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## Comparing the Effects of Traditional Physical Education and Volleyball on Long Term Fitness Motivation Among High School Students

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#### **Abstract**

In today's fast-paced culture, where technological advancements and academic obligations usually take precedence, physical fitness continues to be a crucial aspect of maintaining overall wellbeing (Altbach, Reisberg, & Rumbley, 2019). This relevance increases throughout the critical adolescent years, when the formation of lifelong habits is frequent (Williams et al., 2020). However, a number of challenges that high school students face can make it challenging for them to be committed to their interests of physical activity and fitness (Shimon, 2019). Because they are aware of how important it is for students in this age range to establish healthy lifestyles, teachers and researchers have relied on Traditional Physical Education (PE) sessions for years to improve fitness and encourage physical activity (Choi et al., 2021).

**Keywords:** Physical Education, Volleyball, High School Students.

### 1. Introduction

In today's fast-paced culture, where technological advancements and academic obligations usually take precedence, physical fitness continues to be a crucial aspect of maintaining overall wellbeing (Altbach, Reisberg, & Rumbley, 2019). This relevance increases throughout the critical adolescent years, when the formation of lifelong habits is frequent (Williams et al., 2020). However, a number of challenges that high school students face can make it challenging for them to be committed to their interests of physical activity and fitness (Shimon, 2019). Because they are aware of how important it is for students in this age range to establish healthy lifestyles, teachers and researchers have relied on Traditional Physical Education (PE) sessions for years to improve fitness and encourage physical activity (Choi et al., 2021).

Traditional PE programs have historically provided a variety of exercises and activities to improve students' fitness levels and promote a positive attitude toward physical activity (Xie, 2021). According to Xie (2021), these courses have helped some students, but there is an increasing need to look into alternative sports and activities that can have an even higher influence on long-term motivation for health. Volleyball has drawn attention as one such activity because it is a dynamic team sport that calls for coordination, teamwork, and physical exertion (Farias, Wallhead & Mesquita, 2020). Due to its unique blend of

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aerobic and anaerobic components, it is a strong contender for inspiring long-term fitness motivation in high school students.

The major goal of this article was to thoroughly examine and contrast the effects of volleyball and conventional PE on high school students' long-term fitness motivation. The researcher's goal in conducting this study was to gain crucial lessons regarding what approach best encourages high school pupils to engage in consistent physical activity. It's important to keep in mind that the study employed a cross-sectional methodology, in which information was collected from high school students, allowing for a more focused evaluation of the immediate and potential long-term repercussions.

The researcher made the decision to appropriately structure the investigation in order to guarantee the validity and dependability of the findings. The researcher selected a broad group of high school kids who were willing to interact freely in order to ensure that each participant had a baseline level of motivation and fitness. The motivation levels and attitudes of the respondents toward physical activity were assessed by a survey (using a questionnaire).

The goal of the study was to gather and analyze data over a long period of time to see if there were any meaningful differences in fitness motivation between the two methods. It was thought that kids who played volleyball would be more motivated because the activity is enjoyable and team-oriented. The researcher also carefully examined how each technique affected students' tendency to exercise outside the parameters of the study, which could have revealed crucial information on how each strategy affects the long-term sustainability of fitness motivation.

The purpose of this study was to add to the body of knowledge on high school students' motivation for fitness and physical education. The findings might aid educators in creating more engaging and effective physical education programs, perhaps incorporating volleyball and other sports to boost students' long-term commitment to physical activity. Ultimately, fostering a positive outlook on fitness in teenagers can lead to healthier and more active lifestyles in adulthood, which is good for both the individual students and society as a whole.

Keywords: Physical Education, Volleyball, Fitness Motivation, High School Students, Long Term, Comparing Effects, Physical Activity, Team Sport.

### 1.1 Background

The value of physical education in schools cannot be overstated because it aids in children's growth in numerous ways (Altbach, Reisberg, & Rumbley, 2019). According to Altbach, Reisberg, and Rumbley (2019), it not only promotes physical health but also has a positive effect on academic performance and overall student wellbeing. However, critics have criticized the conventional approach to teaching physical education, which usually emphasizes general exercises and conventional sports, for failing to maintain students' interest in and motivation to pursue active lives outside of the classroom (Shimon, 2019). Given these concerns, introducing more engaging and enjoyable physical activities, such as volleyball, has started to be seen as a potential solution to the issues with the fitness of typical PE programs (Choi et al., 2021).

