, auditory and tactual, are not significant predictors. Notably, the Quality Physical Education (QPE) recorded a higher influence toward college students' motivation in PE. This indicates that for every unit increase in the level of quality physical education and visual learning styles, there is a corresponding significant increase in the level of motivation in physical education of the respondents. This conforms to the study of Bai et al. (2023) which discovered that students engaged in physical education (PE) programs based on Self-Determination Theory principles, which focus on autonomy, competence, and relatedness, had greater levels of intrinsic motivation than those in conventional PE classes. Encouraging independence and providing options in activities, while also developing skills and social relationships, can boost motivation.

Confirmed high rating of Quality Physical Education. This theme

emerged when the participants acknowledged the high rating of quality physical education in the quantitative results based on in-depth interviews and focus group discussions. This theme is congruent to the statement of Ho et al. (2019) who stated that a high quality physical education program is essential in educational settings. To make significant progress in the field of physical education, innovative ideas must be applied across various dimensions, including both pedagogical and practical factors. These include attempts to improve the quality of venues, facilities, and equipment, as well as the adoption of appropriate regulations to provide equitable access and expanded possibilities for learning.

Confirmed the very high level of making teaching and learning physical education fun and enjoyable. The participants affirm the high rating of making the teaching and learning in physical education fun and enjoyable as obtained in the quantitative results of the study. The finding is similar to Grasten et al. (2019) who found, students who experienced higher levels of enjoyment in PE were likely to develop a positive attitude towards physical activity which is imperative for sustaining student's motivation in physical education classes.

Confirmed how religious culture is an issue that contributes to the development of unequal learning opportunities in the country. This theme emerged when the participants confirmed how religious culture is an issue that promotes the development of unequal learning opportunity in the country. The findings concur with Bertram-Troost's et al. (2020) who found that schools with strong religious affiliations might prioritize religious teachings over comprehensive academic instruction, thereby disadvantaging the students who may not share the same beliefs.

Confirmed that gender is an issue that contributes to the development of unequal learning opportunities in the country. The theme emanated because during the interview the participants confirmed that Gender is an issue that helps develop uneven learning opportunity in the country. With these confirmations, the finding is in consonance with the findings of Jones et al. (2022), which showed that students who do not fit traditional gender expectations often experience meaningful school-based barriers, such as biased treatment from teachers and peers, reduced access to resources and lower academic expectations. Furthermore, just as Smith and Taylor (2021) indicate in their research; hostile school environments detrimental to transgender and non-binary students.

Confirmed high rating of Learning Style. This theme emerged based on the explanation of the participants when they were asked by the researcher to clarify more about their learning styles status through confirmed high rating of Learning Style. The resultant theme aligns with the notion emphasized by Griffin and Holt (2019) that integrating diverse learning styles in physical education (PE) classes promotes a feeling of inclusion and engagement among students who may have challenges with conventional methods.

Checking the answer carefully after they finished the test. This theme emerged when participants confirmed having a very high rating of checking the answer carefully after they finished the test. The finding is the same as that of Pashler et al. (2021) who confirms the assertion that there is a pronounced tendency of visual learners checking the answers properly and carefully.

On having problems with class activities that involve visualizations, such as cutting parts to fit each other. This theme emerged when the participants confirmed that they doubted in activities that call for visualization. The finding aligns with that of Whelan and Hodgins (2020) who found that students performed significantly poorer in tasks that require mental rotation of shapes when instructions are purely visual. Also the theme is congruent to the finding of Lee and Kosslyn (2022) that the subjects who hands visual cues alone often misfit components in spatial tasks. They needed more time and many times required verbal explanations to engage in the tasks

Confirmed high rating of Motivation in Physical Education. The participants confirm the high rating for motivation in physical education as obtained in the quantitative results of the study. This indicates that the college students motivation in physical education in various state universities and colleges in Region XII is always manifested. This resulting theme conforms with the idea of Hawthorne (2021), who stated that in order for both learning and instruction to be effective, high motivation among college students must be present. Likewise, as noted by (Lirola & Spray, 2021; Wigfield & Cambria, 2010), studies carried out in school settings have discovered that motivation in PE classes can help students' task choices, persistence in performance conditions, and attitude toward the subject to a large extent.