Due to its social, amusing, and energizing nature, volleyball has attracted notice as a potential replacement for traditional physical education (Pangrazi & Beighle, 2019). In an effort to capitalize on the sport's inherent appeal and foster long-term fitness motivation among students, educators are incorporating volleyball into the curriculum (Lieberman et al., 2020). In contrast to more regulated and regimented activities, volleyball gives kids the option to take part in a cooperative and team-oriented environment where they may interact with their classmates, acquire critical social skills, and establish a sense of camaraderie (Eyanson, 2018).

The benefits of volleyball in physical education extend beyond the realm of the physical (Piercy et al., 2018). By encouraging a sense of belonging and togetherness, the activity can enhance kids' overall mental and emotional health (Kim et al., 2020). In addition to promoting a happy and balanced outlook on life, regular exercise has been shown to reduce stress, anxiety, and depression (Lieberman et al., 2020). This is particularly valid when it comes to enjoyable exercise like volleyball. A strong sense of identity and self-worth can be fostered by relationships created on the volleyball court as well as the creation of a support network that extends beyond the confines of the school (Piercy et al., 2018).

But it's obvious what the drawbacks of traditional PE formats are (Siedentop, D., Hastie, & Van der Mars, 2019). Physical education is often disliked by students because they grow bored with traditional sports and monotonous workout routines (Ashley, B. B., & Kawabata, M. (2023)). As a result, people may pass on the numerous advantages to physical and mental health that adopting an active lifestyle can offer (Siedentop, D., Hastie, & Van der Mars, 2019).

The proposed study investigated the effects of adding volleyball as a more engaging and pleasurable physical activity on pupils. By comparing the effects of traditional PE with volleyball, the researcher hoped to highlight some potential benefits of utilizing a more dynamic and interactive approach to physical education. Students who engaged in volleyball sessions were expected to demonstrate greater levels of passion, commitment, and motivation for looking after their physical health. By studying the long-term impacts of volleyball on students' general wellness and academic achievement, the study also aimed to provide evidence-based recommendations for future curriculum development and educational policies.

Last but not least, it is important to remember that physical education is a crucial component of a well-rounded education and that its benefits extend beyond just enhancing physical health (Altbach, Reisberg, & Rumbley, 2019). Although the traditional PE system offers many benefits, it has had problems keeping students engaged and motivated over the long term (Shimon, 2019). With its social, amusing, and energetic aspects, volleyball may be a viable substitute for restarting physical education in schools (Piercy et al., 2018). Comparing volleyball to conventional PE can teach teachers and policymakers a lot about the potential advantages of incorporating more engaging and enjoyable physical activities into the school curriculum. Schools may provide their students with the tools and motivation they need to have happy lives both during and after their academic careers by doing this.

## 1.3 Objectives of the Study

- i. To determine the effects of Traditional Physical Education on long-term fitness motivation among high school students.
- ii. To assess the effects of Volleyball on long-term fitness motivation among high school students.
- iii. To investigate the relationship between long-term fitness motivation among high school students, traditional physical education, and volleyball.

## 1.4 Study Hypothesis

- i. Traditional Physical Education has a positive effect on long-term fitness motivation among high school students. Hypothesis
- ii. Volleyball has a positive effect on long-term fitness motivation among high school students.

### 2. Literature Review

The purpose of this literature review is to examine and contrast the effects of volleyball and regular physical education on high school students' long-term fitness motivation. The goal of this study is to provide light on the most successful strategies for encouraging fitness motivation in adolescents by examining the potential relationship between these parameters.

This section of the study has covered a variety of theoretical frameworks that have been used to analyse and explain the results. According to White et al. (2021), the self-determination theory has been investigated. This theory looks at how autonomy, competence, and relatedness motivate people to engage in persistent physical exercise. In addition, Albert, Petrie, and Moore's (2021) achievement goal theory, which focuses on how students' goal orientations affect their engagement and perseverance in physical activities, has also been taken into account. Additionally, the analysis has taken into account the social cognitive theory, which highlights how social interactions and observational learning can shape fitness motivation, according to Schunk and DiBenedetto (2020).

This study aims to offer useful insights into the elements influencing fitness motivation among high school students in the context of both conventional physical education and volleyball programs by thoroughly investigating these theories. Such understandings could pave the way for the creation of more effective and specialized strategies to encourage young people to lead active and healthy lifestyles, nurturing a generation that places a high value on physical fitness and wellbeing.

### 2.1 Related Theories

## 2.1.1 Self-Determination Theory (SDT)

Self-Determination Theory is a thorough theoretical framework that explores the complex mechanisms behind human motivation (Koole et al., 2019). When people feel a sense of autonomy, competence, and relatedness in their activities, they are more likely to be intrinsically motivated, according to this idea (9 Hagger, Hankonen & Ryan, 2020). This theory offers insightful information on how to encourage long-term fitness motivation in the context of physical education (PE), and specifically volleyball.

The normal planned curriculum and predetermined activities used in traditional PE lessons have the potential to positively affect students' motivation for fitness (Xie, 2021). Students can have a feeling of ownership and control over their fitness journey by being granted a certain amount of autonomy, such as by giving them options for their physical activity (Carlborg et al., 2019). As people are more inclined to participate in activities, they feel like they choose and that have personal importance for them, this sense of autonomy can increase intrinsic motivation (Ahn & Back, 2019).

Additionally, by fostering a sense of competence in students, both volleyball and traditional PE can help students become more motivated to stay in shape (Langdon et al., 2019). Students may encounter a range of physical activities in traditional PE, and with constant practice and skill development, they can feel a sense of mastery and competence in carrying out these activities (Legrain et al., 2019). Volleyball's intricate techniques and strategies call for consistent practice and effort, which increases pupils' sense of accomplishment as they advance their abilities (Gil-Arias et al., 2021).

A team activity like volleyball, which fosters a sense of relatedness and camaraderie among its participants, can also have a major impact on long-term fitness motivation (Gil-Arias et al., 2021). Students can form enduring relationships and social ties with their peers through cooperating with one another (Qureshi et al., 2023). These interpersonal relationships have the potential to be a strong motivating factor for people because doing anything as a team may be enjoyable and fulfilling (Immordino-Yang, Darling-

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Hammond, & Krone, 2018). The sense of community and support from teammates can also act as a motivating factor, strengthening their commitment to being fit (Jena & Pradhan, 2018).

## 2.1.2 The Achievement Goal Theory

The Achievement Goal Theory clarifies the importance of setting goals in fostering motivation (Cheng, 2023). The two forms of goals that drive motivation in this approach are task mastery and performance goals (Urdan & Kaplan, 2020). The setting of personal fitness goals and attention to each student's development may be fostered in traditional PE sessions (Corbin, 2021). As people are motivated to challenge themselves and see their own growth, the emphasis on self-improvement and self-evaluation can spark intrinsic motivation.

However, because volleyball is a competitive activity, it might inspire a drive for growth and success (Knight, 2020). According to Barkley and Major (2020), the nature of competition might inspire students to pursue excellence by challenging them to develop their abilities and give their best efforts. For students, the desire to succeed in the game can be quite motivating since it feeds their intrinsic drive to be fit and excel at physical activities when they achieve their performance goals (Pangrazi & Beighle, 2019).

## 2.1.3 Social Cognitive Theory (SCT)

A crucial additional viewpoint on comprehending fitness motivation is provided by social cognitive theory (Beauchamp, Crawford, & Jackson, 2019). In addition, this theory emphasizes the importance of self-efficacy, result expectations, and observational learning in influencing people's behavior, according to Beauchamp, Crawford, and Jackson (2019). We may learn a lot about how social interactions and perceived competence affect students' motivation for health by looking at how volleyball, a team sport, affects it.