On not seeing the importance of Physical Education to their life. This theme emerged when participants during IDI and FGD confirmed that they did

not see the relevance of Physical Education in their life. The finding differed from that of Hallal et al. (2020) who posited that PE isn't just about physical activity it's about nurturing the whole child, equipping them with the tools they need to shine academically, socially, and emotionally. By rightfully placing PE in schools, we're not just investing in healthier bodies we're investing in brighter futures for our students.

Confirmed that the participants are not seeing what they are getting out of Physical Education. This theme cropped when the participants during IDI and FGD confirmed that they are not seeing what they are getting out of Physical Education. However, unlike the notion that PE has unseen benefits, Singh et al. (2023) unveiled that involvement in PE has been linked to improved cognitive function and academic performance in different. Likewise, Johnson and Smith (2023) also demonstrated the positive effects of PE on academic performance, cognitive function, and mental health, thus underscoring its multi-dimensional advantages beyond physical fitness alone.

Confirmed that the participants find Physical Education to be fun. This theme cropped when the participants confirmed that they find Physical Education to be fun. The confirmation of the participant is consistent with the ideas of Cairney et al. (2015), who emphasized that fun and enjoyment play a significant role in the elicitation of long-term participation in physical activity among children and adolescents.

### **Implications for Educational Practice**

The results of this study had implied that QPE is essential for promoting a lifelong dedication to physical activity and sports. The educational experience offered to students in the field of physical education should be tailored to their stage of development to promote the development of motor skills, cognitive understanding, and social and emotional abilities that are essential for cultivating a physically active lifestyle. Likewise, the results of this study had implied that learning styles serve as the foundation for the manner in which students are motivated to learn.

Moreover, the result showed learning styles among college students in the State Universities and Colleges in Region XII are not solely focused on the effective and efficient learning styles of college students, but also on dimensions such as the visual learning style, tactual and auditory learning style, that

somehow may influence the learning preference of college students to study and work more competently and competitively.

Furthermore, this study revealed how motivation had contributed to the students' satisfaction and engagement in PE with their teachers' instructional practices, and classroom management. Academic institutions, particularly state universities and colleges, need to establish a system of support that enables the healthy development of student needs and addresses learning barriers in PE especially. These include an effective system of academic, health, and social support that provide personalized resources within and beyond the classroom to address and prevent developmental detours.

## CONCLUSION

Based on the findings of this study, the following conclusions were drawn: The quality physical education was rated high. This implies quality physical education was evident and oftentimes observed. Further, learning styles among college students in Region XII was rated high. This result implies that visual learning style, auditory learning style and tactual learning style was very evident and always demonstrated on all occasions. On one hand, the result of the linear regression analysis revealed that the independent variables, quality physical education, and learning styles significantly influenced the college students' motivation in PE in Region XII. This denotes that the two independent variables have a high influence on the dependent variable. Moreover, regarding the standpoints of the participants on the salient findings of the study, essential themes had emerged. For the salient finding on the participants' high expectations of quality physical education the theme that emerged from the responses of the participants are confirmed high rating of quality physical education, confirmed the very high rating of making teaching and learning in physical education is fun and enjoyable, confirmed how religious culture is an issue that promotes the development of unequal learning opportunity in the country and confirmed that gender is one of those themes that create unequal learning opportunities in the country. On the participants' high expectations of learning styles, the theme that emerged are confirmed high rating of learning styles, confirmed very high rating of checking the answer carefully after they finished the test and confirmed having problems with class activities that involve visualizations, such as cutting parts to fit each other. On the participants' high expectations of the college student motivation in PE, the theme that emerged are confirmed high rating of colleges students motivation, confirmed not seeing the importance of Physical Education to their life, confirmed that the participants are

not seeing what they are getting out of Physical Education and confirmed that the participants find Physical Education to be fun. Lastly, on the participants' views as to why the quality physical education and learning styles significantly influence the college students' motivation in PE the theme that emerged is Confirmed significant influence of quality physical education, learning styles (visual) towards Motivation in Physical Education. In the themes that emerged, the nature of integration is connecting-merging-confirmation which means that all qualitative data gathered from this study confirmed and agreed with the quantitative findings of this study.

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