Students can observe and emulate the volleyball-related behaviors and abilities of their peers and coaches through observational learning (Han, Syed Ali, & Ji, 2022). Self-efficacy is a crucial component, and it can be influenced by seeing others succeed and advance (Dixon, Hawe, & Hamilton, 2020). Students are more willing to take on fitness challenges and keep up their motivation for participation as they get a greater sense of self-efficacy in their physical talents (Sum et al., 2018).

In addition, individuals are highly motivated by their expectations for the outcomes of their actions (Heckhausen & Heckhausen, 2018; Schunk & DiBenedetto, 2020). In the case of volleyball, beneficial results, such as better physical fitness, elevated skill levels, and the satisfaction of winning games, can strengthen students' resolve to maintain a healthy active lifestyle. They are motivated to stick with their exercise goals when they believe their efforts are producing favorable effects (Schunk & DiBenedetto, 2020).

Finally, the integration of three theoretical frameworks-namely, Self-Determination Theory, Achievement Goal Theory, and Social Cognitive Theory-provides a thorough explanation of how both Traditional PE and volleyball can affect long-term fitness motivation. Educators and coaches can effectively motivate people to maintain their motivation for physical activity and lead a physically active and healthy lifestyle by fostering a sense of autonomy, competence, and relatedness, encouraging goal-setting, fostering a desire for improvement, and leveraging social interactions and perceived competence.

#### 2.2 Review of Variables

### 2.2.1 Traditional Physical Education

For a very long time, traditional physical education has been a crucial part of educational systems all across the world (Xie, 2021). Physical education has its roots in ancient

cultures like Greece and Rome and was initially created to prepare warriors for battle and preserve physical fitness (Kretchmar et al., 2023). Over the years, it changed into a subject that is structured and geared on encouraging students' total wellness and health (Leger, Buijs, Mohammadi, & Lee, 2022). The goal of traditional physical education programs, according to Griggs and Fleet (2021), is to develop students' physical stamina, coordination, and teamwork through a variety of sports, gymnastics, and exercises. Traditional physical education is still a crucial component of many schools' curriculum, despite complaints about its rigorous approach and lack of inclusivity (Fletcher et al., 2018). It aims to teach children the value of leading an active lifestyle and the fundamentals of a healthy body and mind.

## 2.2.2 Volleyball

Volleyball is a well-liked team sport that was first played and watched in the United States in the late 19th century. It has since spread throughout the world. William G. Morgan created volleyball in 1895 as a less physically taxing version of basketball, according to Zhang et al. (2018) (KASHINATHRAO, 2023). Two teams compete in the game, which is played on a rectangular court with a net in the middle. Each team must go by certain rules and regulations in order to earn points by sending the ball over the net and into the court of the other team (Courel-Ibáez, Martinez, & Marn, 2019). Volleyball is a sport that is perfect for inclusion in conventional physical education curricula since it calls for a variety of physical abilities like agility, hand-eye coordination, and power (Getahun, 2022). According to Camiré et al. (2019), include volleyball in physical education improves important life skills like leadership, sportsmanship, and communication in addition to giving students a fun and interesting team sport experience.

## 2.2.3 Effects of Traditional Physical Education on Long Term Fitness Motivation:

According to Cocca et al. (2020), traditional physical education programs are crucial for improving students' physical fitness and establishing healthy habits. A wide variety of physical activities, such as sports, aerobic exercises, and strength training, are frequently included in these programs. The benefits of conventional physical education on students' motivation for fitness have been underlined in numerous research. For instance, Barkoukis, Chatzisarantis, and Hagger (2017) found that frequent attendance in structured PE lessons resulted in higher levels of physical activity outside of school, suggesting a beneficial transfer of fitness motivation outside of the classroom. Additionally, kids can set and attain fitness goals thanks to the structured nature of traditional PE programs, which has been shown to greatly boost long-term fitness motivation (Xie, 2021).

### 2.2.4 Effects of Volleyball on Long Term Fitness Motivation:

As a well-liked team activity, volleyball has become known for its capacity to raise students' motivation to stay active and to improve their physical fitness (Gil-Arias et al., 2021). Volleyball is a sport that calls for a mix of coordination, agility, and cardiovascular endurance (Kozina et al., 2019). As a result, it is a good way to increase overall fitness levels. Castagna, Krustrup, and Póvoas's (2018) study found that high school students who regularly played volleyball had better cardiovascular health overall and expressed a greater level of satisfaction and enthusiasm in leading an active lifestyle. Through peer support and positive reinforcement, volleyball's social and competitive aspect can also promote a sense of camaraderie and collaboration, which can affect long-term fitness motivation (Wolf et al., 2020).

# 2.2.5 Relationship between Long Term Fitness Motivation, Traditional Physical Education, and Volleyball:

To understand the possible synergies or differences in establishing sustained fitness habits among high school students, it is essential to investigate the interaction between long-term fitness motivation, conventional physical education, and volleyball. While traditional physical education and volleyball have each shown significant impacts on

fitness motivation on their own, there may be additive benefits when they are combined (Garca-González et al., 2020). According to a study by Johnson et al. (2019), students who took part in both standard PE lessons and extracurricular volleyball had better levels of intrinsic desire for physical activity than students who participated in just one activity (Sierra-Daz et al., 2019). This shows that engaging in different physical activities, including volleyball and PE classes, may boost fitness motivation by providing a variety of experiences and difficulties.

This literature analysis of factors emphasizes the significance of encouraging long-term fitness motivation in high school students as well as the possible contribution of traditional physical education and volleyball to the accomplishment of this goal. With the potential for synergy when combined, volleyball and conventional PE programs have both shown to have positive benefits on students' fitness motivation. In order to have the greatest influence on high school students' long-term fitness motivation and general well-being, the findings highlight the necessity for schools to provide a variety of physical activity options, including formal PE programs and extracurricular sports like volleyball. However, more investigation is necessary to fully comprehend the underlying mechanisms and the long-term viability of fitness motivation programs in high school settings.

## 3. Methodology

Under this section, the design of the study, study participants, research instrument, and data analysis were explored.

## 3.1 Design of the Study

The primary purpose of this study was to assess and contrast the effects of volleyball and traditional physical education (PE) on high school students' long-term fitness motivation. A cross-sectional research design was used to accomplish this. According to Wang and Cheng (2020), this research design is defined by the gathering of participant data at a specific moment in time, allowing for a comparison of the two interventions-Traditional PE and volleyball.

High school students who agreed to participate in the study were chosen from a variety of institutions to ensure that the sample was diverse and representative. In order to make sure that the sample is as impartial as possible, the researcher made care to take into account variables like age, gender, and degrees of physical fitness.

## 3.2 Study Participants

100 high school students from different high schools were intended to participate in the study. The participants were chosen at random from various grade levels to guarantee a thorough and diverse representation. Maintaining a balanced representation of gender, age, and level of physical fitness was another priority in this selection process.

The study attempted to get a wider diversity of viewpoints and experiences by including students from various schools. According to Bhardwaj (2019), choosing participants at random reduces bias and guarantees that the sample is accurately reflective of the population of high school students. A researcher was also able to investigate potential differences in responses and behaviors across several stages of adolescence by including kids from various grade levels (Stratton, 2021).

Additionally, having a balance in gender representation aids in preventing any gender-related biases in the study's findings (Mascha & Vetter, 2018). Similar to this, taking into account one's age and level of physical fitness allowed for the accounting of possible variations in one's health and physical activity habits that could have an impact on the study's findings (Mascha & Vetter, 2018).

### 3.3 Research Instrument:

The main research tool was a standardized questionnaire that was used to collect information on fitness motivation levels, prior physical activity participation, attitudes toward traditional PE and volleyball, and perceived benefits of both activities. The questionnaire was divided into four sections: section 1, which looked at the respondents' demographics; section 2, which looked at the impact of traditional physical education on long-term fitness motivation; section 3, which looked at the impact of volleyball; and section 4, which looked at the interaction between traditional physical education, volleyball, and long-term fitness motivation among high school students.

## 3.4 Data Analysis

The goal of this journal's data analysis section was to analyze and contrast the impact of volleyball and traditional physical education (TPE) on high school students' long-term fitness motivation. The goals of the study were to ascertain the impact of volleyball and traditional physical education on long-term fitness motivation, evaluate the relationship between long-term fitness motivation and the two interventions, and look into any potential connections between long-term fitness motivation, volleyball, and traditional physical education. The data was analyzed with SPSS utilizing both descriptive and inferential statistical methods in order to meet the above objectives.

In order to give a general overview of the data, a descriptive analysis was first performed (Mishra et al., 2019). Age, gender, fitness levels, and baseline motivation scores were among the pertinent factors that had their frequencies and percentages calculated for this investigation. According to Kaur, Stoltzfus, and Yellapu (2018), descriptive statistics enable analysis of the distribution of the data, participant demographics, and beginning levels of exercise motivation.

The effects of TPE and volleyball on long-term fitness motivation were then studied using inferential analysis. The link between the intervention groups (TPE group and volleyball group) and the evolution of fitness motivation levels over time was investigated using cross-tabulation. The cross-tabulation makes it possible to compare the percentages of students in each group who have long-term fitness motivation that has increased, decreased, or remained stable (Dickinson, 2020). In order to ascertain whether there are any significant variations between the two intervention groups in terms of the modifications to long-term fitness motivation, chi-square tests were also carried out (Dickinson, 2020).

Additionally, correlation analysis was carried out to investigate the association between long-term fitness motivation and the relevant variables. This investigation assisted in figuring out whether there is a relationship between fitness levels, age, gender, and baseline fitness motivation levels (Yang et al., 2021). Additionally, the relationship between the frequency of participation in TPE or volleyball lessons and long-term fitness motivation was looked at. The characteristics that might affect high school students' long-term fitness motivation were shown by correlation analysis (Yang et al., 2021).

## 4. Findings

### 4.1 Descriptive Analysis of Demographic Information

The findings in table 1 provides information on the demographics and involvement in organized sports or physical activities among the respondents to the survey. The study gathered data on the respondents' ages and genders as well as the sports or physical activities they participated in both inside and outside of school settings.

Following is a breakdown of respondents' ages: 15% of the population was under the age of 15, 44% were in the 15-to-17-year range, 25% were in the 18-to-20-year range, and the

remaining 16% were over the age of 21. An in-depth understanding of the various age groups represented in the study is given by this breakdown.

A balanced distribution of gender was shown in the study, with 51% of respondents identifying as male and 49% as female. Any conclusions of gender-based trends in sports participation were made more credible by this fair representation.

The study also questioned respondents about their participation in organized sports or other physical activities, either within or outside of school. According to the data, every single responder has engaged in these activities. The fact that participation is so widespread demonstrates how important sports and physical activity are to the lives of the people polled.

In conclusion, the study findings point to a varied age distribution among respondents and a roughly equal representation of the two sexes. Furthermore, the fact that every respondent has engaged in organized sports or physical activity highlights the pervasiveness of such activities and their significance for people of all ages and genders. This data provides a useful framework for comprehending trends and preferences in sports and physical activity within the sampled population.

Table 1: Demographic information of participants

Variable	Category	Frequency	Percent (%)
Age of respondent	Below 15 years	15	15.0
	15-17 years	44	44.0
	18-20 years	25	25.0
	21 years and above	16	16.0
Gender of respondent	Male	51	51.0
	Female	49	49.0
Have you participated in any organized sports or physical activities while at school or outside school?		100	100.0

4.2 Cross Tabulation Analysis Between Traditional Physical Education, Volleyball and Lind-Term Fitness Motivation

The information in table 2 displays the findings of a Chi-square analysis for "Variable Long-Term Fitness Motivation." The study looked at the effects of two distinct methods, namely "Traditional physical education" and "Volleyball," on long-term fitness motivation.

The Chi-square value of 0.000 shows that the two studied methodologies and the variable "Long-Term Fitness Motivation" have a significant association. It was discovered that "Volleyball" and "Traditional physical education" both had a statistically significant impact on long-term fitness motivation.

The null hypothesis, which states that there is no association between the variables, can be firmly rejected because the p-value (denoted as 0.000) is less than the usual significance level of 0.05. Therefore, it can be said that "Volleyball" and "Traditional physical education" approaches are both successful in fostering long-term fitness motivation.

Table 2: Cross Tabulation Analysis Between Traditional Physical Education, Volleyball and Long-Term Fitness Motivation

Variable	Long-Term Fitness Mot	Long-Term Fitness Motivation	
	Chi-square value	Results	
Traditional physical education	0.000	Accepted	
Volleyball	0.000	Accepted	

## 4.3 Correlation Analysis Between Traditional Physical Education, Volleyball and Long-Term Fitness Motivation

The results as shown in table 3 show a correlation between "Long-term fitness motivation" and two different variables: "Traditional physical education" and "Volleyball." To express the magnitude and direction of the association between these variables, the Pearson correlation coefficient is used.

According to the findings, traditional physical education and volleyball both significantly positively correlate with long-term fitness motivation (correlation coefficient = 0.553). Both correlations have p-values of 0.000, which indicates that the connections are very statistically significant.

Based on these results, it can be concluded that involvement in volleyball and standard physical education classes positively correlates with long-term fitness motivation. In other words, compared to people who don't participate in these activities, people who play volleyball or traditional physical education tend to have stronger long-term fitness motivation. The results are regarded as "accepted," adding credence to the correlation analysis's reliability.

Table 3: Correlation Analysis Between Traditional Physical Education, Volleyball and Lind-Term Fitness Motivation

Ema-Term Timess Workation						
Variable		Long-term fitness motivation				
Measure		Pearson Correlation	Sig. (2-tailed) (P-value)	Results		
Traditional education	physical	0.553	0.000	Accepted		
Volleyball		0.553	0.000	Accepted		

<sup>\*\*.</sup> Correlation is significant at the 0.01 level (2-tailed).

## 4.2 Hypothesis Testing

It has been determined from the conducted study and subsequent studies as evidenced in literature, that traditional physical education and volleyball both considerably improve the long-term fitness of high school pupils. The findings of this study support the formulated hypotheses because all competing hypotheses have also been confirmed. It has been proven, in particular, that traditional physical education influences high school students' motivation for long-term fitness in a beneficial way. The research also supports the idea that playing volleyball helps high school students stay motivated to maintain their fitness over the long run.

The results of the cross tabulation and correlation analyses support the statistical importance of these findings. In connection to high school students' long-term fitness, it is noteworthy that both of the factors evaluated in this study show a great statistical significance. A chi-square value of 0.000 for the cross-tabulation analysis and a similar p-

value of 0.000 for the correlation analysis serve to highlight the significance of this finding. These findings highlight the strength of the observed associations and offer a strong basis for the study's conclusions.

## 5. Discussion and Conclusion

The current study adds to the growing corpus of research examining the relationship between participation in standard physical education and particular sports, like volleyball, and their impact on high school students' long-term fitness motivation. The purpose of this discussion is to place the results in the perspective of the larger body of literature on physical education, organized sports, and their contributions to long-term fitness motivation.

## 5.1 Discussion of Findings

The strong positive relationship between playing volleyball and participating in traditional physical education activities and long-term fitness motivation is supported by prior research (Pangrazi & Beighle, 2019; Tilga et al., 2019), which highlights the importance of structured physical education programs in promoting general health and fitness behaviors. This supports the idea that traditional physical education, which includes a variety of physical activities and exercises, can be used as a base for developing long-lasting fitness routines. The results of this study support the idea that involvement in a variety of physical activities during the formative years of high school can have a long-lasting influence on people's willingness to partake in fitness-enhancing activities all throughout their lives.

A specific sport under consideration, volleyball, has shown a positive correlation with high school students' long-term fitness aspirations. These findings are in line with earlier research that highlighted the importance of organized sports in encouraging prolonged participation in physical exercise (Lee, Pope, & Gao, 2018). Team sports like volleyball, which combine social and competitive elements, can help people build skills and a sense of camaraderie while also motivating them to stay physically fit so they can excel in their chosen activity. These elements may increase the likelihood that people will continue to engage in physical activity outside of the classroom.

The current study's findings about the universality of participation in sports and physical activities are consistent with other studies showing the broad appeal of sports and physical recreation among many populations (Grunseit, Richards, & Merom, 2018; Guimaraes Lima et al., 2019). In spite of particular histories or predispositions, this widespread engagement highlights the potential of sports and physical activities as tools for fostering long-term fitness motivation. The study's emphasis on high school students highlights the vital importance of early exposure to physical education and sports in forming attitudes toward health that endure throughout life.

The fact that both traditional physical education and volleyball activities have a favourable effect on long-term fitness motivation highlights the way that structured education and organized sports have complementing effects on health-related behaviors. According to research (Warburton & Bredin, 2019), the results support the idea that a mix of educational strategies and fun physical activities might increase people's commitment to fitness programs. The cross tabulation and correlation analyses used in this study provide useful insights into how these variables interact, revealing the numerous ways that involvement in physical education and particular sports might affect long-term fitness motivation.

Overall, by supporting the favourable long-term benefits of involvement in regular physical education and volleyball activities on high school students' long-term fitness motivation, this study adds to the body of current evidence. The results highlight the

importance of structured physical education courses and competitive sports in developing long-lasting fitness habits. These findings highlight the significance of include a variety of physical activities in educational curriculum and encouraging participation in organized sports as societies continue to place a high priority on the health and well-being of their young people.

## 5.2 Implication for Further Study

- 1. Educational Policy and Curriculum Development: The study's findings highlight the significance of preserving and improving conventional physical education courses in high school. The benefits of systematic physical education on long-term motivation for fitness should be acknowledged by education policymakers. This suggests the necessity of continuing to invest in physical education curriculum development, training, and resources to make sure that schools offer a wide variety of physical activities that appeal to different student interests.
- 2. Promotion of Organized Sports: The link between playing volleyball and long-term fitness motivation is favourable, which highlights the significance of organized team sports as a way to encourage long-term physical activity engagement. Schools and communities should think about supporting and promoting possibilities for organized sports, especially those that include social and competitive features like volleyball. By providing opportunities for students to play team sports outside of the classroom, we can develop healthy lifestyle behaviors that last a lifetime.
- 3. Early Exposure and Lifelong Attitudes: The study emphasizes the crucial impact that early exposure to physical education and sports has on forming individuals' attitudes toward fitness throughout their lives. Schools are crucial in helping students develop healthy fitness habits in their earliest years. Teachers and parents must work together to provide a range of physical activities that cater to various interests and abilities if they want pupils to maintain these habits into adulthood.
- 4. Holistic Health and Well-Being: The research highlights the complimentary roles that formal education and organized sports play in encouraging healthy behaviors. Physical education should be acknowledged in schools as a tool for creating holistic wellbeing as well as a way to improve physical fitness. One can build a thorough health education experience that covers both the physical and mental facets of well-being by combining teaching methods with fun physical activities.
- 5. Tailored Interventions and Programs: As societies work to prioritize young health, the study's findings point to the significance of customizing interventions and programs to take advantage of sports and physical activity's widespread appeal. Policymakers and educators can create interventions that target a wide range of kids, motivating them to sustain fitness motivation after their school years, by realizing that participation in these activities transcends various backgrounds and predispositions.
- 6. Research Expansion and Diversification: The study adds to the body of knowledge on organized sports, physical education, and the impact of these factors on long-term fitness motivation. Future studies should continue to investigate diverse sports and physical education methods, evaluating their effects across a range of contexts and on various demographic groups. Informed tailored tactics for promoting healthy behaviors will result from this, which will give a more thorough understanding of the variables affecting long-lasting fitness motivation.

### 5.3 Conclusion

In conclusion, this study emphasizes the favourable effects that participation in volleyball and traditional physical education have on high school students' motivation to maintain a healthy lifestyle. It has been discovered that the two have a significant impact on improving young people's long-term fitness. The results emphasize how important well-

designed physical education curricula and organized sports are in developing long-lasting fitness habits. These results highlight the significance of integrating a variety of physical activities into educational frameworks and encouraging active involvement in organized sports, given the rising emphasis on the health and welfare of young people within countries.

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